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<b>PAPERS</b>	<b>Page</b>
English use among South Pacific islanders at the University of the South Pacific <i>Rajni Chand</i>	73
Capacity building of elementary teachers through ICT: a public-private partnership (BOOT) model <i>Neeti Dutta, Indrajeet Dutta &amp; Shibani Ray</i>	91
Engaged learning strategies and effective education of adult women <i>Fazalur Rahman, Nabi Bux Jumani &amp; Ameena Abbas Ali</i>	109
Role of open and distance learning in the attainment of United Nations Millennium Development Goals (MDGs) in Cross River State, Nigeria <i>Arikpo B. Arikpo, Roseline E. Tawo, Marcellinus U. Ojuah, &amp; Chris C. Chukurah</i>	123
Technology enhanced capacity building: Web 2.0 tools for in-service teacher education <i>Vinod Kumar Kanvaria</i>	135

# English Use among South Pacific Islanders at the University of the South Pacific

RAJNI CHAND

*University of the South Pacific, Fiji*

**Abstract:** This paper discusses the result of a survey conducted recently at a regional English-medium university in the South Pacific. The University of the South Pacific (USP) uses English as the language for instruction across all disciplines. It begins by providing a brief background of USP, followed by usage of English and other languages in the USP countries. Next, details of the survey are included. The survey examined the perceptions and experiences of English use for daily life activities and English language needs among South Pacific islanders at USP. Though learners at USP use English for academic purposes and the language of instruction at USP is English, there is also the assumption that learners may not be using English for non-academic activities since English is not their first language. The survey questionnaire that was designed on the needs analysis framework of Richards (1983) and Wong (1996) was administered to 172 participants. The descriptive analysis of questionnaires data revealed similar needs for academic and non-academic activities amongst learners of all the 12 countries of USP. The study also indicates the need for further research on English language usage among the learners in the South Pacific region.

**Key words:** EAP, University of the South Pacific, Distance learning, L2, Needs analysis.

## Introduction

Since the last decade, the role of English language as a lingua franca has grown. It is now globally acceptance as a second language as well as the language of higher education. Its use for international trade, science, technology, mass media and political alliances has further promoted English expansion in most parts of the world, including the South Pacific region. According to Crystal (1997) 85% of international organisations use English as their official language in transnational communication. In academia, 90% of published research articles especially in the field of linguistics are in English. In mass media such as films, print, broadcast and internet news reporting, English is the most commonly used language. World Internet Statistics (2008) indicate that English is being used by 30.4% of internet users. It also predicts that by end of 2008 there will be 2, 039, 114, 892 users of English as a language. In most of the past British colonies, the language used for official purposes is English. Countries that University of the South Pacific (USP) serves are no different since English is used together with the indigenous languages and pidgin. This article presents the methods and results of a quantitative study conducted at USP before concluding with some comments on the status of English in the South Pacific region.

## University of the South Pacific (USP)

USP is a public university owned by a dozen South Pacific island countries: Cook Islands, Fiji Islands, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon

Islands, Tokelau, Tonga, Tuvalu and Vanuatu. Its region is spread across 33 million square kilometres and five time zones, and it is approximately three times the size of Europe. However, the total land mass is about the size of Denmark. The populations of the USP countries also range widely, with as few as 1,449 people in Tokelau and as many as 918,675 in Fiji. USP serves a total of approximately 1.3 million people who come from the markedly distinctive cultural areas of Melanesia, Polynesia, and Micronesia.

In serving these 12 countries, USP serves about 235 language groups and 60 different cultures. Vanuatu and the Solomon Islands alone have around 200 of these languages. In all countries English is used as either an official, or a commercial language alongside indigenous languages. English is, thus, a second, third or fourth language for the people of USP member countries. It also serves the 37.4 % of Fiji's population who are of Indian origin, but not the other 54.8 % of the population that is comprised of Indigenous Fijian and other non-Indian groups (World Factbook 2007). Clearly, the countries of the university region share no common vernacular language. The social systems of these countries are also very distinctive. For instance, Kiribati follows an egalitarian system where families are represented by *unimane* (old wise men); the Solomon Islanders are tribal with chiefly systems; the Samoans clannish with *matai* (leaders); and Tonga has a reigning King, nobles and commoners. Christianity is practised by around 95% of the region, although Fiji Indians also practise Hinduism and Islam (Va'a 1998).

Apart from these geographical, linguistic and religious differences, there also exists economic diversity within the region. The level of development differs from country to country, but it also differs from urban to rural or outer island, even within one country. In places like Suva (the capital of Fiji) telephones (landlines and mobile), electrical appliances, and computers and In nections are everyday items for many, yet they are nonexistent or extremely rare in rural Fiji and the outer islands or, they may be very few in countries like Tokelau. Electricity is unheard of in very remote areas, and motor vehicles are rare since most people still travel by bicycles, canoes, wagons or on foot. The outboard motor, however, is ubiquitous.

Language use in the South Pacific region is dependent on the social, cultural and racial makeup of the countries. In Samoa, a single language (Samoan) is usually spoken in the community (Lotherington 1998). In other countries, where there is more than one language spoken, one language or a particular dialect of the language is usually given national prominence or, it may be that code switching is practiced during conversations. For instance, Cook Island Maori is given prominence in the Cook Islands and the Bauan dialect is chosen for literacy in Fijian vernacular education. Code mixing and code switching have been recorded in studies conducted in Fiji (Tamata 1996) and it is known that speakers alternatively use English, Fijian and Fiji Hindi during conversations, depending on the speakers' background. In most situations Pacific Islanders use vernacular rather than English for their everyday conversations. Often vernacular is also used in classrooms (Ielemia 1996; Thaman 1996). Thus English, although the official language for most USP countries, does not serve the same purpose as other languages. The social, cultural or racial situations usually decide the language used for conversations in these countries. Nevertheless, studies by Geraghty, 2005; Robbie, 2004; Siegel, 1996 have shown that usage of English language in media, and use of media in the region have been increasing over the years. Most

forms of media in the South Pacific are available in English with limited space or time for vernacular languages.

## **The Survey**

This study was conducted using the needs analysis framework. Similar frameworks have been used in the studies discussed by Chand (2007; 2008a). Needs analysis (NA) has been used in the field of curriculum development for many years, although its use in the field of language learning began in the 1970s (Nunan 1988). It has been discussed under various names such as needs assessments and needs evaluation (Benesch, 1996; Brown, 1995; Jordan, 1997) and some writers have sub-categorised it as either strategy analysis or means analysis (West 1994). The last decade has seen an increase in studies in learner strategies (e.g. Oxford 1990, 1996; Nunan, 1988, Wenden, 1987, 1991) using NA. It has also been used as a method to differentiate the target needs from learners' needs, and needs from necessities, and lacks and wants (Hutchinson and Waters 1987). Nunan (1988, p. 5) discusses using NA to find the perceived and/or actual needs among teachers and learners and to raise the level of awareness of both groups, but also to find why they are doing what they are doing and to allow them to reflect on the usefulness of the means and ends of the course. It is argued that in the field of language learning, NA should be the first step in curriculum development, followed by five other components: goals and objectives, language testing, material development, language teaching, and programme evaluation (Brown, 1995, p. 271). According to Brown (*ibid.*), the logical outcome of a NA conducted on learners' needs in a language programme will be specification of what the programme will accomplish. It will also indicate the content or skills students need to master in order to achieve those goals.

### **Types of needs**

One of the main issues in NA is considering which types of need ought to be identified. Brindley (1989) and Robinson (1991) consider information about the learners' language proficiency, language difficulties, use of language in real life to be objective needs. Cognitive and affective needs of the learners in language learning, such as confidence, attitude, and expectations, are considered to be subjective needs. Brindley (1989) further discusses the need for a negotiation between teachers and learners in terms of the learners' needs. Usually the teachers and learners have different expectations of learning, which can lead to mismatches in the objective and subjective needs. Through needs analysis, negotiation, and compromise many of these mismatches can be overcome.

Richterich and Chancerel (1977) state that generally learners have little awareness of their needs and are usually unable to express the needs they recognise except in very vague terms. Knox (1990) also points out that adults may be unaware of some of their educational needs, which may be implicit in their attitudes and choices, but may also be aware of some of their educational needs, which they can state explicitly in response to questions. Thus, needs assessment procedures are intended to confirm and discover both implicit and explicit needs that are important to adults. In the present study, Richards' (1983) taxonomy and Wong's (1996) NA framework are adapted to create the NA questionnaires. These are used to find the learners' present and future listening needs for the following reason: both Richards (*ibid.*)

and Wong's (ibid) guidelines have been created with listening skills in mind, and both researchers have suggested its usefulness for finding NA information from L2 learners.

### **Richards' (1983) listening needs taxonomy**

The needs analysis carried out by Richards (1990) are very similar to Munby's (1978) Communicative Needs Analysis. Munby's (1978) taxonomy can be used to investigate the reason why a learner is learning a particular language and the communicative needs of the learner. Additionally, it looks at the particular context in which the language being learnt will be used. The point Richards (ibid.) makes in his description of NA is that, as in foreign language learning, in L2 learning NA plays a vital role. It is also of importance in general language courses. Richards (1983) also discusses taxonomy of listening sub-skills. The taxonomy of listening sub-skills for classroom teaching includes 33 micro-skills for 'conversational listening' and 18 micro-skills for 'academic listening' (ibid., p. 228–230). According to Richards (ibid.), a learner's need for listening skills is dependent on the situations, activities, and tasks for which they use L2. A needs assessment using interview, questionnaire, participant observation, target discourse analysis or literature survey can provide details of the learners' needs. It can then be used to create a profile of their listening needs. Earlier, Munby (1978) created a taxonomy of language skills. However, he was more concerned with describing the skills than with differentiating between the skills (listening skills and reading skills).

### **Wong's (1996) needs analysis worksheet**

Another method to obtain learner needs was designed by Wong (1996). These self-access materials provide a collection of worksheets that can be used by learners to determine their language needs for a variety of skills. One of the worksheets requests learners to put a tick against a list of language skills based on a specific language focus such as reading, writing, listening and speaking. Items listed in these focus areas require the learners to provide, on a 5-point scale, the skills needed for now and the future. They are also requested to provide their proficiency on a similar scale. Items listed under the category of listening skills range from academic activities such as listening to lectures, conversations, discussions, to non-academic activities such as listening to radio, entertainment, and stories.

## **Method**

### **Selection of research method**

In the case of distance learners at USP, locating the distance learners was not easy due to their geographical isolation. Those learners, who enrolled for the English for Academic Purposes (EAP) course at USP and by distance, were spread all over the South Pacific region. Additionally, those learners who had enrolled for the EAP without any face-to-

face support did not come to the regional centres, thus making it even more difficult to contact them. In order to make the study as viable as possible, decisions were

made to collect data using questionnaires.

Since the learners of the EAP course as such, self-instructed learners and without any contact with the teachers it would be very difficult to give them instructions on learning strategies and expect them to recall their use of strategies. Thus, it was decided to collect learners' perception and experience of strategy use. Questionnaires were designed in order to collect information from those learners who were unreachable. Interviews were to be conducted with those who could be approached which are discussed in details in other research papers.

### **Selection of participants**

Two groups of learners were selected for this study. Past learners had previously completed the study skills course by distance and present learners were enrolled for the course at the time of data collection.

- Past learners had the experience of completing the study skills course by distance. No limitations were set for the programme and the centre of their enrolment.
- Present learners were selected because of their enrolment for the course. This was the phase of data collection for this study. There was no limitation because of the programme and the centre where they were enrolled for the course.

### **Data collection methods**

The main aim of the survey questionnaire in this study was to obtain the self-perception and self-evaluation of listening needs from past and present learners of the EAP course. Flowerdew and Miller (2005, p. 70) mention the importance of understanding the listening needs of learners. One method that can help identify these needs is by designing a questionnaire to find the learners' listening needs. As discussed earlier, Richards (1983) designed listening needs taxonomy to find the listening needs of learners. Wong (1996) prepared a needs analysis worksheet, which requested learners to include information on their present and future listening needs. These have been adopted for this study to obtain the learners' self-assessment or self-evaluation of their proficiency in the various tasks involving listening. Adaptations made to Richards (1983) and Wong's (1996) needs analysis framework included questions on language use for specific social activities such as for socialisation, listening to radio programmes, watching films and videos. Thus, activities and functions for which Pacific Islanders used English were selected in the questionnaire. Questionnaires need to translate the research objectives into specific questions; answers to such questions will provide data for hypothesis testing. Thus, all attempts were made to obtain as many filled questionnaires as possible from students from the whole region and from participants with as many differences in background, programmes, profession, age and language as possible.

The questionnaire included closed questions requesting information on students' academic background and their listening. The closed questions were easy to score, code and analyse. They required little writing from the respondents and alternatives were presented to the learners.

### **Procedures in data collection**

500 questionnaires were sent to all the centres within three weeks of the researcher's arrival at USP, using the USP's mail delivery system, and with tutors travelling to the centres for tutorials (250 questionnaires for past learners and 250 for present learners). The centre staff had already been emailed to assist with the distribution and collection of these questionnaires. Teaching staff from Suva campus also volunteered to take questionnaires with them either when they went for tutorial trips for their courses, within Fiji or when travelling to other centres in the region.

The questionnaires used in this study requested similar information from the past and present learners together with their self-perception of use of English for various academic and non-academic tasks. The first part of the questionnaires requested the learners' background information. The second part requested learners' self-perception of listening needs for daily life activities (Question 12) and for academic activities (Question 14). Their self-evaluation of proficiency when using English for various daily life activities (Questions 13 and 15) and for academic activities (Question 16). The selection of these questions was based on the needs analysis criteria that have been discussed earlier.

The choice of seeking the participants' English use for daily life and academic activities was made based on the theoretical frameworks for objective, subjective and situational needs analysis as discussed by Brindley (1989), Richards (1990) and Robinson (1991).

In the study, self-perception for the various daily-life or non-academic and academic activities is assumed the learners' perception of how frequently they used English for these activities (see Questions 12, 14, and 17). For example, how frequently they used English when communicating with family members (daily life activity) or how frequently they used English when discussing academic work with colleagues (academic activity). An additional item included in these questions was the use of listening skills when communicating with domestic helpers, the term widely used in the Pacific for house cleaners. In multicultural countries like Fiji where working couples employ domestic helpers, in most cases these are from different ethnic groups, creating the necessity to use English for conversation. Self-evaluation (see Questions 13, 15 and 16) on the other hand, is assumed the learners' views of their own proficiency in using English for daily life and academic activities. For example, the learners' belief about their proficiency when communicating with family members (daily life activity) or how good their proficiency was for discussing academic work with colleagues (academic activity).

### **Data Analysis**

The first section of the questionnaire (Q1–Q11) included demographic information of the informants such as their gender, age, country of origin, programme they were enrolled in and their employment details. This section also requested learners to provide their first language(s) as well as their experience of English language before enrolling at USP. The information provided is summed up in Tables 1–3. As discussed earlier the main part of the questionnaire (Q12–16) contained Likert scale (closed questions).

The analysis method used for this study was similar to the analysis of an NA questionnaire Iwai et al. (1999) conducted at the University of Hawaii. The analysis, which included such descriptive statistics as means and standard deviations, employed the following steps:

*Step 1:* Analysis of the Likert scale questions required calculating the means, which in this case was the arithmetic average of the responses with 5 points assigned. This point scoring system was based on the calculation system used for assigning values in Likert scale as discussed by Colosi (2005) for measuring evaluation using Microsoft Excel. The standard deviation in this case was then an average of the distance of each response from the mean. In this case, the standard deviation was calculated from the Likert scale's mean. The following criteria were used for assigning points to the responses:

- strongly agree                      5 points were assigned
- always
- excellent
- very useful
- very good
- very important
- strongly disagree                  1 point was assigned
- never
- very poor
- totally useless
- unimportant.

