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IN-SERVICE TEACHERS' PERCEPTIONS ON IMPLEMENTING UNIVERSAL DESIGN FOR LEARNING IN THE REPUBLIC OF MALDIVES

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ABSTRACT

This research explored in-service teachers' perceptions on implementing Universal Design for Learning (UDL), in Maldivian schools. The concurrent triangulation mixed method design was adopted in this research to explore the perceptions of special education teachers, primary teachers, pre-school teachers and relief/contract teachers in implementing UDL. The research collated data by using a quantitative survey form with a sample of 617 in-service teachers from 45 schools of the Maldives and qualitative focus groups interviews with a sample of 30 in-service teachers from 11 schools. The quantitative data were analysed using specific tests such as independent-samples t-test and One-Way ANOVA via SPSS software, and the qualitative data analysis was done using framework analysis method. The results of the study showed that in-service teachers had a positive view towards UDL. Also, the perceptions of in-service teachers towards UDL varied based on demographic variables. The result also depicted the importance of providing a robust training programme for teachers and making all key stakeholders aware of inclusive education, apart from providing required resources to make implementation a success.

Keywords: *Inclusive Education, Universal Design for Learning, Republic of Maldives*

BACKGROUND

Maldives, as being a signatory of the United Nations' Conventions on the Right of Persons with Disability (UNCRPD) in 2007 and did ratification of the treaty in 2010 (United Nations Treaty Collection, 2006), gives high priority in providing education to the students with complex learning profile (SCLP). Remarkable actions were taken in the Maldives after ratification of UNCRPD such as drawing disability specific legislations, enacting Disability Act, (Law No.8/2010) in 2010, setting anti-discrimination legislations such as Article 17 (a) and (b), Article 35 (a) and (b), and Section 1102 (2) (i) of the Constitution of the Maldives (United Nations 2019; United Nations, n.d). Moreover, ratification of the Inclusive Education Policy (IE Policy) in 2013 (Ministry of Education, 2013), and formation of the Department of Inclusive Education (DoIE) under the Ministry of Education in 2018 (President Office, 2018), and enactment of Education Act in 2020 (President Office, 2020) were huge steps taken in the Maldives to begin and improve IE practices in schools. In addition, revisions were brought to the IE Policy 2013 once the Education Act was ratified in 2020, and the revised IE Policy was enacted in the Maldives in 10th November 2021 (President Office, 2021). The revised IE policy 2021 gives more focus on implementing inclusive pedagogical approaches in Maldivian schools such as Universal Design for Learning (UDL) apart from other IE methodologies. Identifying in-service teachers' perceptions on UDL implementation in Maldivian schools would benefit the implementation process, and since there is no research done in the Maldives based on UDL, the findings of the research would fill the gap in the literature related to UDL practices in the Maldives.

AIM AND OBJECTIVES

The aim of the research was to present in-service teachers' perceptions on implementing Universal Design for Learning in Maldivian schools. In this regard, this paper contains perceptions of in-service teachers (special education teachers, primary teachers, pre-school teachers and relief/contract teachers) about implementing Universal Design for Learning

in Maldivian Schools, application of UDL components in Maldivian schools, and significant difference among subgroups of demographic variables when compared to teachers' perception on UDL.

LITERATURE REVIEW

Inclusive Education

Inclusive Education (IE) defined by the book of 'Inclusive Education Strategies' states that IE as an educational approach for all children and the core of IE is based on human right to education (Ticha, Abery & Johnstone et al. 2018). Further, an education system can be considered inclusive, if it deprives from exclusion, and involves all students in learning apart from welcoming and supporting for their learning, and they denotes that getting inclusive education is a right to all children (Ticha, Abery & Johnstone et al. 2018).

Inclusive Education (IE) is about school culture that recognises individual needs and celebrates individual differences. Also it is a model that brings success to the individual learners (Corbett, 2001). Moreover, inclusive education is a two-way process where feelings and experiences of both learner and teacher are significant and valued. IE is also a whole school approach which focuses on appropriate mainstream practices and it is essential for the learners based on their needs. It also requires whole team effort in having a successful inclusive school. IE is not special education, however it is the quality of mainstream education (Corbett, 2001).

Participation indicates learning, playing or working in collaboration with others. This includes making choices and allowing children to have a say in their actions. Moreover, inclusion is being recognised and accepted (Booth & Ainscow, 2011). Inclusive schools seem like full participation and achievement of all learners including Students with Complex Learning Profile (SCLP) (Ministry of Education, 2014). In these schools all children engage and achieve by participating and learning.

Universal Design for Learning

Universal Design for Learning (UDL) is an evidence based framework which proactively designs the curricular materials by considering all learners in mind (CAST, 2013). This useful framework is rooted from neuroscience, and has learner variability as a norm, meaning that, 'no two brains learn in the same way' (Ticha, Abery & Johnstone, et al. 2018). The three principles of UDL, multiple means of representation, action and expression, and engagement support learners to become 'expert learners' by fixing the curricular instead of 'fixing the students'. This helps learners to become resourceful, strategic, and purposeful towards a goal (CAST, 2013, Ticha, Abery & Johnstone, et al. 2018). The three principles of UDL include (1) multiple means of representation focuses on providing various ways for learners to acquire knowledge and information, (2) multiple means of expression focuses on using alternative ways to demonstrate what students know, (3) multiple means of engagement focuses on using techniques that seek students' interest, make them motivated learners, at the same time appropriately challenge their learning (Edyburn, 2005; Rose, 2015). Further, UDL is a teaching methodology which supports both the delivery of content areas and teaching based on the needs of individual children (CAST, 2013).

UDL can be used to remove barriers for the learners so that language can be accessible to all the children by providing multiple means of representation. For instance, children face language differences, visual barriers, auditory barriers, low attention span, physical disabilities, processing challenges, intellectual limitations, and emotional challenges as literacy learning barriers (Dalton & Brand, 2012). Teachers face classroom barriers, lack of space and human resource, less funds for technology, limited materials, and inflexible curriculum. UDL can remove these barriers by providing flexible space, materials, curriculum, technology applications, and personnel (Dalton & Brand, 2012). Therefore, though there are barriers face

by teachers in teaching various subjects, these barriers can be overcome using UDL

A practical guideline to implement UDL in schools include (1) start small, (2) engage everybody, (3) use technology, but do not rely on it, (4) focus on the whole environment, (5) bring students on-board, and (6) be flexible (Noonoo, 2014). In this regard, when schools start applying UDL principles and practices, it is necessary to implement it gradually instead of trying to implement everything together. For instance, instead of focusing on all the curriculum components, we could focus on applying UDL principles into a single activity or a lesson, and based on these experiences and its successes, we can move forward with other curriculum areas (Noonoo, 2014). Secondly it is necessary to engage all the learners by incorporating stimulating techniques such as using video, clay modelling, outdoor trips, alongside the apps and software, teachers' normally use. The UDL practitioners plan ahead to support every learner in the classroom. Thirdly technology can be used in an intentional way based on the needs of the child, instead of relying on it always. For instance, teachers can turn on text-to-speech functions, if a child feels more comfortable hearing passages, instead of reading it by him/herself. Fourthly, it is necessary to cultivate a learning environment from the ground up including goals, methods for achieving goals, utilising materials and resources and assessment to measure progress. Moreover, students need accessibility in all these areas and maximize learning opportunities through multiple ways. Fifthly, students need to be brought on-board by explaining why and how their environment is shifting. Sixthly, UDL opens doors for educators to choose new approaches, instead of relying on formulaic teaching, to overcome barriers to accessible learning (Noonoo, 2014).

Universal Design for Learning is a framework that creates a flexible learning environment and removes barriers for learning. This framework

gives equitable access and participation in learning (Ministry of Education, 2020). This framework supports changing the traditional practices followed by teachers to a more value based approach where learner variability is considered. "One-size-fits-all thinking can create barriers and the "myth of the average learner" has excluded many students from realising their potential (Ministry of Education 2020, p.2). This suggests that it is crucial to apply strategies applicable for the needs of various learners instead of using only a single approach and only focusing on average learners. Educators can design the learning environment proactively by considering the learner variability and valuing their strengths and needs (CAST, 2018). UDL framework helps in doing this. Planning for diversity and learner variability is good for everyone (Moore, 2015). By taking an analogy of 'Bowling Sport' the author explained the importance of keeping the targets of reaching students who need more support so that they could reach all other students in the classroom. UDL is an approach that supports all learners so that everyone benefits from it. For instance, students can be more confident when they get equitable access to learning opportunities, and demonstrate learning using appropriate tools and support (Ministry of Education, 2020,). In UDL based lessons, teachers first consider WHO they are going to teach and what they bring with them to the classroom, before teachers decide on WHAT they will teach in the classroom, thus, this approach is more like a people-first approach. UDL is driven from neuroscience and research with a vision of equity. UDL requires careful planning and can work in a classroom, when teachers focus on (a) posting lesson goals in the classroom to make students aware of what they are going to achieve in the lesson, (b) giving multiple options for completing the assignment/task, (c) having flexibility in the learning environment such as spaces for quite individual work, small or large group work, and group instruction, (d) giving regular feedback to the students to make them encourage about the choice they made in class and check whether they met the goals of the lesson, (e) having digital and audio text to give access to the learning materials for all types of learners (CAST, 2018).

Therefore, in order to increase curriculum engagement of Students with Complex Learning Profile in Maldives, the schools can apply this model so that it would cater to all the learners in the classroom at the same time abiding international conventions on the rights of persons with disabilities.

Theoretical Framework

The theoretical framework of this research is based on Sociocultural Theory and Diffusion of Innovation Theory.

Vygotsky's Sociocultural Theory

The sociocultural theory comprises social environment and cognition, and explains that children's thinking and behaviour can develop via social interaction (UNESCO, n.d) and there is cultural variation in it (McLeod, 2007). According to this theory people understand the world by interacting with people and tools the culture offers to them. The cultural tools can pass from one person to another via three distinct ways, imitative learning, instructed learning and collaborative learning (McLeod, 2007). This theory explains that learning can take place in two levels, (1) interacting with others which is known as inter-psychological and (2) integrating with an individual's mental structure or intra-psychological (UNESCO, n.d). As interaction is one of the core themes explained in sociocultural theory, the second theme explained in this theory was Zone of Proximal Development (ZPD), where the potential for one's cognitive development bounds. In order to reach from students' actual development to potential development level various strategies can be applied such as collaborative learning, discourse, modelling, and scaffolding to assist in students both intellectual knowledge and skills (UNESCO, n.d, McLeod, 2007).

The principles of UDL provide opportunities for all the learners to experience interaction with their peers and also experience cultural tools explained by sociocultural theory. For instance, the three principles of UDL, multiple means of representation, action and expression, and engagement

(CAST, 2013) open ample opportunities for learners to explore and express the content of lessons through various media and with peers. Therefore, UDL is a teaching approach related to sociocultural theory and when this approach is applied in classrooms, students' thinking and behaviour can be improved.

Diffusion of Innovation Theory

Diffusion of Innovation Theory was created in 1962 (Rogers, 2003). The theory describes how an idea disseminates through in a social system or in a definite population. The innovation can be completed in a society through adaptation of it by people, and it depends on how much people are ready to use it and it varies according to their adopter categories (LaMorte, 2019). The theory explains that there are five adopter categories in a population and in general there are (1) 2.5 % Innovators, (2) 13.5% Early Adopters, (3) 34% Early Majority, (4) 34% Late Majority, and (5) 16% Laggards, and explains that majority of population tends to fall in the middle categories (LaMorte, 2019). The theory further explained that Innovators are very curious in applying new ideas so no much work needs to be done to this category for convincing them to start new ideas, and Early Adopters can use new ideas when they see information and procedures of applying new ideas as they have leadership quality, and are aware of required changes. Whereas, Early Majority adopt new ideas after seeing evidence of new idea's effectiveness and success stories as they are rarely leaders. In contrast, the Late Majority starts to adopt new ideas once the majority of the population tries it as they are very reluctant to change. Therefore, this category of people need to be convinced by explaining the total number of people who tried the innovation and its success for them. The laggards require pressure from the population and fear appeal to start an innovation as they are very reluctant to adopt new ideas and do not want to change at all as they have conservative type of behaviour (LaMorte, 2019).

Since UDL is a new inclusive approach that is going to be implemented in Maldivian schools it is crucial to identify theories related to

implementation of new concepts. As explained by the Diffusion of Innovation Theory it is crucial to provide awareness and show good practices of UDL if the model is going to be implemented in all the schools of the Maldives.

METHODOLOGY

This research adopted a mixed method approach aiming to find in-service teachers' perceptions on implementing Universal Design for Learning in Maldivian Schools. The participants of the research were in-service teachers who work in foundation to key stage two, in the public schools of the Maldives. In this regard, 617 in-service teachers participated in the quantitative survey and 30 in-service teachers participated in the qualitative focus group interviews. As this research employed a mixed method approach, participants were selected for the research using Probability Sampling and non-probability sampling methods (McCombes, 2020, Creswell, 2003).

The questions developed for collecting qualitative data were more open ended, and the questions developed for collecting quantitative data were closed questions such as items in a survey questionnaire with allotted scores in it. A survey form was developed using items developed by the researcher to seek teachers' perceptions on UDL. The Part One of the survey form was developed to pursue demographic information of the in-service teachers. The Part Two of the survey form was a 5 point-Likert UDL scale with 13 items developed by the researcher. The scale has a range from 1 (strongly disagree), 2 (disagree), 3 (undecided), 4 (agree), and 5 (strongly agree). The scale succumbs a total score the value of which ranges from 13 to 65, with the highest score of the scale was 65 indicating more favourable attitude and 13 being the lowest score indicating more unfavourable attitude towards UDL. This part of the survey form was developed to identify teachers' perception on UDL.

Validity and reliability were maintained in the data collection scale used in this research. The internal consistency of the 13 item UDL Scale developed for the study was very high. The Cronbach's alpha was 0.934 which indicated a high level of internal consistency for UDL scale.

Data analysis was done using thematic analysis method for qualitative data. Quantitative data was analysed using SPSS software to do descriptive statistical analysis and compare means. Therefore, data analysis was done using frequency tables and by doing specific tests such as independent-samples T-Tests, One-Way ANOVA (Madrigal & McClain, 2012).

RESULTS

Demographic Data of the Survey Participants

The total number of participants who participated in the survey were 617 in-service teachers in which 577 were female (93.5%) and 40 were male (6.5%). Among this 270 (43.8%) participants' age category was 18 - 30 years old, 248 (40.2%) participants' age category was 31 - 40 years old, 78 (12.6%) participants' age category was 41 – 50 years old and 21 (3.4%) participants' age category was 51 – 60 years old. There were 301 (48.8%) primary teachers, 108 (17.5%) special education teachers (17.5%), 107 (17.3%) preschool teachers (17.3%), and 101 (16.4%) relief/contract teachers among total participants. The qualification of the participants were 231 (37.4%) teachers with bachelor's degree (general), 146 (23.7%) teachers with diploma (general), 109 (17.7%) teachers with masters' degree (general), 70 (11.3%) teachers without formal qualification, 20 (3.2%) teachers with masters' degree (special/inclusive education), 21 (3.4%) teachers with diploma (special/inclusive education), 20 (3.2%) teachers with bachelors' degree (special/inclusive education). Some of the participants attended short trainings related to IE. Among this, 370 (60%) attended some of the short trainings whereas 91 (14.7%) attended more IE related short trainings. Also, there were 156 (25.3%) teachers who didn't participate in any IE related short

trainings. The current level teachers attend to teach include 220 (35.7%) teachers in Key Stage 1, 200 (32.4%) teachers in Key Stage 2, 114 (18.5%) teachers in Foundation Stage and 83 (13.5%) teachers in IEP programmes. The teaching experience of these teachers include 306 (49.6%) teachers between 1 – 9 years, 157 (25.4%) teachers between 10 – 15 years, 94 (15.2%) teachers between 16 – 30 years, and 60 (9.7%) teachers less than one year. Some teachers have experience in teaching students with complex learning profile. This include 356 (57.7%) teachers with some experience, and 144 (23.3%) teachers with high experience. Also, there are 117 (19%) teachers without any experience in teaching SCLP. Among the total participants 172 (27.9%) teachers have a family member with specific learning difficulty or disability and 445 (72.1%) teachers do not have a family member with specific learning difficulty or disability. The majority of the participants show having confidence in teaching students with disabilities. The 388 (62.9%) teachers have average level confidence, 164 (26.6%) teachers with high confidence, 61 (9.9%) teachers with low confidence, and 4 (0.6%) teachers with very low confidence.

