



Sri Lankan Teachers' Online Classroom Management Abilities by School Type and Grade Section

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Abstract: The purpose of this research was to study the potential of Sri Lankan teachers to manage their online classrooms. The study was focused to get an insight idea on how teachers manage time in their online classrooms, how teachers' online classroom management ability varies by school type and how teachers' online classroom management ability varies by grade section. Explanatory sequential mixed methodology was followed for the data triangulation. In the first phase of the study, quantitative data was collected by a survey questionnaire and analyzed before collecting the data in second phase. The second phase was followed based on the first phase results and the qualitative data was collected by semi-structured interviews and online classroom observations. The sample for the first phase was consisted of randomly selected 205 teachers in 10 selected 1AB and 1C schools and the second phase samples was purposively selected 10 teachers. Quantitative data was analyzed by descriptive statistical methods using tables, graphs and percentages while qualitative data was analyzed using thematic analysis. The study divulged that 66% of teachers managed time effectively in online classrooms while the teachers of 1AB schools are ahead of the teachers of 1C schools when managing the time in online classrooms. The study further revealed that the teachers of the Mathematics section showed the highest online classroom management skills comparatively to the other sections and teachers of the Commerce section showed the least online classroom management skills.

Keywords: Classroom Management, Online Classroom Management, Digital Literacy, 1AB Schools, 1C Schools.

Introduction

Sri Lanka is a multicultural Asian country, which has a high level of literacy when compared to other countries in the world. One of the main reasons that can affect that high literacy rate is the free education system in Sri Lanka. But with the spread of the Covid-19 pandemic throughout the world in the late 2019, there was a setback in the education field in Sri Lanka. However, with the aim of continuing Sri Lankan education, the ministry of education 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.

Classroom management is an important aspect of teaching learning process (Rahman et al, 2010). Management is a process that accomplishes a set of goals by integrating resources and responsibilities. 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 iPad, 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, Wickramanayake et.al 2022). 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 Ekşi, 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 and time 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, 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 teachers online classroom management abilities by school type and grade section

Purpose and objectives of the study

The primary objective of this research was to divulge how teachers who 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 time in online classrooms
2. Examine how teachers’ online classroom management ability varies by school type
3. Examine how teachers’ online classroom management ability varies by grade section

Research questions

The following research questions were developed to direct the study.

1. How do teachers manage time effectively in online classrooms?
2. How does the teachers’ online classroom management ability vary by school type?
3. How does the teachers’ online classroom management ability vary by grade section?

Methodology

The first phase of the research 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

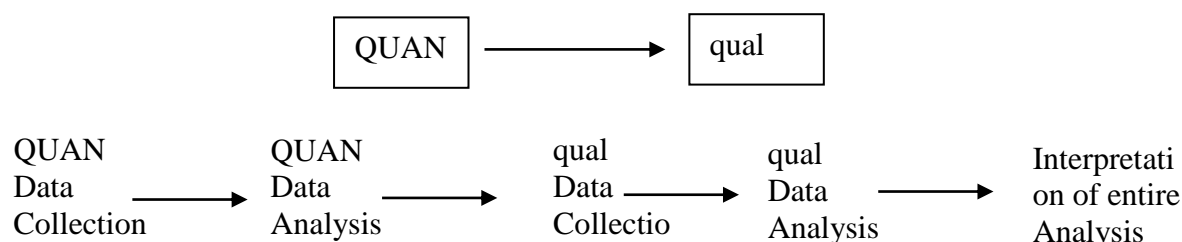


Figure 1: Sequential Explanatory Design- Adapted from Creswell 2008

Study Sample

The details of the sample used for the first phase of the study are briefly presented in the following table. The sample was selected proportionately to the population.

Table 1
Study Sample

Education Zone	Type of School		Number of teachers selected for the sample	
	1AB	1C	1AB	1C
Colombo	05	02	130	25
Piliyandala	02	01	40	10
Total	07	03	170	35
	10		205	

Accordingly, 205 teachers 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 consisted of five sections. 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.