The rest of the scores in the middle were assigned two, three or four depending on whether the response was positive (4), neutral (3) or negative (2).

*Step 2:* After the mean for each response was calculated, a criterion for selection of responses for discussion was made. Oxford (1990, p. 300) in her discussion of a strategy inventory for language learning (SILL) uses the following criteria for understanding the calculation of average (mean) retrieved from Likert scale items:

High	Always or almost always used	4.5 to 5.0
	Usually used	3.5 to 4.4
Medium	Sometimes used	2.5 to 3.4
Low	Generally not used	1.5 to 2.4
	Never or almost never used	1.0 to 1.4



It was decided to use the criteria similar to Oxford's (1990) for the analysis. However, a minor alteration was made. A calculation of the mean of all the questions provided the following details:

### **Past learners**

Out of 30 questions (i.e. the total of all closed questions), only one response from past learners yielded a mean above 4.5 (Question 14a). There were 23 questions with the mean between 3.5 and 4.4. The remaining one question had the mean below 3.4.

### **Present learners**

Similarly, responses from present learners showed that only one question (Question 14e,) had a mean above 4.5. Twenty six questions had a mean between 3.5 and 4.4. The remaining three questions had a mean of below 3.4.

### **It was decided to make adaptations to Oxford's (1990) criteria as follows:**

Instead of a range between 3.5 and 5.0 for high, it was raised to 4 to 5. This provided lesser issues to discuss but also provided a narrower view presented by the learners (i.e. extreme end of the high responses).

Instead of a range between 2.1 to 3.4 for medium, it was reduced to cover 2.1 to 3.9. This meant more responses were included in this range, which were previously included under high (between 3.5 and 3.9).

The range covering low now began at 0 until 2.0. Thus instead of having five groups (as divided by Oxford, 1990), there were now only three groups.

Since the questionnaire was to find the frequency of listening skills used for different activities, extremely high usage of listening skills will be discussed. The means between 4 and 5 indicated a higher level of agreement to the items in the questionnaire. The standard deviation indicates the average of the distance of the response from the mean. Only in situations where the standard deviation indicated a very high deviation was it included in the discussion. Wherever the mean and standard deviation used in discussions, the figure will be rounded to two decimal places in the discussions.

*Step 3:* The next step in the analysis procedure involved grouping the question items under different themes. Details of the grouping process are provided below.

Questions with Likert scale items were analysed separately. Each of these questions had subsections or items and needed further analysis. These questions are categorised as follows:

#### **1. Self-perception**

- (a) Usage of English in daily life (Q12: five items )
- (b) Usage of English in academic situations (Q14: five items)
- (c) Usage of English after university study (Q17: four items)

## **2. Self-evaluation**

- (d) Proficiency for everyday communication (Q13: six items)
- (e) Proficiency for daily life (Q15: five items)
- (f) Proficiency for academic situation (Q16: five items)

Responses obtained from the past learners have been put in a table (Table 1), followed by the responses from present learners (Table 2). Next, a table has been created including responses from both groups (Table 3) that had high mean. The reason for selecting these was to find the situations for which the learners had indicated a very high degree of perception of using English for daily, academic and distance learning.

### **Analyses of questionnaire data**

This section provides details of the analysis of the closed questions completed by the two groups of learners.

As discussed in the data analysis section questions were categorised under two main categories: self-perception and self-evaluation. The statically analysed results obtained from these questions have been included in Tables 1, 2, and 3 below. In each of these tables, the mean and standard deviation for all items have been included.

A discussion based on the categories under which the results have been organised, is then carried out.

#### **1. Self-perception**

Earlier, the contents of the self-perception questions included in the closed questions were discussed. These questions provided both groups of learners' self-perception of English use in academic, daily and in future pursuits. For each question, there were items within each question. For example, Question 12 had five items.

#### **2. Self-evaluation**

Questions 13 and questions 15–16 required the informants to provide their personal ratings of their proficiency in English use for everyday communication, daily life activities and academic activities.

The following tables show the learners' response for various activities listed under each question. The questions are listed under the three categories discussed above rather than in the order, they appeared in the questionnaires. Table 1 containing the results of the past learners can be found first and then Table 2 with the results of the present learners.

To read the tables, scan from left to right and each row will tell the question for a particular category. For example, Category 1 (Self-perception) has three questions. These questions further have more items included. The main ideas of these items have been written in columns next to the question. The mean and standard deviation for each item can be found in the rows below these questions. For example, for Question 12 past learners had to provide their responses to using English for watching TV/video/films (Q12a); for listening to radio (Q12b), communicating with family member (Q12c), communicating with domestic helpers (Q12d), and socialising with friends and colleagues (Q12e). (The three main categories used for the analysis and the mean

82 English use among south...

over four have been highlighted in the table.)

**Table1:** Past learners' questionnaire responses (n=19 )

<i>Self-perception</i>					
<b>Q12 English use (Daily life) (n=153)</b>	a. Watching TV	b. Listening to radio	c. Communicating with family members	d. Communicating with domestic helper	e. Socialising with friends/colleagues
<b>Mean score</b>	3.980392	3.718954	3.143791	3.143791	3.633987
<b>StDev</b>	0.983218	1.126578	1.279485	1.193305	1.011458
<b>Q14 English use (academic)</b>	a. Participating in lectures	b. Participating in extra-curricular activities/functions	c. Participating in panel/meetings	d. Discussing academic work with colleagues	e. Listening to lectures, discussions or seminars
<b>Mean score</b>	4.470588	3.928105	4.078431	3.960784	4.51634
<b>StDev</b>	0.858846	0.967257	1.205958	0.945087	0.744317
<b>Q17 English use after university -(n=19)</b>	a. Helped in my profession	b. My note-taking is better now	c. My listening skills are better	d. I can follow conversations better	
<b>Mean score</b>	4.601307	4.084967	3.928105	3.915033	
<b>StDev</b>	0.691488	0.850292	0.903972	0.972975	

<i>Self-evaluation</i>						
<b>Q13 Proficiency for everyday communication</b>	a. Reading	b. Listening	c. Speaking	d. Writing	e. Grammar	f. Vocabulary
<b>Mean score</b>	4.473684	4.105263	3.789474	3.842105	3.578947	3.684211
<b>StDev</b>	0.696692	0.737468	0.7132 83	0.83421	0.901591	0.945905
<b>Q15 Proficiency for daily life activities</b>	a. Watching TV/video/films	b. Listening to radio	c. Communicating with family members	d. Communicating with domestic helper	e. Socialising with friends/colleagues	
<b>Mean score</b>	4.421053	4.105263	3.421053	3.736842	4	
<b>StDev</b>	0.692483	0.936586	1.121298	0.733493	0.816497	
<b>Q16 Proficiency for academic activities</b>	a. Participating in lectures	b. Participating in extra-curricular activities/functions	c. Participating in panels/meetings	d. Discussing academic work with colleagues	e. Listening to lectures, discussions or seminars	
<b>Mean score</b>	4.157895	3.842105	3.736842	3.789474	4.263158	
<b>StDev</b>	0.764719	0.688247	0.733493	1.031662	0.653376	

## Past Learners' Responses to the Closed Questions

Table 2: Past learners show the following details:

### 1. *Self-perception*

For the three questions under the category of self-perception: seven out of 14 items had a mean of above four. Brief details of the results are as follow:

- Past learners indicated that they used English most for listening for one daily life activity, which was when watching TV, video and films (Q12a).
- For academic activities, past learners used listening most for two activities, namely when participating in lectures (Q14a) and when listening to lectures, discussions and seminars (Q14e).
- Past learners also believed that the listening skills learned from the study skills course were useful for all the four activities, i.e. for their profession (Q17a), and specifically for note-taking (Q17b), general listening (Q17c) and following conversations (Q17d). None of the responses had a mean below two.

## 2. Self-evaluation

For the three questions under the category of self-evaluation: seven out of 16 items had a mean of above four. Brief details of the results are as follows:

- Past learners indicated that they had high proficiency in reading (Q13a) and listening (Q13b).
- In the case of daily life activities, the past learners indicated they had high proficiency for watching TV, videos and films (Q15a), for listening to radio (Q15b), and for socialising with friends and colleagues (Q15e).
- For academic activities, the past learners indicated that they had high proficiency for participating in lectures (Q16a), and for listening to lectures, discussions and seminars (Q16e).

The rest of the responses had a mean of above three. None of the means was below three.

Four other questions had a mean over three. There was only one instance where the mean was around two (Q18f).

**Table 2:** Present learners' questionnaire responses ( $n = 153$ )

<i>Self-perception</i>					
<b>Q12 English use (Daily life) (n=153)</b>	a. Watching TV	b. Listening to radio	c. Communicating with family members	d. Communicating with domestic helper	e. Socialising with friends/colleagues
<b>Mean score</b>	3.980392	3.718954	3.143791	3.143791	3.633987
<b>StDev</b>	0.983218	1.126578	1.279485	1.193305	1.011458
<b>Q14 English use (academic)</b>	a. Participating in lectures	b. Participating in extra-curricular activities/ functions	c. Participating in panel/meetings	d. Discussing academic work with colleagues	e. Listening to lectures, discussions or seminars
<b>Mean score</b>	4.470588	3.928105	4.078431	3.960784	4.51634
<b>StDev</b>	0.858846	0.967257	1.205958	0.945087	0.744317

<b>Q17 English use after university -(n=19)</b>	a. Helped in my profession	b. My note-taking is better now	c. My listening skills are better	d. I can follow conversations better		
<b>Mean score</b>	4.601307	4.084967	3.928105	3.915033		
<b>StDev</b>	0.691488	0.850292	0.903972	0.972975		
<b>Self-evaluation</b>						
<b>Q13 Proficiency for everyday communication</b>	a. Reading	b. Listening	c. Speaking	d. Writing	e. Grammar	f. Vocabulary
<b>Mean score</b>	4.222222	3.993464	3.843137	3.69281	3.470588	3.614379
<b>StDev</b>	0.84466	0.790542	0.744432	0.788745	0.811584	0.828157
<b>Q15 Proficiency for daily life activities</b>	a. Watching TV/video/films	b. Listening to radio	c. Communicating with family members	d. Communicating with domestic helper	e. Socialising with friends/colleagues	
<b>Mean score</b>	4.196078	4.091503	3.54902	3.54902	3.869281	
<b>StDev</b>	0.786889	0.701122	1.075695	0.979669	0.92972	
<b>Q16 Proficiency for academic activities</b>	a. Participating in lectures	b. Participating in extra-curricular activities / functions	c. Participating in panel/meetings	d. Discussing academic work with colleagues	e. Listening to lectures, discussions or seminars	
<b>Mean score</b>	4.091503	3.895425	3.803922	3.934641	4.202614	
<b>StDev</b>	0.746567	0.804293	0.960118	0.775218	0.701122	

### Present Learners' Responses to the Closed Questions

Table 3: Present learners show the following details:

#### 1. *Self-perception*

Out of the three questions under the category for self-perception: five out of 14 items had a mean of above four. Brief details of the results are as follows:

- Present learners did not indicate a high self-perception for any of the daily life activities.
- For academic activities, present learners indicated that they used most listening skills for participating in lectures (Q14a), participating in panel discussions and meetings (Q14c), and when listening to lectures, discussions or seminars (Q14e).
- Present learners believed that the listening skills learned from the study skills course would be useful for two activities, i.e. for their profession (Q17a), and specifically for note taking. (Q17b).

None of responses had a mean below 2 and all other responses had mean above three.

#### 2. *Self-evaluation*

Out of the three questions selected under the category of self-evaluation: five out of 16 items had a mean of above four. Brief details of the results are as follows:

- Present learners felt that they had high proficiency for only one language skill, reading (Q13a).
- In case of proficiency for daily life activities, the present learners indicated they had high proficiency watching TV, videos and films (Q15a), and for listening to radio (Q15b)
- For academic activities, the present learners indicated that they had high proficiency for participating in lectures (Q16a), and for listening to lectures, discussions and seminars (Q16e).

The rest of the responses had a mean of above three. None of the means were below two.

Seven other questions had a mean over three. There were two instances where the means were below three (Q18b) and (Q18f).

### Discussion of Responses

As discussed earlier, a table was created from those questions for which both groups of learners had indicated a mean of more than four. Table 3 below summarises these responses. Mean<sup>1</sup> in the table refers to the response from the past learners and mean<sup>2</sup> to present learners. The discussion of each group of questions can be found after Table 3 with the interpretation of past learners responses first followed by those of the present learners.

**Table 3:** *past and present learners questionnaire responses (mean = >4)*

<i>Self-perception</i>					
<b>Q12 English use (Daily life)</b>	a. Watching TV/ Video /Films 4.157895	<b>(rest of the items had mean below 4)</b>			
<b>Mean score<sup>1</sup></b>					
<b>Q14 English use (academic)</b>	a. Participating in lectures	c. Participating in panel / meetings	e. Listening to lectures, discussions or seminars	<b>(rest of the items had mean below 4)</b>	
<b>Mean score<sup>1</sup></b>	4.578947	<i>(below 4)</i>	4.421053		
<b>Mean score<sup>2</sup></b>	4.470588	4.078431	4.51634	<b>(rest of the items had mean below 4)</b>	
<b>Q17 English use after university-</b>	a. Helped in my profession	b. My note-taking is better now	c. My listening skills are better	d. I can follow conversations better	<b>(rest of the items had mean below 4)</b>
<b>Mean score<sup>1</sup></b>	4.473684	4.473684	4.157895	4.210526	
<b>Mean score<sup>2</sup></b>	4.601307	4.084967	<i>(below 4)</i>	<i>(below 4)</i>	

<i>Self-evaluation</i>				
<b>Q13 Proficiency for everyday communication</b>	a. Reading	b. Listening	<b>(rest of the items had mean below 4)</b>	
<b>Mean score<sup>1</sup></b>	4.473684	4.105263		
<b>Mean score<sup>2</sup></b>	4.222222	<i>(below 4)</i>		
<b>Q15 Proficiency for daily life activities</b>	a. Watching TV/videos/films	b. Listening to radio	e. Socialising with friends/colleagues	<b>(rest of the items had mean below 4)</b>
<b>Mean score<sup>1</sup></b>	4.421053	4.105263	4	
<b>Mean score<sup>2</sup></b>	4.196078	4.091503	<i>(below 4)</i>	
<b>Q16 Proficiency for academic activities</b>	a. Participating in lectures	e. Listening to lectures, discussions or seminars	<b>(rest of the items had mean below 4)</b>	
<b>Mean score<sup>1</sup></b>	4.157895	4.263158		
<b>Mean score<sup>2</sup></b>	4.091503	4.202614		

### *1. Self-perception*

#### **Question 12: English use in daily life**

This question required learners to provide their perception of English use for daily life activities. Past learners indicated that they used English for watching TV/Video/Films (Q12a). They did not show high self-perception for any other items for daily life activities. Present learners did not show high perception of English use for any of the daily life activities.

#### **Question 14: English use in academic activities**

This question required learners to provide their perception of English use for academic activities. Out of the five items under this question, there was high perception indicated for three items. Both groups indicated high perception of English use for participating in lectures (Q14a), and when listening to lectures, discussions and seminars (Q14e). Additionally, present learners indicated high perception of English use for participating in panel discussions and meetings (Q14c).