Perceptions of In-service Teachers on UDL

The survey result showed that most of the participants had a positive view on Universal Design for Learning (UDL). The mean score of the UDL Scale was 55.78 and the mode was 52 (Table 1). The highest value of the scale was 65 whereas the range was 52, and 52 was the highest frequency number of UDL total score.

Table 1: Statistics of UDL Scale

N	Valid	617
	Missing	0
Mean		55.78
Median		57.00
Mode		52.00
Std. Deviation		8.42
Variance		70.86
Range		52.00
Minimum		13.00
Maximum		65.00

In-service Teachers' Perception on UDL in Relation to Gender

The group statistic result showed that the Gender variable groups, Male and Female, when compared with the UDL total score, the group Female has a higher mean value, 55.99, than the group Male, 52.85 respectively. The results of the independent sample *t*-test showed that the Levene's Test for Equality of Variance has less than 0.05 as the Sig. value, 0.014, and the *t*-test for equality of means has greater than 0.05 as the Sig. (2-tailed) value, 0.12 (Table 2). Therefore, there were no statistically significant differences between Male and Female group of Gender variables.

Table 2: Independent Samples Test of UDL Total by Gender

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
UDL Total	Equal variances assumed	6.11	.014	-2.29	615	.023	-3.14	1.37	-5.83	-.44
	Equal variances not assumed			-1.58	41.32	.12	-3.14	1.98	-7.14	.87

In-service Teachers' Perception on UDL in Relation to Age

The descriptive statistical result showed that the Age variable groups, 18 – 30 years, 31 – 40 years, 41 – 50 years, 51 – 60 years, when compared with the UDL total score, the group 51- 60 years has a higher mean value, 56.81, than other groups. The Levene statistics of homogeneity of variance was 0.26 which was greater than the 0.05 alpha level. Therefore, the homogeneity of variances has been met in the Age groups. The ANOVA result showed that F value was 1.38 and the Sig. value was 0.25 which was greater than the 0.05 alpha level (Table 3). Therefore, the difference between the means of the different groups of the Age variable was not statistically significant.

Table 3: ANOVA of UDL Total by Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	293.41	3	97.81	1.38	.25
Within Groups	43357.48	613	70.73		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Job Classification

The descriptive statistical result showed that the Job Classification variable groups, Special Education Teacher, Preschool Teacher, Primary Teacher, and Relief/Contract Teacher, when compared with the UDL total score, the group Special Education Teacher has a higher mean value, 58.44, than the other groups. The Levene statistics of homogeneity of variance was 0.29 which was greater than the 0.05 alpha value. Therefore, the homogeneity of variance has been met in the Job Classification groups. The ANOVA result showed that F value was 5.76 and the Sig. value was 0.001 which was less than the 0.05 alpha level (Table 4). Therefore, the difference between the means of the different groups of the Job Classification variable was statistically significant. The result of the Post Hoc, Tukey HSD showed that statistically significant differences were, the mean difference between Special Education Teacher and Preschool Teacher group, and Special Education Teacher and Primary Teacher group with Sig. value 0.000 and 0.006 respectively. As the Sig values of these two pairs were less than the 0.05 alpha level, the mean differences were significant in these two pairs. The mean difference between Special Education Teacher and Relief/Contract Teacher group was not statistically significant as the Sig. value of this pair was 0.20 which was greater than 0.05.

Table 4: ANOVA of UDL Total by Job Classification

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1197.28	3	399.09	5.76	.001
Within Groups	42453.61	613	69.26		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Qualification

The descriptive statistic results showed that the Qualification variable groups, Masters' Degree (General), Masters' Degree (SEN/IE), Bachelors' Degree (General), Bachelors' Degree (SEN/IE), Diploma (General), Diploma (SEN/IE), and Do Not Have Qualification, when compared with the UDL total score, the group Masters' Degree (SEN/IE) has a higher mean value, 58.40, than the other groups. The Levene statistics of homogeneity of variance was 0.09 which was greater than the 0.05 alpha value. Therefore, the homogeneity of variance has been met in the Qualification groups. The ANOVA result showed that F value was 1.484 and the Sig. value was 0.18 which was greater than the 0.05 alpha level (Table 5). Therefore, the difference between the means of the different groups of the Qualification variable was statistically not significant.

Table 5: ANOVA of UDL Total by Qualification

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	627.92	6	104.65	1.48	.18
Within Groups	43022.98	610	70.53		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Short Training

The descriptive statistical results showed that the Short Training variable groups, High, Some and None, when compared with the UDL total score, the group High (at least 40) has a higher mean value, 58.35, than the other groups. The Levene statistics of homogeneity of variance was 0.05 which was greater than the 0.05 alpha value. Therefore, the homogeneity of variance has been met in the Short Training groups. The ANOVA result showed that F value was 8.63 and the Sig. value was 0.00 which was less than the 0.05 alpha level (Table 6). Therefore, the difference between the means of the different groups of the Short Training variable was statistically significant. The result of the Post Hoc Tukey HSD showed statistically significant differences between all compared pairs. The mean difference between High and Some, High and None were 0.038, 0.000 as Sig. values respectively.

Table 6: ANOVA of UDL Total by Short Training

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1193.99	2	596.99	8.63	.000
Within Groups	42456.89	614	69.15		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Level of Teaching

The descriptive statistics results showed that the Level of Teaching variable groups, Foundation Stage, Key Stage 1, Key Stage 2 and IEP Programme, when compared with the UDL total score, the group IEP Programme has a higher mean value, 56.37, than the other groups. The Levene statistics of homogeneity of variance was 0.43 which was greater than the 0.05 alpha value. Therefore, the homogeneity of variance has been met in the Level of Teaching groups. The ANOVA result showed that F value was 4.23 and the Sig. value was 0.01 which was less than the 0.05 alpha level (Table 7). Therefore, the difference between the means of the different

groups of the Level of Teaching variable was statistically significant. The result of the Post Hoc Tukey HSD showed statistically significant difference between one compared pair, the IEP Programme group and Foundation Stage group. The mean difference between IEP Programme and Foundation Stage was 0.004 as Sig. value. The mean difference between other compared pairs was not statistically significant as the pairs have higher Sig. values than the 0.05 alpha level.

Table 7: ANOVA of UDL Total by Level of Teaching

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	884.81	3	294.94	4.23	.01
Within Groups	42766.09	613	69.77		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Years of Teaching Experience

The descriptive statics results showed that the Years of Teaching Experience variable groups, 16 – 30 years, 10 – 15 years, 1 – 9 years and Less than 1 year, when compared with the UDL total score, the group Less than 1 year has a higher mean value, 57.08, than the other compared groups. The Levene statistics of homogeneity of variance was 0.81 which was greater than the 0.05 alpha value. Therefore, the homogeneity of variance has been met in the Year of Teaching Experience variable groups. The ANOVA result showed that F value was 0.62 and the Sig. value was 0.60 which was greater than the 0.05 alpha level (Table 8). Therefore, the difference between the means of the different groups of the Years of Teaching Experience variable was not statistically significant.

Table 8: ANOVA of UDL Total by Years of Teaching Experience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	131.84	3	43.95	.62	.60
Within Groups	43519.05	613	70.99		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Experience in Teaching SCLP

The descriptive statics results showed that the Experience in Teaching SCLP variable groups, High (at least 30 full days), Some and None, when compared with the UDL total score, the group High (at least 30 full days) has a higher mean value, 58.43, than the other compared groups. The Levene statistics of homogeneity of variance was 0.20 which was greater than the 0.05 alpha value. Therefore, the homogeneity of variance has been met in the Experience in Teaching SCLP variable groups. The ANOVA result showed that F value was 9.88 and the Sig. value was 0.00 which was less than the 0.05 alpha level (Table 9). Therefore, the difference between the means of the different groups of the Experience in Teaching SCLP variable was statistically significant. The result of the Post Hoc Tukey HSD showed statistically significant differences between High and Some, and High and None pairs. The mean difference between High and Some, High and None were 0.00 and 0.00 Sig. values respectively. The mean difference between the other compared pair, Some and None, was not statistically significant as the pair has higher Sig. values than the 0.05 alpha level.

Table 9: ANOVA of UDL Total by Experience in Teaching SCLP

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1360.39	2	680.19	9.88	.00
Within Groups	42290.50	614	68.88		
Total	43650.89	616			

In-service Teachers' Perception on UDL in Relation to Having a Family Member with LD or Disability

The group statistic result showed that the Having a Family Member with LD or Disability variable groups, Yes and No, when compared with the UDL total score, the group No has a higher mean value, 56.01, than the group Yes, 55.20 respectively. The results of the independent sample t-test showed that the Levene's Test for Equality of Variance was greater than the 0.05 alpha level as the Sig. value was 0.69 (Table 10). Therefore, the homogeneity of variance has been met in the Having a Family Member with LD or Disability variable groups. The t-test for equality of means was greater than the 0.05 alpha level as the Sig. (2-tailed) value was 0.29. Therefore, there were no statistically significant differences between the Yes and No group of Having a Family Member with LD or Disability variable.

Table 10: Independent Samples Test of UDL Total by Having a Family Member
with LD or Disability

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
					Sig. (2-tailed)	Mean Differen ce	Std. Error Differen ce	Lowe r	Upper
	F	Sig.	t	df					
Equal variances assumed	.16 1	.69	-1.06	615	.29	-.80	.76	-2.29	.68
Equal variances not assumed			-1.08	322. 26	.28	-.80	.74	-2.26	.66

**In-service Teachers' Perception on UDL in Relation to Level of
Confidence (Teaching Students with Disability)**

The descriptive statistics results showed that the Level of Confidence
variable groups, High, Average, Low and Very Low, when compared with
the UDL total score, the group High has a higher mean value, 58.27, than the
other compared groups. The Levene statistics of homogeneity of variance
was 0.63 which was greater than the 0.05 alpha level. Therefore, the
homogeneity of variance has been met in the Level of Confidence variable
groups. The ANOVA result showed that F value was 6.69 and the Sig. value
was 0.000 which was less than the 0.05 alpha level (Table 11). Therefore, the
difference between the means of the different groups of the Level of
Confidence variable was statistically significant. The result of the Post Hoc
Tukey HSD showed statistically significant differences between pairs of
High and Average, and High and Low. The mean difference between High

and Average, and High and Low were 0.00 and 0.04 Sig. values respectively. The mean differences between the other compared pairs were not statistically significant as the pairs have higher Sig. values than the 0.05 alpha level.

Table 11: ANOVA of UDL Total by Level of Confidence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1383.18	3	461.06	6.69	.00
Within Groups	42267.71	613	68.95		
Total	43650.89	616			

Qualitative Data Analysis

This part of the research consists of qualitative data findings when analysed using thematic analysis method.

Perceptions of In-service Teachers in Implementing Universal Design for Learning in Maldivian Schools

The researcher asked participants of the interview: *What is your view on implementing UDL in Maldivian schools*. All the teachers who participated in the study expressed positive views about implementing UDL in Maldivian schools. Moreover, teachers highlighted the importance of UDL for all the learners in mainstream class. Also teachers expressed challenges might be faced due to the current situation in schools and how to overcome those challenges. For instance, some teachers mentioned,

"if we apply all three principles it will be very beneficial for students…" (SEN Teacher 2)

"I think this will not only benefit SCLP but also other students in the class as there are variety of learners who use different learning styles…." (SEN Teacher 5)

Mainstream teachers and pre-school teachers highlighted their practice related to UDL while following the curriculum. For instance, some teachers mentioned,

> *"we use presentations, bring resource people to the class, use constructive materials and use many kind of these things and continue differentiated learning…Now also we use it..."* (Preschool Teacher 3)

> *"So instead of doing it by writing we provide options like showing picture and its characteristics. Like this also we consider it as the child has achieved it…"* (Mainstream Teacher 2)

> *"sometimes if students can't write, we provide chance for them to say it orally…after giving assessment also, based on the work they do, bring the child near and ask questions orally…."* (Mainstream Teacher 3)

Apart from this most of the teachers highlighted that UDL is new to them and if implemented all the teachers need to be made aware of this. For example, teachers highlighted,

> *"I heard of it. But the concept is new…"* (Preschool Teachers 2 & 3)

> *"I studied about UDL. Before inclusion, some elements of UDL are being applied in teaching. However, if we know thoroughly what UDL is it will be very helpful for inclusion..."* (SEN Teacher 2)

Challenges expressed by teachers while implementing UDL are as follows.

> *"finding resources will be a challenge…not all schools but in some schools it will be a challenge…there might be students whose difficulty is holding pencil...so for each child there might not be a laptop or a*

> *"in my opinion resources might not be a challenge, but time might be a challenge…within 35 minutes period attending all the students might be a challenge. Also, in a class more than 25 students are there and there are different level students is a class…so making preparation for all the students and teaching will be a huge challenge ..."* (SEN Teacher 6)

> *"major challenge is in a classroom there are more students and one teacher unable to attend all the students ..."* (SEN Teacher 4)

Teachers suggested how to overcome those issues. For example, some teachers mentioned,

"student teacher ratio can be lowered ..." (SEN Teacher 3)

"if there are more students in my opinion time should be increased…. then only it will go effectively…plus teachers' awareness in the most important thing ..." (SEN Teacher 1)

"in some schools, there is a mentality that if there is a special education child / SCLP in a school, they believe it is a responsibility of special education teacher to take care of the child. So what I believe to overcome the challenge we face, one very important thing is, the special education teacher and mainstream teacher work collaboratively to support these children, then it will be very effective…" (SEN Teacher 5)

Application of Four Component of UDL in Practices

All the teachers who participated in the interview highlighted that their practices are very much linked to these components while following the curriculum though there are some challenges like finding specific materials for students. For instance, teachers stated,

"we follow curriculum…we select some goals from the curriculum. In the IEP we have band A, B, and C. In band A we have special need goals. For band B we take from the curriculum….." (SEN Teacher 5)

"we select learning goals based on the child's current level of understanding….." (SEN Teacher 2)

"so many times we face challenges in deciding goals…for the students who are low in literacy and numeracy…..when we check foundation level, that also we modify and select it….we refer a book, Brigance…" (SEN Teacher 5)

Teachers expressed importance of providing resources if new concepts are introduced,

> *"we had a student with visual impairment. We wanted a brail but didn't get it. Now we don't have a child like that…still it is not getting…" (SEN Teacher 10)*

> *"we had a student with visual impairment…and two weeks before we got resources…brail…but yet we don't have a teacher trained for teaching with brail…so it is difficult…" (SEN Teacher 12)*

> *"most of the time resources are given. But sometimes, in special circumstances there will be a child who require a different type of mouse or key board so it might take more days to get it…"* (SEN Teacher 4)

Both quantitative and qualitative results of the research had disclosed that in-service teachers had positive views on UDL. The research explored in-service teachers' perception on UDL in relation to demographic variables including gender, age, job classification, qualification, short training, level of teaching, teaching experience, experience in teaching SCLP, having a family member with LD or disability, and level of confidence. The study depicted that some of the demographic variables lead in-service teachers to have a more positive view towards UDL when compared to other demographic variables. In this regard, there are significant differences between perceptions of in-service teachers towards UDL in relation to job classification, short training, level of teaching, teachers experience in teaching SCLP, and level of confidence in teaching SCLP. The special education teachers have a more positive view on implementing UDL in schools compared to pre-school teachers and primary teachers. The in-service teachers with the highest number of training and also who got some training had a more positive view on implementing UDL compared to teachers who did not get any training. The teachers who attend IEP programmes had a more positive view on UDL implementation compared to foundation stage teachers. The teachers with a

high level of experience in teaching SCLP had a more positive view compared to teachers with some and none level of experience in teaching SCLP. The teachers with high levels of confidence in teaching SCLP had more positive views on implementing UDL compared to teachers with average and low levels of confidence. In contrast, the result of the research also showed that there are no significant differences between perceptions of in-service teachers on UDL due to gender, age, qualification, years of teaching experience, having a family member with LD or disability.

Moreover, the qualitative findings of the study had shown that all the participants of the study highlighted the importance of implementing UDL with its three principles in Maldivian schools. Moreover, the participants highlighted its benefit to all the students in the classroom, including students with and without disabilities. Also, teachers highlighted their current practices related to UDL such as flexibility given in the curriculum and assessment. In addition, the in-service teachers highlighted, importance of providing training related to UDL since the concept is new to most of them. Also, they highlighted the importance of lowering the teacher-student ratio, providing necessary resources, increasing time, and both special education and general education teachers take responsibility for teaching SCLP. Furthermore, the in-service teachers highlighted their practices related to the four components of UDL.

