The Potential of Sri Lankan Teacher in Managing Online Classroom

Roshani Wickramanayake, H. M. Lalitha Kumari
Lumbini Collage, Colombo 5, Department of Social Science Education, University of Colombo

Abstract: The purpose of this empirical research was to examine how the Sri Lankan teachers manage their online classrooms. Three research questions were used to guide the study to a rational conclusion. Accordingly, the study was focused to get an insight idea on how teachers manage physical and digital resources and human resource in their online classrooms and the problems that the teachers face during their online teaching. Sequential mixed methodology was followed for the data triangulation which quantitative data was collected and analyzed first, followed by qualitative data. A survey was administered for the first phase while semi-structured interviews and online classroom observations were implemented for the second phase to obtain data from 205 teachers in 10 selected 1AB and 1C schools. Quantitative data was analyzed by descriptive and inferential statistical methods using tables, graphs and percentages while qualitative data was analyzed using thematic analysis. The study revealed that 55.5% of teachers effectively manage physical and digital resources in online classrooms and 52.5% manage human resource. The research further revealed that many teachers had problems in managing online classrooms due to low student participation and non-continuity of internet signals. Also, the univariate analysis conducted through the research revealed that the type of school affects the physical and digital resources and human resource management in the online classrooms and it does not vary according to the education zone. Accordingly, it was unveiled that the school has a significant impact on the emergence of the teacher's management ability.

Keywords: Classroom Management, Online Classroom Management, Online Education, Digital Literacy.

Introduction
Although Sri Lanka is a developing country, it has a very high level of literacy when compared to other countries in the world. With the introduction of the free education policy in 1947, the education system in Sri Lanka began to develop in various aspects. However, with the spread of covid-19 virus disease throughout the world in late 2019, there was a setback in many fields in Sri Lanka. However, with the aim of continuing Sri Lankan education, the ministry of education was decided to integrate online education into the national education system for overcoming that challenge. Accordingly, Sri Lankan teachers and students adapted to online education. This study is based on the examining the ability of Sri Lankan teachers in managing their online classrooms.

Management is a process that accomplish some set of goals by integrating resources and responsibilities. Classroom management is an important aspect of teaching learning process (Rahman et al, 2010). Classroom management consists of various linguistic, communicative and social aspects. Lesson plans, syllabus, techniques and teaching methods and instructional supervision are some parts of it (Kumari, 2019, 2021a, 2021b, 2022a, 2022b and 2022c). In recent years some technological equipment such as I pad, smart phones, smart boards, projectors, laptops and computers have become essentials for managing classrooms. E-learning has been changed the general process of teaching and learning (Ibrahim, 2016). Educational goals and
objectives require an adequate provision of resources, maximum utilization and appropriate management of resources to improve the quality of teaching learning process (Usman, 2016, Kumari, 2022d, 2022e, Pillegedara, et,al. 2021). Teachers need classroom management skills to manage their classrooms. A successful teaching and learning process is taken place when organizing physical setting of the classroom, students, resources and the equipment effectively (Saricoban and Sakizli, 2006).

An exciting and dynamic learning experience can provide to the students through a well-managed classroom; but student behavior often interferes with this process. Therefore, classroom discipline plays a major role in education system (Kaliska, 2002, Mulkanthi, et,al. 2021, Wijekoon, et,al. 2021)). There is an interrelationship between the behavior of the students and the classroom environment. Management of behavior is essential to manage a classroom well (Bull and Solity, 1987). For doing this, teachers can be provided a behavioral management training (Teoh et al, 2018).

For effective teaching in online learning environment, the teachers must have pedagogical skills, design skills, content skills, technological skills, management and institutional skills, and social and communication skills (Fatimah, 2020). In online education, the teacher should be a facilitator and the learner can learn his own space conveniently. Technologies such as e-mail, chat, group conversations, audio and video conferencing, worldwide web are used in online education (Dhull and Sakshi, 2017). Online synchronous communication helps the student to be independent and enhance self-esteem as well as improving motivation. But there are certain challenges such as teacher multi-tasking, time lag, dead space, poor sound quality and technical support (Murphy, 2009). A strong interaction between the teacher and the students, steady participation and timely reinforcement are cause for a better cyber learning process (Dykman and Davis, 2008).

