European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.843577 Volume 3 | Issue 8 | 2017

# RESOURCES FOR ONLINE TEACHER TRAINING COURSES

**Lalith Ranjan Gonsalkorala**[i]
Senior Lecturer, Department of Secondary & Tertiary Education,
Faculty of Education, The Open University of Sri Lanka, Sri Lanka

**Abstract:**
With the integration of ICT to teaching and learning almost all disciplines which were conducted in the traditional mode throughout the years, are now being taught online as well. The premier open and distance education University in Sri Lanka, the Open University of Sri Lanka (OUSL) which conducts teacher training courses and programmes at many levels in addition to many other programmes and courses in numerous disciplines is planning to conduct some teacher training courses online as well. Around 3000 graduate teachers of the country's school system has enrolled in the post graduate diploma in Education (PGDE) programme in the 2017/2018 academic year and the programme is conducted in all the districts of the country through the university's study centres. To follow online training courses conveniently teachers need resources. This study was conducted to find whether those resources are available with the teachers, whether there are differences in the availability of resources as per their locations and gender and to make suggestions to improve the resource availability. To select the sample of teachers, initially two districts and the 2 study centres in those districts were selected. After that, the teacher samples were selected randomly from those registered for the PGDE programme in the current academic year for the 2 centres. The main instrument for data collection was a questionnaire while a semi structured interview were conducted with a few teachers from both centres. The findings were that the availability of some resources was satisfactory while some are not. The majority had the Internet facility; there were no remarkable differences between the teachers as per location of the centres. However, male teachers had more resources than the female teachers. Suggestions were made to improve the resource availability and facilitate online learning of teachers.

[i] Correspondence: email lrgon@ou.ac.lk

**Keywords:** graduate teachers, online teacher training, resources, Internet facility, location, gender

## 1. Introduction

In order to follow online courses or parts of such courses an essential requirement is the availability of resources. The resources should be available with the learners or else the institutions offering such courses should provide the required resources for the learners. However if the learners themselves have the required resources, online learning would be much more convenient for them. The general education system of Sri Lanka depends entirely on the traditional face to face mode of education. The teaching-learning process in schools has no online component at all. Therefore, the school teachers' role is still an entirely traditional one. Similarly the teacher training in the country which originated in the beginning of the 19th century under the British rule, has also always been conducted in the traditional face to face mode and still continues without any changes.

However, with the inclusion of the new Information and Communication Technology (ICT), many non-state higher educational institutions have commenced offering online courses in various disciplines. Even Universities, including state Universities are treading the same path and are already offering a large number of online courses in various disciplines. The Open University of Sri Lanka (OUSL) which is the premier Open and Distance Education University in the country has also started offering such courses. With the government policy also encouraging the conversion of traditional courses to online, some of the courses of the Post Graduate Diploma in Education (PGDE) Programme of the Faculty of Education of the OUSL are to be converted to online courses in the near future. The PGDE programme is offered to graduate teachers in the school system to provide professional training to them. Around 3000 such teachers are enrolled in the programme for every academic year from almost all districts in the country. At this juncture, it was thought fitting to find out whether they have the required resources to follow such courses in a convenient manner.

## 2. Literature Review

According to Tatto 2002, teacher training commenced in Sri Lanka then known as Ceylon, around the beginning of the 19th century. Nielsen & Tatto 1993 stated that the first formal institution for teacher training was established during the early 20th century. The recommendations proposed by the education committee in 1943 can be considered

as a remarkable development in teacher education in Sri Lanka. A main recommendation was to set up a basis for the education of non-graduate and graduate teachers, situating the first in a single type of Teacher College and the second in a department in the University (Tatto & Dharmadasa 1995). Accordingly, thereafter three particular Universities (Colombo, Peredeniya and Jaffna) started to offer postgraduate diploma courses to graduate teachers and were later joined by the OUSL as well.

Sudarshana 2014 stated that the world has become a global village with ICT and that education moves forward with the ICT. Especially in higher education, the ICT has become an essential instrument. The effectiveness of online learning approaches appears quite broad across different content and learner types (U.S. Department of Education, 2010). Several studies have been done to investigate the effectiveness of online learning and it's comparison with face to face learning. For example, Neuhauser's 2002 study showed that equivalent learning activities can be similarly effective for both online and face-to-face learners.

However, resources are not equally distributed all-round the country. The Computer literacy survey 2009 results reveal that at least one computer is available in one out of every ten households on average in Sri Lanka. The household computer availability in urban sector, stated as a percentage was 23.6%, where a computer is available in one out of every four households is much higher than the rural sector (9.2%) and the estate sector (3.1%) in 2009.