DISCUSSION

In-service Teachers' Perception on UDL Implementation in Maldivian Schools

Both qualitative and quantitative findings of the study showed that in-service teachers had a positive view on implementing UDL in Maldivian schools. Since Maldives education system had taken tremendous measures to improve inclusive practices such as introducing inclusive pedagogy this result gives hope to the system. In an effective inclusion model, schools can have four key elements such as curriculum and instruction, teacher roles and

responsibilities, classroom and school organisation, and teacher beliefs about schooling (McLeskey & Waldron, 2000). Therefore, in order to bring an impact on IE implementation and apply it successfully, teachers' perception on SCLP, inclusive education and teaching strategies applicable for the SCLP have to be positive. UDL is an evidence based instructional model that caters diverse learners by proactively designing curricular materials. The three principles of curriculum: multiple means of representation, action and expression and engagement makes learners resourceful, strategic and purposeful towards a goal (CAST, 2013). Therefore, to implement this crucial inclusive pedagogical approach schools need to have teachers who are willing to accept and are ready to implement UDL to benefit all the learners.

In-service Teachers' Perception on UDL Compared to Demographic Variables

The demographic variables when compared with its sub-groups and in-service teachers' perception on UDL showed significant differences between some of the sub-groups. This include (1) special education teachers having a favourable perception on UDL implementation compared to pre-school and primary teachers, (2) the in-service teachers with highest and some training having a favourable attitude towards UDL implementation compared to the teachers who did not get any training, (3) the teachers who teach in IEP programmes having positive view on UDL implementation compared to foundation stage teachers, (4) the teachers with highest level of experience in teaching SCLP having a favourable view on UDL implementation compared to the teachers with some and none level of experience in teaching SCLP, and (5) the most confident teachers in teaching SCLP having a positive view on UDL implementation compared to the teachers with average and low level of confidence. Some of these findings are similar to a research conducted by Sharma, Forlin, Loreman et.al (2006) to explore pre-service teachers' attitudes, concerns and sentiments towards

inclusive education. Their study also revealed that previous training related to inclusive education and experiences with people with disabilities (SCLP) lead to teachers having a favourable attitude towards people with disabilities and inclusion, and applying inclusive practices confidently in classrooms (Sharma, Forlin, Loreman et.al, 2006). As UDL is an inclusive pedagogy teachers can apply to support diverse learners the identified group of in-service teachers can take various measures to implement the strategy through their positivity towards UDL. Moreover, the other groups of teachers can also follow these teachers to implement the approach in their classroom practices. The literature shows that researches that were conducted based on UDL lack identifying teacher perception in relation to demographic variables. Therefore, the result of this study's findings add extra information on literature related to UDL.

UDL Benefits to Students' Learning

In-service teachers highlighted the importance of applying three principles of UDL and its benefit to all the students in a general education class including SCLP. This finding is related to social cultural theory. Sociocultural theory explains how people understand the world by interacting with people and tools the culture offers to them (McLeod, 2007). For instance, the SCLP are given the opportunity to interact with their peers in a general education setting where they can learn many things. They can understand how to be with others and can reform their behaviour if proper guidance is given to them. The SCLP can see and learn how the general class systems work, the activities normally conducted, the subjects they study, and will have the opportunity to explore with their peers. The cultural tools offered to them such as imitative learning, instructed learning and collaborative learning (McLeod, 2007) can help students to understand curricular concepts delivered in classrooms. The theory further explains that learning can take place in two levels, 1) interacting with others which is known as inter-psychological and (2) integrating with an individual's mental structure or intra-psychological (UNESCO, n.d). The three principles of

UDL, multiple means of representation, action and expression, and engagement (CAST, 2013) open doors for learners to attend curricular concepts with interpsychological and intrapsychological level. For instance, the content delivered in multiple means is a way of scaffold learning to support learners to reach their potential learning level. Also multiple means of action and expression applies various strategies such as modelling, experimenting, and interacting in small groups and many more. Therefore, as suggested by in-service teachers of this study, sociocultural theory aspects embedded in the UDL framework will benefit all the learner including SCLP in general education setting.

Application of UDL Components in Classroom Practices

In-service teachers highlighted some forms of UDL practices they currently apply in their practices. For instance, while following the National Curriculum Framework (NCF) they apply the flexibility given in the curriculum while conducting assessments to the SCLP. The students who are unable to write are given a chance to express what they know orally or by drawing. The National Curriculum enrolled in the Maldives in 2015 is developed by having its pillars, pedagogical dimensions focusing on enhancing inclusive education (National Institute of Education, 2015). Therefore, it guides teachers to implement inclusive pedagogy, especially differentiated instruction has been given a high priority in the curriculum by keeping one of the pedagogical dimensions as differentiated instruction (National Institute of Education, 2015). The four components of UDL are (1) goals, (2) materials/resources, (3) methods, and (4) assessment (Mavropoulou, 2019). Some aspects of NCF are similar to these four components, especially the elements of assessment for learning and also some pedagogical dimensions described in the NCF. The major assessment method used in the NCF from foundation to key stage 2 (preschool to grade 6) is Assessment for Learning (AFL). The assessment component of UDL gives focus on AFL (Mavropoulou, 2019). Moreover, taking goals based on

tiered levels, using visuals to activate students' prior-knowledge, and self-evaluation are practices of UDL under different components which have similar practices as AFL elements and pedagogical dimensions of NCF. Apart from this UDL gives more focus on giving access to all the students to the learning activity such as having open-ended goals, providing accessible materials such as applying low-tech and high-tech materials, students choosing their assessment mode, providing accessible feedback (Mavropoulou, 2019). These practices based on UDL the in-service teachers can follow to improve their current practices.

Ways to Improve UDL Implementation in Schools

The in-service teachers suggested conducting teacher training programmes on UDL, and lower-down student teacher ratio, provide resources, increase time in class/period, and both general and special education teachers take responsibility to support learners with SCLP. As UDL is a teaching strategy that will be introduced to teachers which bring alteration to school, it is necessary to focus on the areas the in-service teachers highlighted and other proponents of the field suggested. Fullan and Miles (1992) cited in (McLeskey & Waldron, 2000) highlighted that to bring a successful alteration to the school system, the alteration must be brought working systematically. Therefore, to start the UDL approach in schools an utmost importance needs to be given to establish a cohesive system with all necessary procedures set. Some of the crucial steps the authors suggested were to work on teacher development and teaching, provide a student support system and collaborate with the community.

In this regard they emphasis to focus concurrently on the development and interrelationships of the main components of the system, curriculum, teaching and teacher development, community and student support system (McLeskey & Waldron, 2000). They also further highlight to give focus on issues that are embedded in school culture apart from

considering structure, policy and regulations. They further highlighted the importance of considering all inside and outside factors while bringing a change to a school system. Therefore, the Maldivian education system, while implementing the UDL instructional method, it is crucial to provide all required training to the teachers, provide necessary resources, and take all necessary measures to combat barriers that might face related to inside and outside factors.

CONCLUSION

The study showed that in-service teachers had a positive view in implementing UDL in Maldivian schools despite challenges faced by schools due to high student-teacher ratio, lack of resources, limited time, and lack of collaboration between special education and mainstream teachers. In the meantime, the in-service teachers who attended IE related training programmes, the teachers who teach in IEP programmes, the teachers who had experience in teaching SCLP, and the teachers with high level of confidence in teaching SCLP had more positive view on implementing UDL compared to other demographic variables of the study. It is recommended to commence implementing UDL in Maldivian schools and before mainstreaming the concept in all Maldivian schools it is crucial to provide UDL related robust trainings to all stakeholders including UDL principles, application of UDL components, and high tech and low tech application in classrooms. Moreover, train teachers on using effective teaching strategies to engage students in learning activities, improve students' social skills apart from applying interactive activities between teachers and peers, do modelling and scaffold learning. For a successful implementation process policy makers need to have a clear and carefully designed UDL implementation procedure and put baby steps. As such, start from small samples and do pilot projects to identify challenges faced in the implementation process so that barriers can be addressed while generalising UDL implementation in all Maldivian schools.

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USE OF CONCEPT MAPS AS AN ASSESSMENT MODALITY IN SECONDARY GRADES

Sumith Parakramawansa

ABSTRACT

Various assessment modalities have been introduced under the School-Based Assessment program. It has been convinced that it is important for teachers to use other forms of assessments other than techniques that most of occasions are inclined to writing modalities. Concept maps (CM) have been identified as an important alternative available for the purpose. Therefore, the study aims to promote the use of CMs as a modality of assessment. The objectives were to study the current use of CMs as a modality of assessment; to explore the awareness of teachers about CMs as a modality of assessment; to use CMs as a form of assessment and to explore the strengths, weaknesses and problems in using CM. The research design was developed based on Kirkpatrick's four levels of Evaluation Model. The sequential transformation design was used under the mixed research approach for the research due to the fact that the study has two distinct stages. A sample of 150 teachers for the first and the second phases were selected and the third and the fourth phases a sample of 15 teachers were selected by multi-stage cluster sampling. Research revealed that concept maps have a much lower priority over other assessment modalities in using SBA modalities in the secondary grades. Due to the teachers' low level of awareness and negative attitudes and because of the relatively low level use of CM as an assessment modality, it is recommended that all the secondary grade teachers receive a comprehensive training on the use of CMs as assessment modality under the school-based professional teacher development (SBPTD) programme.

Key words: *School Based Assessment, assessment modality, concept map*

INTRODUCTION

In 1998, the School-Based Assessment (SBA) program was introduced into the Sri Lankan education system to enhance the quality of the teaching and learning process (Ministry of Education and Higher Education, 1998). This program is applicable to all subjects which have been taught in all grades 6 to 13. SBA is done during the classroom-level learning and teaching process. The focus here is on the assessment of the achievement of learning outcomes, which cannot be assessed by a written test in summative assessments. SBA is not simply an examination system, but a process of identifying students' strengths and weaknesses while they are learning and taking them to the desired level of proficiency (Ministry of Education, 2017).

Under this program, various assessment modalities can be used. An assessment modality is a technique that allows the student to develop the skills that motivate them to learn and to assess whether they have been developed. These modalities are best used by the teacher as a learning-teaching method in or outside the classroom. Its end result is assessment. A variety of assessment modalities have been introduced for this purpose. It is up to the teacher to select the appropriate assessment modality for the subject unit. The most popular assessment strategies used by the majority of teachers in implementing the SBA program are those in the written section (NIE, 2018). These include group activities, short written tests, assignments, and open book tests. A minority of teachers use techniques that awaken students' creative talents. These include discussion panels, projects, explorations, exhibitions, debates, concept maps, seminars, double entry journals and surveys.

Although the majority of teachers are aware of the SBA program, it has been revealed that the majority of teachers have negative attitudes towards it (NIE, 2018). However, it has been revealed that teachers did not have a clear idea of the assessment modalities as per Karunaratne (2011) and that teachers have not been trained on how to perform school-based assessments. In-service sessions were held in each province to train the

subject matters, but no sessions were held to train SBA. In interviews with teachers it was revealed that although there was internal and external supervision of the school, but did not provide feedback to improve their assessment practices (Karunaratne, 2011). According to Iddamalgoda and Karunaratne (2012), the study found that SBA is an effective methodology for improving teaching and learning, and need more training programs that help change teachers' negative attitudes and practices to be applied. Furthermore, the study found that students were more enthusiastic and proactive in learning with a well-planned unit plan that included different modalities of assessment, and that interviews with teachers who implemented the unit plan have identified conceptual differences than others. Also revealed that the circulars and guidelines issued on SBA do not support teachers' conceptual understanding of SBA and that it would be more effective if small groups of teachers' discussions on different SBA modalities and to activate them in their classrooms rather than conducting traditional SBA based workshops will continue to exist (Alahakoon and Karunaratne, 2012).

SBA is a measure introduced to minimize the shortcomings of existing student assessment systems and to promote student learning. However, various shortcomings have emerged in the implementation. By diversifying the assessment, it is important for the students to actively engage in the assessment instead of the passive assessment modalities that are burdensome to the written section. It is also essential to continue to train the teachers who implement them in SBA and to build positive attitudes towards them. It is apparent that, in the SBA programme the teachers are more inclined to use written tests. Since it only measures a limited range of knowledge, it is important, to use alternative modalities that can measure the student's knowledge, attitudes, skills, and social abilities. Chan (2009) divides two kinds of assessment types: passive type assessment modalities and active type assessment modalities. Passive type means, the learner responses passively and active type means, the learner responses actively during an assessment.

Examples of passive type assessment modalities are exams, essays, Multiple-Choice Questions (MCQs) and gobbet. Examples of active type assessment modalities are portfolios, presentations, direct observations, orals, Concept maps (CM) and Project Based Learning (PBL). In SBA programme it is expected to practice more active type modalities than passive type modalities. Concept maps (CMs) have been identified as an important modality that can be used for this purpose (Chan, 2009) and according to Zvacek, Restivo and Chouzal (2012), those help the students to develop high level thinking: Imagination, Speculation, and Creative Thinking. The observation made by the researcher during his school visits, identified that the CM type of assessment have helped average and the slow learners to express abstract and concrete concepts they learn in different subjects than through other assessment modalities such as written tests, MCQs, Essays and oral test etc. The intent of this study was to study the current use of CMs as a modality of assessment; to explore the awareness of teachers about CMs as a modality of assessment; to use CMs as a form of assessment and to explore the strengths, weaknesses and problems in using CM. In the first phase the fluctuation of knowledge regarding the CMs was tested before and after a treatment. Based on the information received from this phase a focus group interview with a few participants was used to explore the current use of CM as an assessment modality in the implementation of SBA program in secondary grades, in which the teachers' awareness and identifications of actions / interventions to be used to enhance concept maps as an assessment modality. Therefore, this research is important in a timely manner. Under this, it was specifically intended to answer the following research questions.

1. How often the CMs are used as an SBA modality compared to other form of assessment modalities?
2. What Knowledge and attitude do the secondary grade teachers have regarding the use of concept maps as an SBA modality before the awareness programme?

3. What Knowledge, attitude and proficiency do the secondary grade teachers have regarding the use of concept maps as an SBA modality after the awareness programme?

4. Have the teachers reached the desired level of practice in classrooms, in the use of CMs as a modality of assessment after receiving the treatment?

5. What are the teacher tasks, strengths, problems and challenges in applying the CMs in classrooms as an assessment modality?

LITERATURE REVIEW

2.1 Theoretical basis of research

CMs are mainly based on the cognitive assimilation theory of human learning of Ausubel (2000). The basic idea of this is that learning takes place through the assimilation of new concepts into the existing conceptual structure within the learner. Under this, effective learning is based on a process of consciously adapting new structures to the existing conceptual organization of the cognitive structures or schemas in the brain. This involves connecting new ideas or concepts with previously acquired knowledge.

According to Ausubel (2000), the most important factor influencing learning is the learner's previous knowledge (Novak, 1998). When a person learns, the relationships between concepts in the cognitive structure gradually become more complex. Creating a CM should be done after the students have a good understanding of the relevant concept. This means practicing the relevant concept, problem solving, writing, reading, explaining or engaging in any other activity necessary to propagate their new understanding. This will link the student's web of related schematic knowledge to the concept (Woolfolk, 2004). Then the CMs will further develop the conceptual schematic knowledge network and enhance conceptual understanding of the student. A schematic knowledge network is organized that is related to a person's prior knowledge of a particular subject. It helps the person to understand new knowledge. According to this theory, a person's learning

takes place through the assimilation of concepts. Therefore, the use of CMs in assessing individual learning can be explained by this theory. That is, assimilation of new knowledge into the prior knowledge of the individual is the theoretical basis for the assessment of learning. Therefore, the theoretical basis of this research is the theory of cognitive assimilation of human learning.

2.2 Concept maps

The CM is a visual tool, a non-traditional assessment tool designed to specify individual mental models through graphic representation. Applying and grasping concepts is challenging in improving learning of students (Quinn et al., 2003). Most of the information in the teaching is directed towards a linear series and there is minimal time to explain their complex relationships. The use of CMs to bridge this gap is a relatively simple tactic that allows students to build their own ideas about the meaning and interrelationships of scientific ideas and principles. Once the concept map has been prepared, then, cooperative-learning is more appropriate so that students can discuss their logic using it. Expert thinking is often characterized by the synthesis or connection of knowledge in complex ways to reach a conclusion. Teacher can use CMs to help students to focus in this direction and gives the teacher the opportunity to assess the facts such as: has the student really gained the ability to focus on all aspects of the topic? And has student reached a meaningful definition and usage? For example, students in an introductory course of the Geography lesson have used CMs to explore the impact of prehistoric life development (Preszler, 2004). In the same study reveals that the students prepared CMs three times on the same concepts during the semesters, and teachers used marking rubric to assess the content and depth of the CM. Research results show that students are more proficient in the subject during the semesters. Similarly, when students are directed to prepare CMs for the relevant subject area before the examination, it is inevitably shown that the students have obtained high results in the examination. Furthermore, analysis using control groups

showed that students' ability to retain information and adapt to new situations improved when CMs were built collaboratively. One of the powerful uses of concept maps is not only as a learning tool but also as an evaluation tool, thus encouraging students to use meaningful-mode learning patterns (Novak & Gowin, 1984; Novak, 1990, Mintzes, Wandersee and Novak, 2000). Concept maps are also effective in identifying both valid and invalid ideas held by students.