This question required learners to provide their perception of English use after university study. Out of the four items under this question, high perception was indicated for all these items, though not equally by both groups. While past learners indicated a high perception of English use for all the items, present learners showed high perception for the importance of listening skills' for their profession (Q17a) and for note-taking only (Q17b).

Out of the 14 items under the three questions in this section, past learners showed high perceptions of English use for seven items while the present learners for five items. Thus past learners showed more perception of English use, for academic and after university study activities. However, there was only one item under daily life activities where they perceived to be using English more, which was for watching TV/video and films.

## **2. Self-evaluation**

Under this category of questions, learners provided their self-evaluation of proficiency for a number of daily life and academic activities.

### **Question 13: Proficiency for daily life communication**

Out of the six items under this question, high evaluation of proficiency was given for only two items. Past learners indicated that they had high proficiency for reading (Q13a) and listening (Q13b) while present learners indicated high proficiency only for reading (Q13a).

### **Question 15: Proficiency for daily life activities**

Out of the five items under this question, high proficiency was indicated for three items. Past learners indicated high self-evaluation of proficiency for watching TV/ Video/Films (Q15a), listening to radio (Q15b), and for socialising with friends and colleagues (Q15e). Present learners indicated high proficiency for the first two items indicated by the past learners but not for the later one.

### **Question 16: Proficiency for academic activities**

Out of the five items under this question, high self-evaluation of proficiency was indicated for two items. Both groups of learners felt that they had high proficiency for participating in lectures (Q 16a) and for listening to lectures, discussions or seminars (Q16e).

Out of 16 items for which self-evaluation of proficiency was requested, high means were shown for seven items. Past learners felt they had high proficiency for all these seven items, while present learners felt they had high proficiency for five items. Thus, past learners indicated a slightly higher self-evaluation of proficiency than present learners for everyday communication, daily life activities and academic activities.

Past learners as well as present learners indicated high mean for nine items. Altogether, past learners showed a higher self-perception and self-evaluation of English use for daily life, academic and after university study than present learners. The past learners' results also indicated English use for daily life activities and a high self-evaluation of proficiency for daily life, academic and after university study activities. The fact that they are now working and know about the use of English for these activities may have been influential in this self-evaluation.

## **Conclusion and Comments**

Learners' self-perception and self-evaluation of their language use develops with time. This study has shown that learners who have studied at University level for a longer period of time (past learners) have a better understanding of their language use, perception and use of the skills for after university study. The past learners of the EAP course at USP are no different; they indicated the assertiveness and sureness of their language skill in this study. Learners studying by distance at USP face many challenges when studying using a language that is not their first language. Lack of interaction with their teachers and other learners, limited facilities mean that they depend on everyday resources for learning. This study indicated the language that



the regional students used for media-since there were no other languages available for them. Chand (2008b) similarly discusses the lack of vernacular languages media in the Pacific region making it difficult for language development and preservation in the Pacific region. The study has indicated the usage of media tools such as radio, video and TV which can also be used for learning a second or foreign language. The study also reflects on the differences between the assumptions we have about ESL/EFL learners. Learners all over the world, not only in developed countries but also in isolated regional countries are using English more than before. Studies and reports on media literacy and education (Geraghty, 2005; Robbie, 2004; Siegel, 1996) have provided us information on usage of English in media in the Pacific region. This small study reconfirms that status. Knowing that Pacific Islanders use English for listening to media, and for daily communication can be used as a tool for developing their language skills-not only for English but for their own languages as well. It also indicates the need for studies on other skills taught at university level (e.g. reading, speaking and writing) Thus, there is a need for further studies of English usage amongst these learners so that their needs, experience and expectations of learning can be known further.

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**Dr Rajni Chand** is Course Coordinator, English for Academic Purposes, School of Language, Arts and Media, Faculty of Arts and Law, University of the South Pacific, Suva , Fiji Islands.  
Email: [chand\\_ra@usp.ac.fj](mailto:chand_ra@usp.ac.fj)

# Capacity Building of Elementary Teachers through ICT: A Public-Private Partnership (BOOT) Model

NEETI DUTTA\*, INDRAJEET DUTTA\*\* AND SHIBANI RAY\*\*\*

*\*Ideal Institute Of Management And Technology, Ggsip University*

*\*\*Lingaya's Lalita Devi Institute Of Management And Sciences, Ggsip University*

*\*\*\*Lingaya's Lalita Devi Institute Of Management And Sciences, Scert, Delhi*

**Abstract:** Capacity building of specially untrained teachers is a cause of concern more for the government with the enforcement of RTE. Since, they have to be trained without withdrawing from their working place it is imperative they have to be trained through the ODL mode. But the ODL mode has its own limitations because it requires huge investment in infrastructure and other peripherals. The government has its limitations in relation to funding: so an alternative is public-private-partnership (PPP) model wherein private parties are to be roped in for building, operating, maintaining, coordinating the various aspects of elementary education including teacher training. The PPP model is successful in almost all the sectors. In the form of self financing institutes, teacher training institutes are there but they are for profit motive. What is required is that these self financing institutes follow the form of PPP model so that quality control and monitoring lies in the hands of government agencies like IASE, CTE or at local level DIETS or state education departments.

**Key words:** Capacity building, Teacher training, Public-private partnership, ICT.

## Introduction

Education is considered the corner stone of economic and social development. This is because investment in education has a direct and positive effect on productivity as well as development of social-cultural activities. Recognizing the central role of the education sector in achieving the overall development goal of improving the quality of life the government has made structural reforms for improving the quality of education and ensuring universal elementary education with a view to strengthening the link between education provided at all levels and the socio-economic development of country. India is a signatory to three key international instruments that guarantee the right to elementary education – Universal Declaration of Human Rights, 1948, the International Covenant on Economic, Social and Cultural Rights, 1966 and the Convention on the Rights of the Child, 1989. The 86<sup>th</sup> constitutional amendment making RTE (right to education) a fundamental right for the children between the age group 6 to 14 indicates government intention of providing quality elementary education is a step towards that direction.. But this act also bring in itself lots of challenges which the government has to take care of and one of them is to train the number of untrained teachers in the next five years, as well as re-orienting and motivating existing teachers to provide quality learning in the classroom, as envisaged by the RTE Act. By implementing this act the implications related to teacher recruitment and training are as follows:

There are 7.72 lakh untrained teachers in the education system. Presently, the number of students in a classroom to the teacher ratio stands at 50:1. However, the Act stipulates that the ratio should be 30:1. Already, there are 5.1 lakh schools with a pupil-teacher ratio of more than 30:1. On top of that 5.48 lakh untrained teachers at the primary and 2.25 lakhs at upper primary level have to acquire necessary qualification within five years of the RTE Act coming into force. To maintain the stipulated ratio, at least 12 lakh more trained teachers need to be recruited. More critically, more than five lakh teachers are currently untrained whereas the Act states that all the teachers must be qualified and trained.

The Bigger question is how this untrained teachers and the teachers who have to acquire necessary qualification as per the norms laid down will be provided training to make them professional in the field of school education?

In most cases, seeing the 'large number of teachers' to be trained, the focus has been on centralised models, where training modules are designed and developed at state capitals and then sought to be implemented across the entire state in a homogenous manner, so much so that the biggest fear here is 'cascade dilution'. We are familiar with the large size of the trainee groups (even 50+) so as to be able to conduct the program within the expenditure norms allowed, or cases of some teachers repeatedly attending training programs, while others bypass such programmes. Most of the in-service teacher training programme lacks contextuality in respect to the school education. The training programme provides through distance and open learning mode or through in-service programmes needs upgradation. In this context, the need for teachers' capacity building has become extremely important. After all it is the quality of the teaching that influences the shaping up of young minds and motivating them in the right direction for their as well as their country's better future. A good teacher should have the following qualities to be able to provide the right kind of education to the students: Leadership; Flexibility; Resilience; Effectiveness; Teaching. Continuous Professional Development (CPD) can bring about all these qualities in a person and certify him/her as a trained teacher. This type of training sketches a course curriculum where the teachers learn the various ways of effective teaching and how to implement them in the practical scenario. The training also fosters inspiration in them besides building confidence, and promoting personality development.

A professional development course for teachers can be considered effective if it proves to be valuable and useful to the teachers directly. The training should be inspiring and have the ability to empower individuals. Professional development training for teachers can take up several forms. For example, a development program can be made as simple as observation of master and teacher. It can also be just attending a personally selected teaching workshop. Also, an individual can choose to participate in a mentor training program. Professional training can be made for both fresher as well as experienced teachers for upgrading their skills. Many a times, PD sessions are arranged in schools. Such all-staff workshops strengthen the unity and the bonding between the teachers. In present context rather than professional development of teachers it is more important that these untrained teachers should go for skill refinement, utilization for existing resources i.e. capacity building. In India, two decades major in-service training programs have been conceptualized and implemented. District Primary Education Programme (DPEP) and subsequently Sarva Siksha Abhiyan (SSA) have brought in the possibility of continuous capacity

building exercise for teachers along with regular academic support through Cluster Resource Centres (CRCs), Block Resource Centres (BRCs) and District Institute of Educational Trainings (DIETs). It operates through a network of linkages with national institutions like IGNOU, NCERT, etc and State Level institutions for designing and development of distance learning materials. We need to review this process, the gains, and the shortcomings and share the alternative strategies used at different places including by groups other than government(private) We have to review and analyze participation of state level and national organizations in these efforts and the extent to which meaningful progress in design and implementation of the programme of capacity building were made, analyze the scope of participation and involvement of agencies working in education and the availability of capable pedagogues the capacity building and training of functionaries is carried out by using distance learning inputs.

### **What is Capacity Building?**

The UNDP defined capacity building as the creation of an enabling environment with appropriate policy and legal frameworks, institutional development, including community participation (of women in particular), human resources development and strengthening of managerial systems, adding that, UNDP recognizes that capacity building is a long-term, continuing process, in which all stakeholders participate (ministries, local authorities, non-governmental organizations and water user groups, professional associations, academics and others).

The WCO defines capacity building as “activities which strengthen the knowledge, abilities, skills and behaviour of individuals and improve institutional structures and processes such that the organization can efficiently meet its mission and goals in a sustainable way.” It is, however, important to put into consideration the principles that govern community capacity building. Capacity Building is much more than training and includes the following:

Human resource development, the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively.

- Organizational development, the elaboration of management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).
- Institutional and legal framework development, making legal and regulatory changes to enable organizations, institutions and agencies at all levels and in all sectors to enhance their capacities.

### **Why is Capacity Building Needed?**

- The issue of capacity is critical and the scale of need is enormous, but appreciation of the problem is low.
- The link between needs and supply is weak.
- There is a lack of realistic funding.
- There is need for support for change.
- Training institutions are isolated - communications are poor.

- Development of teaching materials is inefficient.
- Alternative ways of capacity building are not adequately recognized.

### **Why We Need Capacity Building in Teacher Education?**

A teacher needs to be prepared in relation to the needs and demands arising in the school context, to engage with questions of school knowledge, the learner and the learning process. The expectations of the school system from a teacher change from time to time, responding to the broader social, economic and political changes taking place in the society. The teacher must be equipped not only to teach but also to understand the students and the community of parents so that children are regular in schools and learn. The RTE act mandates that the teacher should refrain from inflicting corporal punishment, complete the entire curriculum within the given time, assess students, hold parent's meetings and apprise them and as part of the school management committee, organize the overall running of the school. The Act, vide section 29 (2), emphasizes the following areas while laying down the curriculum and evaluation procedures:

- Conformity with the values enshrined in the Constitution.
- All round development of the child.
- Building up child's knowledge, potentiality and talent.
- Development of physical and mental abilities to the fullest extent.
- Learning through activities, discovery and exploration in a child friendly and child-centred manner.
- Medium of instruction shall, as far as practicable, be in child's mother tongue.
- Making the child free of fear, trauma and anxiety and helping the child to express views freely.
- Comprehensive and continuous evaluation of child's understanding of knowledge and his or her ability to apply the same.

In addition, the NCF requires a teacher to be a facilitator of children's learning in a manner that helps children to construct knowledge and meaning. The teacher in this process is a co-constructor of knowledge. It also opens out possibilities for the teacher to participate in the construction of syllabi, textbooks and teaching-learning materials. Such roles demand that teachers be equipped with an adequate understanding of curriculum, subject-content and pedagogy, on the one hand, and the community and school structures and management, on the other. These areas are particularly significant to the professional development of teachers at all stages, both in their initial and in-service training. Thus it means the capacity for research or inquiry; the capacity for creativity and innovation; the capacity to use high technology; the capacity for entrepreneurial leadership; and the capacity for moral leadership is what required from teachers.

Research and enquiry: The 21st century is about the management of all the knowledge and information we have generated and the value addition we could bring to it. We must give our teachers the skills with which they find a way through the

sea of knowledge that we have created and continue with life long learning. Today we are empowered by technology to teach ourselves beyond classrooms and become life-long learners. This is indeed required for sustained economic development of the nation and also individual prosperity.

**Creativity and innovation:** The management of knowledge in the 21st century is beyond the capacity of a single individual. The amount of information that we have around is overwhelming. The management of knowledge therefore must move out of the realm of the individual and shift into the realm of the networked groups. The teachers must learn how to manage knowledge collectively and to work in multi-disciplinary teams. When the information is networked the power and utility of the information grows multifold. Information that is static does not grow. In the new digital economy, information that is circulated across enterprise, creates innovation and eventually contributes to national wealth.

**Capacity to use high technology:** Every teacher in our schools and colleges should be brought in contact with technology to aid their learning process. Educational institutions should be equipped with adequate computing equipment, laboratory equipments, and Internet facilities with high band width connectivity and provide an environment for the teachers to enhance their learning ability. For full utilization of the available connectivity through satellite, high band width optical fibre communication in conjunction with technologies like Wi-max, the most critical aspect is the availability of quality content. I would suggest all the experts here to address this important issue and evolve a time bound action plan so that the quality content is made available at nodal points for access by the students, teachers and desiring learners.

**Moral leadership:** Moral leadership involves two aspects. First it requires the ability to have compelling and powerful dreams or visions of human betterment. Moral leadership requires a disposition to do the right thing and influence others also to do right things. There is a need for inclusion of “moral science” class as a part of education in all the schools and colleges. This is essential for promotion of value based education leading to enlightened citizenship.

### **How Can this Be Achieved?**

India thus has a large education system, given the size of its billion-plus population. However, it suffers from various challenges like quality, access, participation, relevance, management and resources. A point to note is that 460 million of its population is in the eligible age group (6-24 years of age) for study at educational institutions. Out of this, only about 63% are enrolled in educational institutions. This percentage is very low when compared to other BRIC economies like Brazil and Russia where about 88% and 89%, respectively, of the eligible population (5-24 years in these countries) are studying. Indeed, the Government has taken initiatives to improve the current state by allocating increased budgets to higher education. However, although the expenditure on higher education has increased in absolute terms, the percentage expenditure has declined. Further, the share of GDP spent on higher education has declined from 0.77% in 1991 to 0.67% in 2005. The same is estimated to stand at 0.7% of the GDP in 2008. Also, the share of expenditure spent on higher education as a percentage of total education expense has remained stagnant at around 12-13% for the past three years. Without adequate funding from the Government, public institutions find it difficult to develop infrastructure to



enhance student facilities and expand enrollment. In addition to these challenges, the Indian higher education system also suffers from imbalanced reach of education institutions across the country. For instance, the rural areas of the country, which represent about 65% of the total population, have just 20% of the total professional colleges. Approximately 58% of all higher education institutions (HEIs) are located in six states, which are among the most populated states in the country. Considering these problems relating to education infrastructure, the Indian Government has enhanced its focus on education in the XI Five Year Plan. It has allocated an increased budget of INR850 billion — an almost nine-fold increase from about INR 96 billion in the X Five Year Plan — for expansion of higher education facilities in the country. However, despite all the efforts of the Government, the need still outshines the provision. In terms of funds, a majority of the HEIs in India are dependent on the government for financing. With growing demand for education and government spends in this segment forming a small part of the total education budget, the private sector HEIs have steadily increased its presence to meet the gaps. These HEIs provide additional and more diverse educational opportunities to the increasing number of students who are willing to bear costs for high quality education. Between 2002 and 2007, the share of enrollments in private HEIs has risen from about 33% to over 50%. Considering the demand-supply mismatch in the available educational infrastructure, the socio-economic changes that impact higher and technical education, and the best practices of several countries, FICCI proposes a revamp of the existing regulatory framework, and its substitution with a system comparable with international standards. . The President of India, Shrimati Pratibha Patil said at the inauguration of a campus at Jammu University in May 2008:

“I am happy to note that the State Government has laid great emphasis on creating new institutions of higher education and revitalizing the existing ones. All these initiatives are steps in the right direction. The possibility of public-private partnership in this sector should be further explored for faster expansion of higher education.”