For the second phase an interview protocol and a classroom observation checklist were used. 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 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, for analyzing data, frequency distributions and percentages which come under descriptive statistics were mainly used and also cross-tabulation, histograms and pie charts were used to show the analyzed results. Bivariate analyzes were used to examine the variation in teachers' time management skills by school type (1AB and 1C) and by grade section (Art, Commerce, Science, Mathematics and Technological). 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

A major finding of the first phase of the study was 66% of advanced level teachers managed time in the online classrooms. By following a flexible time schedule and by using the facilities of the mobile apps, teachers save the time and efficiently manage the online classrooms. 49% of the teachers were always used a timetable for the online classrooms and 43% of them were always used term plans. Many of the teachers were planning objectives of lessons (51%) and subject matters (58%) very often that was highly affected for managing time effectively. Another positive fact was 51% of teachers had timely awareness of online classroom activities. And also 39% of teachers used options available in software to make tasks easier. But, teachers had paid less attention to use day notes and lesson notes for saving time in their online classrooms.

Table 2

Teacher response for the statements about managing the time in online classrooms

Statement	Always		Very Often		Sometimes		Rarely		Never		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Teaching according to a time schedule	99	49	86	43	7	4	8	4	1	0	201	100
Using day notes	34	17	40	20	35	17	80	40	12	6	201	100
Using lesson notes	36	18	54	27	35	17	75	38	1	0	201	100
Using term plans	85	43	38	19	35	17	25	12	18	9	201	100
Planning objectives of lessons	41	20	102	51	40	20	13	7	5	2	201	100
Planning subject matters	61	30	116	58	8	4	12	6	4	2	201	100
Planning classroom activities	46	23	86	43	26	13	11	5	32	16	201	100
Timely awareness of classroom activities	32	16	103	51	32	16	12	6	22	11	201	100
Use options available in software to make tasks easier	55	27	78	39	42	21	16	8	10	5	201	100

When analyzing the data that collected by interviews and online classroom observations regarding on time management, it could be further clarify that the term plans, lesson notes and planning objectives of lessons helps to saving the time of the online classroom. And also, teachers used options available in software that use for online classroom to make tasks easier and save time by accepting responses through chat box and microphone.

Another finding of the study was teachers of 1AB schools are ahead of the teachers of 1C schools when managing the online classrooms. According to the below graph, 1AB school teachers' time management ability was comparatively higher than that of 1C school teachers. 1AB school teachers showed 4.29 standard deviation in planning subject matters than that of 1C school teachers. 1C school teachers showed 1.97 standard deviation in timely awareness of online classroom activities that showed a lower management ability. And also, 1C school teachers showed lower attention on using day notes, using term notes, planning classroom activities and using options in software to make tasks easier for saving time.

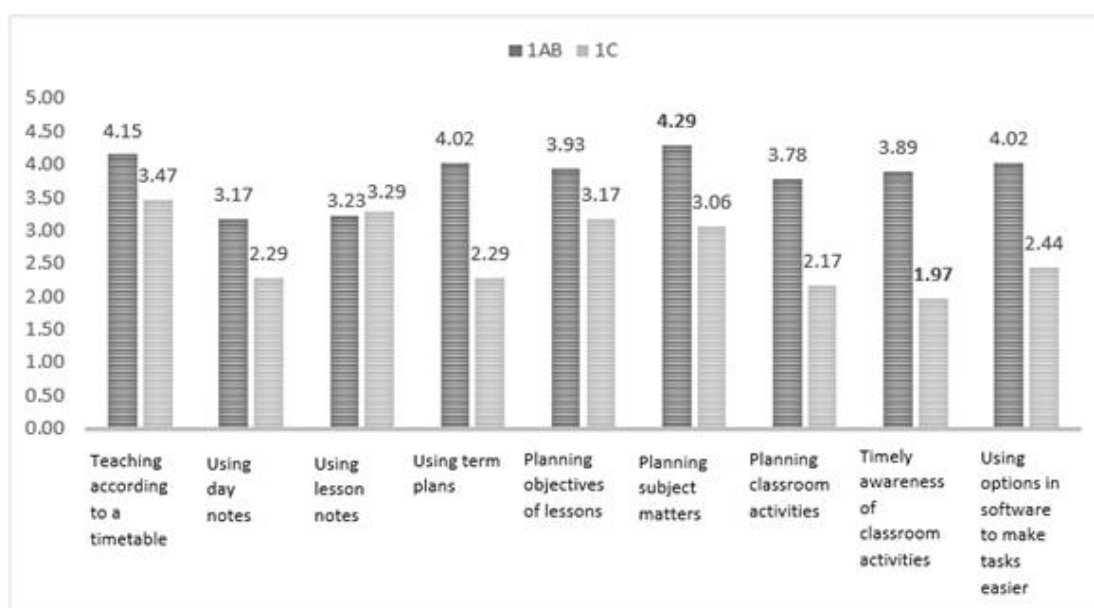


Figure 2: *Variation of teachers' time management skills by school type*

Physical and digital resource management skills of the online classrooms were shown in figure 3. According to the figure 3, 1AB school teachers showed the highest physical and digital resource management than that of 1C school teachers. Almost all teachers paid the attention on preparing students groups.