In CMs, concepts are usually encircled or put in boxes, and the relationship between concepts is represented by the lines drawn between them. The words written on those lines describe the relationship between the concepts. Concepts are represented in a hierarchical form on a map, with the most general concepts at the top and the most specific concepts at the bottom (Whitehead, 2008). Cross-links of a CM are links in different domain of the CM describe the relationship between two concepts contained in. That is, it shows the relationship between a concept in one domain and a concept in another domain on the map. The inclusion of specific examples of an event or object in a CM helps to further clarify the meaning of a given concept. A CM illustrates a set of meaningful propositions about a topic. Every two concepts (in some cases more than two,) along with the linking phrases, form a meaningful sentence, otherwise known as a proposition.

Learners, who did rote learning, find it difficult to engage in creative thinking in building a good CM. Rote learning does not help in the development of creative thinking or solving high level problems as knowledge is added to a person's knowledge structures. Concept mapping is therefore an excellent tool for meaningful learning as well as for developing creative thinking and problem-solving new methods. CMs have also become popular as a form of assessment, and the teacher has the opportunity to explore the creative thinking of learners in the development of CMs (Whitehead, 2008).

CMs can be described as a type of meta-cognitive (special thinking) tool. Its purpose is to make several concepts scientifically valid at the same time in a

hierarchical manner. There are three more distinctive features that characterized CM s. i.e. ideas should be represented in a hierarchical way with more general ideas at the top of the map and specific ideas at the bottom of the map. The relationship between any two related ideas must be expressed in a word or phrase and must be scientifically valid. The CM should be revised when new concepts need to be incorporated or incorrect connections found (Novak and Gowin, 1984). CMs are an important tool that can be used to assess student learning. The aim of this study was to promote the use of CMs to assess student learning. Therefore, it is important to study CMs extensively.

2.3 Assessment of concept maps

In assessment of CMs, different criteria are used in different contexts in order to assess CMs. Assessment of a CM has been described as a critical and tedious process (Ramasamy et al., 2012). According to Novak and Gowin (1984) to assess the CMs are used to scoring system as proportions, hierarchies, cross-links, and examples on a CM. Markam, Mintzes, and Jones (1994) suggested that the criteria to be used in assessing a CM are as follows: Concepts, Relationships, Branching, Hierarchies, cross-links and Examples. Ministry of Education (2008) has introduced five criteria to assess a CM: relevance to the basic concept of information, meaningful linking of information, illustration of interrelationship of information, extent of dissemination of information and organization and clarity of the map. The marking rubric and grading standards in CM assessment are outlined in more detail in Chan (2009) as follows: organization, links, thinking and ideas, communication, and team work. Further Chan (2009) has introduced four levels of assessment: excellent, proficiency, average and weak. Clear criteria and marking rubric should be identified when using CMs as an assessment modality. It is important to develop clear criteria in concept map assessment for this research, which is conducted to promote the use of CMs to assess student learning.
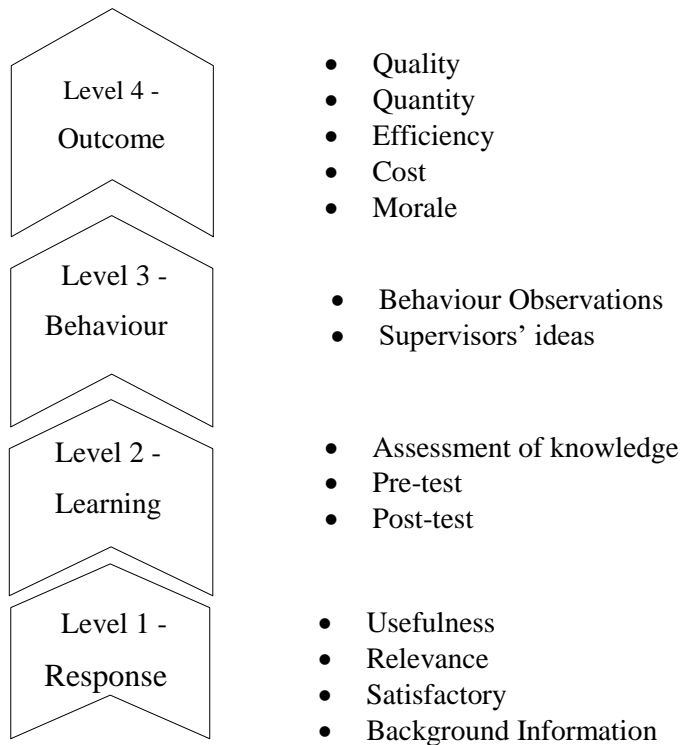
CMs have been identified as an important assessment modality by different researchers (Ruiz-Primo & Shavelson, 1996; Turkay, 2014; Kumar, Sarukesi, Uma, 2013). According to Ruiz-Primo & Shavelson (1996) CM as an assessment tool can measure the structure of the student's declarative knowledge procedure. According to Turkay (2014), CM can be used to externalize and make explicit the conceptual knowledge (both correct and erroneous) that students hold in a knowledge domain. Because, concepts maps: are objective, meaningful assessments through which the teacher can monitor student progress, self-evaluate instruction, and revise the delivery of instruction in the classroom, are effective in identifying both valid and invalid ideas held by students, can be useful for assessing both the knowledge students have coming into a program or course and their developing knowledge of course material, can give students and school meaningful information about student performance, and indirectly the performance of the teacher in the classroom. According to Ruiz-Primo & Shavelson (1996), a CM is a structural representation that purports to tap some important aspect of the structure of a student's knowledge in a subject domain. The use of CMs to supplement traditional multiple-choice tests has attracted attention among educators and researchers.

Although in Sri Lankan context, as per NIE (2018), as an assessment modality, CM has been acquired lower priority than other assessment modalities. Group activities, short written test, assignments, and open book test (OBT) are most popular assessment modalities and CM has gained the 23rd place of the priority. Only 26.11% of occasions, the CM has been used as assessment modality of 180 teacher sample (NIE, 2018).

RESEARCH METHODOLOGY

3.1 Research Design

Under the Sequential Transformative Design under the mixed research approach, Kirkpatrick's four levels of Evaluation Model was used to develop the research design (Diagram 1).

Level 4 -
Outcome

- Quality
- Quantity
- Efficiency
- Cost
- Morale

Level 3 -
Behaviour

- Behaviour Observations
- Supervisors' ideas

Level 2 -
Learning

- Assessment of knowledge
- Pre-test
- Post-test

Level 1 -
Response

- Usefulness
- Relevance
- Satisfactory
- Background Information

Diagram 1: Kirkpatrick's four levels Evaluation Model (Sourc: Kirkpatrick, 1994)

The first level of the model is the response level; focus is on the learner's perceptions about the program and its effectiveness. This is usually done immediately before or immediately after the training activity. In this study, before the awareness program a questionnaire was given to test pre-knowledge and attitudes regarding CMs and then exposed to an awareness program of concept mapping, which was conducted as a researcher intervention to enhance the use of CMs as a modality of assessment. It has consisted of eight themes which were identified from the research literature such as introduction to CMs, theoretical basis, features of a CM, elements of a CM, reasons for creating a CM, stages of teacher guidance during the developing a CM, assessing a CM and the importance of using a CM. This

was intended to increase teachers' awareness of the use of CMs as an assessment modality, as well as to motivate them to use CMs.

The second level of the model is called the learning level; is content evaluation, the examination of what learner learned in the training program and this level too is usually done immediately after the end of the training activity. In this study, at the end of the awareness program, a questionnaire was given again to test post-knowledge and attitudes of CMs. Subsequently, a change in teacher awareness of CMs, such as dependent variable, was examined. Awareness of CMs means the ability to introduce a CM, the ability to name elements of a CM, the ability to describe the process of creating a CM, the ability to assess CMs, the knowledge of the theory behind CMs, the use of CMs as assessment modality and awareness of the abilities that can be developed in students through concept mapping. After post-tests of the study and has been done practicing session of CMs, grouped them and were instructed to select a topic relevant to their subject area and to build a CM. Once those CMs were built, they were assessed according to the map by using pre determinant criteria.

The third level of the model is called the behavioral level and it measures employees' job performance by determining the extent to which employees apply their newly acquired knowledge and skills on the jobs. It is usually between 1 to 3 months after the end of the training activity. In this study the teachers used CMs as an assessment modality in the classroom context and the supervisors (in-service advisers) have been done observations and recorded. The teachers have been instructed on the use of CMs as assessment modality in the classrooms of schools where they work. And the ISAs observed the classroom practices in use of CMs as assessment modality by the observation schedule. At the same time the teachers have been advised to maintain a self-reflection note about their lesson.

The fourth level or final level of the model, is called the outcome level, which takes place between 3 months and 2 years after the end of the training activity. Level 4 is the most important and also the most challenging

level to assess. Typically, at Kirkpatrick's Level 4, organizations search the results for their training efforts. At this level, organizations attempt to measure actual organizational changes due to training and determine a value on those changes. In this study a focus group interviews with the teachers have been done as final step to explore the teacher experiences, strengths, weaknesses, issues challenges, and suggestions related to the use of CMs as an assessment modality, and to gain a broader understanding for the introduction of appropriate practices to enhance the effective use of CMs as an assessment modality. The reason for using a qualitative stage was to better understand and explain the results obtained from the quantitative stage in order to raise teachers' awareness and attitudes to promote the use of concept maps as an alternative to the assessment modalities that weigh heavily on the writing sector.

The summary of the research layout based on Kirkpatrick's four-level teaching intervention model depicts as follows (Diagram 2).
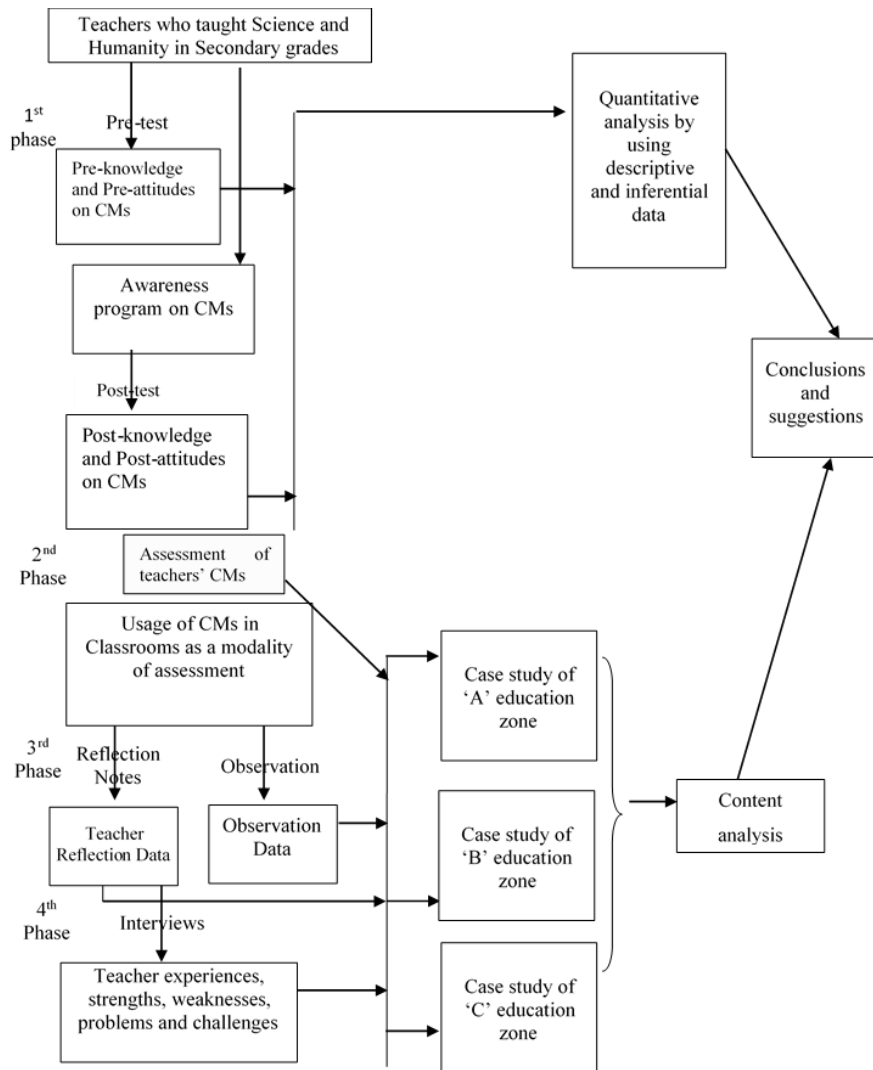
Diagram 2: Research design

3.2 Population and sample

The selecting of the sample was based on the multi-stage cluster sampling process. The research population was teachers who taught science and humanities subjects in grades 6-11 in schools in the Southern Province Three education zones were selected to represent the Galle, Matara and Hambantota districts of the Southern Province. This was due to the ease of management of the amount of data generated and the ability to complete the research within a given time frame. For each of the first and second phases, the selection of schools were on the assumption that the schools within the 6-11 category are fairly similar with regard to the teacher profile. Thereafter 150 teachers were selected, 50 teachers from each zone teaching in particular grades using simple random sampling (SRS) technique.

Similarly, in the presentation of research data, Pseudonyms were used to describe educational zones. This was done in such a way as to protect the privacy of the participants and the confidentiality of the data obtained from them. Accordingly, the sample was selected to represent each of the educational zones equally at each stage of the research (Table 1).

Table 1: Participants of the study

Education Zone	The subject taught	research stage			
		I	**II**	**III**	**IV**
A	Humanities	25	25	3	3
	Science	25	25	2	2
B	Humanities	25	25	3	3
	Science	25	25	2	2
C	Humanities	25	25	2	2
	Science	25	25	3	3
	Total	**150**	**150**	**15**	**15**

Table 2 shows general information on the sample. Of the 150 respondents, the majority (77%) were women. Also, according to the age group, most teachers belong to the age group of 30-40 years. Most teachers have a bachelor's degree in terms of level of education.

Table 2: General information of the sample

General information	frequency (n)	Percentage (%)
Gender		
Male	34	23
Female	116	77
Total	150	100
Age Level (Years)		
20 - 30	30	20
30 - 40	53	35
40 - 50	34	23
50 - 60	33	22
Total	150	100
Level of education		
GCE (Advanced Level)	57	38
First Degree	87	58
Postgraduate degree or above	6	4
Total	150	100

(n = 150)

3.3 Data collection techniques

Five instruments of data collection were used at the study. First instrument is a pre and post questionnaire in the first and second phases of the research and it has been consisted written test and attitude scale. The questionnaires have been used to collect pre-knowledge, pre-attitude and post-awareness and post-attitude of Concept Maps. Second one is a Checklist to assess of concept maps which were developed by the teachers in the second phase by the criteria of organization, relationships, thinking and ideas, communication and completeness. Third one is classroom observation schedule to observe of the teacher-student interaction, teacher observation, and feedback data at the use of CMs as an assessment modality in the classroom by research assistants (ISAs). Forth one is the reflection notes conducted by the teachers their reflections on the use of CMs in classrooms as a form of assessment. Fifth one is interview schedule to conduct interviews

in the fourth stage to collect classroom experiences, strengths, disadvantages, problems, challenges, and suggestions on use of CMs as a modality of assessment.

3.4 Data Analysis

Descriptive statistics on frequency, percentage, mean and standard deviation was used to analyze the quantitative data. A Paired sample *t*-test was used to check for a significant difference in the marks obtained by the relevant teacher sample in the pre and post-tests. Because one of the most common cases where dependent samples occur is when both samples have the same subjects and they are "paired by subject." In other words, each subject is measured twice on the response variable, typically before and then after some kind of treatment/intervention in order to assess its effectiveness. The content analysis was used to analyze the qualitative data in the second stage.

DATA PRESENTATION AND DISCUSSION

4.1 How often the CMs are used as an SBA modality compared to other form of assessment modalities

Data from the most common assessment modalities used by the teacher sample to assess secondary grade students under the school-based assessment program were analyzed. To check that the frequency and priority of each assessment modality were calculated (Table 3). According to the table, assignments have taken precedence over SBA recording, while concept maps stand at ninth position usage. This analysis was done to see the usage of CM assessment modalities comparatively to other modes of assessment modalities.

