A Study on the Perception of the Principals Regarding the Difficulties in the Implementation of Online Education in Rural Small Schools

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ABSTRACT

This study examines the challenges faced by principals in rural small schools when implementing online education in response to the COVID-19 pandemic. The Main objective was to understand the nature of the online education in these schools and identify specific difficulties encountered by the principals. The study used a mixed-method, sequential explanatory research design. Forty eight school principals were selected randomly out of 130 schools according to the research criteria (n=48). Data was collected through online questionnaires and qualitative interviews. Findings indicated that although principals have a basic understanding of online education, further development is needed. It was found that practical problems and difficulties hindered the effective implementation of online education in rural small schools. Recommendations included implementing a formal awareness program for all school stakeholders and mobilizing necessary resources.

1. INTRODUCTION

By United Nations convention on the Rights of a child, every government has a responsibility of providing education for all children in the country (UNESCO, 2019). In the Covid-19 pandemic situation, the face to face teaching and learning method had to be stopped completely. In the circumstances, Internet-based distance mode of teaching (on-line learning) was gaining popularity all over the world. Sri Lanka, even without a proper precedence, the online education was implemented in the school sector. In a situation like that, the principals of the schools had to meet the challenge of implementing online education even without a proper training or theoretical knowledge of online education.

It has been estimated that 70% of schools in Sri Lanka have no access to online education (Sunday Times, 2021). As education is a basic human right, children should be provided with proper education in any case. In such a background principals in rural small schools are faced with many difficulties in providing education for children (Bandaranayake & Ganegoda, 2023). So that this should be researched properly. Even though several research are conducted on online education and the implementation worldwide, there are only few researches conducted on the problems and difficulties faced by rural small schools in the implementation of online education (Priyadarshani & Jesuiya, 2021). When considering the Sri Lankan context there are only few studies based on this. These studies are mainly based on the use of technical equipment, finding the proper effective time for a lesson, proper lessons for teach and so on. But no in-depth studies are available on the role of principals in rural small schools as the implementation of online education was very rarely conducted in rural schools. For successful implementation of on-line learning principals' instructional leadership plays an important role

apart from their management skills (Perera, 2011).

1.1 Research problem

With the outbreak of corona virus schools had no option other than conducting lessons using internet-based video conference software like ZOOM. School administration and teachers were not having prior experience of this mode of teaching and most parents were also could not afford to buy the technology required. School principals and teachers had to face a formidable challenge to convert traditional teaching into on-line version of it. The problem statement of this research is, how to manage the problems and the difficulties faced by school principals in rural small schools in implementing online education in rural small schools. The extensive purpose of this research is to suggest recommendations in order to minimize the problems accessible for rural small schools in online education.

1.2 Research Objectives

- To discover the perception of the rural small school principals on online education.

- To identify the capabilities of rural small schools in the implementation of online education

- To identify the problems faced by principals in online education in rural small schools.

- To suggest recommendations in order to minimize the problems of online education in rural small schools.

2. MATERIALS AND METHODS

2.1 Sample

This research was carried in Galle district. There are four zonal education divisions in Galle district and

188 rural schools (Ministry of education, 2019). Sixty school principals were selected randomly out of 130 of these schools for the survey and 5 principals, three males and two females, were selected purposively for the interviews.

2.2 Instruments

A questionnaire was used to collect quantitative data and interview guide was used to collect qualitative data. In order to collect data, the questionnaire. The questionnaire was developed based on a five-point Likert scale and it was focused on the five main themes in order to investigate perception of the principals. Following are the themes: Comprehension on teaching learning theory, Ability to manage technology for teaching and learning process, Skills on online lesson development and administration of the online learning process. (Anderson, 2003; Alan, Paul & Brian, 2004). Each main theme was addressed through same six subthemes viz. online learning-teaching process awareness, online learning-teaching process organization, resource management for the online learning-teaching process, training for the online learning-teaching process, implementation of the online learning-teaching process and regulation and monitoring of the online learning-teaching process (Paul, 1990). Thereby, the questionnaire consisted of 5X6=30 items. The choices were Strongly Agree (SA), Agree (A), Moderately Agree (MA), Disagree (D) and Strongly Disagree (SD)

2.3 Method of collection and analysis of data

The questionnaire was made available to selected principals through Google Forms to collect data. The data collected were analysed using frequencies and percentages on each choice for each item in the questionnaire. The sample in the Table 1 explains the calculation of frequency of choices for the main theme 1.