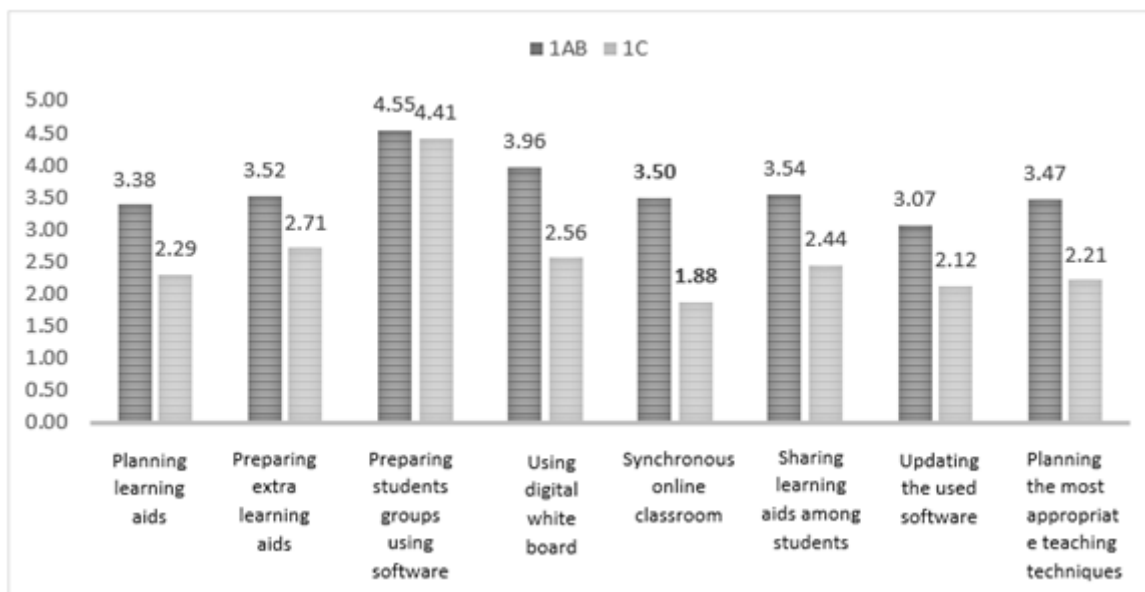


Figure 3: Variation of teachers' physical and digital resource management skills by school type

When considering about the human resource management of the online classrooms, figure 4 could be obtained. All the considered facts except marking attendance, 1AB school teachers showed the highest standard deviations rather than 1C school teachers. The teachers used appreciating students and enacting rules and regulations for managing students in online environment.