Digital literacy is a new interpretation for education. With the growth of digital societies, both the teachers and the students have to acquire a certain level of computer literacy (Nawaz and Kundi, 2010). Digital literacy is a literacy where digital factors are dominant and knowledge on technological devices, the ability to use them and the formation of creative factors are present (Ayhan, 2016). In order to implement online education, teachers need to know how to handle digital devices and services, teachers should be trained for this, and digital literacy of student teachers should first be increased by allowing them to experience multimedia tools in teacher education programs (Erdemir and Eksi, 2019).

Online education has several weaknesses as well as strengths. Some of that weaknesses are higher dependency on network connection, inability to check on each and every student, lack of transparency on examinations and limited feedback. But it still the best option specially in lock down situations because, it connects teachers and students from far-away places to one platform (Gupta and Sharma, 2020). However, more attention should be paid to the difficulties faced by online classrooms in reforming the learning and teaching process and implementing the active learning concept (Li, Wang and Wu, 2021).

Statement of the problem

Since ancient times, students were given education through the traditional education system in Sri Lanka. In these traditional classrooms there are limitations of fixed place, fixed time, excessive competition and less freedom, but they are highly capable of developing students' affective and psychomotor skills. The teacher who engages in the teaching process in these traditional classroom manages the physical resources properly and handles the students well, and is able to develop the cognitive, affective and psychomotor abilities of the students during the prescribed period. Therefore, learning productivity can be enhanced through a highly managed classroom. But, with the introduction of online education, out of this situation, the teacher and students had to adapt to a non-physical classroom. The online education system has the ability to deliver education very quickly, systematically and accurately. In these online classrooms it is necessary to manage the available resources as in physical classrooms. Therefore, Sri Lankan
teachers who are without any prior training or experience have to manage these online classrooms. But there is a reasonable doubt as which extent this is done qualitatively. Therefore, further investigation on this matter is a current necessity. Specially, the teachers who are engaged in the teaching process of advanced level classes should manage their online classrooms in order to provide more quality online education for the students. Therefore, this study was focused on examine the potential of the advanced level teachers of 1AB and 1C schools in Sri Lanka in managing online classrooms.

**Purpose and objectives of the study**

The primary objective of this research was to divulge how teachers who are working in public schools in Sri Lanka manage online classrooms effectively. On that account, the specific objectives of the study were to;

1. Examine how teachers manage physical and digital resources in online classrooms
2. Find out how teachers manage human resource in online classrooms
3. Investigating the problems faced by teachers in online classroom management

**Research questions**

The following research questions were developed to direct the study.

1. How do teachers manage physical and digital resources in online classrooms?
2. How do teachers manage human resource in online classrooms? and
3. What are the problems that teachers face in online classroom management?

**Methodology**

The first phase of the research was employed a descriptive survey which consisted of both quantitative and qualitative data. Based on the findings of the first phase, the second phase was launched which consisted of semi-structured interviews and online classroom observations for a purposively selected sample. Accordingly, explanatory sequential mix methodology was employed in this study. Sequential explanatory strategy has strong quantitative leanings and characterizes by the collection and analysis of quantitative data at first phase followed by the collection and analysis of qualitative data in second phase that constructed on the results of the quantitative phase (Creswell, 2008).

Sequential Explanatory Design

![Sequential Explanatory Design](image)

**Study Sample**

The details of the sample that was used for the first phase of the study are briefly presented in the following table. The sample was selected proportionately to the population.
Accordingly, 205 teachers were included for the sample from randomly selected 10 government 1AB and 1C schools in Colombo district, Sri Lanka. 10 teachers from the above sample were purposively selected for the second phase of the study.