Also on the issue of PPP, the Chairman of National Knowledge Commission quoted at the Pravasi Bharatiya Divas in New Delhi on January 2008, “We recognize that the Government is not capable of meeting the challenges in education. We need public private partnership... Work with us. Help us. We need expertise.”

It is an opportune time for the government and public sector to tap into private funds through various partnerships. The fundamental challenge is to create an appropriate regulatory framework which addresses the needs of the education sector in India. The other challenges is in the product mix and structuring that would be viable and attractive to the private players while not compromising the requirements of students, quality of education delivered and the governance of the educational enterprise.

### **Concept of Public Private Partnership**

Public Private Partnerships (PPPs) are arrangements between government and private sector entities for the purpose of providing public infrastructure, community facilities and related services. PPPs are characterized by the sharing of investment, risk, responsibility and reward between the partners. The reasons for establishing such partnerships vary but generally involve the financing, design, construction, operation and maintenance of public infrastructure and services. The most successful partnership arrangements draw on the strengths of both the public and private

sector to establish complementary relationships. The roles and responsibilities of the partners may vary from project to project. For example, in some projects, the private sector partner will have significant involvement in all aspects of service delivery, in others, only a minor role. PPP when applied to social sector such as Education and Health is sometimes known as Public-Social Private Partnership (PSPP). The term private in PPP/PSPP encompasses all nongovernmental agencies such as the corporate sector, voluntary organizations, self-help groups, partnership firms, individuals and community based organizations, PPP, moreover, subsumes all the objectives of the service being provided earlier by the government, and is not intended to compromise on them. It is a contractual arrangement through which a private party performs part of the service delivery functions of the government while assuming associated risks. In return, the private party receives a fee from the government according to pre-determined performance criteria. Such payment may come out of the user charges or through the government budget or a combination of both. The World Economic Forum defines the Public Private Partnership as a voluntary alliance between various actors from different sectors where both agree to work together to reach a common goal or to fulfill a specific need that involves shared responsibilities, means, competencies and risks. Broadly, PPP in school education can operate to provide (i) infrastructural services, (ii) support services and (iii) educational services. There appears to be a progression in scope with the simplest being one in which the private partner provides infrastructure services but the government provides educational and other support services. The next stage in progression is where the private sector provides both infrastructure services and support services. The third type is where private sector provides infrastructure, support and educational services bundled together. Range of services under PPP:

- (i) Infrastructure facility services (design, build and maintain school building)
- (ii) Non-educational services (catering, transport of students etc)
- (iii) Support services (IT facility, library, playfield, gymnasium etc)
- (iv) Educational services
- (v) Teachers' training
- (vi) Management of public schools (with the existing staff and facilities)
- (vii) Operation of public schools (provision of teaching and non-teaching services including staff)
- (viii) Provision of teaching services in private schools to publicly funded students (school voucher system).

### **Nature and Significance of PPP**

PPP in the education sector is not a new concept. The private sector has been involved in different ways and at various levels in the provision of education services. Two definitions that capture the essence of PPP are as follows:

- 'risk sharing relationships based upon an agreed aspiration between the public and private sectors to bring about a desired public policy outcome'.

- ‘a cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined public needs through an appropriate allocation of resources, risks and rewards’.

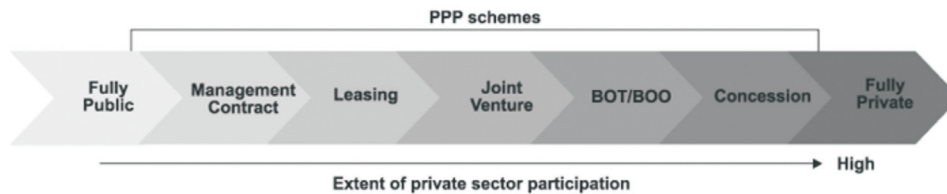
The central tenet of PPP is shared ownership of the project, which means sharing of risks and rewards. Thus the importance of a mutually conducive partnership agreement cannot be overemphasized. In general, most PPP frameworks may be shaped around the following concepts:

Effectiveness:	Success in meeting the PPP objectives; effectively managing and monitoring the; delivery of the program; Scalability/replicability
Efficiency:	Return on investment analysis; Affordability (public sector support); Developing and implementing a regulatory mechanism
Equity & Political:	Equity (access for poor and rural populations); Political/ trade union resistance; Contingent on wider public sector reform
Sustainability:	Economic returns to the private sector (within the medium to long term); Financing risk (within a long-term arrangement); Private sector appetitive and capability; Local stakeholders buy-in

Between fully public sector enterprises and fully private enterprises, there is a continuum of PPPs managed contracts, lease agreements, joint ventures, build-operate-transfer schemes, build-operate-own schemes, and concession agreements. A totally privatized enterprise does not have any shared responsibility with the public sector; it is a case of full divestiture to the private sector and thus can no longer be considered a PPP. The perceived commercial potential of providing public services is often associated with the significant market power of the public sector given that it may be the only provider of such services and the consumers do not have choices. The return on investment for the private sector partners may be achieved directly through fee for service, government concessions, or combinations of both. In the case of philanthropic private partners, the return could be non-monetary, such as ensuring a healthy, prosperous, and empowered community.

The different modalities, the number of partners and their roles, and the nature of service sought can affect the level of risk in the partnership. For instance, PPP enterprises in large countries like China, India, and Indonesia can be formed at the federal and state government levels with the federal government forging agreements with the state government, which in turn has agreements with private providers. These multi-layered PPPs seek enhanced outreach capacity through the NGO networks that are often more effective and efficient in delivering public services to the grassroots. It allows the public sector to utilize the strengths of different government entities and NGOs to become more responsive to local demand. Being negotiated agreements, PPPs are not always straightforward. There must be careful consideration of the medium- to long-term impact of PPPs, as many of the issues may not be readily apparent at the time of negotiations. PPP arrangements can vary across a risk-reward spectrum in terms of planning and design, construction/ development, implementation/performance, operating costs and capacity, variation

in revenue and demand for service, technology obsolescence and limited expertise, and terminal and residual risks. The partners should separately undertake a risk assessment using a detailed 'risk allocation matrix'. The risk assessment should be realistic and risks should be calculated for the medium- and long-term. Usually, the greater the risk, the more return the private sector partner will expect before signing up to a PPP agreement.



(Source: The National Council of Private Public Partnerships 2000)

Risks tend to be greater when dealing with ICT in education due to the rapidly changing technology, continuous curriculum reforms, ever increasing competition, and intangible and uncertain returns on investment. Thus private partners are often very cautious in entering PPPs for ICT integration in education. For the public sector the important thing to consider is the level of risk transfer that can be achieved through the PPP.

### Why PPP Model in Teacher Training?

It is possible to harness the abiding interest of the corporate sector in furthering the cause of teacher education through a framework. In general, it is preferable to avail of one time assistance for creation or improvement of infrastructure or facilities through use of corporate sector resources or expertise. To expect the corporate sector to fund the recurring cost on a continuous basis for long periods may be unreasonable. While the corporate sector is willing to participate, a framework would help the partnership to be well-defined with clear-cut roles and responsibilities. Corporate Social Responsibility (CSR) can also be made use of in conjunction with PPP to bring down the cost further and to improve the quality. The PPP model is utmost require in teacher training specially in the states where there is a high scarcity of trained teachers. It is estimated that there are 7.6 lakh untrained teachers in the country. The highest percentages of untrained teachers are in Arunachal Pradesh (75%), Assam (61%), Manipur (50%), Meghalaya (70%), Nagaland (71%), Sikkim (55%), Tripura (57%), Bihar (51), Jammu & Kashmir (45) and Jharkhand (45). These States need to look at their pre-service teacher training capacities as well. The States will have to undertake induction training for almost 13.3 lakh new teachers in the next three years for which preparedness is required. The highest number of teachers to be inducted are in Uttar Pradesh (3.9 lakh), Bihar (2.2 lakh), West Bengal (1.0 lakh), Gujarat & Rajasthan (0.6 lakh), and Orissa (0.5 lakh).

### Rationale for PPP

The following constitute some of the rationale for public private partnership in the school education system.

**(1) Easing the budget constraint:** There is a huge gap between the requirement and the availability of teachers in the country. For the year 2011-12, around Rs

21,000 crores (for SSA) has allocated which is 40 per cent higher than 15,000 crore allocated in the Budget for 2010-11. Majority of the expenditure has been incurred on opening of 309,727 new schools, construction of 254,935 school buildings, construction of 1,166,868 additional classrooms, 190,961 drinking water facilities, construction of 347,857 toilets, supply of free textbooks to 8.70 crore children, and appointment of 11.13 Lakh teachers. Last year moreover, around 14.02 Lakh teachers have received in-service training under SSA programme. In an estimate around 48,000 crores are further required apart from what has been sanctioned in 11<sup>th</sup> plan to implement RTE this includes hiring new teachers and provide them in-service training. It is almost impossible to provide such a large amount from the government alone in a short period of time. If the private sector is involved, it could augment the financial resources by providing school infrastructure for which it would be paid an annuity. Thus, without investing a very huge sum of money upfront, government would be able to cater to a much larger student population.

**(2) Efficiency gains:** Private sector has greater efficiency in certain areas because of specialization. For example, those in the construction sector can create innovative designs for schools; those in the financial sector can create appropriate instruments for raising funds for schools, and similarly, private sector can provide support services and even operational services with much greater efficiency as compared to the government sector because of specialization. Another reason for improvement of efficiency is the greater accountability of private staff to perform in a private set up as compared to the accountability of public sector staff because of the inherent nature of the arrangement.

**(3) Appropriate risk sharing:** It is a fundamental principle that in a partnership, any particular risk should be allocated to that partner which can best manage that risk. In a PPP, risk allocation between the public and private sector can be optimized to ensure that the overall risk is lowered significantly.

**(4). Speed of implementation:** In a public sector school project, many players are involved and coordination becomes difficult. In general, construction of school building and opening of a full fledged high school takes about three years in government. Since the private partner would be interested in getting payment as soon as the services start being made available, the speed of implementation would be much quicker. It should be possible to complete the project in not more than 18 months.

**(5) Reduction of costs:** Because of greater efficiency and competition among private partners, the cost of operation is expected to be much lower than in government set up. This is due to the greater managerial efficiency in the private sector.

**(6) Accountability for performance:** In the public sector, accountability for performance in schools is diffused. Therefore, there are many instances of failed schools, particularly in urban areas. However, in case of a PPP model, failed schools would mean no payment and hence is preferable.

**(7) Quality monitoring:** In case of PPP, government will monitor the quality in the school as payment is related to quality. The private partner would have an incentive to raise the quality of education in the school to be eligible for payment.

**(8) Greater flexibility:** Under PPP, there will be greater autonomy and flexibility at the school level whereas the government systems have rigidity. The private partner will have much higher autonomy in hiring teachers and organizing the various activities related to their capacity building.

### **ICT and PPP Model for Capacity Building**

A recent World Bank report notes that across the world, per capita economic growth is driven by three information and communication technology (ICT)-related factors: investments in equipment and infrastructure, investments in human capital (i.e. in education and innovation), and efficient use of labour (human resource) and capital that increases productivity (Schware, 2005). These three factors have a direct impact on the provisioning of education. For one, the demand to adopt ICT-supported education services, or e-education, is outweighing the capacity of governments to adequately support education reform and expansion. At the same time, these three factors are key areas of interest to the private sector, which includes local, national, and international private commercial enterprises, non-government organizations (NGOs), not-for-profit trusts, philanthropic organizations, and development agencies. This interest and support from the private sector can be leveraged to enable the sharing of resources to overcome such obstacles as limited funds and lack of technical expertise and project management capacities in ICT integration in education.

Public and private enterprises associated with e-education projects are driven by different agendas, which results in divergent targets and bottom lines. However, they may share common 'development' interests in having educated and healthy citizens, in putting in place the physical and social infrastructure that would improve the quality of learning, and in expanding markets for sustainable growth of e-education. A sharing of resources between public and private enterprises in e-education interventions make possible a shift away from collective, tax-based financing of educational infrastructure and services. Moreover, it is assumed that when public and private partners join forces to improve the provision of e-education services their complementary strengths can accelerate the pace of progress. Such partnerships draw in new ideas and capacities for problem-solving and leverage investments and professional expertise. Thus, the sum of the partnership wields greater influence, touches more people in need, and reaps benefits for all participants. The experience of Organisation for Economic Co-operation and Development (OECD) countries shows that public-private partnerships (PPP) can play a vital role in mobilizing the scale of resources required for financing and building ICT infrastructure, developing applications and locally relevant content, and developing the human capacity required for harnessing the full capacity of ICT productive tools .

### **Using PPP in ICT-Supported Education and Training**

The 2007 Global Knowledge Conference recognized the need to invest in human capacity development in many Asia Pacific countries to enable them to implement ICT initiatives in general and e-education initiatives in particular. Projections of demand for online learning by investment firms such as IDC, Merrill Lynch, and WR Hambrecht & Co., all indicate exponential growth in the future (Varoglu and Wachholz). This rapidly unfolding demand has emerged alongside an increased responsiveness from the private sector to engage in the development and delivery

of education services and products. Traditional models of providing for education and training can no longer meet the demand, opening up opportunities for PPPs both at the national and transnational levels. Partnerships with private providers of education services have had mixed reactions. Issues of national sovereignty and cultural values, equity and access, quality, and relevance of content to local needs, among others, have been raised and they need to be addressed via a good regulatory framework. Opening up the market to national and transnational providers also has implications for the survival of local providers, as the larger national and transnational providers have the advantage of economies of scale. Despite these concerns, however, PPPs have become more significant, largely because of the huge capital costs and new types of expertise associated with e-education interventions. Given that e-education has cross-sector, national, and transnational implications, it is important to consider partnerships both within a local and broader framework. For transnational PPPs, the World Trade Organization (WTO) General Agreement on Trade in Services (GATS) could provide national authorities some guidance in the development of a regulatory framework for opening up and managing education markets to national and international private providers. PPPs can be forged for various aspects of e-education provision as discussed here.