Table 3: The most commonly used assessment modalities by the teacher sample

	Assessment modality	Frequency	Priority
1	Assignment	110	1
2	Practical Activities	109	2
3	Group Activities	105	3
4	Short Written Tests and Structured Essay Tests	91	4
5	Creative Activities	31	5
6	Explorations	30	6
7	Speech	27	7
8	Quiz Programs	26	8
9	Concept Maps	22	9
10	Observations	19	10
11	Open Book Tests	18	11
12	Teacher made Assessment Variations	18	11
13	Field Trips	17	13
14	Role play/ Simulations	12	14
15	Projects	11	15
16	Exhibitions / Presentations	10	16
17	Discussion panels	8	17
18	Wall papers	6	18
19	Debates	6	18
20	Self-creative works	5	20

4.2 Knowledge, attitude and proficiency do the secondary grade teachers have regarding the use of concept maps as an SBA modality before and after the awareness programme

4.2.1 The pre-test vs. the post-test

The pre- and post-test used in this study consisted of two parts. That is, the knowledge test (first pair) and the attitude test (second pair) about the use of CMs as an assessment modality. The means of the pre- and post-knowledge tests as the first pair and the sum of the pre- and post-attitude tests as the second pair for the *t* test. The paired sample test was performed using statistics (Table 4) on the mean, number of subjects, standard deviation and

means of standard error to the test of the sample. According to the results of that test (Table 5) there is a significant difference between the pre- and post-awareness of the use of CMs as an assessment modality. There is a significant difference in the pre- and post-teacher attitudes towards the use of CMs as an assessment modality.

Table 4: Paired Sample Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Mean	2.64	150	1.32	.11
	Post-Mean	13.64	150	2.23	.18
Pair 2	Pre-Sum	46.26	150	3.29	.27
	Post-Sum	52.12	150	5.16	.42

Table 5: Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		*t*	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pre-Mean – Post-Mean	-11.00	2.79	.23	-11.45	-10.55	-48.28	149	.000*
Pair 2	Pre-Sum – Post-Sum	-5.86	4.57	.37	-6.59	-5.12	-15.69	149	.000*

* Significant at 0.05 level (p<0.05)

4.2.2 Effect Size (Eta²)

The following equation was used to calculate the impact of teacher development program on teacher knowledge and attitudes on the use of CMs as modality of assessment (Pallant, 2002).

$$(Eta^2) = \frac{t^2}{t^2 + N - 1}$$

To determine the effect size, it has been used following levels; 0.01 = small effect, 0.06 = moderate effect, 0.14 = large effect (Cohen, 1988).

Accordingly, from the teacher development program conducted on the use of CMs as assessment modality, the effect size on teachers' knowledge is 0.9, That is to say, a large effect has been made on the knowledge. The effect size on teachers' attitudes is 0.62, That is to say, a large effect has been made on the attitudes.

4.2.3   Mastery level of concept mapping proficiency in the sample

The table 6 depicts the comparison of CMs constructed by the sample groups of three different educational zones under the qualitative phase making the total of 12 groups. Constructed Concept Maps and Process were assessed on the criteria and proficiency levels set by the Ministry of Education. The proficiency levels were determined according to the mastery levels introduced under the SBA Programme. Thus the levels are; 100-81 Proficiency level, 80 - 61 near Proficiency level, 60 - 21 to be developed level and 20 - 00 to be developed immediately (MOE, 2004). According to table 6, there are four (04) groups that need to be developed in usage of CMs as assessing students' performance in learning teaching process.

Table 6: Proficiency in building CMs in the teacher sample

Zone	Number of groups				
	proficiency	approximate proficiency	should be developed	Immediate develop	**Total**
A	3	0	1	0	4
B	0	3	1	0	4
C	1	1	2	0	4
Total	4	4	4	0	12
Percentage	33.33%	33.33%	33.33%	0	100%

4.3 Have the teachers reached the desired level of practice in classrooms, in the use of CMs as a modality of assessment after receiving the treatment

4.3.1 Teacher-Student Interaction and Teacher observations and Feedback

When using CMs as an assessment modality, teacher-student interaction is considered to be the excellent standard of the two observed classrooms in '*A*' education zone and three of them in very good standard. Also, the observed four classrooms in the '*B*' education zone are of excellent standard and one classroom is in good standard. Three classrooms in the '*C*' education zone are of excellent standard and two classrooms are of very good standard. Thus, it has been observed that teacher-student interactions are better or higher when applying concept maps to classrooms as a whole as an assessment modality.

Three teachers in the '*A*' education zone are at excellent level and two teachers are at good level in terms of teacher observation and feedback when CMs are used in classrooms as an assessment modality. Also, one teacher in the '*B*' education zone is at excellent level, three are very good and one teacher is at good level. Three teachers in the '*C*' education zone are at excellent level and two are at very good level. Thus, on the whole, it has been observed that teacher observation and feedback are at good level or even higher level when CMs are used in classrooms as an assessment modality.

4.4 The teacher tasks, strengths, problems and challenges in applying the CMs in classrooms as an assessment modality

4.4.1 Teacher tasks

Table 7 presents the teacher tasks to be performed in the application of CMs in classrooms as an assessment modality. Those teacher tasks are categorized as pre-activity, during activity, and post-activity.

Table 7: In the practice of CMs in classrooms as an assessment modality
Teacher tasks to be performed

Stage to be performed	Teacher tasks to be performed
Before the activity	• To provide a comprehensive understanding of concept maps before applying CMs • To build model CMs several times with student participation • In the early stages of using CMs, the structure of the map should be drawn on a piece of paper, written on the relevant concept on cards and started with an exercise in positioning them in the appropriate places on the map. Then the student should be guided to build CMs gradually on their own. • To organize the activity well planned and well prepared
In the beginning and during the activity	• To encourage students to have an introductory discussion at the beginning of the activity and to build a summary of the lesson • To arouse the curiosity of the students regarding the activity in that discussion • Mixed groups of boys and girls in group activity • Determining the group structure and the number of students in a group so that all students can participate in the activity • Selecting the focus question relevant to building the CM considering the level of all the students in the class • To encourage students to be critical and creative • When building CMs, the student should be given a short period of time to reflect on the points in the lesson after the teacher's explanation. Then a group discussion should provide an opportunity to summarize the facts. • To provide an extra assistance of the teacher to students when students show an apprenticeship in concept mapping in the early stages • Teacher intervention in cases where student support is low in group activities • To provide more guidance with the intervention of the teacher to students who have difficulty in developing CMs • To motivate students the teacher should walk around the classroom during the activity and give the guidance they need. • To guide to connecting life experiences in concept mapping
After the activity	• To provide feedback to students at the end of the assessment • To guide to using CMs in answering an essay question • Display of CMs created in different contexts in the classroom

4.4.2 Strengths

The strengths identified in the practice of concept maps in classrooms as an assessment modality are presented in Table 8. They are categorized as student related and teacher related.

Table 8: Strengths observed in the application of CMs in classrooms as an assessment modality

Type	Strengths
Student-related	• Active participation of Students • Dealing with team spirit • Engaging in recreational activity • Understanding of complex subject matters Simply • Confirmation of learning through assessment • Motivation for self-study • Opportunity for group exploration • The emergence of hidden talents and creativity • Ability to get the help of well-to-do students by using a combination of them and backward students. Thereby developing the attitude of helping others in the well-to-do students • Slow learners in the classroom are also enthusiastically engaged in activities • To motivate students by organizing as a game or a competition • Being able to grasp the subject matter well • Opportunity for innovation due to the diversity of CMs as a results of student diversity • Opportunity to assess students' hidden abilities • Encourage students to incorporate even additional points into CMs even in the text books • CMs can be used to motivate even slow learners to learn
Teacher-related	• Ability to improve student focus by organizing the content of multiple pages into a single visual field • Ability to present a concise diagram of comprehensive information • Ability to easily understand complex subject matters • Can easily assess according to criteria • Reducing the pressure on the teacher regarding assessment when well planned • CMs can be applied to a large number of lessons in the syllabus • Opportunity to review the subject • To build a strong teacher-student relationship by assessment through CMs • CMs make it easier for the teacher to assess compared to other assessment modalities

4.4.3 Issues and challenges

In the application of CMs in classrooms as an assessment modality it has been observed 5 issues and challenges. They are Decreased student enthusiasm for building a CM in relation to already learned lessons rather than applying it to a new lesson; Decreased student enthusiasm in concept mapping of small schools with low enrollment compared to schools with relatively large enrollment; Only talented students are active and the rest of the students are inactive; Different speed of girls and boys in completion of a CM and Problems arise in time management due to students' apprenticeship of concept mapping in the early stages.

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The use of CMs in classrooms as a modality of assessment under the SBA program is relatively low. Popular modalities of assessment are assignments, practical activities, group activities, short written tests and structured essay tests. This is due to the lack of awareness and negative attitudes of the teachers about CMs. It is also possible to develop teachers' awareness attitudes and proficiency through an appropriate teacher development program. Following the teacher development program conducted by the researcher, the results of the practical exercise, which were grouped to assess the ability to use CMs as an assessment modality in the relevant sample, revealed that there were a significant number of teachers who were not proficient in participating teacher groups. When concept map classrooms are used as an assessment modality, it is revealed that all the classrooms where teacher-student interaction, teacher observation and feedback performed well or at a high level. Accordingly, as a modality of the assessment, CMs outline 19 teacher tasks to be performed in classroom practice. The general nature of these is that they represent the guidelines needed to optimally apply CMs as an assessment modality. CMs as an assessment modality show 26 strengths observed in classroom practice. The

general nature of these is to encourage students as well as teachers to apply CMs as an assessment modality. The general nature of the problems and challenges observed in the application of CMs in classrooms as an assessment modality is that they are all problems related to guiding students to concept mapping.

5.2 Recommendations

CMs as a modality of the assessment program under the SBA program have been used relatively low level in secondary grades because of relatively low level of teacher awareness and negative attitudes towards concept mapping. Extensive training should be provided in the use of maps to all secondary grades teachers under the programme on school-based professional teacher development (SBPTD). For this, master trainers should be trained and deployed as appropriate at the zonal level. Similarly, a teacher guideline should be printed and given to all the schools. Sub-themes used in the awareness program can be used for the guideline, such as: introduction to CMs, theoretical basis, features of a CM, elements of a CM, reasons for creating a CM, stages of teacher guidance during developing a CM, assessing a CM and the importance of using a CM. and need continuous training or guidance for teachers. A senior teacher should be appointed to guide and regulate the SBA program. In addition, the use of various assessment modalities in school-level monitoring programs should be regulated and provided with feedback.

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English Writing Difficulties of English Medium Bachelor of Education Undergraduates at a State University in Sri Lanka

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ABSTRACT

Writing skills are essential for the Bachelor of Education (BEd) graduates because majority of them are employed as teachers and teacher educators in schools or higher education sector. However, it was identified that majority of the BEd undergraduates who followed the content in the English Medium (EM) have not developed the required writing competencies. This study aimed to identify the major writing difficulties of the BEd undergraduates enrolled in the EM programme of a state university in Sri Lanka in-order to propose strategies to develop their essential writing skills on graduation. The study used a descriptive-qualitative research design to obtain data from a sample of EM BEd undergraduates in a state university in Sri Lanka. Data were collected by assessing the written scripts of the students as well as by administering a questionnaire and interviews and analyzed using qualitative methods. Some key findings of the study were: they had difficulty in organizing ideas, using appropriate vocabulary, conveying intended meaning and using correct structures. They lacked ideas and creativity. Some reasons for their difficulties were due to the First Language interference, inadequate opportunity and exposure to develop writing skills. It was identified that BEd undergraduates in the sample had not developed their Basic English writing competencies when entering the university.

Keywords: *Bachelor of Education Undergraduates, Academic Writing*

INTRODUCTION AND BACKGROUND

Why is writing important for the undergraduates?

English Language proficiency is the basis of success in the academic pursuits (Racca and Lasaten, 2016; Kilmova, 2012). The ability to use language functions effectively in the expression of thoughts through analytical academic engagements contributes significantly to the academic performance of a student. Thus, an adequate level of competence in writing is essential for the academic advancement of all the undergraduates. Writing in English has been challenging not only for the English as a Second Language Learners in Sri Lanka but also for the undergraduates in other countries. Many research studies have highlighted, that majority of the undergraduates had not developed the essential writing skills required of a graduate (Lloyd, 2018; Defazio at.el, 2010; Bartlette, 2003)

Writing skills are particularly important for the BEd undergraduates who would be employed as teachers or educators after the graduation and they are expected to be instrumental in developing the writing skills of their students. Other than this, they are also required to produce written assignments and research reports in the fulfillment of the degree.

Why is writing difficult?

However, the written scripts of the EM BEd undergraduates revealed several writing difficulties even in the basic mechanics of writing such as grammar and vocabulary. Although the statistics in the year 2019 presents Sri Lanka as a country with a literacy rate of 92% (World Bank, 2021), National Assessment studies conducted by National Education Research and Evaluation Centre, Sri Lanka (NEREC, 2016) revealed that the achievement of English Language skills was below the 50% benchmark and the poorest achievement was shown in the writing skills of which majority of the students had not even attempted the writing tasks in the test paper. The study also revealed that majority of the low achievers for English Language was not from the easily accessible urban schools with facilities and resources.

This disparity in the writing skills could be identified in several BEd EM undergraduates in a state university by examining their assignments, research reports and answer scripts. A questionnaire administered to the Second and Third Year EM BEd undergraduates revealed that majority of the EM BEd undergraduates who entered the University were from various parts of the country and majority of them had entered the University from the rural schools.

According to many researchers (Graham, Harris and Larsen,2002; Christzer et.al.,2018), writing is the most difficult skill to learn because it requires a combination of skills such as good fine motor functions, visual-motor planning, attention, thinking, memory, knowledge of grammar, sentence structure and vocabulary. Thus, writing is a complicated skill which requires a combination of several skills.

Therefore, in-order for a student to be competent in writing, he or she should have acquired the above abilities to an accepted level. Recognizing this necessity, the development of writing skills in both First Language (L1) and English Language has been included in the school curriculum. Therefore, the student who enters the University is expected to have already developed the above skills in the school not only in the L1 but also in English as their Second Language (L2).

A research was carried out by Dalsky and Tajino (2007) in the Kyoto University in Japan to examine the perceptions of students of their difficulties in academic writing and it was identified that although academic writing was important for the academic success of the students, it had been the most difficult skill for the students to master.

Purpose of the study

Although there are studies that highlighted the importance of writing skills in the academic success of students, few studies have focused on identifying the specific writing difficulties of the undergraduates. There are studies to examine the English Language Learning needs of the students

in Sri Lanka but very few studies have been conducted to identify the specific English writing needs and difficulties of the BEd undergraduates.

Although there are some studies on the challenges and problems faced by both students and teachers when teaching and learning English as the L2 in the classroom, few studies have focused on identifying the language issues faced by non-English speaking students when the medium of instruction is English. Very few studies have been conducted to identify the writing needs of the English Medium BEd undergraduates. It is important to identify the writing needs of BEd undergraduates who would be graduated as teachers because they are expected to have the capacity to teach the subject matter in English and to help the students in their language needs including writing.

Research studies have revealed that there is a significant relationship between the English language proficiency and the academic performance of the EM students in the subjects they study in English (Racca & Lasaten, 2016). Writing is an essential skill that contributes towards the academic success of the students. A study conducted by Qasem and Zayid (2019) on Final Year undergraduates of University of Bisha revealed that the main difficulty of students was low proficiency in English when they wrote their research projects in English.

Development of the students depends on the skills of the teacher and if the teacher has not developed the required writing competencies, he or she will not be able to help the students in their difficulties. Racca & Lasaten, 2016 have said that the teachers of English, Science and Mathematics should be fluent in English because the ability to use language effectively in the classroom will facilitate the learners to understand the concepts. Moreover, teachers who teach descriptive language rich subjects such as History, Geography and Civic Education also should be fluent in English or the students will not be able to comprehend the subject matter. Therefore, it is important to develop the academic writing skills of the BEd

undergraduates by first identifying their writing difficulties. Accordingly, this study was carried out to achieve the following objectives.

Objectives of the Study

This study aimed to;

1. Identify the writing difficulties of BEd First Year undergraduates
2. Examine the factors for the writing difficulties of the BEd First Year undergraduates
3. Examine ways to address the identified difficulties

LITERATURE REVIEW

Theory of Writing

Cognitive Process Theory of Flower and Hayes (1981; p. 366) can be considered as a suitable theory to be used in examining the writing issues of the students and in identifying remedies to develop the writing skills of the learners.