**Data collection instrument**

In order to achieve the specific objectives of the study, a survey questionnaire, semi-structured interview protocol and online classroom observation checklist were used to collect the necessary information from the sample. All of the data collection instruments were developed by the researcher. A questionnaire which having 33 items was used for the first phase. It is important to understand that the questionnaire is a tool and it is important to be able to use it so that the reader can easily understand, interpret and complete it. This increases the accuracy of responses. Concerns about reliability and validity are essential in designing a questionnaire as a research tool (Adams and Cox, 2008). Likert scales can be considered as one of the primary and widely used psychometric tools in educational and sociological research questionnaires (Joshi et al, 2015). Therefore, a questionnaire was used for the research which was consisted of sections that contained multiple choice questions regarding the respondents’ profile, Likert scale items regarding physical and digital resource management of online classrooms as well as regarding human resource management. And also another section that was contained an open ended question regarding the problems and challenges faced by the teachers when managing the online classrooms. Five-point scale with a response mode of Always (5 points), Very often (4 points), Sometimes (3 points), Rarely (2 points) and Never (1 point) was used to measure the item responses.

An interview protocol and a classroom observation checklist were used for the second phase of the study. The most common format of data collection in qualitative research is interviews. In such cases, semi-structured interviews are very important. Semi-structured interviews are a format with broad and in-depth open-ended questions which prepared before eliciting responses (Jamshed, 2014). The interview protocol of the research consisted of 5 open ended basic questions and some unstructured questions were asked during the period of interviewing. Purposively selected 10 teachers were interviewed and their classroom observations were scheduled after that. In order to obtain observations, the researcher can enter the field of study as an active participant and it is important to pay primary attention to the time, the context of observation and the people who are being observed. However, direct participant observation is more robust. (Boström and Öhlander, 2017). The classroom observation checklist consisted of 23 items.

All the instruments were pilot tested in order to make sure about the validity and reliability. The exercise was completed within a month.

**Data analysis**

Data analysis is basically done to quantify the evidence in the data. Appropriate methods, computational tools and languages should be used to assess the strength of evidence for specific hypotheses (Stephanie and Roger, 2019). As this research was based on sequential explanatory mix methodology, the data that collected in the first phase were analyzed first. There are two methods in which a data analysis can be summarized, as summary statistics and tabulations. The

### Table 1

**Study Sample**

<table>
<thead>
<tr>
<th>Education Zone</th>
<th>Type of School</th>
<th>Number of teachers selected for the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombo</td>
<td>1AB 05</td>
<td>1C 02</td>
</tr>
<tr>
<td>Piliyandala</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td>Total</td>
<td>07</td>
<td>03</td>
</tr>
</tbody>
</table>

205
first form can be presented as mean or standard deviation and the second can be presented in a column and row format (Stephanie and Roger, 2019). Therefore, frequency distributions and percentages which come under descriptive statistics were mainly used for analyzing data and also cross-tabulation, histograms and pie charts were used to show the analyzed results. Besides that, bivariate analysis and independent two samples t-test which come under inferential statistics were used for further analyzes. Specially, t-test was calculated for finding out the impact of the type of school and the education zone for the management of physical and digital resources and human resource in online classrooms. After analyzing the quantitative data, the findings of the first phase were presented.

As the second phase of the study was consisted of semi structured interviews and classroom observations, thematic analysis was used mainly for analyzing data. Besides that, percentages also used to analyze the data which obtained from the online classroom observation checklist.

Findings

One of the findings that revealed by the study was 55.5% of teachers who engaged in teaching process for advanced level classes were well managed the physical and digital resources of the online classroom. For doing this, using digital mobile apps to form students’ groups, using digital whiteboard for the teaching process, using digital and online learning aids and share them with students, updating their teaching profiles etc. were highly attended practices of the advanced level teachers.

Table 2

<table>
<thead>
<tr>
<th>Statement</th>
<th>Always</th>
<th>Very Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning learning aids</td>
<td>17</td>
<td>8</td>
<td>87</td>
<td>43</td>
<td>31</td>
<td>50</td>
</tr>
<tr>
<td>Preparing extra learning aids</td>
<td>54</td>
<td>27</td>
<td>48</td>
<td>24</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Preparing students groups using software apps</td>
<td>131</td>
<td>65</td>
<td>57</td>
<td>28</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Using digital whiteboard</td>
<td>83</td>
<td>41</td>
<td>30</td>
<td>15</td>
<td>54</td>
<td>27</td>
</tr>
<tr>
<td>Synchronous online classroom</td>
<td>22</td>
<td>11</td>
<td>93</td>
<td>46</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Sharing learning aids among students</td>
<td>22</td>
<td>11</td>
<td>82</td>
<td>41</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td>Updating the used software</td>
<td>15</td>
<td>7</td>
<td>56</td>
<td>28</td>
<td>61</td>
<td>30</td>
</tr>
<tr>
<td>Planning the most appropriate teaching techniques</td>
<td>28</td>
<td>14</td>
<td>71</td>
<td>35</td>
<td>55</td>
<td>27</td>
</tr>
</tbody>
</table>