According to the Computer literacy survey conducted in 2009 the households have acquired the first computer during the period 2005–2009 and the rural sector shows a higher recent acquisition (75%) than the urban sector (66%). This situation augers well for the rural Students in following online courses in the near future. The US Department of Education report of 2010 mentioned that students in online conditions performed modestly better, on average, than those learning the same material through traditional face-to-face instruction. Providing guidance for learning for groups of students appears less successful than does using such mechanisms with individual learners (The U.S. Department of Education (2010)). Allen & Seaman 2010, regarding student enrolment in higher education found that online enrollments continue to grow at rates faster than overall higher education. The study showed that similar learning activities can be equally effective for online and face-to-face learners. Marimuthu et al 2013 conducted a survey on five variables namely motivation, self-monitoring, internet literacy, internet anxiety and concentration in online learning with samples of male and female students. The findings showed that there was really no significant difference in the online learning experience between the male and female students

## 3. Material and Methods

The design selected for the study was the descriptive survey design.

### 3.1 The Objectives of the Study

To find:

1. The availability of required resources with teachers to follow online teacher training courses.
2. Whether there is a difference in the availability of resources with teachers to follow online courses as per the location
3. Whether there is a difference between male and female teachers in the availability of resources to follow online courses.
4. To make suggestions to ensure the availability of required resources for teachers to follow online courses.

A questionnaire was constructed to obtain data on the availability of required equipment and facilities for the study. It had two parts and the first part had 4 items to collect data on the availability of resources on a 3-point rating scale as shown in table 1 below.

**Table 1:** Part 1 of the questionnaire on the availability of resources

| **Equipment** | **Available** | | **Not available** | | **No response** | |
|---|---|---|---|---|---|---|
| | **No** | **%** | **No** | **%** | **No** | **%** |
| Computer with accessories | | | | | | |
| Printer | | | | | | |
| Virus guard | | | | | | |
| Resource person | | | | | | |

Whether the Internet facility is available and if so how it was accessed were the focus of part 2 of the questionnaire as shown in table 2.

**Table 2:** Part 2 of the questionnaire on the availability of Internet facility and how Internet is accessed

| **Centre / Gender** | **Broadband and Mobile phone** | | **Dongle and Mobile phone** | | **Mobile phone only** | | **Not available** | |
|---|---|---|---|---|---|---|---|---|
| | **No** | **%** | **No** | **%** | **No** | **%** | **No** | **%** |
| | | | | | | | | |

The Population for the study was the teacher cohort which enrolled in the PGDE programme of the OUSL for the academic year of 2017/2018. The sample was selected

according to the objectives of the study at three levels. The first level was the selection of districts. The number of districts in the country is 25, and at least one study centre has been established in every district and the PGDE programme is conducted at almost all districts through the study centres.

To obtain the teacher sample, initially two districts were selected by random sampling. The two districts so selected were the Ampara district and the Hambantota district. The two study centres in those two districts, the Ampara study centre and the Ambalantota study centre respectively were therefore selected for the study on a purposive basis. Then from each of those two centres the samples of PGDE students who are graduate teachers from the batch of 2017/2018 were selected by using the random sampling technique. Initially for each centre a random sample of 50 were selected from the sampling frame using random number tables and the questionnaire was sent to them by post. Finally, the response rate for Ampara was 33 out of 50 and for Ambalantota it was 35 out of 50. Therefore, the final teacher samples for Ampara and Ambalantota stood at 33 and 35 respectively. However, in both samples the number of female respondents was higher than the number of male respondents. When even the total population in the PGDE programme was considered, the vast majority was the females.

**Table 3:** The sampling details

| **District** | **Study centres** | **PGDE student Population (Reg. students for the academic year - 2017/2018)** | **Intended sample (Q-mailed)** | **Responded sample** | **Gender wise breakdown** | |
|---|---|---|---|---|---|---|
| | | | | | **M** | **F** |
| Ampara | Ampara | 144 | 50 | 33 | 9 | 24 |
| Hambantota | Ambalantota | 106 | 50 | 35 | 12 | 23 |

The main data collection instrument used for the study was a questionnaire which was mailed to the student teachers of the two particular centres and in addition, 5 student teachers from each centre (10 from both centres) were interviewed as per their availability, using a semi structured interview schedule to obtain more information. Data were analyzed by using both qualitative and quantitative analyzing methods.