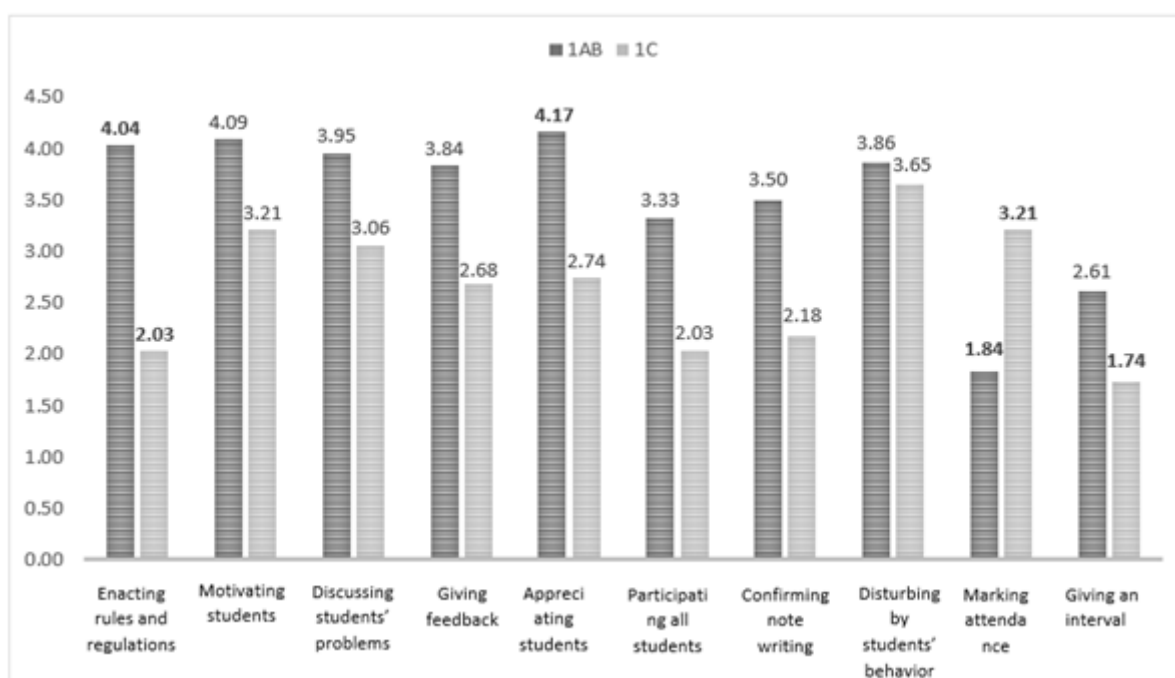


Figure 4: Variation of teachers' human resource management skills by school type

One of the other findings of the study was teachers of Mathematical section showed the highest management skills comparatively to the other sections and teachers of Commerce section showed the least management skills (A= Art section, C= Commerce section, S= Science section, M= Mathematics section and T= Technological section).

As shown in figure 5, when managing time, teachers paid higher attention on teaching according to a timetable and paid less attention on using day notes and lesson notes for the online classrooms. And also Science teachers as well as Commerce teachers paid less attention on planning online classroom activities.

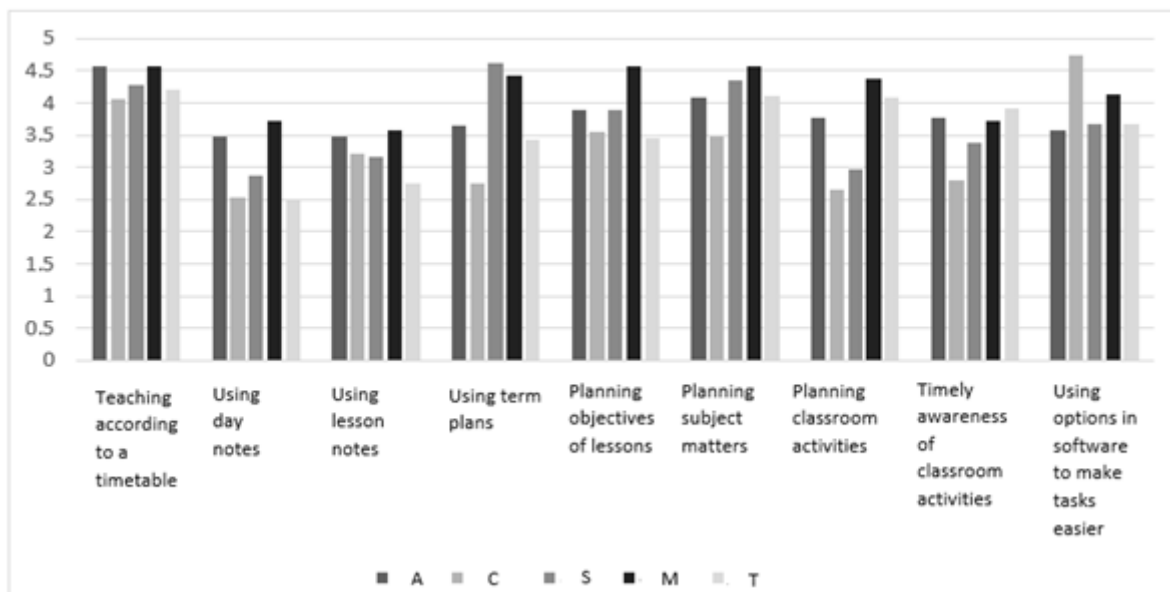


Figure 5: Variation of teachers' time management skills by grade section

As shown in figure 6, teachers of Mathematics section managed physical and digital resources of the online classrooms than that of the other teachers. But, the teachers of all sections prepared students groups using some software. Commerce teachers paid less attention on planning learning aids. Comparatively both teachers of Commerce and Science sections paid less attention for managing physical and digital resources.