This Theory is based on four key points: 1.The process of writing is understood as a set of distinctive thinking processes that is organized by the writers during the act of composing; 2. These processes have a hierarchical, highly embedded organization in which any given process can be embedded within any other; 3. The act of composing itself is a goal-directed thinking process, guided by the writer's own growing network of goals; 4.

Writers create their own goals in two key ways: by generating both high-level goals and supporting sub-goals which embody the writer's developing sense of purpose, and then, at times, by changing major goals or even establishing entirely new ones based on what has been learned in the act of writing.

Three major elements are involved in this theory. a) Task Environment; b) Writer's long term memory; and c) Writing process.

Task environment is explained as the factors outside the writer such as the 'rhetorical problem' and 'the text'. Writer's long-term memory consists of 'the knowledge of the topic, audience, and various writing plans'

of the writer. Writing processes is defined as 'planning, translating, and reviewing'.

The Process of 'Planning' is generating ideas by retrieving information from the long-term memory. Planning involves the process of organizing. Organizing involves creative thinking and discovery and during this process the writer organizes the ideas to develop the topic. Textual decisions on presentation and ordering are made in the process of organizing. This is followed by the process of goal-setting by the writer. This process goes on throughout the writing process.

'Translating' is presenting the ideas in the graphic form using imagery and kinetic impressions. Extreme concentration on writing mechanics such as spelling and grammar may interfere with generating of ideas and ignorance of writing mechanics may produce poorly written scripts. Those who have mastered the writing mechanics and conventions will be able to produce ideas more effectively than those who struggle with syntactic issues.

'Reviewing' is evaluating and revising the written text.

This Theory is used in the current study to examine how writing skills are developed in the students and to identify strategies that can be used in the development of writing skills of the BEd undergraduates.

Research studies on the L2 writing difficulties of the students in other parts of the world were investigated in the next section to understand the issues and difficulties faced by the BEd students in the current study by comparing their issues with the issues faced by students in other countries.

Writing Difficulties of Students in Different Parts of the World

High School students in Philippines

Pablo and Lasatan (2018) conducted a research to identify the writing difficulties and the quality of academic essays of senior high school students in Laoag City, Philippines. It was revealed that many students faced difficulties in the organization of ideas and in the usage of words as well as in the sentence structures. Students had difficulty in writing academic essays due to the lack of variety of ideas, incorrect use of words

and idioms, difficulty in the choice of words, poor sentence structures and so on. The essays lacked cohesion, coherence and logical sequence of ideas. Quality of the academic essays of the private school students was found to be of better quality than that of the public school students. Absence of useful details or lack of details to write an academic essay was found to be a problem with these students.

A study carried out by Christzer et.al. (2018) on Senior High School Students in Philippines revealed that the students tried to avoid writing tasks due to the lexical, syntactical and morphological difficulties as influence by their native language. According to them academic writing should demonstrate a clear purpose for writing and should be organized and developed according to specific points of facts and information using accurate and appropriate words and grammar. Students should possess adequate knowledge of academic vocabulary in-order to be successful in academic writing.

Undergraduates in Pakistan

Similar findings were highlighted in a research on undergraduates in a Pakistani University by Fareed, Ashraf and Bilal (2016). Insufficient linguistic proficiency, writing anxiety, lack of ideas, reliance of L1 and weak structure organization were some challenges faced by the students when writing in English.

Undergraduates in Malaysia

Jackson (2012) conducted an experimental study with the objective of examining the effectiveness of CLIL combined with genre process writing in enhancing the writing skills of the university undergraduates in an international university in Malaysia. In this study the students reflected on the information on reading texts to gather information for the written texts and produced their own writing based on the information gathered from the texts related to the subject content. Content correctness, precision and language accuracy were essential components in the evaluation of the written texts produced by the students. Lessons were based on the subjects

that the students studied for their degree. Students initially produced simple sentences which were formed into paragraphs and the paragraphs were formed into the essay.

Undergraduates in Japan

Following writing difficulties were identified in a research conducted by Dalsky & Tajino (2007) to examine the perceptions of students in Kyoto University in Japan. Many students had problems with structuring paragraphs, writing with responsibility for successful communication and in linking ideas. They had difficulty of relating the writing they have learnt in the schools to the writing expected in the University. They had difficulty in writing their ideas clearly. This made their intended meaning obscure.

B.Ed Undergraduates in South Africa

Research carried out by Mbirimi (2012) to investigate the academic writing challenges faced by First Year Bachelor of Education students in a South African University revealed that students had difficulty of transfer from school literacy to academic literacy. Students of Koyoto University also had a similar problem. They lacked vocabulary and practice in using English in writing and they lacked understanding as to what is required of them due to unclear instructions. Students did not have adequate background knowledge for writing. Majority of the students were unaware of the academic discourse and they were unprepared for the University.

Pineteh (2014) conducted a research on undergraduate students in a South African University to examine the challenges faced by students in academic writing. His findings were; the academic writing challenges are consequences of students' linguistic and general literacy backgrounds; their attitude towards academic writing.

University Students in the United States

Giridharan (2012) conducted a study to identify the gaps in academic writing of English as a Second Language University Students in the United States. The study revealed that although many University students have a general understanding of grammar rules, many have not developed the academic writing competence and majority of them were not aware of their own ability in academic writing. Common grammatical, structural and syntactical errors made by the students were identified in the research. It was revealed that majority of the students had enjoyed the writing tasks, drafting essays and working with peers to brainstorm ideas and essays for their drafts. However, majority of them were unable to evaluate their own work.

Strategies and techniques proposed in the research studies conducted on the development of second language writing skills of the students in the higher education were investigated to identify suitable strategies and techniques to develop the writing skills of the B.Ed students in the current study.

Techniques Proposed in Literature to Develop the Writing Skills of the Students

According to Christzer et.al. (2018), successful writing should; demonstrate a clearly defined purpose; present a certain point; be supported clearly by specific information; use appropriate vocabulary; produce concise, emphatic and correct sentences.

Five Major Strategies have been identified by Crandall et.al. (2002), to develop the language and literacy skills of the students while learning the content in English. Some of these strategies can be used in the development of the writing skills of the students. They are; building conceptual frameworks to understand the relationship between the ideas and self-learning by using learning strategies.

Reppen (2002) has proposed a genre-based approach to facilitate the students in their academic writing in the content classroom. The teacher

provides the student with; scaffolding, linguistic support, awareness of text functions, knowledge in the use of graphic organizers and opportunity for cooperative learning.

Some of the suggestions made by Echevarria et.al. (2013), to develop the knowledge and use of Second Language vocabulary of the students were; a) combination of rich and varied language experiences; b) teaching key words; c) providing opportunity for the students to use the vocabulary appropriately in a relevant context; d) help the students make connections between the structure of their first language and English by giving them the awareness of the grammatical arrangement of words and the use of language in social and academic contexts.

Methodology of the current study was planned by considering the background to the current study as well as the findings of the research reviewed.

METHODOLOGY

This study was carried out as a case study to obtain in-depth data through exploration into the L2 writing difficulties of the EM BEd undergraduates. The descriptive-qualitative research design was applied to identify the common written errors of the students and the reasons for these errors in-order to suggest remedies to overcome their issues.

Data Sources of the Study

Population of the study was EM BEd undergraduates in a State University in Sri Lanka.

Participants of the Study

First Year EM B.Ed students in one academic year and the lecturers who taught for them were the participants of the study. In-addition, a questionnaire was administered to the students who participated in the study as well as to the Second and Third Year EM B.Ed students in the selected University to identify the background of the students who entered the

University, their exposure to English Language and the opportunities they had to develop their English language skills.

Data Collecting Methods and Materials

Writing difficulties of the students were identified by administering a writing task to the students. Participants were assigned an in-class writing activity to write an academic article to a magazine on the *'Social Responsibility of a Teacher'*. This topic was selected for two reasons; BEd students who complete the degree in the English Medium should be able to write an academic article related to their profession and they should have awareness of their social responsibility when they are employed in the Education sector. Students were given one hour to complete the article with minimum of 200 words.

Each written article was evaluated by using a pre-decided scoring rubric. The rubric was prepared by considering the elements specified by Christzer et.al (2018) for academic writing. Accordingly, each article was evaluated under five criteria; Use of vocabulary; Use of Spelling; Use of Grammar; Conveying the Intended Meaning; Relevance of the Facts.

The rubric was validated by an expert in the field and was developed to evaluate the academic writing of the student participants. Each criterion had a set of rubrics that ranged from 0 to 5. '0' indicated more than 10 inappropriate use of words; more than 10 grammatical errors; more than 10 spelling mistakes; over 10 errors in conveying the intended meaning and over 10 irrelevant facts and ideas in the article. '1' represented between 7 to 10 errors in the five areas and '2' and '3' indicated '5-6' and '3-4' errors in the five areas respectively, while '4' represented 1-2' errors in the five areas and '5' indicated hundred percent accuracy in all five areas.

The errors identified from the articles of the students were verified by examining their written assignments. Further, a questionnaire was administered to the students and interviews were conducted with the

students as well as the EM lecturers to identify the reasons for their writing difficulties and to triangulate data.

The questionnaire consisted of seven items. The first five items had five scales for the students to rate their proficiency level on each language skill. These items intended to examine the assessment of each student of their own writing skills.

Response of the students to the first item that required the students to rate their English Language proficiency level gave information on the perception of the student of his/her own English Language Skills. The second and third items required the students to rate the language skill they perceived to be the easiest and the most difficult to develop. Response of the students to these questions gave an idea about how they had been able to identify their own strengths and weaknesses in the development of English.

The fifth and sixth items aimed to examine whether the students had perceived writing as an important skill to be developed in-order to be successful in their teaching profession.

The sixth item consisted of ten language skills out of which the student was asked to select the three skills they wanted to develop according to the ascending order. The main objective of this item was to examine the attitude of the students towards the development of their writing skills and to understand the value they had placed on the development of their writing skills.

The seventh item was an open-ended question that asked for the views of the student on the support that the Faculty could give for their academic development. These items intended to identify the attitudes and perceptions of the students with regard to their L2 writing skills.

Interviews were conducted informally with the lecturers and students to validate the data in the questionnaire and to obtain in-depth data on the writing difficulties of the students.

Data Analysis

Data were analyzed using qualitative content and thematic data analysis methods by categorizing data under identified themes. Interpretations of Data were carried out in comparison with the theories and findings of the previous research studies and conclusions were drawn accordingly.

DISCUSSION AND ANALYSIS

Written scripts of the students were evaluated using the criteria described above and the following issues were identified.

Issues related to lack of vocabulary

Lack of knowledge in the appropriate use of vocabulary was a major problem for majority of the students. Many students had more than six vocabulary related errors in the article and some had more than ten errors. Vocabulary related errors could be detected not only in their article but also in their written assignments. Some of the errors made in the article by the students who had fewer errors in the use of vocabulary in their scripts are given below;

> *Society is **marvelous** about their behaviour (*The correct word should be *impressed*)
>
> *People have **upper** knowledge regarding this (*The correct word should be *higher)*
>
> *One has to work **heavily** to achieve goals (*The correct word should be *hard)*
>
> *They are **stucked** between good and bad. (*The correct word should be *stuck)*

Lack of knowledge on the appropriate vocabulary to be used in writing affects the meaning of the idea conveyed and the reader has difficulty in understanding the content. Problems related to spelling are mainly due to the lack of understanding of the meaning of words.

Issues related to Spellings

Although there were many spelling errors in the handwritten scripts, the word processed articles had few spelling errors because of the spellcheck facility in the Computer Application. However, this has led to the inappropriate use of vocabulary in many instances because there are many words with similar pronunciations but spelled differently to convey different meanings. Students had problems of selecting the correctly spelled word that was appropriate to convey the intended meaning. A few significant errors in the handwritten scripts are given below.

*Teachers get **credict** for their good behavior (*The correct word is *credit*)

*There is no **medisine** for this*. (The correct word is *medicine*)

*This **efects developmet*** (This should be corrected as *This affects development*)

These errors may be due to the unfamiliarity with the pronunciation of the word and lack of exposure to English writing. However, if the article had been word processed these words would have been automatically corrected.

However, there were many errors in the word processed articles due to the incorrectly spelled words. Therefore these errors can be considered as vocabulary related errors as well. Some examples are given below.

*People must not follow the **floor*** (The correct word should be *flow*)

***Principle** should be an example to the Teachers* (The correct word is *Principal*)

*Teachers produce **worriers** to the society*. (The correct word is *Warriors*)

***Mail** students are more difficult to handle*. (Correct word should be *Male*)

*Teachers must promote **piece*** (Correct word should be *peace*)

Spelling of the word was correct but it was not the appropriate word that should be used in the sentence. Reasons for these errors may be; due to the confusion of words with similar pronunciation; due to the lack of practice in writing and confusion of letters with similar sounds. However, such errors affect the meaning of the idea presented in the written article.

Issues related to the Inability to Convey the Intended Meaning

One main problem in all the scripts was the inability to convey the intended meaning. All the students had difficulty in expressing their ideas which had resulted in the poor organization and lack of meaning in their scripts. Some examples taken from the articles written by the students are given below.

*So teacher can get that challenge. And their pass for that challenge will be the success of our society. (*This should be corrected as; *The society will be successful if the teachers can overcome the challenges they face successfully.)*

Meaning of the above sentences can be understood by reading carefully but the exact idea is not accurately conveyed. However, the idea conveyed in the following sentence cannot be understood.

It is our responsibility to develop our mother country. So In-order to carry out our responsibility we have **to learn by heart as much as possible**. (This should be corrected as; *Responsibility for the development of our country should emerge from the hearts of the people.)*

Inability of the students to convey the intended meaning could be due to the lack of knowledge and practice in using vocabulary and grammar in writing in English. Absence of opportunities to develop the writing skills too could be a cause for this problem. Many grammatical errors were identified in the articles of the students.

Issues related to the Lack of Knowledge in Grammar

The recurring errors that were identified in the articles were inappropriate use of verbs, tenses prepositions and word order. A few selected errors in the script are given in the grid below.

Sentence in the script	Error	Corrected sentence
Teacher have responsibility to do it	Subject-predicate/ article/ Redundancy	Teacher has a responsibility for it
Because doctor can not creates new doctors	Conjunction/ of verb	Doctors cannot produce more doctors
Development mean not only development of building, buisnes. It is must be a moral development.	Misplacement due to confusion of structure/inappropriate use of article and verbs	Development is not only constructing buildings or expanding businesses but also the moral development
Teachers can fulfill that ability for society. Because small child see the world through teacher's eyes.	Confusion of structure/ preposition/ demonstrative pronoun/ clauses	Teachers can develop the abilities of the people in the society because the small child sees the world through the eyes of the teacher
Children should have given higher knowledge on every subjects.	Noun/ adjective/ voice	Children should have been given a higher knowledge on every subject.

All the students needed adequate practice in the use of grammar correctly in writing. Although the students had extensive knowledge about the rules of grammar they lacked practice.

One common error that was identified in the scripts of the students was the inappropriate use of the verb and the conjunctions in a sentence. One such sentence was; *student is followed teachers. Student is behave well.* The student intended to say that the *Student behaved well by following the teacher* but the intended meaning was not conveyed due to the lack of knowledge and practice in the appropriate use of verbs and conjunctions in a sentence.

Intended meaning of the ideas were completely changed due to the wrong use of prepositions. One student had written *Children want to help to good citizens.* The writer intended to say that the *Children wanted help to be good citizens*. However, a completely different idea is conveyed in the sentence written by the student.

Students could not understand the mistakes they made because they were not given feedback for their language errors. Therefore, they continued to repeat the same errors in all their writings. Lecturers who taught the subject content ignored the language errors in the assignments of the students and assessed only the content. As a result, the student believed his or her language to be good. Some errors identified in a project report produced by a student who was awarded an Á' Grade for the report is given below.

> *Primary students very liked to get star marks. I gave role playing activity to do after finished the assignments. First I recall their prior knowledge by asking them to tell with what subjects do we use has/have in sentences. Then there were 15 minutes remain.*

One main reason for many of the grammatical mistakes of the students was the structural difference between the L1 of the students and English.

Issues due to the L1 Interference

Students reflected the ideas in their First Language and then tried to translate it to English. There were structural errors due to the difference of structure in the sentence formation in L1 and English. The sentence structure of the L1 of the students is; *subject + Predicate + Verb* whereas the sentence structure of English is; *Subject +Verb + Predicate*

Some of the errors made by the students due to the L1 interference are given below.

Social responsibility teacher must to teach students. (Grammatically correct sentence should be: *Teacher must teach the social responsibility to the students)*

People social responsibility understand is difficult. (What the student intended to write was; *It is difficult for the people to understand their social responsibility)*

In-addition to the issues identified above, all the students had difficulty to organize facts relevant to the given topic.