But the teachers have paid comparatively lower attention on using technological services such as television and internet as additional learning aids, conducting synchronous online classrooms and the using the better teaching techniques for the online lessons. Furthermore, it was found that the most of the teachers use PowerPoint presentations, word and pdf documents and use zoom technology in their online classrooms. The teachers who engaged in teaching process in Mathematics and Technical streams, managed physical and digital resources of online classroom satisfactorily while the teachers of Commerce stream showed lower physical and digital resource management skills. The t-test (1AB; M=3.62, SD=4.45, n=167 and 1C; M=2.58, SD=0.78, n=34)
that calculated for finding the significant difference between the two school types showed \( p = 0.007266 \). Hence, \( p<0.05 \) it could be concluded in 95% that the type of school has an impact on the management of physical and digital resources. But when the t-test (Colombo; \( M=3.47, SD=0.48, n=151 \) and Piliyandala; \( M=3.37, SD=0.63, n=50 \)) calculated for the education zones, \( p \) value was 0.703656 and because of \( p>0.05 \), it concluded that education zone does not impact on the management of physical and digital resources.

When analyzing the data that collected by interviews and online classroom observations regarding physical and digital resource management, it revealed that the teachers use learning aids that prepared by PowerPoint presentations, MS word or as a pdf file. And also, teachers use zoom platform and lecture method for delivering the subject matters.

Another major finding of the study was 52.5% of teachers showed a satisfactory management skill in managing students in online classrooms. The teachers have enacted some rules and regulations for the students those who participate for the online sessions.

### Table 3

*Teacher response for the statements about managing human resource in online classrooms*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Always</th>
<th>Very Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
</tr>
<tr>
<td>Enacting rules and</td>
<td>68</td>
<td>34</td>
<td>68</td>
<td>34</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>Motivating students</td>
<td>47</td>
<td>23</td>
<td>109</td>
<td>54</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Discussing students’</td>
<td>52</td>
<td>26</td>
<td>74</td>
<td>37</td>
<td>61</td>
<td>30</td>
</tr>
<tr>
<td>problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Giving feedback</td>
<td>49</td>
<td>24</td>
<td>73</td>
<td>36</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Appreciating students</td>
<td>63</td>
<td>31</td>
<td>88</td>
<td>44</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Participating all students</td>
<td>20</td>
<td>10</td>
<td>77</td>
<td>38</td>
<td>51</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Confirming note writing</td>
<td>45</td>
<td>22</td>
<td>34</td>
<td>17</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Disturbing by students’</td>
<td>4</td>
<td>2</td>
<td>14</td>
<td>7</td>
<td>61</td>
<td>30</td>
</tr>
<tr>
<td>behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Marking attendance</td>
<td>73</td>
<td>36</td>
<td>77</td>
<td>38</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Giving an interval</td>
<td>6</td>
<td>3</td>
<td>25</td>
<td>12</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
</tbody>
</table>

According to the table 3, teachers manage the students by motivating them and by discussing the subject matters and problems. But, when managing students, teachers were not paying enough attention for assessing and giving feedback, engaging all the students of the classroom to the online platform, making sure to write notes and allowing time off for relaxing. When the teachers of Art stream paid the highest attention in managing students in the online classroom, the teachers of Commerce stream paid the least. The t-test that calculated for finding the significant difference between the two school types (1AB; \( M=3.52, SD=0.75, n=167 \) and 1C; \( M=2.65, SD=0.63, n=34 \)) showed \( p= 0.012235 \). Hence, \( p<0.05 \) it could be concluded in 95% that the type of school has an impact on the management of human resource. But when the t-test calculated for the education zones (Colombo; \( M=3.40, SD=0.72, n=151 \) and Piliyandala; \( M=3.32, SD=0.52, n=50 \)), \( p \) value was 0.782172 and hence \( p>0.05 \), it concluded that education zone does not impact on the management of human resource.