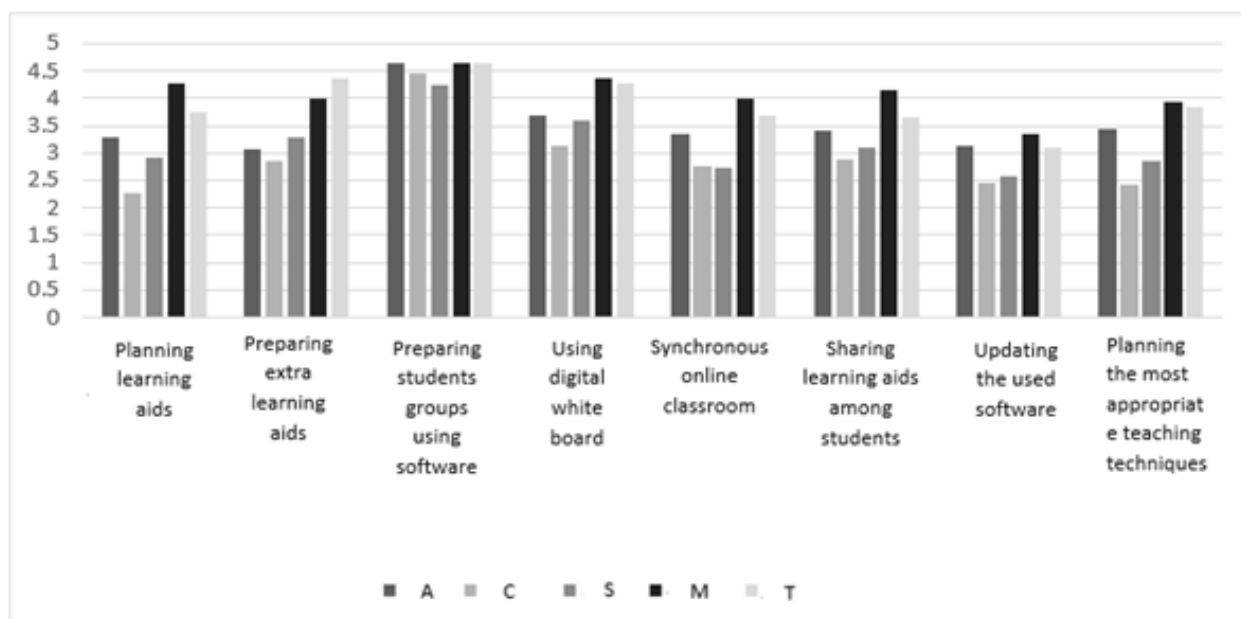


Figure 6: Variation of teachers' physical and digital resource management skills by grade section

As shown in figure 7, teachers of Mathematics section considerably paid a higher attention for many facts than other teachers. But, almost all teachers paid less attention on marking attendance of the classroom and giving interval for the students.