### **PPP for the Provision of Educational and Professional Training**

The increasing demand for education in general and higher education and continuing education in particular cannot be met by the current model for delivering education and training systems. PPPs are an alternative model:

**Online ICT skills training:** An example of PPP in training is the Cisco Academy, which provides online training through partnerships with public and private institutions or universities that they designate as Learning Solutions Partners or Cisco Learning Partners. The public institutions either integrate the Cisco training within their programs to increase the relevance of their programs and increase student enrolments, or provide space, for a fee, to deliver the training. Online training is also provided by Indian company Aptech in partnership with the Indian Technical and Economic Co-operation (ITEC) as part of a Government of India initiative to provide software design and applications training to local and international participants from a range of sectors, including education. Aptech has also initiated the India Window Program where foreign students and corporate executives are trained in information technology and multimedia in India and participate in a mandatory internship at IT firms in Bangalore, the 'Silicon Valley of India'. These skills training partnerships provide courses that are driven by specific industry demands and have globally recognized credentials. They enjoy a high status, unlike regular distance and online education programs. But this cannot be said of all transnational online programs, and national and global online training partners have to be carefully scrutinized for quality (see 'Intec Partnership to Promote ICT for Education').

**Corporate online training:** The flexibility and cost-efficiency of developing and delivering e-education and training, which traditionally has been the role of universities and IT vendors, has caught the interest of large multinational private organizations. These companies are forming 'concession' partnerships to jointly develop and deliver training on new equipment, software, and use of productive tools to public and private organizations. Hewlett-Packard has estimated that it

saved USD 5.5 million on training 700 engineers (Hall 2000), and IBM saved USD 200 million in one year by delivering its management development program online (Horton 2000). The Ford Motor company, which operates in 125 countries and six continents, has adopted the e-education services provided by the Ford Learning Network for all training and staff development needs. Lessons from these private sector initiatives have also been adopted for the training of senior managers and technical staff in the public sector, mainly with private vendor companies. In Asia Pacific countries, the base-level ICT capacity of senior managers, the turnover of staff with ICT capabilities within the public sector, and the peculiarities of individual government agencies can vary significantly. Thus, forging PPP agreements for customized training services on a long-term basis can be very attractive.

As the significance of ICT is realized, more universities are teaming up with leading ICT companies, such as learning management system (LMS) developers, professional associations and corporate organizations, to jointly develop and deliver new e-education programs. Partnerships for the use of TV and radio for education already exist in countries like China, India, Pakistan, and Thailand. The challenge now for Asia Pacific universities is to use integrated IT platforms for the delivery of university courses. In the West, using IT platforms to jointly develop and deliver training can be seen in the US army forming a partnership with universities in creating a unique e-learning program called 'eArmyU'. The program allows soldiers to take classes from 32 US universities while working locally or overseas (Voth 2003). There are also joint research and development (R&D) programs for complex learning management systems, multimedia tools for developing complex simulations and analysis, and course content development.

PPPs supporting university research particularly in the medical sciences, including pharmacy, IT and energy, are common and are likely to increase with the emergence of grid computing, which is largely driven by the private sector. The grid computing paradigm provides access to high-quality video conferencing facilities, large-scale distributed meetings and collaboration, and synchronous interactive sessions from multiple locations for research seminars, lectures, tutorials, and training. High-performance computing capacity for digitization, visualization, animation, and mapping has revolutionized research and communication while nanotechnology innovations have increased efficiency in data processing and storage. These technological innovations have the potential to enable large-scale resource sharing and to bring people, computing systems, and information resources together through collaborative partnerships between private and public sector research and education enterprises. To enhance their global research and knowledge innovation capacities, universities can form partnerships not only with other universities through university consortiums but also with private sector partners. The development of Open Access as a means of disseminating findings from government-funded research is being supported by Informatics India, a private enterprise. Similar research databases serving the mutual purposes of universities and the private sector exist in the West. In addition, public sector initiatives like the Australian Research Council's industry linkage scheme provide a facility through which university and private sector partners can engage in joint research, including in ICT innovations.

These research agreements are concession partnerships where limited public funds are provided by the public sector and the private sector partner matches the funding through a mix of cash and 'in-kind' contributions. The intellectual property produced or developed is often shared between the university (ies), the private sector



partner(s), and the researchers. Indeed it is not uncommon for private companies to tap university professors and students, as well as university infrastructure, in product or applications development. When Microsoft first introduced its Tablet PC, it funded a research trial use of the machine. But in this case the partnership is closer to a contract and the intellectual property is owned by Microsoft.

### **PPP-BOOT Model of Teacher Training**

BOOT (build, own, operate, transfer) is a public-private partnership (PPP) project model in which a private organization conducts a large development project under contract to a public-sector partner, such as a government agency. A BOOT project is often seen as a way to develop a large public infrastructure project with private funding. The public-sector partner contracts with a private developer - typically a large corporation or consortium of businesses with specific expertise - to design and implement a large project. The public-sector partner may provide limited funding or some other benefit (such as tax exempt status) but the private-sector partner assumes the risks associated with planning, constructing, operating and maintaining the project for a specified time period. During that time, the developer charges customers who use the infrastructure that's been built to realize a profit. At the end of the specified period, the private-sector partner transfers ownership to the funding organization, either freely or for an amount stipulated in the original contract. In a sense, it is true that there is no substitute for face-to-face (F2F) learning. F2F learning happens in four walls of a classroom but teachers in the 21st century face challenges that their predecessors did not. This is an age of easily accessible and easily digestible material because of all the electronic media available to students. Effective teaching in the 21st century requires more than just a basic understanding of educational theory and classroom management. Teachers must also collaborate with other educators to learn how to implement new technology in the classroom, and how to prepare students to enter a global economy. On the one hand, it may seem as if the role of teachers has grown immensely; they are now expected to be tech-savvy, computer literate and at the cutting-edge of education.

On the other hand, it can seem as if technology makes the traditional role of the teacher largely obsolete. This, however, is not quite true; rather, teachers must keep their traditional devotion to students and hands-on interaction while teaching students how to navigate their 21st century world. Having students engage in the learning experience is necessary to ensure that they will learn the new objectives presented to them. Teaching in the 21st century is difficult because students receive so much stimulation from television, computers and other electronic devices that many find school dull. The challenge for teachers today is to make lessons relevant to a student's everyday life. Making these connections will ensure that students are engaged in learning and will retain the important objectives covered each day. In this respect, our teacher-training programmes lack enormously. First, while we continue to teach would-be-teachers, the core theories related to pedagogy of teaching, we give very cursory introduction to new technology tools that, in the past one decade, have changed the face of teaching and learning. The gaps arise because of two reasons. Our teacher-training colleges are not well equipped with modern technology. They have what one can call demonstration-level equipment but what is needed is the possibility of allowing young would-be-teachers to play and experiment with technology. The larger gap is in availability of the right trainers. The trainers in

teacher-training colleges have very limited mastery over technology and they lack complete experience in making learning objects that make classroom education more meaningful. It would be futile to imagine that trainers in these colleges would become master trainers for use of technology in classrooms. Their mindset is totally locked with job security. It would be necessary to bring in expertise from private information and communication technology (ICT) companies and incorporate that with training programmes in teacher-training colleges. We have an impressive band of young computer experts in ICT companies; we also have a small but certain number of good teachers who are good in core subjects and are tuned with the use of technology. What is needed is to create an environment where this expertise is incorporated to create good courseware for training of would-be-teachers.

What is more critical is to train these young people in the process of creation of learning objects that link the concept with experiences in life. It is fusing of ideas and imagination with the use of right and appropriate technology to create enriched learning material. In a sense, private-public partnerships (PPPs) would make teacher-training colleges more meaningful and productive. We cannot expect such things to happen purely on a charity basis. It is in this respect that the National Council for Teachers Education has to come out to with a more open and flexible PPP policy that would attract ICT companies to invest in teacher-training colleges. At present, globalization refers to the growing interconnectedness of the world. Technological advances have made it possible for companies to have international operations. Television, the internet, and other media make cultural exchanges across continents possible in only minutes. Giving students an understanding of globalisation will create effective future leaders because they will be capable of seeing things from a worldview. Teachers who are skilled in creating lessons that teach students about the importance of globalisation are essential to education in the 21st century. Teachers have to acquire these skills and they can never stop learning. The education profession is constantly evolving and will continue to do so throughout the 21st century. Improvements in instructional strategies and technology are always happening. Being an effective teacher involves staying current on new issues and developments in the field. The teacher-training colleges have to imbibe these aspects in teacher-training programmes. Professional development in the 21st century will involve staying abreast of new research and training in new developments.

Caution using BOOT model:

1. A tender is floated inviting bids to set up computers (with basic software) in specified schools, and also to provide one or more trainers/ support persons in each school who will take care of training and support in that school, for a specified period of years.
2. Businesses respond to the bid and typically a vendor is chosen mostly on the 'least cost' principle, .The companies that mostly have been bidding for these CLPS are NIIT, Educomp, Everron, Aptech etc.
3. 'Site preparation', meaning setting up a computer room with furniture and power, in the identified schools, is the responsibility of the government.
4. The vendor installs the computers and software

5. The vendor deputes the person ('trainer') whose role is to be with the school regularly / daily and train students on computers as per the timetable of the school.
6. After the end of the specified period, the assets are handed over to the government.
7. The government in return makes a fixed payment (based on the tender amount) to the vendor on a periodic basis (from monthly to quarterly). These amounts can be quite significant<sup>6</sup>.

## Conclusion

In the past few years' global initiatives such as the Digital Opportunity Task Force, the Global Knowledge Partnership, the UN ICT Task Force, and the World Summit on the Information Society have significantly increased awareness of the vital role that international cooperation can play in providing access for all to ICT as a tool for economic and social development. They have established multi-stakeholder partnerships, such as the Global Digital Opportunity Initiative (GDOI), as a mechanism for developing creative PPPs and mobilizing private sector interest in supporting ICT for development and education. There are challenges to confront. On one hand, the private sector is less interested in financial assistance to the education sector than in the profitability of the demand for its products and services in the long run. On the other hand, demand for the new access devices to the Web, new broadband networks, and new social networking applications such as blogs, wikis, and music and video sharing, and the increasing availability of educational content for online learning are becoming a part of global education and learning services. This demand and growth has the potential to generate more interest from the private sectors and provide alternative ways to mobilize community interest and action toward furthering PPP in the education sector.

From a national perspective, e-education is an important strategy for adapting the workforce to the technological revolution. It is also a tradable service with no boundaries. Education for all is a real possibility for the first time in human history and PPPs have the potential to make a significant contribution to delivering this reality. Perhaps the most challenging task for governments will be the development of a sound understanding of what is entailed in PPPs and creation of conducive environments for sustaining the interest of both public and private partners. Knowledge, skills, and expertise in developing, negotiating, implementing, and monitoring projects and programs with partners that may have competing agendas are crucial for the success of PPPs in ICT for education.

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108 Capacity building of elementary...

**Mrs. Neeti Dutta**, Assistant Professor, Ideal Institute of Management and Technology

GGSSIP University, 16-X Institutional area Karkardooma Delhi-110092, India. [tanudutta37@gmail.com](mailto:tanudutta37@gmail.com)

**Mr. Indrajeet Dutta**, Assistant Professor, Lingaya's Lalita Devi Institute of Management and Sciences, GGSIP University, 847-848, Mandi Road, Mandi New Delhi-110047, India. [indraneet@gmail.com](mailto:indraneet@gmail.com)

**Ms. Shibani Ray**, Head, ECCE, Lingaya's Lalita Devi Institute of Management and Sciences, SCERT, 847-848, Mandi Road, Mandi New Delhi-110047, India.

# Engaged Learning Strategies and Effective Education of Adult Women

FAZALUR RAHMAN\*, NABI BUX JUMANI\*\*, AMEENA ABBAS ALI\*

*\*Allama Iqbal Open University, Islamabad, Pakistan*

*\*\*International Islamic University, Islamabad, Pakistan*

**Abstract:** This research was undertaken to investigate the role of engaged-learning strategies in adult education of women in an ongoing basic computer education program in a vocational centre of Lahore city, Pakistan. The sample of the study consisted of 16 adult women learners enrolled in basic computer education program of the vocational centre along with their teachers. Data was collected from teachers and adult women through questionnaire and interview. It was concluded that engaged learning strategy played an effective role in enhancing the knowledge of adult female learners and the teachers. It was also found that engaged learning developed confidence in the adult women and as a result they produced knowledge and products for themselves and as well as for the community. It was further found that engaged learning helped the adult female learners to discover concepts and apply skills. It was concluded that engaged learning strategy enables the learners to interact with the physical world and other people, and this helps them in their social life. It was recommended that engaged learning strategy may be extensively used in the adult women education programs.

**Key words:** Engaged learning, Learning strategies, Adult education, Women education.

## Introduction

Learning is the process of gaining knowledge and expertise (Knowles, 1998). However, this process of gaining knowledge and expertise varies in the life span of persons. Pedagogically, a learning process takes the form of a number of cognitive activities that satisfies the learning goal (Hawryszkiewicz, 2007). On the other hand, engaged learning is a type of education that put classroom skills and knowledge into practice while serving the community (Main Centre of Engaged Learning, 2006). Engaged learning is the process in which students actively participate in their learning. Students are involved on the first day, in the decision making of the course of their study. Students vigorously research, discuss, create projects, and use technology to make discoveries based on their choices. Students are active participants in the learning process. The teacher serves as a “coach or facilitator,” guiding students to the desired goal (The Teacher Development Network, 2008).

In recent years, researchers have formed a strong consensus on the importance of engaged learning not only in formal schools but also in the field of adult and continuing education. This consensus, together with recognition of the changing needs of the 21<sup>st</sup> century has simulated the development of specific indicators of engaged learning. Indicators of engaged learning have been developed by Jones, Valdez, Nowakowski and Rasmussen (1994) enlisted these indicators as:

1. Vision of learning
2. Tasks

110 Engaged learning strategies...

3. Assessment
4. Instructional model
5. Learning
6. Teacher roles
7. Student roles

Engaged learners are essentially responsible for their own learning. Engaged learning strategy also encompasses working together with other students and or other teachers (NCRL, 2005). The students may be engaged in four different ways as pointed out by (Bowen, 2005).

- a. student engagement with the learning process,
- b. student engagement with the object of the study
- c. student engagement with the context and
- d. student engagement with the human condition.

Engagements are essential part of the learning process and they provide a basis for defining the services needed at each learning step. It may be defined as number of interactions to achieve a learning sub-goal within a larger goal as described by Bednar, Eglin and Welch (2007). For example, preparing and assessing an assignment may include a number of engagements, such as clarifying the problem, discussion with peers, or looking up references. This is followed by actual writing of assignment and finally its assessment.

Typical engagements in learning include:

- a. Preparing a document that may be an assignment or a report,
- b. Obtaining feedback following by assessment,
- c. Presenting and following up a query,
- d. Round table discussions on a topic.

It may be summed up that an engagement includes:

1. It has a goal.
2. Actions define to accomplish the goal.
3. Services to carry out the actions such as chat rooms and discussion databases.
4. Local private context is what is directly needed to complete the engagement, as for example a critique.
5. Global context.

The concept of engaged learning has roots in well-established and researched learning constructs such as interest (Dewey, 1913), effort (Brophy, Rohrkermpfer and Goldberger, 1983; Meece and Blumenfeld, 1998), motivation (Pintrich and De Groot, 1990; Skinner and Belmont, 1993) and time on task (Berliner, 1990; Lentz, 1998). Bulger, Mayer and Almeroth (2006) characterized engaged learning as having high levels of active learner participation designed into the plan for learning. Engaged learning is described as an active learning as learners take responsibility for their own learning during which they are “actively developing thinking/learning

strategies and constantly formulating new ideas and refining them through their conversational exchanges with others” (Hung, Tan, and Koh 2006, p.30). Different frameworks for engaged learning offer means for understanding, designing for and evaluating engagement in learning. They may also shed light on how to integrate digital technologies that resonate with today’s digital native students of informed and pedagogically sound ways (Jennifer and Yeonjeong, 2008).