Table 1: Frequency distribution of choices made by the participants for the Main Theme1 (sample)

Choice	Sub Theme1	Sub Theme2	Sub Theme3	Sub Theme4	Sub Theme5	Sub Theme6	Main Theme1
SA	7	7	5	4	13	4	40
A	28	18	13	25	21	5	110
MA	18	27	23	21	16	12	117
D	3	4	13	6	6	20	52
SD	2	2	4	2	2	17	29

Chi-squared statistics for goodness of fit were used at .05 significant level of probability for the significance difference in the choices made on each main theme. Principals were interviewed over the phone and audio recorded. The audio recording was transcribed and thematically analysed.

3. RESULTS AND DISCUSSION

Fifty-eight participants (96.7%) responded to the questionnaires.

Table 2 illustrates the Chi Squared statistics for choices (SA, A, MA, D and SD). The frequency for each choice was calculated and directed to the test. The differences among choices for each main theme was significant at $p < .05$ significant level.

Table 2: Chi Squared test results of main themes in the questionnaire

Seq.	Theme	Chi Squared value for choices SA, A, MA, D and SD	Significance	% Frequency of SA and A	% Frequency Of MA	% Frequency of SA+A+MA
	Comprehension on teaching learning theory	96.454023	Yes	43.10	33.62	76.72
	Ability to manage technology for teaching and learning process	78.4508671	Yes	38.73	31.89	70.62
	Skills on online lesson development	107.086207	Yes	31.32	35.06	66.38
	Knowledge on teaching learning strategies for online education	131.314121	Yes	41.50	35.06	76.56
	Administration of the online learning process	95.6206897	Yes	40.23	32.18	72.41

Note: "Chi Squared value for choices SA, A, MA, D and SD" means that the Chi Squared value calculated for the total votes received via sub themes for each choice for each main theme (Refer Table 1)

According to the analysis, only 43.1% of the principals admitted that they have a sound comprehension about teaching and learning in on-line environment, but at the same time, this situation can be improved as 33.62% of the principals are moderately aware of this. In the interview, one principal expressed " I did not have any specific training on on-line education but I used my current education knowledge for this purpose". Only 38.73% of the principals are able to manage technology for teaching learning process while 31.89% being able to perform moderately. The difficulty was evident from the comments like " I have only very little knowledge on ICT and only one teacher on my staff has ICT knowledge. We shared lessons with students on WhatsApp as per our ability but I did not check whether students have used them". Lowest (31.32%) was the skills in the development of on-line lessons. Although it is not a regular practice of principals to develop lessons, it is useful aspect of principals' instructional leadership in order to enhance students' achievements (Gray, 2018). The moderate ability (35.06%) level is an encouraging sign that it could be developed through professional development. This is corroborated by the remarks made by the principals who were interviewed "We have never received a comprehensive training on how to teach with technology. Therefore, we find it difficult to guide our teachers for this purpose". The highest percentage (41.5%) of the SA and A have been received by the principals' knowledge on teaching learning strategies for online education which is specific in on-line learning (Navarro and McGrath, 2021). Relatively high status (40.23%) is displayed in the principal's ability to administrate on-line learning process which is an essential aspect of on-line education when a virtual school is created on the Internet during a situation where students cannot physically present at school (Zincirli, 2021).

The following themes emerged in the analysis of the qualitative data collected through interviews.

The lack of knowledge and skills of the principals about pedagogy of on-line education, poor skills in handling ICT hardware and software, students' lack of access to ICT facilities in the rural areas and lack of interest in the teachers to be involved in innovative practices. Lack of access is mainly due to poverty of parents to purchase equipment and internet services and signal weaknesses in the Internet services.

4. CONCLUSIONS

According to the results, it was clear that the majority of the principals have some understanding regarding the online education process. However, it was clear from the data that the understanding was not a high level of understanding, but moderate understanding. It is clear that although all the principals want to implement the entire process of online education in their schools lack of facilities and resources stand as obstacles. Students' access to required resources for on-line learning has been the main barrier that the principals cannot remove to ensure successful on-line learning.

As for the suggestions, five major items could be given. Firstly sufficient facilities for on-line education must be provided to the schools. Secondly, principals should be professionally developed on how to manage on-line education in terms of pedagogy and basic ICT knowledge. Thirdly, teachers should also be provided with knowledge and skills in pedagogy and instructional strategies for on-line learning. At the same time teachers should be professionally developed on ICT hardware and software knowledge. Finally conducting awareness programs for parents about the benefits of online education is also a must.

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