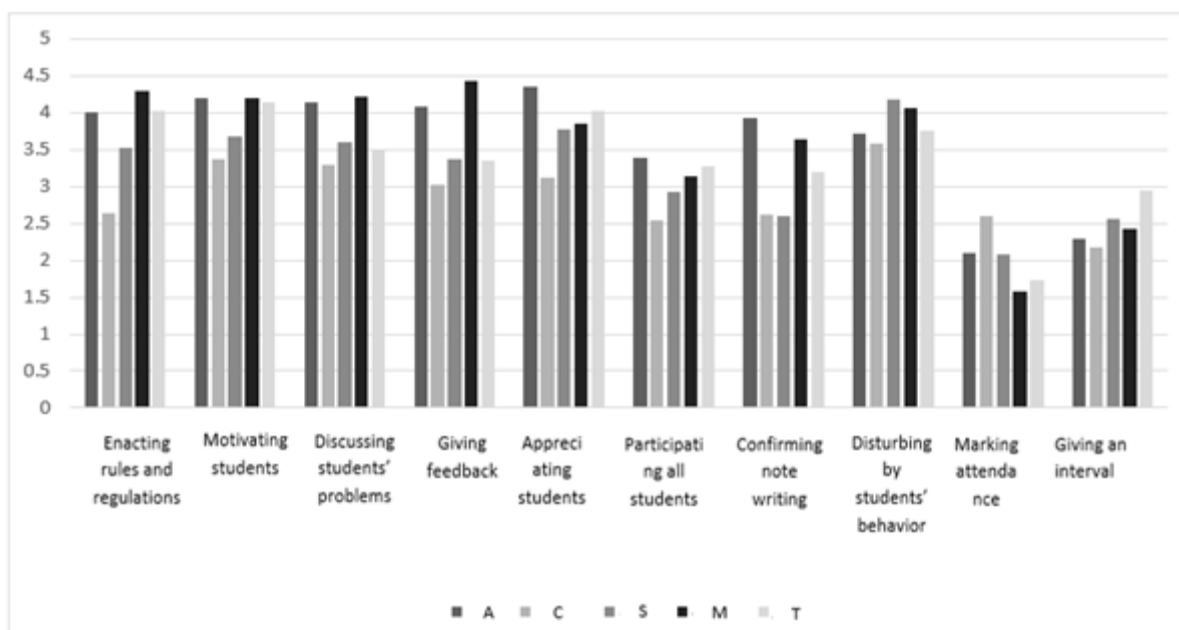


Figure 7: Variation of teachers' human resource management skills by grade section

Discussion

Findings of the study revealed that the time is managed in satisfactory level by the teachers when conducting online education. The teachers are not pay a considerable attention on some factors regarding in using day notes and lesson notes for the online classrooms which highly affected for saving cyber time. But in the second phase of the research, it could be revealed that teachers did not use day notes as they were not monitored by Head of the grade section or other higher management professional. But they used term plans frequently as it should present to the school. And also according to the interviews, teachers used lesson notes for each and every lesson. They mentioned that it is easy to use lesson notes and many of them share the notes with the students after finishing the online classroom for saving time. And also 90% of teachers planned lesson objectives with the aim of saving time. 70% of teachers used chat box and white board for making tasks easier in the online classrooms.

When considered the school type, 1AB school teachers successfully managed the online classroom as they were guided better than that of 1C school teachers.

Specially, 1AB school teachers were monitored well. There were certain meetings conducted regarding the online teaching in 1AB schools. Therefore, 1AB school teachers regulated and managed the online classrooms with enacting certain rules and regulations.

The teachers in Mathematics section managed the online classrooms as they have to inculcate mathematics in students. Sometimes, it was a difficult task but after preparing well the faced the students well.

Conclusions and recommendations

Based on the results of this study, it was evident that the most of the advanced level teachers of 1AB government schools in Sri Lanka, manage time in their online classrooms in a satisfactory level. However, it was revealed that the teachers face many challenges while managing online classrooms. Specially, when managing time, some software only allowed very small period of time for a session and after the particular time passed, the session disconnected. When managing time in the online platform, this was a big challenge for the teachers and therefore, the class continuity could not be maintained. So, the teacher claimed that this should be minimized to maintain a quality online education.

As 1C school teachers faced many challenges regarding on managing time in their online classrooms, it is recommended that an adequate training and supervision should provide for the

teachers regarding on managing online classrooms. This can be done by workshops, modules, discussions and so on. Specially, a better monitoring procedure should be there to stronger their backup. And also IC school principals should be given an adequate knowledge and proper guidance to guide their teachers well.

And also Sectional Heads and Subject Leaders should be given proper instructions to monitor the procedure. According to the subjects offer by the sections, the online classrooms should be changed and proper teaching techniques, learning aids, lesson delivery patterns should be maintained. Students also should be given a proper guidance about online education.