When analyzing the data that collected by interviews and online classroom observations regarding human resource management, it could be further clarify that the students should set their profile picture in school uniform, mention profile name and students’ index number, use the alternative responses available in the software to inquire problems that arise and join the lesson
within 10 minutes after starting it. It further revealed that teachers mark the students’ attendance via a google form or in a book. And also, teachers confirmed the note writing by getting its’ photograph.

According to the qualitative data analysis, the teachers have faced technical issues (72%) and subject related challenges (70%) rather than student related problems and the teacher related problems that occurring when managing online classrooms.

![Figure 2: Challenges that Teachers faced when managing online classrooms](image)

Although the first phase of the research showed the above results, when conducting interviews in the second phase, it was revealed that many teachers have teacher related problems rather than all the other types of challenges. Specially, some teachers were not aware of the alternative options available in online platforms that use for the online classrooms. Some teachers negatively unveiled the reality of their online classrooms.

**Discussion**

Findings of the study revealed that the physical and digital resources as well as human resource of the online classrooms are managed in moderate level by the teachers. The teachers do not pay a considerable attention on some factors regarding in managing physical and digital resources and human resource. Specially, many of the teachers did not group their students to perform group activities in the online classroom. There is breakout room option in software to group the students and teachers were not aware of this option. And also synchronous online sessions could not be observable in any online classroom. But some of the teachers claimed that they were unable to perform it due to loss of internet signals. Many teachers have avoided to do practical sessions in online platform. But teachers can share video clips easily to perform them. And also, it was highlighted that many teachers did not share their learning aids with students and they did not properly plan the most suitable teaching technique to deliver the lesson. Although teachers have enacted certain rules and regulations, it was observed that many students did not follow them. Specially, many students were joined with the lesson after 10-15 minutes. Sometimes students have forgot to change even their profile names. But when the teachers noticed them, they advised the students to do so. Many of the teachers used a flexible timetable to the online sessions. The major reason for that was to increase the participation of students.

The problems and challenges faced by teachers were different according to the type of school and the education zone. Specially, 1C school teachers were not aware of the online platforms which can be used for the online education. And the inactiveness of the students also was a serious problem in online education. Therefore, both teachers and students must be given an
adequate knowledge about online education.

Conclusions and recommendations

Based on the results of this study, it was evident that the most of the advanced level teachers of 1AB and 1C government schools in Sri Lanka, manage their online classrooms moderately. However, it was revealed that the teachers face many challenges while managing online classrooms. Some of that problems were technical issues and the most of the problems were teachers’ personal issues. There is an impact of the school type on the teachers’ management skills while the education zone does not.

As the teachers have faced many challenges regarding their personal issues, it is recommended that an adequate training and supervision should be provided for the teachers for managing online classrooms. Specially, workshops, modules and teacher guidance should be provided freely to improve their management skills as well. Further, it is recommended that the principals also should be given an adequate instructions regarding on managing online classrooms and for releasing the teachers those who have the necessity to improve the management skills.

And also it is a necessity to monitor the online education regularly by conducting SWOT analysis. The ministry of Education should lead this with the help of National Institute of Education, Education Commission and relevant Universities of Sri Lanka. Online education should promote primarily with the national education system as blended learning or any other suitable education method to familiarized this with the students also. As the online education is a novel and fit for the students in alpha generation, it can be embedded into school system easily.

Infrastructure facilities and internet facilities should be provided for each and every school in Sri Lanka to overcome signal issues and technical issues. It is important to update the education system with spare a higher share to education field from the budget to develop skillful teachers and principals as well as to develop physical and digital resources particularly for improving a quality online school environment.

References


https://www.researchgate.net/publication/349141020_SWOT_Analysis_of_Online_Teaching_During_Lock_Down_Blended_Teaching_the_Way_Forward


https://doi.org/10.4103/0976-0105.141942

https://doi.org/10.9734/bjast/2015/14975

https://core.ac.uk/download/pdf/5066121.pdf


http://creativecommons.org/licenses/by-nc/4.0/


20. Kumari, H. M. L. (2021a) *A study on instructional supervision by principals in Type 2 and Type 3 schools in the Colombo District, Sri Lanka*. International Research Symposium