## 4. Results and Discussion

**Table 4:** Availability of the required resources with the teachers at the Ampara and Ambalantota Study Centres

| Statements | Ampara | | | | | | Ambalantota | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Available | | Not available | | Not responded | | Available | | Not available | | Not responded | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Computer with accessories | 9 | 27 | 21 | 64 | 3 | 9 | 19 | 54 | 16 | 46 | 0 | 0 |
| Printer | 6 | 18 | 26 | 79 | 1 | 3 | 7 | 20 | 28 | 80 | 0 | 0 |
| Active virus guard | 16 | 48 | 16 | 48 | 1 | 3 | 21 | 60 | 14 | 40 | 0 | 0 |
| Supportive resource person | 24 | 73 | 9 | 27 | 0 | 0 | 24 | 69 | 11 | 31 | 0 | 0 |

It was clear that the majority of the student teachers can find a supportive resource person (Ampara-73% & Ambalantota-69%) as well as many of them have active virus guards (Ampara-48% & Ambalantota-60%) in both centres. Even though regarding the availability of Printers it was very low in both centres (less than 20% in both centres). When considering the other resources (accessories such as camera, headphone etc.) a low percentage was recorded at Ampara centre (27%) but at Ambalantota centre it was higher (54%). Anyway, it is important to note the number of teachers who haven't these resources.

**Table 5:** How the Internet was accessed by the teachers of Ampara and Ambalantota Study Centres

| Centre | Category | Broadband & Mobile phone | | Dongle & Mobile phone | | Mobile phone only | | None | |
|---|---|---|---|---|---|---|---|---|---|
| | | No | % | No | % | No | % | No | % |
| Ampara | All | 3 | 9 | 10 | 30 | 17 | 52 | 3 | 9 |
| | Male | 1 | 12 | 4 | 44 | 4 | 44 | 0 | 0 |
| | Female | 2 | 8 | 6 | 25 | 13 | 54 | 3 | 13 |
| Ambalantota | All | 7 | 20 | 13 | 37 | 14 | 40 | 1 | 3 |
| | Male | 1 | 8 | 7 | 59 | 4 | 33 | 0 | 0 |
| | Female | 6 | 26 | 6 | 26 | 10 | 44 | 1 | 4 |

According to the table No 5 majority of the teachers in both centres (Ampara-52% and Ambalantota-40%) used the mobile phones only to access the Internet. And a considerable number of teachers were using dongle and broadband with the mobile phone (ranging from 9% to 37%). There were also some teachers who did not have the

Internet connection (Ampara-9% and Ambalantota-3%). The table shows the differences in the mode of accessing the Internet. It is apparent that while male teachers mostly use dongles and mobile phones the female teachers mostly use only mobile phones to access the Internet. The fact that 4% of the male teachers and around 10% of the female teachers in both centres did not have any access to the Internet is a matter for concern. According to the table No 5, when taken together, a majority of the male teachers were using both Broadband with Mobile phone and Dongle with mobile phone (Ampara 56% and Ambalantota 67%). Most of the female teachers were able to access the Internet only with the mobile phone (Ampara 54% and Ambalantota 44%). Also, there were a considerable number of male teachers (Ampara 44% and Ambalantota 33%) who access the Internet only with the mobile phone

Table No 6 below very clearly shows that a majority of the male teachers have more resources mentioned there than the female teachers. Availability of the printers were comparatively low among both male and female teachers of both centres (Ampara 33% and 12% and Ambalantota 17% and 22% respectively). A Majority of the teachers both male and female of both centres did not have printers and other accessories such as headphones/cameras etc.

**Table 6:** Availability of the required resources with the male and female teachers of the Ampara and Ambalantota Study Centres

| Resources | **Male** | | | | | | **Female** | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Available** | | **Not available** | | **Not responded** | | **Available** | | **Not available** | | **Not responder** | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Computer with accessories | **4** *7* | 44 *58* | **5** *5* | 56 *42* | **0** *0* | 0 *0* | **5** *12* | 21 *52* | **16** *11* | 67 *48* | **3** *0* | 12 *0* |
| Printer | **3** *2* | 33 *17* | **5** *10* | 56 *83* | **1** *0* | 11 *0* | **3** *5* | 12 *22* | **21** *18* | 88 *78* | **0** *0* | 0 *0* |
| Active virus guard | **5** *8* | 56 *67* | **4** *4* | 44 *33* | **0** *0* | 0 *0* | **11** *13* | 46 *57* | **12** *10* | 50 *43* | **1** *0* | 4 *0* |
| Supportive resource person | **8** *10* | 89 *83* | **1** *2* | 11 *17* | **0** *0* | 0 *0* | **16** *14* | 67 *61* | **8** *9* | 33 *39* | **0** *0* | 0 *0* |

**Key:** data for Ampara - Arabic numbers, Ambalantota – *italic numbers*

## 5. Conclusions

A. The objective No. 1: The availability of required resources with teachers to follow online teacher training courses. The majority of the respondents in both centres (

Ampara 73% & Ambalantota 69%) had a resource person who can support them in computer matters. In addition, the Internet was available for access through dongle and mobile phone (Ampara-30% & Ambalantota 37%) and broadband and mobile phones (Ampara-9% & Ambalantota 3%) and the majority of the teachers access the Internet only through the mobile phones (Ampara-52% & Ambalantota 40%)It seem only a few respondents had printers (Ampara 18% & Ambalantota 20%) and other facilities (headphone/camera/microphone use with computers) are also less in Ampara center (27%) but at the Ambalantota centre (54%) the availability is higher. Similarly, with regard to virus guards the Ampara Centre (48%) recorded less availability than the Ambalantota centre (60%).