References

1. Adams, A. and Cox, A. (2008). Questionnaires, in-depth interviews and focus groups. Cambridge University Press. https://www.researchgate.net/publication/42795848_Questionnaires_indepth_interviews_and_focus_groups
2. Ayhan, B. (2016). Digital Literacy. Digitalization and Society. Peterlang Publications. Turkey. Pp 36 https://www.researchgate.net/publication/323018313_Digital_Literacy
3. Boström, K. W., & Öhlander, M. (2017). Observation Methods. Qualitative Methodologies in Organization Studies, 33–52. https://doi.org/10.1007/978-3-319-65442-3_2
4. Bull, S.L. and Solity, J.E. (1987). Classroom Management-Principle to Practice. Published by Croom Helm Ltd, United Kingdom. Pp 13 https://books.google.lk/books?hl=en&lr=&id=46kzc8huB5oC&oi=fnd&pg=PP1&dq=principles+of+classroom+management&ots=WiGEHInbwt&sig=FW2mFreQ3rxQTKLvtFp5Pb9bWY&redir_esc=y#v=onepage&q=principles%20of%20classroom%20management&f=false
5. Creswell, J. W. (2008). By John W. Creswell - Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (Third Edition) (Third Edition). SAGE Publications, Inc. USA. Pp 203-224 <http://www.ceil-conicet.gov.ar/wp-content/uploads/2015/10/Creswell-Cap-10.pdf>
6. Dhull, I. and Sakshi, M.S. (2017). Online Learning. International Education and Research Journal, Vol. 3, Pp. 32.
7. Dykman, C. A. and Davis, C. K. (2008). Online Education Forum - Part Three A Quality Online Educational Experience. Journal of Information Systems Education, Vol. 19(3). Texas <http://jise.org/Volume19/n3/JISEv19n3p281.pdf>
8. Erdemir, N. and Ekşi, G. Y. (2019). The perceptions of student teachers about using An online learning environment 'Edmodo' in a 'flipped classroom'. SDU International Journal of Educational Studies, 6(2), Pp 174-186. <https://dergipark.org.tr/en/download/article-file/863154>
9. Fatimah, A. Albrahim. (2020). Online Teaching Skills and Competencies. Turkish Online Journal of Educational Technology, 19(1), 9–20. <http://files.eric.ed.gov/fulltext/EJ1239983.pdf>
10. Gupta, R.M. and Sharma, P. (2020). SWOT Analysis of Online Teaching During Lock Down: Blended Teaching the Way Forward. Indian Journal of Extension Education. Vol. 56. India https://www.researchgate.net/publication/349141020_SWOT_Analysis_of_Online_Teaching_During_Lock_Down_Blended_Teaching_the_Way_Forward
11. Ibrahim, M.H.A.R. (2016). Classroom Management: The Effectiveness of Teachers' Role. Education and Linguistic Research. Vol. 2. Soudi Arabia https://www.researchgate.net/publication/299404825_Classroom_Management_The_Effectiveness_of_Teacher's_Roles

12. Jamshed, S. (2014). Qualitative research method-interviewing and observation. *Journal of Basic and Clinical Pharmacy*, 5(4), 87. <https://doi.org/10.4103/0976-0105.141942>
13. Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/bjast/2015/14975>
14. Kaliska, P. (2002). A COMPREHENSIVE STUDY IDENTIFYING THE MOST EFFECTIVE CLASSROOM MANAGEMENT TECHNIQUES AND PRACTICES. Pp 28, 29 <https://core.ac.uk/download/pdf/5066121.pdf>
15. Kumari, H. M. L. (2011) A Study on Classroom Management Practices Leading to an Effective Teaching-Learning Process in Secondary Schools in Sri Lanka, Annual Research Symposium, University of Colombo
16. Kumari, H. M. L. (2014) Role of the principals in the leadership of teaching and learning in secondary schools in Sri Lanka. 2nd Annual Postgraduate Researcher's Presentation, 47-48, University of South Wales PRESS.
17. Kumari, H.M.L. (2019) A Study on Instructional Supervision by Principals in Type 1C and Type 2 Schools in Sri Lanka. *International Journal of Social Sciences: PEOPLE* 5 (3), <http://creativecommons.org/licenses/by-nc/4.0/>
18. Kumari, H. M. L. (2020) Instructional Leadership Practice and Educational Achievement of Students: Survey of Literature. *Adyapana SANWADA* 10, 121-133, University of Colombo PRESS
19. 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 2021 Interdisciplinary Research in Education, PROCEEDINGS* (1), 176-185 <https://edu.cmb.ac.lk/proceedings-irs-2021/>
20. Kumari, H. M. L. (2021b) A Study on Distributed Leadership Practices and its Impact on Teaching and Learning. *International Journal of Teaching, Education and Learning: PUPIL* 5(1), 55-72 <https://doi.org/10.20319/pijtel.2021.51.5572>
21. Kumari, H. M. L. (2022a). Instructional Supervision by Principals in Type 1C and Type 2 Schools in the Gampaha District Sri Lanka. *International Journal on Integrated Education (IJIE)* 5(8), 117-125 <https://journals.researchparks.org/index.php/IJIE>
22. Kumari, H.M.L. (2022b) Principals Distributed Leadership Practices and its Impact on Teaching and Learning in Type 1AB and Type 1C Schools in the Colombo District Sri Lanka. *International Journal on Integrated Education (IJIE)* 5 (9), 17-25 <https://journals.researchparks.org/index.php/IJIE>
23. Kumari, H.M.L. (2022c) Importance of School Leadership in improving Educational Achievement of Students: Survey of Literature. *Adyapana PRATHIBA* (12), 135-147. University of Colombo Press.
24. Kumari, H.M.M. L. (2022d) A Study on the Implementation of School Based Management of Secondary Schools in Sri Lanka with special reference to 1AB & 1C Schools. *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, 11(11), 16-24 <https://www.ijltemas.in/digital-library/volume-xi-issue-xi.php>
25. Kumari, H. M. L. (2022e). Instructional Supervision by Principals in Type 2 and Type 3 Schools in Sri Lanka. *Sri Lanka Journal of Education* 1(1), 73-88
26. Li, L., Wang, Y. and Wu, B. (2021). Discussion on online classroom teaching mode under the concept of active learning. China. <https://iopscience.iop.org/article/10.1088/1742-6596/1976/1/012070/pdf>