Issues on presenting relevant facts for a given topic

Although the students had creative ideas, they had difficulty in presenting these ideas clearly in English due to the lack of writing skills in English. Many scripts lacked systematic organization of ideas. There was no connection between the ideas that were presented and facts had been presented without considering the relevance of the facts to the topic. The students were required to write on the social responsibility of the teacher but majority had written on the nobility of the teaching profession and not on the responsibility. Some such examples are;

Teaching is a noble job. Everyone respects the teacher. Teaching is better than all other jobs.

Teacher has to be committed. Teaching is not easy. Teacher has to love the students like a mother.

> *Teacher has to teach rural students and urban students. Rural students are different from the urban students.*

None of the above statements conveyed the social responsibility of a teacher. This may be due to their lack of understanding of the social responsibility of a teacher. However, in some articles, the same idea was repeated several times. An example from one article is given below.

> *Teacher is the most important person of the society. He gives many important things. Teacher is a very important part of the world. They give very important things for the children's lives. Education is the most important part of the country.*

The above examples highlight not only the language difficulties of the students but also their lack of ideas. Articles of the students clearly displayed lack of ideas. None of the articles contained creative ideas and the ideas were not developed through a critical approach. None of the articles reflected academic writing. In-addition to the lack of Basic English writing competencies, the students lacked ideas to produce an acceptable academic article.

Therefore it was important to identify the reasons behind their writing difficulties.

Reasons for the English Writing Difficulties of the BEd Undergraduates

Perceptions of the students on their writing difficulties in English and the reasons for these difficulties were examined by administering a questionnaire to the students and by conducting informal interviews with the students and the lecturers. Data were categorized under the following themes.

Opportunities to Develop English Writing Skills

All the students had completed their general education in the L1 and had learned English only as a subject in the school curriculum. Although English was offered as a subject from Grade Three through to Advanced Level, majority of the students had not got the opportunity to

learn English in the Advanced Level class. Some schools did not have a teacher for English and many schools overlooked General English in the Advanced Level Class because it was not considered for the university admission.

Many students considered their English Language writing skills to be satisfactory because they had secured an 'A' Grade (The highest Grade) at the General Certificate of Education (Ordinary Level) Examination. Some of their responses were;

> *I got A for English. It is because my English is good*
>
> *My writing is good. I got A for OL.*
>
> *My writing good in school. I have A pass but now not so good.*

According to them they had adequate practice of writing in English in the school. They had written essays in English on various common topics such as *'Myself', 'My friend', 'My School'* and so on but no student commented on writing essays that required creativity and critical thinking. They had practiced writing letters and notices as well. However, when they were asked about the feedback they received from the teacher, most of them said they had got a mark or a grade and some said that the teacher underlined the errors and sometimes corrected the language errors but they had not given attention to correcting these errors.

> *We wrote lot of essays. Everyday teacher is giving something. We write. At home also we write. Teacher write 'very good'*
>
> *Teacher didn't correct. Teacher give a grade or marks*
>
> *Teacher underline red all wrong things. She write sometimes the correction.*
>
> *No we don't write again. She didn't tell us to write again.*

Student Perceptions on their English Writing Issues

Data in the questionnaires revealed that majority of the students believed their English writing ability to be good. All of them thought that the development of English speaking skills was more important for a teacher than the development of English writing skills. They viewed writing

skills as not very important for a teacher which is a misconception. Some of their responses were;

> *Writing not a big problem. Not like speaking*
>
> *Teacher has to speak in the class but writing only students doing*
>
> *My writing is good. I have problem only speaking*

However, their written scripts showed many language errors. According to the lecturers, majority of the students had severe writing issues. However, they thought it would be unfair to deduct marks for their language problems because the students had no adequate exposure to develop their English writing skills. They had not developed the essential writing competencies that should have been developed in the school

CONCLUSION

Although every student had the opportunity to study English during their general education (Grade six to Grade 13) majority had not mastered even basic writing skills. Assessment methods and the grading system in the schools and the public examinations as well as in the university were misleading and made it difficult for the students to identify their English language writing needs. Students did not think it was important for them to develop their academic writing skills. They believed their writing to be good because they got good grades for their assignments & exam papers. Giridharan (2012) has identified a similar problem among the students in a university in United States.

English was included as a subject for all the students irrespective of their stream, in the Advanced Level (AL) curriculum of Sri Lanka in-order to give opportunity for the students to develop the essential English Language competencies before entering the higher education or the world of work. Since this was not compulsory to pass and not considered for the University entrance it had been neglected by both the students and the teachers.

Thus, only two students in the sample had the opportunity to learn English in the AL classroom. This was mainly because both students and teachers were focused only on being qualified to enter the university but ignored the development of the English language skills which was an important requirement for higher education and employment.

Even though English was introduced as a compulsory second language in the primary grades (from Grade Three onwards) majority of the students had no opportunity to develop their basic writing skills at this stage either due to the teacher shortage or once again due to the Grade Five Scholarship Examination. Teachers and parents were more focused on obtaining high marks at the examination and since English was not considered in the calculation of marks, this was neglected. Thus, majority of the students had not developed the basic writing skills when they entered the secondary classes. B.Ed students regretted not making use of the opportunity they had in developing the English writing skills in the school.

Majority of the students had little opportunity to develop writing skills in the schools. Teachers have not given adequate attention to develop the writing skills. Although the students had been given many writing activities, they rarely had got feedback for their writing and they had no opportunity to find out their English writing problems.

They lacked basic skills of writing simple sentences and when they were required to use academic language for writing in the University, they could not meet up with the challenge. They did not know that there was a difference between simple classroom conversational language and academic writing.

All the students had difficulty in organizing the ideas clearly and cohesively. Pablo & Lasatan (2018) identified a similar problem among the students in Philippines. Majority of the students could not use appropriate vocabulary to convey meaning and they had problems in the sentence structures which were identified among the university students in many

countries (Pablo & Lasatan, 2018; Mimbri, 2012, Fareed, Asraf & Bilal, 2016; Giridharan, 2012).

Interference of the First Language was another problem identified among the B.Ed students that affected their writing and hindered in conveying the intended meaning. This was identified as a problem in Philippines as well as in Pakistan (Christzer, 2018; Fareed, Ashraf & Bilal, 2016)

Students lacked ideas and creativity in their written scripts. Majority of the students were unable to produce simple, connected texts on topics which were familiar to them using correct and appropriate language and they were unable to give reasons and explanations for their ideas using meaningful language.

According to the Cognitive Process Theory (Flower & Hayes, 1981), the process of writing is understood as a set of descriptive thinking processes organized by the writer during the act of composing. However the scripts of the students displayed disjointed and irrelevant ideas. Their scripts lacked organization. Although information has been retrieved from the long-term memory this had no relevance to the topic and the topic has not being developed. There was no evidence for creative thinking.

Christzer et.al. (2018) describe writing as a piece of work that demonstrates a clearly defined purpose; present a certain point; be supported clearly by specific information; use appropriate vocabulary; produce concise, emphatic and correct sentences. None of these could be seen in the articles written by the students in the sample.

Students did not know their language difficulties because they were not given enough support from their school days to identify their issues and address the issues. They had judged their writing ability by assessing the Grade they had got at the examination. They did not have adequate exposure to develop critical writing skills or creative writing skills.

Flower & Hayes (2009) have said that those who have mastered the writing mechanics and conventions would be able to produce ideas more

effectively than those who struggled with syntactic issues. Therefore it is important for the B.Ed students to first master the writing mechanics and conventions in-order to produce a successful academic article with creative ideas.

RECOMMENDATIONS

It is important to develop the English Language writing skills of the B.Ed students while they learn the subject matter in English because it is an essential skill for a teacher. The strategy of building conceptual frameworks to understand the relationship between the ideas (Crandall et. al, 2002) can be used to develop the language skills of the B.Ed students while learning the content in English.

The genre-based approach that provides the students with scaffolding, linguistic support, awareness of text functions, knowledge in the use of graphic organizers and opportunity for cooperative learning (Reppen, 2002) is a suitable approach to develop the writing skills of the students in the content classroom.

Suggestions of Echevarria et.al. (2013), to develop the knowledge and use of Second Language vocabulary of the students can be used to develop the writing skills of the B.Ed students. Students can be exposed to rich and varied language experiences and they can be provided with opportunity to use the vocabulary appropriately in a relevant context. It will be effective if the student is helped to make connections between the structure of their L1 and English by giving them the awareness of the grammatical arrangement of words and the use of language in social and academic contexts.

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READING THE PAST, WRITING THE FUTURE

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ABSTRACT

This paper presents the findings of a case study that investigated the success of teaching English at a public school in Sri Lanka. The research problem investigated was related to the role of teacher dedication, devotion and motivation. Interview schedules and focus group discussion protocols were used to gather the necessary data and a narrative analysis of the data was conducted. It was revealed that the teacher's dedication, devotion and motivation were the decisive factors in teaching the English language at the selected school. The principal method of teaching was the employment of a communicative approach to teaching which was blended with other elements drawn from different ELT methods as well to make it principled eclecticism. Diary writing while reconfirming and assuring its potential as a technique, was one of the key activities the teacher used in teaching English. Innovative, personalised and individualized activities to build on the existing knowledge of the students were also used in the classroom to teach English. Using authentic materials, notice boards to display the students' writing and assigning simple activities such as self-introductions, making speeches, displaying dicta inside the school premises were used to orient the students to learn the English language. As part of recommendations, we suggest diary writing, displaying dicta, assigning short speeches and using class wallpapers to teach English to the students as these activities may provide a rich experience in learning a language.

Keywords: ***Communicative Teaching Method, Eclecticism, Teacher dedication, Teacher motivation***

INTRODUCTION

What method works best in the English as a second language (ESL) classroom is a debatable topic and it seems that no single method of teaching can be suggested; given its vast repertoire of methods, techniques and approaches, English language teaching enjoys innovative, modern and time-tested methods of teaching. Curriculum innovation and innovation in teaching methods have attracted stakeholder—practitioner inquiry and the ever-changing landscape of teaching English informs us of the demand teachers face.

The present study was a case study conducted in a type II school situated about 17 kilometres away from Kurunegala. The school has earned a reputation for its teaching of English to the students in a manner that every child can speak in English to an acceptable level. The secret behind that success seems to be the unwavering and concerted effort of the teacher in charge of English. It was revealed that before this teacher joined the school, almost every child had failed; however, subsequently, a rapid and steady increase in the results of the students was noted due to the innovative and student-friendly approach to teaching.

1.1 Significance

As no recent studies are conducted on teachers' motivation, dedication and devotion, and how personal and contextual variables matter in teaching English, this case study fills the gap in current knowledge thereby filling a long-felt need to explore this area of investigation.

1.2 Rationale

Students in rural areas have often been stereotyped as low achievers in the English language and overlooked in literacy research. The role of socio-economic factors that affect classroom teaching and learning have been researched. However, the role of the teacher's motivation, dedication and devotion to the profession needs an empirical investigation. In this article, we

explore what methods of teaching English worked best in the school selected for the study and present an in-depth analysis of the trajectories, theories, assumptions, subsequent performativity of the tasks (activities) the teacher used in teaching English to the students.

1.3 Case presentation

The teacher in charge of English at the school is a trained teacher of English from a government Teachers' College and is dedicated, devoted and duty-conscious as was noted in the discussion we had with him and the parents who were present at school. As we are all conscious of the fact that socio-economic variables affect the learning of English in any socio-demographic context, this success story of learning English at a public school may be attributed to the dedication, devotion and unwavering efforts of one individual, the teacher of English. Whilst emphasizing the concerted effort of the teacher-in-charge of English, it is unarguably the motivation, energy, beyond all the reasons, that helped students to achieve a pass mark of English at the Ordinary Level English.

1.4 Demographics

This public school has 155 students and it is a mixed school where co-education is provided. The school has grade 1–11 classes and a principal[i] with a teacher's certificate and a degree in arts heads this school. On the day we visited the school, there were 149 students present. The level of improvement of the student was incomparable with any success story of teaching English in the country the school has been hailed for its efforts to English educate the student population. This school has received media attention, the teacher has been awarded the 'Sumathi Award'' for his dedication.

The students at the school are from middle and lower-middle-class families. Most of the fathers are employed; the mothers are mostly housewives and look after children and do domestic chores. Parents' level of

education is limited and some parents have a very poor notion about education as revealed from the interviews we conducted. This is a Sinhala medium school and all the students are from Sinhala speaking families. All the students are Buddhists. On inquiry, it was noted that most of the boys wanted to be army soldiers while only one boy wanted to be a doctor.

LITERATURE REVIEW

Teacher commitment can be defined as a teacher's psychological attachment to the profession of teaching to professional institutions and colleagues, parents, and students (Firestone & Pennell, 1993). Commitment is an internal force that drives teachers to invest more time, energy and involvement at school. This willingness of teachers helps to find new ways for them to improve their teaching and aids to develop an emotional bond with students and their parents that will ultimately allow students to reach their targets. Teacher commitment is a major factor that affects the achievement of students. Hence, teachers with a high capacity of commitment can do drastic positive changes in students' life concerning learning and achievements.

Crosswell & Elliott (2004) claimed that teacher commitment contributes to factors such as professional knowledge, teaching professions, career continuance, students, and the school. It is a well-proven fact that committed teachers are in love with teaching. Most of the time, they do not expect any extra for the sacrifice they made on behalf of students. They value their profession and strive to give their maximum for the betterment of the students. Commitment to teaching allows teachers to improve themselves as well which leads to enhancement of job performance which helps to establish an effective learning environment for students. All these improvements pave the way to upgrade the performance of the school and ultimately the achievement of students.

A transformation and an admissible overhaul of the current practices in teaching is needed. This requirement is a necessity because, our time-tested system of education, as in other fields, changes. Gomendio (2017) concluded that "in this context, the teaching profession needs to undergo a profound transformation in order to [*sic*] prepare students for the societies in which they will live and work, and education systems must support teachers to face these new challenges" (p. 18). Teachers are recognised for a variety of reasons. Teachers are not just teachers, they are the managers of the world's greatest resource, children. In a transformative approach to teaching, teachers' dedication, devotion and motivation are crucial. However, Sujeewa (2013) believed that "the main motivating factors for teachers include, students themselves, the act of teaching students and the prestigious social position for English teachers in Sri Lanka whereas the main demotivating factors include, limited facilities for teaching and learning in schools". Elaborating further, he concluded that "the inefficiency of school administration and zonal education offices, difficulties in obtaining teacher transfers, the discrepancy between the English curriculum and students' English proficiency and the poor relationship between colleagues"[ii]. This shows that teacher demotivation is an issue in Sri Lankan public schools which needs the immediate attention of the stakeholders and policymakers.

According to him, the main motivation factors for teachers are students (students' performance and success, being with students, student motivation, students' recognition and appreciation of teachers and students' positive attitude towards English) and the act of teaching (Sujeewa, 2013).

Apart from these factors, another motivation factor encountered in this study was a sociolinguistic situation of the country which is the position of English in the country that can earn higher prestige for ESL teachers over other teachers in public schools. On the other hand, the main demotivators for ESL teachers in the study were inadequate facilities in schools for teaching and learning, incapability in school administration and zonal

education offices, issues in obtaining teacher transfers, the mismatch between the expectations of the English curriculum and students' proficiency in English, lack of support from other colleagues (fellow teachers) and insufficiency of involvement of parents in their children's education. According to the above-mentioned study, the most common demotivator influencing teachers in this regard was the difficulty in obtaining a transfer to a school they prefer even after completion of a mandatory period of service in a remote school.

According to Sampath (n.d.), the organizational commitment of English teachers has a positive relationship with job performance, task performance, and contextual performance over the individual commitment of each. Therefore, it is important to enhance the organizational commitment of English teachers to improve the performance of students. In this study, the essential factor in improving task performance and contextual performance among the English teachers was their affective commitment.

PROBLEM STATEMENT

With the demand for a fair proficiency of English that allows school leavers to secure rewarding employment/enter higher educational institutions for further studies, the teaching of English has received an unprecedented demand. Even after 13 years of English language learning, some school leavers fail to pass the English language paper set for the O/Level and A/Level. Let alone speaking English, it is also poor and that though various programmes have been implemented to help school students, we are far behind our expected levels of achievement.

Research Questions

1. What is the method behind this success story of teaching at this school?

2. What type of teaching aids/materials are used in the classroom?

3. How does the teacher's motivation affect the teaching and learning of English in the classroom?

4. What kind of support and guidance is provided to the students in learning English at the school?

Aims and Objectives

To report the causal effects and examine the correlation of the teacher's motivation, this study addresses the following research objectives.