Engaged learning is the process in which students actively take part in their learning. Students involve in the decision making of the course of their study. Students vigorously research, discuss, create projects, and use technology to make discoveries based on their choices. Students actively participate in the learning process. The teacher serves as a “coach or facilitator,” guiding students to the desired goal. Thus it allows students to participate in “real-life” activities through collaboration, exploration, and discovery with peers. Engaged learning projects do not focus on one subject, but the integration of many or all subjects. Assessment in engaged learning can be very diverse. Assessment should be real, continuing, and encouraging” (Belt, et al. 2008). In engaged-Learning a part or all of the class objectives are learned by working on projects with a community partner (Keene State College, 2009).

Engaged-Learning is an umbrella term used for a variety of educational approaches that involves joint intellectual effort by students, or students and teachers together. This means that everyone learn from everyone in the classroom. Usually, students work in groups of two or more, jointly searching for understanding, solutions, meanings, or creating a product for their or community welfare. Engaged- Learning activities vary widely, but mostly focus on student’s exploration or application of the course material, not simply the teacher’s presentation or explanation of it.

Engaged learning promotes the development of autonomous learners who are motivated to become, and responsible for being, in control of their own learning processes. It does not matter whether students work in groups or alone they learn how to take responsibility for their own learning. (Engaged Learning with Technology, 2009).

On the other hand, Jonassen, et al (2004) argue that engaged learning occurs when learners are active, constructive, intentional, cooperative, and working on authentic tasks. Human learning is a naturally active mental and social process. When humans are engaged in learning in natural contexts, they interact with their environment and manipulate the objects in that environment, observe the effects of their interventions and construct their own explanations of the phenomena and the results of the manipulation and then share those interpretations with others. Through formal and informal apprenticeships in communities of play and work, earners develop skills and knowledge that they then share with other members of those communities with whom they learned and practiced those skills. In all of these situations, learners are actively manipulating the objects and tools of the trade and observing the effects of what they have done.

Literature review also indicated that most contemporary theories of learning agree that engaged learning requires a meaningful task, and the most meaningful tasks are those that emerge from or are at least simulated from some authentic context (Jonassen and Strobel, 2006).

Engaged learning is often collaborative. Humans naturally work in learning and



knowledge building communities, utilizing each others' skills and appropriating each others' knowledge. There are certain indicators of engaged learning as pointed out by Jones and his colleagues (1995) as cited by (Hung, Tan and Koh, 2006) shown below:

**Table 1:** *Indicators of engaged learning*

<b>Variable</b>	<b>Indicators of Engaged Learning</b>	<b>Definition of Indicator</b>
Vision of Learning	Responsible for learning	Learner involved in setting goals, choosing tasks, developing assessments and standards for the tasks; has big picture of learning and next steps in mind.
	Strategic	Learner actively develops repertoire of thinking/ learning strategies
	Energized by learning	Learner is not dependent on rewards from others; has a passion for learning.
	Collaborative	Learner develops new ideas and understand conversations and work with others.
Tasks	Authentic	Pertains to real world, may be addressed to personal interest
	Challenging	Difficult enough to be interesting but not totally frustrating, usually sustained
	Multidisciplinary	Involves integrating disciplines to solve problems and address issues
Assessment	Performance-based	Involving a performance or demonstration, usually for a real audience and useful purpose
	Generative	Assessments having meaning for learner, maybe produce information, product, service
	Seamless and ongoing	Assessment is part of instruction and vice versa; students learn during assessment
	Equitable	Assessment is culture fair

Instructional Model	Interactive Generative	Teacher or technology program responsive to student needs, requests (e.g. menu driven). Instruction oriented to constructing meaning; providing meaningful activities/experiences
Learning Context	Collaborative	Instruction conceptualizes students as part of learning community; activities are collaborative
	Knowledge-building	Learning experiences set up to bring multiple perspectives to solve problems such that each perspective contributes to shared understanding for all; goes beyond brainstorming
	Empathetic	Learning environment and experiences set up for valuing diversity, multiple perspectives, strengths
Grouping	Heterogeneous	Small groups with persons from different ability levels and backgrounds
	Equitable	Small groups organized so that over time all students have challenging learning tasks/ experiences
	Flexible	Different groups organized for different instructional purposes so each person is a member of different groups; works with different people
Teacher Roles	Facilitator	Engages in negotiation, stimulates and monitors discussion and project work but does not control
	Guide	Helps students to construct their own meaning by modeling, mediating, explaining when needed, redirecting focus, providing options
	Co-learner	Teacher considers self as learner; willing to take risks to explore areas outside his or her expertise;
	Co-investigator	collaborates with other teachers and practicing professionals
Student Roles	Explorer	Students have opportunities to explore new ideas/tools; push the envelope in ideas and research
	Cognitive apprentice	Learning is situated in relationship with mentor who coaches students to develop ideas and skills that stimulate the role of practicing professionals (i.e. engage in real research)
	Teacher	Students encouraged to teach others in formal and informal events
	Producer	Students develop products of real use to themselves and others

### Related Research

Wieman (2005) focuses on engaged learning in reference with science. He found that students are actively thinking about subject and applying scientific ideas to solve problems. He further concluded that student meaningfully engaged in learning science

Bowen (2005) found that students engaged in learning in four different ways. Student engaged with the learning process, object of the study, contexts and human condition. He recommended following different strategies that one may use to implement meaningful engaged learning:

- a. Short-term feedback
- b. Writing across the curriculum
- c. Cooperative learning
- d. Learning Communities

On the other hand, Munir (2001) presented a model of engaged learning His model of engaged learning has four aspects:

- i. The first is Environment that is student/teacher relationship characterized by teachers having high expectations and students dealing with their confidence in abilities
- ii. Second aspect is Experience which is consisted on patterns and learning styles
- iii. Third is motivation which involves interest and autonomy
- iv. Fourth is meaning which involves connections and mental frameworks.

North Central Regional Educational Laboratory (2005) developed specific indicators for engaged learning. These indicators act as a compass for renovation of instruction, helping educators chart an instructional course and maintain an orientation based on a vision of engaged learning and what it looks like in the classroom.

Similarly, Curriculum, Technology, and Education Reform (2002) found that engaged learning is a comprehensive student-centered approach. It energizes students so they may have a lifelong passion to solve and understand problems. This approach allows students to take responsibility for their own learning. The teacher's role is to create activities with certain specific curricular goals in mind and the students then use these activities for information and are assessed through a comprehensive grading rubric.

The strategy of engaged learning is very successfully applied in adult and life-long learning

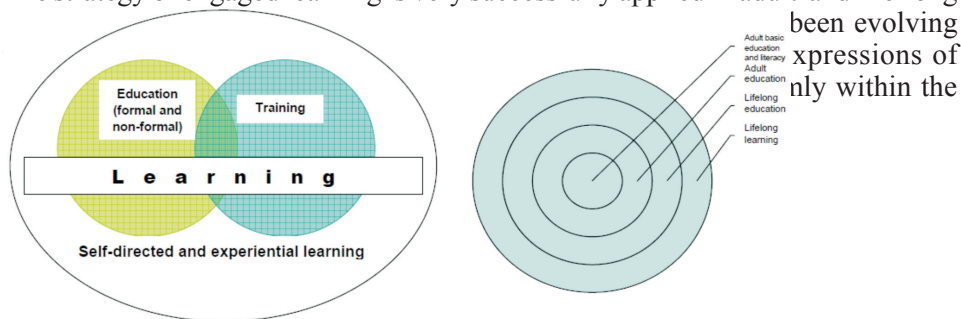


Figure 1: Convergence of adult education and lifelong learning (Ahmed, 2009)

The purposes of adult education cannot be served or replaced by formal education system. The key challenges in adult learning and education are the wider access, improved quality and enhanced relevance. This critical role of adult education cannot be neglected in any society (ICAE, 2008).

### **Adult Women Education in Pakistan**

Adult education plays a vital role in human capital formation. It raises the productivity and efficiency of individuals and produces skilled manpower that is capable of leading the economy towards the path of sustainable economic development. Like many other developing countries, the situation of the adult education sector in Pakistan is not very encouraging (Memon, 2007).

According to National Institute of Population Studies (NIPS) Islamabad, the estimated population for 2005 is 159.061 million of which, 51.9% are of males and 48.1% are females (National Report of Pakistan, 2008). It ranked 134<sup>th</sup> out of 177 countries on the 2006 Human Development Index (UNDP, 2006). Literacy rate is low among girls and women in Pakistan. Female literacy rate is 42% against 68% male.

Adult literacy centers cater the needs of 15+ age group people. At present, there are 70,000 adult literacy centers having an enrollment of 1.7 million. (National Report of Pakistan, 2008). In adult literacy centers primarily focus is on reading writing and numeracy skills.

Vocational and technical education is essential for socio-economic development of a country. Pakistan inherited a weak vocational education and training (VET) base at the time of independence in 1947. Vocational education was introduced in mid 1950s with setting up of two polytechnic institutes in Karachi and Rawalpindi. Half a century later, there has been a manifold increase in the number of institutions, enrolments and teachers imparting vocational education. During the period 1950-2002, hundreds of middle, secondary and higher level vocational education and training schools, polytechnic institutes, colleges and universities in government and private sector have been set up (Munir, 2002). The terms technical and vocational (TVE) are some time used synonymously. However in the Pakistani context, the term technical education refers to post secondary courses of study and practical training aimed at preparation of technicians to work as middle level supervisory staff; whereas the vocational education refers to as lower level education and training for the preparation of semi skilled and skilled workers in various trades.

According to National Report of Pakistan (2000), Vocational education and training in various trades were offered (one year certificate and two years diploma) in vocational institutes. There were 194 vocational institutes, with an enrolment of about 9500, operating under Provincial Education Departments. Provincial governments are also running a number of vocational institutes, particularly for females.

The comparative analysis of vocational education and training (VET) in all the National Education Policies of Pakistan since 1959 show that the number of vocational and technical education institutions in the country is 43% of the total that is close to female population ratio but their enrolment is 20%, almost one fifth of the total enrolment which is a disappointing indicator. The reason for this sharp decline in female enrolment in vocational education institutions is that the

vocational trades offered are not considered fit for women workers in Pakistani society. Generally, people consider trades and professions gender-specific.

Pakistan is a developing country with a population of approximately 160 million. It ranked 134<sup>th</sup> out of 177 countries on the 2006 Human Development Index (UNDP, 2006). Keeping in view the imperative role women play in any society, different organizations, NCHD, City District Government, Bunyad, TEVTA, and Social Welfare etc established community technology learning centers/vocational centers in the four provinces of Pakistan. The focus of these centers was to build capacity, train and enhance the competency of the females of Pakistan with the help of engaged learning strategies so that they could participate more actively and play an effective role in the progress of the country. This study was undertaken to visualize the problem of engaged learning strategies and effective adult education of females.

### Objectives of the Study

The objectives of the study were to:

- i Analyze indicators of engaged learning which are relevant to female adult education.
- ii Assess the effectiveness of engaged learning in vocational centers of adult female.

### Method

#### Sample

The participants of the study consisted of 16 adult female learners enrolled in the basic computer education program along with their teachers in the vocational centre of City District Government Lahore. The duration of the Program was three months and data was collected after two months. The detail of the sample is given in Table 2 that reveals that majority of adult females belonged to age group of 19-20 years.

**Table 2:** *Age profile of female adult learners*

Age of the Learners	Number of Learners
17-18	2
19-20	10
21-22	2
23-24	2

#### Research instrument

A questionnaire and interview schedule were used to collect data for the research. A six-item scale was developed to analyze the effectiveness of the indicator of

engaged learning i.e. 'student roles' and an interview schedule was developed to analyze the effectiveness of other indicator that is 'teacher roles'. The questionnaire was based on a five Likert scale ranges from strongly agree to strongly disagree. The interview schedule was prepared for the teacher to assess the effectiveness of the indicator of the engaged learning i.e. teacher roles.

## Analysis and Results

Data was collected separately from the female learners and the teacher/facilitator. Information gathered from questionnaires was processed and tabulated. As the data was nominal in nature, therefore Chi-Square was used to analyze the data. The summary of students' responses is presented in the Table 3:

**Table 3:** *Students opinion*

Category	Statement	SA	A	UNC	DA	SD	$\chi^2$
Explorer	The course increases the skill to explore.	14	2	0	0	0	46.5 df (4)
	The course positively helps in social life.	12	4	0	0	0	34 df (4)
Cognitive Apprentice	Feedback is provided on the assignments after completion in form of grades and scores.	9	7	0	0	0	24.6 df (4)
	Opportunity is provided to share work with others.	15	1	0	0	0	54.6 df (4)
Producer of Knowledge	The course helps to discover concepts and apply skill.	12	4	0	0	0	34 df (4)
	Engaged Learning develops confidence to generate knowledge of one's self and community.	16	0	0	0	0	54.6 df (4)

### Summary of interview

The researcher interviewed the teacher of the vocational technology centre to analyze the effectiveness of the indicator of the engaged learning i.e. Teacher Roles. The teacher, who had the professional experience, found the vocational teaching to adult female a challenging task. The teacher being a facilitator monitored the learners, giving directions and engaging them in discussions individually and helping them in fulfilling their assignments and tasks. The teacher acted as a guide and helps adult

learners as a mediator and used group technique for learning by sharing.

The teacher expressed the view that they face the communication problem with the adult learners because of the weak vocabulary. Teachers usually provided feedback was provided to the learners by awarding grades and marks. The teachers also told that they also acted as a co-learner they gain new experiences through sharing the knowledge with adult female learners. The instructors also indicated some problems like lack of proper staff, stationery items, computer maintenance, and non-availability of internet.

### **Summary of questionnaire**

Engaged-Learning increased the skill of the adult female learners to explore.

It capable the learners to interact with the physical world and other people who positively helps them in their social life. The female learners received continuous feedback in form of grades and scores, which encouraged them to cope with different aspects of complex problem or skill. Engaged learn ing process provided the adult learners with the opportunity to learn by sharing. Engaged-Learning helped the adult female learners to discover concepts and apply skill. Adult female learners were fully agreed that engaged-learning developed confidence in them and now they are produce knowledge and products for themselves and for the community as well.

The study investigated the effectiveness of engaged learning in adult female education. It was found that engaged learning developed confidence in the adult female and as a result they produce knowledge and products for themselves and as well as for the community. It helped the adult female learners to discover concepts and apply skill. It also provided the opportunity of learning to the adult learners. It was also found that engaged learning strategy enables the learners to interact with the physical world and other people and this helps them in their social life.

### **Recommendations**

In the light of present study, it is clear that engaged learning plays a significant role in the female adult education, study therefore recommends that:

- i It was recommended that engaged learning strategy may used in the adult female education programs.
- ii As engaged learning requires practice and for appropriate practice availability of computers may be ensured for every learner at the centre.
- iii There is need of appointment of proper helping staff along with the teacher/ facilitator in each computer as the teacher has to perform multiple duties alone.
- iv Vocational centers may be provided all the facilities including stationery and multimedia support.