27. Malkanthi, J.P.R. & Kumari, H. M. L. (2021) Enhancing Students' Higher Order Cognitive Skills. International Research Symposium 2021, Interdisciplinary Research in Education, PROCEEDINGS (1), 201-208 <https://edu.cmb.ac.lk/proceedings-irs-2021/>
28. Murphy, E. (2009). Online synchronous communication in the second-language Classroom. Canadian Journal of Learning and Technology. Vol. 35. Canada. <https://files.eric.ed.gov/fulltext/EJ896571.pdf>
29. Nawaz, A. and Kundi, G.M. (2010). Digital Literacy: An analysis of Contemporary Paradigms. Journal of Science and Technology Education Research. Vol. 1(2), Pp. 27. Pakistan. http://www.academicjournals.org/app/webroot/article/article1379488135_Nawaz%20and%20Kundi.pdf
30. Pillegedara, S.P. & Kumari, H. M. L. (2021). School-based planning and the contribution of stakeholders in developing the re-opened schools. International Research Symposium 2021, Interdisciplinary Research in Education, PROCEEDINGS (1), 387-392 <https://edu.cmb.ac.lk/proceedings-irs-2021/>
31. Rahman, F., Jumani, N.B., Basit, A., Chishti, S.H. and Ajmal, M. (2010). Let the Teacher Manage the Challenge of Classroom Management. International Journal of Business and Social Science. Vol 1. Pakistan. Pp 96,99 <http://ijbssnet.com/journals/8.pdf>
32. Saricoban, A. and Sakizli S., (2006). Factors Influencing How They Manage Their Classrooms. Journal of Language and Linguistic Studies. Vol.2. Turkey https://www.researchgate.net/publication/265494438_Factors_Influencing_How_Teachers_Manage_Their_Classrooms
33. Stephanie, C. Hicks, & Roger D. Peng. (2019). Elements and Principles of Data Analysis. ArXiv: Applications. <https://arxiv.org/pdf/1903.07639v1>
34. Teoh, H. J., Cheong, S. K, Stuart, L. T., Manorama, B., Kisha, G., Edirippulige, S., Bambling, M. (2018). Brief Online Classroom Behavior Management Training for Teachers to Address Male Student Behavioural Issue in Chennai, India. Creative Education. https://www.scirp.org/pdf/CE_2018011815381636.pdf
35. Usman, Y. D. (2016). Educational Resources: An Integral Component for Effective School Administration in Nigeria. Research on Humanities and Social Sciences. Vol. 6. Nigeria. <https://files.eric.ed.gov/fulltext/ED578024.pdf>
36. Wickramanayake. R, Kumari, H. M. L. (2022). The Potential of Sri Lankan Teacher in Managing Online Classroom. International Journal on Integrated Education (IJIE) 5(11), 320-330 <https://journals.researchparks.org/index.php/IJIE/article/view/3685>
37. Wijekoon, K.M.J. & Kumari, H. M. L. (2021) Examining the teachers' perception of the School Based Professional Teacher Development Programms. International Research Symposium 2021, Interdisciplinary Research in Education, PROCEEDINGS (1), 387-392 <https://edu.cmb.ac.lk/proceedings-irs-2021>