B. The objective No. 2: Whether there is a difference in the availability of resources with teachers to follow online courses as per the location. When considering the availability of a supportive resource person teachers of both Ampara (73%) and Ambalantota (69%) centres, as indicated in table No 4 did not show any remarkable difference between them. Similarly according to the data in table No 5, the aggregate percentages of those having Internet access by whatever mode were 91% and 97% for teachers of Ampara and Ambalantota centres respectively. As the sample, sizes are low, the difference between the two percentages mentioned above cannot be considered as significant without carrying out such tests of significance.

With regard to the availability of computers with accessories and active virus guards there was seen a remarkable difference between the two centres as indicated in table No 4 with teachers of Ampara Centre recording only 27% and 48% availability and those of Ambalantota centre recording 54% and 60% availability respectively. With regard to the availability of printers, teachers of both centres had recorded almost similar low percentages.

C. The Objective No. 3: Whether there is a difference between male and female teachers in the availability of resources to follow online courses.

It was clear that the majority of the male teachers have more required resources than the female teachers. The table No 4 indicates that all male teachers had access to the Internet while 13% of female teachers of the Ampara centre and 4% of the female teachers of Ambalantota centre did not have access to the Internet. Non availability of other resources as presented in table No 6 indicates that it is higher for female teachers of both centres than for the male teachers of both centres. Availability of the printers is comparatively low among both male and female teachers. Therefore, it can be concluded that male teachers were ahead of female teachers in the availability of required resources for online learning.

D. The Objective No. 04: To make suggestions to ensure the availability of required resources for teachers to follow online courses. The semi-structured interviews

conducted with 5 teachers from each centre enabled the formation of the following suggestions with regard to the resource availability.

The suggestions are presented as recommendations of the study below.

### 5.1 Recommendations

- Provide loans under easy payment schemes to buy required resources
- Increase resource availability in the study centres
- Provide easy access to the computer resource centre of the study centres.
- Conduct short term courses on ICT before launching online courses for them

More studies with bigger samples and the use of statistical significance tests would shed more light on this and other related issues.

### 5.2 Conclusions - summary

- The availability of some resources was satisfactory while some are not.
- The majority had the internet facility.
- There were no remarkable differences between the teachers as per location of the centres.
- However, male teachers had more resources than the female teachers.

### References

1. Allen E. Seaman J. 2010 Class *Difference:* Online Education in the United States. Http://Sloanconsortium.Org/Publications/Survey/Class_Differences. accessed on 01.07.2017
2. Department Of Census And Statistics Sri Lanka 2009 Household Computer Literacy Survey Of Sri Lanka, http://www.Statistics.Gov.Lk/CLS/Buletincomputerliteracy_2009.Pdf accessed on 01.07.2017
3. Marimuthu R. Chone L. S. Heng L. T. Nah E. N. Fen O.S. 2013 Comparing The Online Learning Strategies Of Male And Female Diploma Students Of An English Language Course, Procedia - Social And Behavioral Sciences, Volume 90, 10 October 2013, Pages 626-633
4. Neuhauser C. 2002 Learning Style and Effectiveness of Online and Face-To- Face Instruction, *The American Journal Of Distance Education*, 16(2). http://www.Eric.Ed.Gov/Ericwebportal/Search/Detailmini.Jsp?_Nfpb=True&_&ERICE

Xtsearch_Searchvalue_0=EJ656148&Ericextsearch_Searchtype_0=No&Accno=EJ65_6148, accessed on 20.06.2017)

5. Nielsen H.D. and Tatto M. T. 1993 Teacher *upgrading in Sri Lanka and Indonesia*, in: Perraton, H. (ed.), Distance education for Teacher Training, Routledge, New York.
6. Sudarshana M. L. 2014 Usage Of Internet And Computer Among The Sri Lankan University Students, OUAAS Annual Academic Sessions On 27th And 28th November 2014
7. Tatto M. T. and Dharmadasa K. H. 1995, *Social and Political Contexts of Policy Formation in Teacher Education in Sri Lanka*, in: Ginsburg M. and Lindsay B. (eds.), The Political Dimension in Teacher Education: Comparative perspectives on policy formation, socialization and society, The Falmer Press, London, Washington, DC.
8. Tatto M. T. 2002, The value and feasibility of evaluation research on teacher development: contrasting experiences in Sri Lanka and Mexico, *International Journal of Educational Development*, 22, pp. 637-657.
9. U.S. Department of Education. 2010 Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. Http://Www2.Ed.Gov/Rschstat/Eval/Tech/Evidence-Based-Practices/Finalreport.Pdf, accessed on 20.06.2017.