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**Fazalur Rahman** is Lecturer, Department of Early Childhood Education & Elementary Teacher Education, Allama Iqbal Open University, Islamabad, Pakistan. [fazalalaiou@yahoo.com](mailto:fazalalaiou@yahoo.com)

**Prof Dr Nabi Bux Jumani** is Professor, Department of Education, International Islamic University, Islamabad Pakistan. [nbjumani@yahoo.com](mailto:nbjumani@yahoo.com)

**Ameena Abbas Ali** is Research Fellow in MS leading to PhD at Allama Iqbal Open University, Islamabad, Pakistan.



# Role of Open and Distance Learning in the Attainment of United Nations Millennium Development Goals (MDGs) in Cross River State, Nigeria

ARIKPO B. ARIKPO, ROSELINE E. TAWO, MARCELLINUS U. OJUAH,  
CHRIS C. CHUKURAH

*University of Calabar, Cross River State, Nigeria*

**Abstract:** This study reports the view Cross River State distance education learners hold about the relevance of Open and Distance Learning (ODL) in the process of attaining the United Nations Millennium Development Goals (UN MDGs). A brief review of the concept and methods of ODL in making information and knowledge available to people was made. Also, the United Nations MDGs were identified and problems encountered in meeting the targets briefly outlined. It is postulated that, greater awareness of the concept and methods of open and distance learning in meeting the targets of Millennium Development Goals (MDGs) was not being created sufficiently to meet the felt needs of targeted populations. The sample for the study was made up of 88 students purposively selected from the open and distance learning study centres in Calabar Metropolis. The study design was survey research. The instrument was a 26 item Likert-type scale designed by the researchers. Simple percentages were adopted for data analysis. Based on the analysis, it was found that 69.70% (seventy percent) of the respondents agreed that ODL methods provided wider access to learning and training, and the acquisition of functional literacy skills for all learners, which are relevant in the attainment of UN MDGs. Based on the findings, it was recommended among others that: programmes for attainment of UN MDGs should incorporate the views of the targeted population in a practical attempt to attain the MDGs in the Cross River State and elsewhere; the ODL methods of CEP, ETRP and IBEP should be relied upon for widest reach to the targeted individuals and groups for the benefits MDGs.

**Key words:** Open/distance learning (ODL), Learning assessment, Millennium Development Goals (MDGs), Cross River State.

## Introduction

The success of every nation's effort in economic, social, political and technological development depends largely on her ability to make education accessible to her citizens. This has inspired and posed challenges on the Nigeria government to provide education for all her citizenry. The government saw open and distance learning system as a big relief to its objective of, making education available to all its citizens. Ihieonyemolor and Obioma (2007: 201) reported that, the efforts of the government in the development of open and distance learning dates back to Ashby Report on higher education in 1960, when it recommended the establishment of the University of Lagos, considering the concentration of people and the higher demand of university education. Open and distance learning is no longer new in Nigeria.

Ipaye (2006, p.35) explained that, open and distance learning began in Nigeria in the 1940s as correspondence studies, when many Nigerians enrolled in colleges in Great Britain and studied for many examinations. This, according to him continued

until some Nigerian Universities, through their Institutes of Education, started distance learning programmes. Contributing similarly, Adekanmbi (1993, p.95) narrated that:

The emergence of the correspondence system of instruction in the early part of the 18<sup>th</sup> century marked a turning point in the provision of educational opportunities for millions of people all over the world. It signified a major departure from the traditional face-to-face approach to teaching and learning by making it possible for teachers and learners to be separated in time and space.

The National Policy on Education (2004: 34) made it clear, where it said. "Correspondence education would be encouraged, being a low cost method of mass education". Mass education, according to Omolewa (1985, p.5) involves;

Adult education, to the school of Thomas Hodgkin and Rowland Chadwick, known as "fundamental education", the acquisition of reading and writing skills which are to be applied for the development of the community. Thus adult education is concerned with agricultural extension, community development and social welfare. It involves the building of latrines; the construction of Maternity Homes to facilitate health delivery and the establishment of village industries to stimulates economic growth and generate a spirit of self-reliance.

Apart from the correspondence method of mass education, Tawo, Arikpo and Ojuah (2008: 2) listed the multimedia approach, tutorial approach, small group problem solving approach, individualised instruction approach, use of information technology approach and support services of counselling, to form part of open and distance learning methods of instructional delivery. Tawo et al. (2008: 2) explained that distance learning is a planned form of education that uses technology to bridge the distance gap. Adekanmbi (1993: 97) categorised distance learning approaches into four (4) models, namely; the correspondence school model, the consultation model, the integrated model and the distance teaching or Open University model. The objectives of Open and distance learning according to the National Open University of Nigeria (2006, p.18) consist of programmes;

Essentially designed to widen the access to education and to ensure equity and equality of opportunities for all and sundry. Open and Distance Learning Education is to be used as an instrument for poverty alleviation, especially in rural communities, by providing opportunities that support Education For All (EFA) and lifelong learning. Open and distance learning is to equip the Nigerian populace for the emerging global culture of technological literacy via its programmes and use of information and communication technology.

The objectives of instructional methods of Open and Distance Learning are quite consistent with the attainment of goals of the Millennium Declaration, by evidence of Fasokun (2006: 21-43) about which he disclosed that, in September, 2000, 189 nations met and committed themselves to combat poverty and make development a reality for everyone in the United Nations Millennium Declaration"... specifically, they called for halving, by the year 2015, the number of people who live on less than one dollar a day... they emphasised the need for promoting gender equality

and empowerment of women, guaranteeing a basic education for everyone and supporting principles of sustainable development. Continuing, Fasokun (2006: 22-24) listed Millennium Development Goals (MDGs) as follows:

- Goal 1: Eradication of extreme poverty and hunger.
- Goal 2: Achieve Universal primal education.
- Goal 3: Promote gender equality and empower women.
- Goal 4: Reduce Child Mortality.
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a Global Partnership for Development

Concluding, Fasokun (2006, pp.29-41) said the achievement of MDGs will be largely determined by the extent to which rural poverty reduction is achieved.

### **Statement of the Problem**

The standard of education in Nigeria has been observed to ill-equip the learners with career related functional literacy (Arikpo, Tawo and Ojuah, 2008, p.16; Ngwu, 2003, p.viii; and Dike, 2002, p.2). Ben (2006, pp.263-288) observed that, "sole focus on access to education may not deliver education for all. Education for all should be accompanied with acquisition of functional literacy in order to accommodate quality and quantity. Functional literacy according to Kolawole and Adepoyi (2006, p.19) refers to literacy which goes beyond ability to read and write; it is an emancipatory practice that requires people to be able to read, speak and understand what is read, and be able to use the knowledge to solve their socio-cultural and economic problems.

Continuing, Okedera (1981) in Kolawole et al. (2006, p.19) remarked that, for literacy to have impacts on the recipients, it must be functional and permanent. Unfortunately, the views of learners in Open and Distance learning in the Cross River State have never been assessed, in terms of how this form of learning methods are relevant in meeting the Millennium Development Goals' eight-point criteria, as far as their personal and community development are concerned. Observably however, Tawo, Arikpo and Ojuah (2008, p.3) stressed that distance learning uses methods which focus on learners needs. Contributing, Perreton (1993) in Tawo et al. (2008, p.3) disclosed that distance learning involves situations in which learners' physical separation from the educational principles is bridged by postal mail, e-mail, fax, computer conferences, telephone or periodic tutorial sessions etc. This means ODL provides both education for all and the kind of quality needed for learners' permanent functional literacy.

#### **Purpose of the study**

The main focus of this study was to access the overall views of Open and Distance Learning students (ODL) on the adequacy of Correspondence Education Programme (CEP); Radio and Television Education Programme (RTEP); and Internet-Based

Education Programme (IBEP) methods in the attainment of United Nations Millennium Development Goals and education for all in Cross River State of Nigeria.

#### Research question

What is the overall view of students of ODL on adequacy of: Correspondence Education Programme, Radio and Television Education Programmes, and Internet-based Education Programme methods in the provision of education for all in Cross River State of Nigeria?

#### Significance

Generally, the merit of this study is that, results from the assessment of learners views provide critically needed data for planning programmes on attainment of MDGs targets, without which the beneficiaries are either victimised or are ignorant of what may be happening in their lives and environment.

#### Assumption

It is assumed that all the respondents are adults who know the value of education in personal and community capacity building. Most of them may have suffered one form of deprivation or the other and so are competent and reliable as respondents of this kind of study.

### Method

The sample was made up of 88 students of open and distance learning study centres in Calabar South and Calabar Municipality Local Government Council Areas randomly selected for this study. The research design is survey research. The instrument was a 26 item Likert-type scale questionnaire designed by the researchers. The questionnaire had sections A and B. Section A contains the personal data of the respondents. While Section B had four sub-headings which briefly described some instructional methods used in ODL instructional delivery, and also stated how the ODL methods enhance the attainment of each of the eight MDGs. Information in Section B served as the main variables for the study. Simple percentages was used in analyzing the data collected.

### Findings

**Table 1:** *Percentage analysis of student's view on the adequacy of; correspondence education programme; radio/television education programmes and internet-based education programmes methods in the provision of education for all (N=88).*

S/N	ITEM	STRONGLY AGREE - 4		A G R E E - 3		DISAGREE 2		STRONGLY DISAGREE-1	
		F	%	F	%	F	%	F	%
1	<b>Correspondence Education System (CES).</b> ODL increases access to learning and training through correspondence education system.	31	35.2	48	34.5	7	8.0	2	2.3
2	ODL encourages continuous learning and retraining through correspondence education system made available directly to the learners.	37	42.0	47	53.4	3	3.4	1	1.1
3	ODL augments the work of conventional institutions where they are unable to admit all candidates at a particular time through CES	25	28.4	38	43.2	21	23.9	4	4.5
4	Through correspondence education system, ODL encourages the working class and family members to study at their convenience using study materials posted to them.	30	34.1	45	51.1	6	6.8	7	8.0
5	<b>Educational Radio and Television Programmes (ERTP).</b> ODL provides life and recorded lectures to people in their homes through satellite, cable television and radio.	30	34.1	35	39.8	16	18.2	7	8.0



6	ODL provides speedy and efficient training for key target groups through TV and radio educational programmes.	25	28.4	42	47.7	17	19.3	4	4.5
7	ODL provides lifelong and inclusive learning through TV and radio system irrespective of the age, sex and location of the learners.	25	28.4	45	51.1	12	13.6	6	6.8
8	ODL mounts educational/ literacy campaigns to a larger audience through educational TV, radio jingles and programmes.	23	26.1	53	60.2	10	11.4	2	2.3
9	<b>Internet-based Education Programmes (IBEP).</b> ODL provides entrepreneurial training for learners by delivering study materials in electronic format through computers.	22	25.0	45	51.1	16	18.2	5	5.7
10	ODL facilitates teacher-student interactions through e-mail	17	19.3	45	51.1	14	15.9	12	13.6
11	ODL promotes student-student and, one to one interactions for effective studies through computers.	19	21.6	44	50.0	15	17.0	10	11.4

12	ODL provides opportunities for one-to-many and many-to-many interactions through conferences assisted by computers and bulletin boards.	24	27.3	45	51.1	15	17.0	4	4.5
13	<b>ODL Relevance in Attainment of UN MDGs.</b> ODL is more suitable for giving lessons on functional and vocational literacy to all manner of learners, thereby reducing unemployment and extreme poverty.	30	34.1	41	46.6	9	10.2	8	9.1
14	ODL is a more convenient tool for achieving universal literacy, by its strategies of providing access to all learners continuously.	33	37.5	42	47.7	10	11.4	3	3.4
15	ODL methods provide learning opportunities and materials without bias to gender, thereby empowering women and also eliminating gender disparity.	26	29.5	48	54.5	10	11.4	4	4.5
16	ODL strategies provide information on child nutrition/ care readily by health care bodies, thereby reducing ignorance and infant mortality.	27	30.7	51	58.0	6	6.8	4	4.5

17	ODL methods of seminars and workshops on improved maternal care are more effective and affordable to women and concerned public, on improved maternal care.	29	33.0	43	48.9	9	10.2	7	8.0
18	ODL methods are better avenues for planning and educating all targeted groups/ individuals on HIV/AIDS, using radio, TV, posters, jingles and town criers.	29	33.0	45	51.1	9	10.2	5	5.7
19	ODL correspondence, seminar/workshop and jingles methods are more effective in educating members of the community on sustainability of their environment.	21	23.9	57	64.8	8	9.1	2	2.3
20	ODL correspondence and electronic based educational programmes are more reliable for providing current information and awareness for global partnership on human and related development.	30	34.1	46	52.3	9	10.2	3	3.4

Based on the results given in Table 1, the following were the results:

**1. Correspondence Education System (CES) as part of ODL:**

- (ii) Increase access to learning and training with a total of (69.70%) of the respondents agreeing while (30.30%) disagreed on this.

- (ii) Encourages continuous learning and retraining, (95.4%) agreed while (4.6%) disagreed.
- (iii) Augment the work of conventional institutions, where they are unable to admit all candidates at a particular time, (71.6%) agreed while (28.4%) disagreed.
- (iv) Encourages the working class and family members to study at their convenience using study materials provided, (85.2%) agreed and (14.8%) disagreed.

## **2. Educational Radio and Television as part of ODL:**

- (i) Provide live and recorded lectures to people in their homes through satellite, cable television and radio, (70.9%) agreed while (26.1%) disagreed.
- (ii) Provide speedy and efficient training for key target groups through ETRP, (76.1%) agreed while (23.8%) disagreed.
- (iii) Provide life-long and inclusive learning through ETRP irrespective of age, sex and location, (79.5%) agreed while (20.5%) disagreed.
- (iv) Help in monitoring educational and literacy campaigns to larger audience through educational television and radio jingles programmes, (86.3%) agreed while (13.7%) disagreed.

## **3. Internet-based Education Programme (IBEP) as part of ODL:**

- (i) Provide entrepreneurial training for learners by delivering study materials in electronic format through computers, (76.1%) agreed while (23.9%) disagreed.
- (ii) Facilitate teacher-student interactions through e-mail, (70.4%) agreed while (29.6%) on one hand disagreed.
- (iii) Promote student-student or one-to-one interactions for effective studies through computers, (71.6%) agreed while by (28.4%) disagreed.
- (iv) Provide opportunities for one-to-many and many-to-many interactions through conferences assisted by computers and bulletin boards, (78.8%) agreed while (21.2%) disagreed.

## **4. ODL Relevance in Attainment of UN MDGs:**

- (i) Is suitable for giving lessons on functional and vocational literacy to all manner of learners, thereby reducing unemployment and extreme poverty, (80.7%) agreed while (19.3%) disagreed.
- (ii) Is suitable for promoting functional literacy and access to all learners continuously, (85%) agreed while (15%) disagreed to this.
- (iii) Provide learning opportunities and materials without bias to gender, thereby empowering women and also eliminating gender disparity, (84%) agreed while (16%) disagreed.
- (iv) Provide information on child nutrition and care readily by health care

bodies, thereby reducing ignorance and infant mortality, (88%) agreed and (12%) disagreed.

- (v) Seminars and workshops on improved maternal care are seen as being more effective and affordable to women and concerned public for improved maternal care, (81.95) agreed while (18.1%) disagreed.
- (vi) Seminars, workshops and jingles methods are seen as being more effective for educating members of the community on sustainability of their environment, (88.7%) agreed while (11.3%) disagreed.
- (vii) Is seen as a better avenue for planning and educating all targeted groups and individuals on HIV/AIDS, using radio, television, posters, jingles and town criers, (81.1%) agreed while (15.9%) disagreed.
- (viii) Correspondence and electronic based educational programmes are seen as being more reliable for providing current information and awareness for global partnership on human and related development, (86.4%) agreed while (13.6%) disagreed.

### **Discussion and Implications of Findings**

Based on the assessment of views or perceptions of ODL learners in the Cross River State, a higher percentage of them feel ODL methodologies create maximum access to learning for all and as well provide functional literacy skills, relevant in the attainment of the eight point UN MDGs. Assessment of people, especially adults has to rely on their individual perceptions for the needed information. Assessment according to Denga (2006, p.4) is seen to involve the evaluation of the cognitive, affective and psychomotor skills. It includes qualitative statements or value judgments.

Similarly, perceptions, according to Oyedemi (1988, p.110) may be defined as the process of identifying, discriminating, recognising and judging objects and qualities or relation in our environment by means of sensory information an individual learns to understand his physical and social world through sense organs. Any situation in which the views of people, especially adults, were not assessed and taken into consideration over an issue or programme that affects such people, the result may be oppression, victimisation or outright failure in the attainment of objectives of such a programme. Bodley (1982, p.110) warned that, any programme of directed culture change imposed upon a “target” population against their will would almost unavoidably violate the rights and in principle at least such programmes are usually rejected by social engineers.

### **Conclusion and Recommendations**

1. The views of the benefiting individuals, groups and nations shall have to be taken into account while designing and implementing programmes for the attainment of the UN Millennium Development Goals in Cross River State and elsewhere.
2. Secondly, in an attempt to consider the views of beneficiaries, emphasis on resource allocation should be placed on adult teaching and learning methodologies adopted by open and distance learning.

3. Thirdly, in line with the 2000 UN Millennium Declaration, education for all should be matched with individual functional literacy skills acquisition for all as provided by the ODL methods. This way, individuals would be better equipped for effective performance even when faced with changing circumstances both in their persons and their environments.
4. Fourthly, given the trend towards global partnership and the exclusive nature of programmes of traditional institutions, ODL methods guarantee better alternatives among individuals and nations for access to information and remedies for solving educational, social, health, political, economic and environmental issues.
5. Finally, a more comprehensive study should be carried out on a larger sample, using more advanced statistics beyond percentages, although the theme and methodology of this study would still be followed

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**Dr. Arikpo B. Arikpo** holds a Ph.D in Education, was Head of Department of Adult and Continuing Education of the University, Director of State Agency for Non-Formal Education (Cross River State), Coordinator of Distance Learning (Cross River State). Has published extensively. Correspondence: Dr. Arikpo B. Arikpo, Department of Adult and Continuing Education, University of Calabar, Calabar, Cross River State, Nigeria: [drarikpo@yahoo.com](mailto:drarikpo@yahoo.com)+234 (0) 8068414110

**Dr. Roseline E. Tawo** holds a Ph.D in Guidance and Counselling. Taught for 12 years in secondary schools in Akwa Ibom and Cross River States, and now in the University. Coordinator, B.Ed Adult Education programme of University of Calabar (2002-2006). Academic Adviser. Examination Officer (1999-2002). A member of (Local and International) Professional Associations. Has attended and presented papers in Local and International Conferences. Correspondence: Dr. Roseline E. Tawo, Department of Adult and Continuing Education, University of Calabar, Calabar, Cross River State, Nigeria: [ekasiah@yahoo.com](mailto:ekasiah@yahoo.com) +234(0) 8037058000

**Dr. Marcellinus U. Ojuah** holds a Ph.D in Adult Education from University of Nigeria, Nsukka, Nigeria. Currently a senior lecturer at University of Calabar. Belong to three learned Societies (NNCAE, CAETA and MNAEP). Involve in CBO/NGO activities. Correspondence: Dr. Marcellinus U. Ojuah, Department of Adult and Continuing Education, University of Calabar, Calabar, Cross River State, Nigeria: [marcellojuah@yahoo.com](mailto:marcellojuah@yahoo.com). +234 (0) 8036679321

**Mr Chris C. Chukurah** is examination officer in the Department, once a Coordinator of Students Industrial works Experience (SIWES), Students Academic Adviser. Correspondence: Mr Chris C. Chukurah, Department of Vocational and Special Education, University of Calabar, Calabar, Cross River State, Nigeria: [churac2006@yahoo.com](mailto:churac2006@yahoo.com), +234 (0) 8034715757

# Technology Enhanced Capacity Building: Web 2.0 Tools for In-service Teacher Education

VINOD KUMAR KANVARIA  
*University of Delhi, Delhi, India*

**Abstract:** Technology is a 'translucent' term. Nobody can strongly say about not knowing anything about technology (Sawchuk, 2003); neither can we boast up about getting hold of everything pertaining to technology. Being not an exception, stakeholders of educational field, too, are, every day, exploring and experimenting upon the use of technology in various fields of educational sphere including teacher education (Bauersfeld, 1998).

After introduction of the concept of *Sarva Shiksha Abhiyan* (SSA, i.e. EFA), Right to Education (RTE) and Continuous and Comprehensive Evaluation (CCE) in Indian educational fora, extra liabilities are automatically being levied on educational stakeholders like MHRD, IGNOU, NCERT, DIETs, SCERTs, etc. to reach upto the mark, through teacher education in general and in-service teacher education in particular. Endeavors are being made to improve and quantity and quality of education through in-service training programmes like capacity building (Harris of Schlappa, 2008) programmes etc. The need of the hour is not only capacity building of teachers during these programmes but also continuous support to these teachers after the programmes, at their workspace. The current paper shares some experiences of in-service teacher education (Siddiqui, 2008) programmes, discusses about technology enhanced capacity building and elaborates some tools which have been used or can be used, effectively, through futuristic and continuous approach for in-service teachers education.

**Keywords:** Technology, Capacity building programme, In-service teacher education.

## Introduction

In the current era of technology and teacher education, everyday a new chapter is being added in the book of technology enhanced teacher education. Most of the stakeholders of teacher education are looking forward for having better results by the use of technology in this field. Everyday some new technology is being incorporated in the process of teacher education. It has its impact, equally, on pre-service as well as in-service teacher education. Stakeholders are so keen to apply and know the impact of latest technologies in this respect.

Teacher education, in general, and in-service teacher education, in particular, is more concerned, at present, in capacity building of its learners and beneficiaries. A number of in-service teacher training programmes are being held for capacity building of the teachers at various levels viz. from elementary teacher level to teacher educator level. These programmes have, most of the time, a good impact on the learners as far as capacity building is concerned. But, invariably and most of the time, by the valediction of these programmes, the process of capacity building, too, gets a pause for that particular set of learners. The need is there for continuous capacity building of these learners, even after the valediction of the specific in-service teacher education programme.



The current paper shares some experiences and various technologies for enhancing capacity building in in-service teachers. It emphasizes upon the need of orienting teachers for continuing capacity building through the use of technologies, even after, in spite of giving merely the content, then and there, in the in-service programmes. It talks about some experiences and notes regarding the use of Google Groups, Classroom 2.0, wiziQ, Scope, Blackboard, Identi.ca, Learncentral and Elluminate for opening a new window for continuous capacity building for in-service teachers.

### **Conceptual overview**

Alongwith in-service teacher training programmes, after evolution of SSA and RTE, the need has been arisen to have a consistent and continuous communication with the teachers even after the specific training programmes for better reflection of the programmes into practices. Various technology tools can be used for being in contact with the participants of in-service programmes, after the programmes. Through the technology enhanced communication they can share their experiences, problems, ideas and other educational issues with other issues. The various tools used and/or suggested are Gmail, Google group, Classroom 2.0, wiziQ, Scope, Blackboard, Identi.ca, Learncentral and Elluminate. These tools bestow ample freedom to teachers or users to express themselves freely, indigenously, as and when required i.e. independent of spatial and temporal constraints. Through these tools and their applications they can solve not only their own academic and professional problems but also personal, academic and social problems of their learners. These tools provide means to teachers and teacher educators to connect and get in touch with learners, teachers, peers, educational administrators etc. for the betterment of entire educational field.

These tools have helped and can help a lot more for continuous capacity building and professional growth of in-service teachers. These can further develop a good rapport between the participants and resource persons of the programmes for future interaction and collaboration (Kanvaria, 2011) under various educational aspects.

### **Need of the study**

In most of the in-service teacher training programmes, the learners are transacted some content, innovative ideas etc during the programmes. They, most of the time, are very keen to learn these. But, after valediction of the programmes, when these learners reach their workplace again, there is no communication among the participants and resource persons. The learners feel so many problems and hurdles while further applying those ideas at their workplace. They also feel the strong need to be in touch with their peers at such an occasion. They need a consistent support, communication and help from their resource persons. So, the need of the current paper is being felt to talk about technology enhanced continuous communication and tools for participants and resource persons of in-service teacher training programmes.

### **Objectives**

The specific objectives of the study were to:

1. Apply and observe the effects of using technologies in in-service teacher

training programmes.

2. Obtain the reflection of teachers for, while and after using these technologies.
3. Establish the concept of technology for capacity building and professional growth of teachers.
4. Enable teachers to be techno-friendly by creating online account, holding online debate and self-explored learning experiences.
5. Discuss and suggest technology enhanced communication platforms for post-programme contact with resource persons for sharing experiences, problems and other educational issues by the participant teachers.

### **Related Literature**

A large number of educational stakeholders have expressed their concern about teacher education, in-service teacher education, capacity building of teachers, and use of technology by teachers, teacher educators and administrators. A few of these are quoted here. Just as the technology has made its way into daily life, invited or not, technology has made its way into the school. School administrators and educators may, or may not, enthusiastically embrace an additional set of expectations and expertise. However, a prudent administrator needs to know about the technology knowledge and skills required to be competent in the digital age. Professional organizations publish the standards that reflect best practice (Linda, 2006).

The in-service and recurrent teacher education requires the use of latest educational and communication technologies alongwith the traditional face-to-face mode (Rajput, Walia, 2002).

Teachers' capacities appeared to enhance colleagues' capacities, which seemed to motivate students and led to improved student outcomes in report card grades and reading assessment scores within the learning community. The teaching and learning process takes shape and structure by building upon teachers' capacities and forming a real group of interdependent learners (Pancucci, 2008).

Since teachers are the most important component of quality schooling, it will be necessary to continuously upgrade the quality of teachers through on-the-job training, inservice education programmes and a variety of other mechanisms, besides pre-service qualifying programme of teacher training (CABE, MHRD, 2005).

As a whole, it can be understood that technology is important for capacity building and professional growth of teachers, teacher educators and administrators. Efforts are being made and further needed to be made for incorporating the use of technology in various teacher education programmes for futuristic and continuous communication, and hence, for the betterment of quality and quantity of teacher education.

### **Method**

#### **Sampling**

The sampling technique adopted was incidental non-random sampling. The current study shares some of the experiences of two in-service teacher training programmes held in February, 2011 at Jharkhand and Odisha states in India. In the first programme, Block Resource Center (BRC) coordinators, Cluster Resource

Center (CRC) coordinators, primary and middle school teacher participants were taken as sample. From the second programme, teacher educators, lecturers, senior lecturers and principal participants from DIETs and SCERT were taken as sample. These participants belonged to Jharkhand, West Bengal and Odisha.

### **Procedure**

The steps were as under:

1. The participants of programmes were discussed at length various content and ideas.
2. After expression of interest from the participants for being in continuous touch even after the programme, they were facilitated to learn Gmail, Google groups, Classroom 2.0, Scope and Elluminate.
3. The participants were given assignment like debate through Google group, created.
4. For other tools, they were explained, demonstrated and motivated to participate like on classroom 2.0 they were facilitated to create their accounts. Demonstration was held for using scope and elluminate.
5. About other tools like learning central and identi.ca they were oriented to learn through exploration.
6. During the entire process, their actions, progress and output were observed and analyzed.

### **Outcomes**

1. The participants created their Google account and they joined a Google group created.
2. The participants took part in an online debate through Google groups.
3. The participants opened Classroom 2.0 accounts.
4. The participants keenly learnt and used these tools and expressed their very much interest for being further in touch and sharing problems using technologies.
5. Participants, after orientation, explored and presented the uses and applications of Scope; Learncentral and Elluminate, using self-learning approach, in the programme.
6. Participants learnt about wiziQ and identi.ca, their use and application in educational field.

### **Analysis and Discussion**

The participants, at every level, of in-service teacher training programmes want to be in further contact with the resource pers hey feel that problems occur after valediction of the programmes, while they reach their workplace and apply, the

ideas learnt, into practice. Participants are highly interested towards learning new technologies. They welcome learning and using new technology tools for not only their teaching-learning process but also to share their experiences and problems with other stakeholders. While acting through Gmail, Gtalk and Google groups, participants expressed these to be important tools for better discussions and further communication among them.

The participants, irrespective of their age and gender, were keenly welcoming the technologies and admiring the benefits of using technologies. They highly appreciated the technology enhanced continuous and post-programme communication approach. In-service teachers, though they may not be familiar and well versed with the latest technologies, but they are keen to learn and apply these for the betterment of their learners, teaching and learning.

Technologies helped them not only in capacity building but also developed their professional growth through various aspects. Many of the participants never operated a computer earlier, but then they were feeling comfort with the computer operating and they used it too during their in-service teacher training programme. The use of technology created confidence among the participants. They concluded that through technology, if they themselves do not have solution for a problem, they can get the same by easily and efficiently discussing the problem with others sitting even hundreds of miles away from them.

Some of the technology tools for better continuing discussion and capacity building of teachers and teacher educators may be Gmail including Gtalk, Google group, Classroom 2.0, wiziQ, Scope, Blackboard, identi.ca, Learncentral and Elluminate etc.

Technology tools provide opportunity to teachers and teacher educators not only to contact their resource persons and learners in a spatial-free and temporal-free environment but also help them to explore online content at their own and later to create educational resources in the form of e-content. This, in one or the other way, paves the path to make the teachers and teacher educators independent of time and space.

Teachers, at in-service teacher training programmes, must be acquainted with and trained to use technology to enhance their capacity building. This will also help them for facilitating ease and comfort in discussing and sharing their experiences, problems, innovations and other educational issues with other teachers and learners. This will help them to fulfill their quest for sharing their views, ideas and feedback with the resource persons and further communication with these stakeholders of educational sphere.

### **Educational Implications**

Some of the educational implications of the study are as follows:

1. Technologies (ICT and web 2.0 tools) can be effectively applied in in-service teacher training programmes.
2. Technologies can be applied for obtaining reflection of teachers for capacity building programmes.
3. Concept of technology can be established, using web 2.0 tools, among

teachers for capacity building and professional growth of them.

4. Teachers could be made to be techno-friendly by creating online account, holding online debate and self-explored learning experiences.
5. Technology enhanced communication platforms could be discussed and suggested for post-programme contact with resource persons for sharing experiences, problems and other educational issues by the participant teachers.
6. Web 2.0 tools could be used not only for teachers but other staff and officials too for better communication, which is temporal-free and spatial free in nature.
7. Technology enhanced capacity building could open windows for new means of communication and can enhance work-efficiency of learners and users.
8. Web 2.0 tools could help in bestowing a personal and human touch in professionalism by keeping people constantly connected.

## Conclusion

In-service training programmes are very helpful in capacity building and professional growth of teachers at all levels. These programmes should focus not only upon training during the programme but also post-programme contact and solving problems of participants, while applying ideas learnt during programmes, at their workplace. A number of technology tools for this continuous communication are Gmail including Gtalk, Google group, Classroom 2.0, wiziQ, Scope, Blackboard, identi.ca, Learncentral and Elluminate. Teachers, basically, are keen to learn new technologies for their learners, interaction, teaching and learning. Technology enhanced capacity building and professional growth of teachers in this regard may open a new window for learners to be in further contact, through technology, with their resource persons and peers. This will help learners to share their experiences, ideas, problems and various educational issues at a mass level with other stakeholders of the educational sphere and equip them to be ready for future problems.

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**Dr Vinod Kumar Kanvaria** is Assistant Professor, Department of Education, University of Delhi, Delhi 110007, India. [vinodpr111@gmail.com](mailto:vinodpr111@gmail.com) mobile: +91- 9810086033