1. To determine how the teachers' motivation leads to the learning of English at school

2. To explore the teaching aids/materials used in teaching English

3. To examine the role of the teacher's dedication, devotion and motivation in teaching English.

Several recommendations together with suggestions to improve the learning of English are part of the aims and objectives of this case study. Hence, this research investigation aims to propose recommendations to the policymakers, stakeholders, and regulatory bodies in the hope that they may implement the recommendations we make to guarantee equitable teaching of English at public schools.

METHODOLOGY

This study used a case study research design in which qualitative data were collected for analysis. Different data collection methods lead to deeper insight into the understanding of the phenomenon in this study; thus, both structured interviews and focus group discussions were conducted for gathering data for qualitative analysis through thematic coding. Interviews

were conducted face-to-face with the students and teachers and focus group discussions were held with a selected group of parents.

6.1 Data Analysis

We did a narrative analysis of the data. During the conversations we had, it was revealed that the teacher's dedication, devotion and motivation was instrumental. In the narrative analysis, it was noted that the teacher used a communicative approach blended with some elements drawn from other methods as well. The eclectic approach to teaching motivated the learners and resulted in increased motivation to learn English.

A school in a rural area in Sri Lanka showed a very special development of the English language skills in the students. Compared to other schools in Sri Lanka, these children are exceptionally fluent in conversing in English. After finding out the reason behind it, the AHEAD research team went to see the person who made this difference.

This individual is a humble teacher who gave his best to the students. His commitment and compassion for those students made them excel in a language that most of the other students in Sri Lanka cannot do even after 13 years of school. This specific teacher went to this school in 2000, when there was not a single student who passed the Ordinary Level Examination with a 'simple pass' for English. He said, "no child has passed English language subject even with a 'simple pass' for a long time".

Then and there, he started his endeavour, to make these students pass the English language and to give them a better future. Starting from 2000, he has made a difference by developing the skills of students to make them pass with 'A, B, or C Passes' instead of getting 'S passes', all of the students passed the subject. 'But I made the results progress into 100% pass, including 'A and B Passes', every child passed English.'.

Seven of his students have become teachers of English, which is a great achievement in his career. His view is that the current method of teaching English in Sri Lanka is not successful. Even though students from affluent backgrounds excel in the English language, students from rural areas do not have the proper background or influence to learn English that much, therefore changing the method of teaching English can make a big difference. He has proven that by doing it practically. 'If we change the method of teaching English, all the children in Sri Lanka will be able to learn English properly without any issue. I have the method, here spoken English and grammar are taught at the same time in a way that they understand.' it is his view that by teaching grammar properly the students will pick up speaking skills automatically. 'If we make our writing skills good, our speaking will automatically be developed".

During his time at the school, during normal class hours, he taught the students grammar lessons using different methods and did classes for students from 5 am and this shows his great commitment towards the students. However, in his early morning classes, he taught them how to speak by using the grammar lessons that were done during the class hours. He said that "in my normal class period time I taught the students grammar lessons with interesting methods, and in the early morning class at 5 am, I taught them how to speak." This early morning class was done for the whole school. While the senior students were speaking, the primary students would listen, from this, the primary students would also learn speaking skills. When the primary students go to grade 6, he teaches them grammar from the beginning. He told that "the students in senior classes will be speaking in English, and the students who were in junior grades would just listen, so when the smaller kids come to grade 4 and 5, they can speak in English and when they come to grade 6, I start to teach them grammar from step one. Then students become very fluent." From this method, he could produce students who were very fluent both in speaking and writing English.

However, he expressed that he was not given an opportunity by the authorities to share his methods with others so then the students benefit. He despairingly explained that he was removed from several occasions that could have made his teaching methods known to the country. "There are no unusual ways, I used some different methods and that is how I did this, but I would like to give this to the whole country" he said. Throughout the interview, it was highlighted in several places that he was not given an opportunity to do so. He said that "I could do a change if I were given a chance those days." He also expressed the negative reaction he received from the principal. Unfortunately, such talent and dedication had been wasted; otherwise, he could have done a better service to the whole country.

His main approach to teaching was involving the students and helping them use the language in the classroom. He used innovative and student-friendly activities—a blend of writing (writing diary entries) and speaking (class debates), dicta in and around classrooms, encouraging speaking inside and outside of the classrooms. Further, teacher-designed teaching and learning materials were used for the purpose of promoting authenticity to make the students motivated to learn English of every day use. An activity of interest was the compilation of a diary in which, the students had to enter almost everything they did from morning until bedtime. Apart from the classroom activities, English camps, English days, after school support classes were also part of his teaching programme at this school. After school extra classes were aimed at the students who required more support, guidance and teaching. Through these after school classes, he guaranteed equity to every child under his care and guidance.

Class Time, Interest and Equity

Teaching started around 5 in the morning before school began and the classes were filled with enthusiastic students. His proclivity for hard work and determination to increase the level of engagement of the students in learning English reached fruition. Before he entered the classes, the students

sat in the class with alacrity and showed interest in learning English—the teacher's approach was that of a motivator and a counsellor and every child could approach the teacher regarding any matters related to learning English.

We understood that he was a catalyst, one who could breathe life into lifeless textbooks and enliven the lessons in the textbooks and personalise and individualize the lessons to suit the learning styles of the students. He adapted materials and catered to the varying degrees of language proficiency of the students at school. Being of exemplary character as a teacher, he showed sympathy and empathy (He said "I love these poor children") towards the students. Before he entered the classes, the students were ready with their homework, textbooks, and pre-assigned work; this shows how motivated the students were and the burning desire to learn English under the teacher's tutelage.

Incorporating extra reading materials such as newspapers and small storybooks, he kindled the interest in learning English; as much as he could, he used authentic materials in his teaching. As per the parents, "We noticed how nicely decorated the wallpapers in every class were; they were full of student writings: letters, biographies, autobiographies, essays and vivid descriptions of the countryside and people". He used every possible activity in his lessons and assured that every child received a fair share of his attention—this concern yielded better results at the Ordinary Level Examination and his programme enthused every child to learn English. He used a battery of tests and the materials were readily available to every student. Unlike at other schools, the school library housed a series of reading books that interested every child.

The Role of Stakeholder Accountability

Stakeholder accountability, in its contribution to the success story, is a crucial element. For example, the parents accompanied the students at dawn and left them at school until school started. The parents were willing to

accompany their children at dawn because they knew that English would be required once their children finish their school education. The enthusiasm of the parents was also a determinant. Besides, the principal's support was available; other teachers extended their support whenever it was required. What brought stakeholder accountability into teaching is still indescribable; however, the teacher's enthusiasm and interest in teaching the students at school was the primary and decisive factor. The motivation was an inducement in learning English at this school. The motivation of parents, teachers, and principal resulted in the increased intrinsic motivation of the students.

CONCLUSION

This case study investigated the success story of English education of a type 2 school in rural Sri Lanka. It had been realized through the dedication and the motivation of the English Language teacher attached to the school. Out of his enthusiasm, he was determined to use appropriate methods of teaching which was basically Communicative Language Teaching method blended with teaching grammar and writing as well. Apart from eclecticism, the accountability of the stakeholders also could be considered as a contributing factor in this success story in English Education in a school in rural Sri Lanka.

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A STUDY ON SBA LITERARY OF ESL TEACHERS IN SRI LANKA

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ABSTRACT

This research aimed to understand the current state of school-based assessment literacy of ESL teachers in Sri Lanka. The study implemented a survey-based online questionnaire administered to a sample of 250 ESL teachers representing all the 25 districts selected through stratified random sampling technique to capture their self-perceived literacy and frequency of practice of SBA. Statistical analysis was carried out through descriptive as well as thematic analysis. The research findings point out the strengths and weaknesses in SBA literacy of ESL teachers. Among strengths, competence in performance assessment and practice of communicating assessment results are prominent, while competence in grading and digital assessment practices are highlighted among weaknesses. Overall, ESL teachers view themselves as moderately competent in language assessment, and they exhibit reluctance to do away with traditional assessment methods. The study discusses implications of research findings, and offers suggestions for future research and recommendations for improvement of SBA program as well as ESL teacher preparation programs.

INTRODUCTION

Pupils are usually assessed by school teachers as well as by other external bodies such as the Department of Examinations (DOE) for different purposes. These purposes include certification, selection, promotion, and studies. For example, the main purpose of the General Certificate of Education (Advanced Level) Examination (GCE AL) conducted by the DOE in Sri Lanka is to select pupils for university entrance. "An assessment carried out in schools by pupils' own teachers with the prime purpose of improving pupils' learning is referred to as school-based assessment (SBA)." (Nanayakkara, 2009, p. 51).

SBA has been adopted by a large number of major examination bodies in the world over the last few decades. Sri Lanka adopted SBA nearly 25 years ago, and it has undergone various changes over the years. It is at the threshold of another major change under the proposed educational reforms to be implemented from 2023. (DOE, 2021)

In Sri Lanka, the Ministry of Education (MOE) has issued 13 circulars regarding SBA, within the period of 23 years from 1998 to 2021. The first circular issued in January 1998 concerning SBA states that the initiative aimed to bring the then existing public examination results to a more satisfactory level, lower the number of repeaters and dropouts and make the school an institute that provides joyful learning experiences. Unfortunately, the National Education Commission (NEC) report of 2016 complains that the reality is otherwise. The report further states that a majority of teachers are not adequately competent to assess students effectively. In earlier research also the NEC (2014) had found out that even the trained teachers had no assessment or test item writing skills. In addition, Ginige (2021) has revealed that the teachers had not given up on the traditional method of imparting lower-order mental skills. She has further stated that the schools were reluctant to part with the traditional approach, and that the teachers continued

to get their students to name, state, and list things or define, describe and explain things in assessment.

There is no doubt that language proficiency cannot be measured through a written examination alone as it involves mastery of all the four skills - reading, writing, listening, and speaking. Therefore, language assessment is a key competency an English as a Second Language (ESL) teacher should possess to execute the learning-teaching process effectively. Although there are a few research studies on SBA in Sri Lanka, it is unfortunate that none of those studies seem to have addressed the assessment literacy of ESL teachers.

Objectives of the study

This study aimed to investigate the current levels of SBA literacy of ESL teachers in Sri Lanka, and the extent to which they were practicing SBA in the language classroom. In addition, special attention was paid under both the questions to gather data on their digital assessment literacy and practices as well. Further, an attempt was made to identify the training needs related to SBA through the data gathered on the first two research questions.

Significance of the study

This study is significant for two main reasons. First, although the SBA history of Sri Lanka is nearly 25 years, research that has dealt with SBA is limited, and there is hardly any research that focuses especially on the assessment literacy of ESL teachers in the country. Therefore, this study will be a valuable addition to the SBA as well as ESL research. Second, under the proposed reforms to be implemented from 2023 onwards, the contribution of SBA for the General Certificate of Education (Ordinary Level) Examination (GCE OL) certificate is going to be 70% of the total marks for each subject (DOE, 2019). It will reduce the contribution of the summative assessment conducted by the DOE by means of a written examination to

30%. This study will be useful to the authorities in reviewing this decision which has already aroused controversy.

Limitations of the study

The major limitation of the research design used for this study was relying on self-reporting by respondents.   Despite the assurance of confidentiality and anonymity they could still have given responses that might not reflect the actual situation or practices on the ground. Next, as the sample was drawn from the marking examiners' database of the DOE, the results might not reflect the status of the average ESL teacher. Also, it might be difficult to generalize the findings to the entire population of ESL teachers in Sri Lanka, due to the relatively small sample size of 250 teachers from the 25 districts.

Further, the study was limited to an online questionnaire due to the prevailing COVID-19 pandemic situation. There was no chance to observe at least a few classes to get a firsthand overview of the classroom practices of the teachers. Also, a test paper on SBA, and evaluation of teacher-produced assessment tasks would have been handy to obtain a clearer picture of the present levels of their knowledge, but it was not possible under the current circumstances.

LITERATURE REVIEW

SBA is an assessment carried out by schools with students being assessed by their own subject teachers. By integrating learning and teaching with assessment, it helps students understand their strengths and weaknesses through quality feedback from teachers (Hong Kong Examinations and Assessment Authority, 2021). According to the SBA guidelines issued by the MOE, Sri Lanka in 2017, one of the main focuses of SBA is to assess learning outcomes that cannot be assessed through written examinations. Nanayakkara (2009) also has stated that "SBA provides opportunities to assess aspects that cannot be assessed in public examination settings" (p. 52).

Therefore, SBA has immense value and importance when it comes to subjects that have a practical component. For example, practical work such as laboratory experiments, workshops, research projects, and others that need more time to finish can only be assessed by school-based assessment (Jamal, 2021). Also, the competence of subjects like dancing, music, and language cannot be assessed through a written examination alone. There is no doubt, therefore, that SBA literacy is very important for an ESL teacher.

SBA has many important characteristics which distinguish it from other forms of assessment. According to Nanayakkara (2009) and Hong Kong Examinations and Assessment Authority (2021), these characteristics can be summarized as follows:

- SBA provides a more balanced and trustworthy assessment system because it allows a wide range of assessment modalities to be used.
- SBA provides opportunities to assess aspects that cannot be assessed in public examination settings, thereby improving the validity of the assessment.
- As judgments related to SBA are based on many assessments of the pupil over an extended period of time, they are more reliable.
- SBA provides a beneficial wash-back effect on the teaching-learning process, including assessment practices.
- SBA empowers teachers as their judgments are recognized by external stakeholders and used for several purposes, including certification and selection.
- SBA has a professional development function and contributes to improving the assessment and teaching skills of teachers.
- SBA contributes to improving the learning, teaching, and evaluation processes in the classroom.
- SBA promotes the involvement of multiple assessors in the assessment process, such as other teachers, pupils' groups (peer assessment), and individual pupils themselves (self-assessment).

- SBA allows ample opportunities for teachers to provide meaningful and timely feedback to pupils.

History of SBA in Sri Lanka

Although Sri Lanka officially initiated SBA in 1998, it has nearly 40 years of experience on the subject. The continuous assessment introduced with the educational reforms in 1981 can be viewed as the first attempt at introducing SBA to general education in the country. Although it was abandoned in 1989 due to the excessive paperwork placed on the part of the teacher, inadequacy of resources, and strong opposition imposed by the student unions in universities and some sectors of the community, it stands as a milestone in the general education history of Sri Lanka (Nanayakkara, 2009).

In 1994, National Institute of Education (NIE) initiated a classroom-based assessment program for Grades 6 – 9. It was piloted in North Western Province and later extended to 100 schools. The program was revised and renamed as SBA and introduced into the general education system in 1998 through the Circular No. 98/04 of the MOE. In 2001, the DOE did further revision and implemented the revised SBA program in GCE OL classes. In 2003, the DOE extended the implementation of the SBA program to GCE AL classes (NIE, 2015).

The DOE commenced including SBA grades in the GCE OL and GCE AL certificates in 2002 and 2005 respectively (Niroshanie, 2011). Although the SBA grades were included in a separate column in the certificate, it gave SBA national-level recognition for the first time. Yet, the grades received for the written examination conducted by the DOE continues to be superior to the SBA grades in the society. For example, no job advertisement so far has mentioned that the SBA grades would be taken into consideration as a qualification. It means that the SBA has failed to establish its due position in the general education system during the course of nearly 25 years. Sedere, (2016) blames the DOE for this failure, stating that "rather than improving

SBA to gain validity and reliability, the Department of Examinations discarded its value and further centralized examinations" (p. 11).

The latest circular on SBA issued by the MOE in 2017, highlights the need for implementing the SBA program in a novel manner aiming at empowering the learning-teaching process effectively by considering the current trends and innovations in education. All teachers need to keep pace with the current trends and innovations in education to perform their duties to the satisfaction of the stakeholders concerned. How the ESL teachers have responded to the above call of the MOE could be revealed through the current study.

Teaching English as a second language

In Sri Lankan schools, formal teaching of ESL starts in Grade 3 and continues up to Grade 13. Since the early 1950s, teaching ESL in Sri Lankan schools irrespective of the socio-economic or geographical background has been a major concern of successive governments of Sri Lanka (Sanmuganathan, 2017). Yet, the statistics of the DOE indicate that nearly 40% of the school candidates fail English at public examinations. For example, 37.64% of the school candidates had failed the English at GCE OL examination in the year 2019. It means that 114,851 students out of 305,162 who sat this examination had failed to score a minimum of 40 marks. The percentage of candidates who had obtained an 'A' pass at this examination in the same year was 10.58%. The mean and the standard deviation for the same subject were 41.30 and 19.98 respectively.

The educational qualifications of ESL teachers in Sri Lanka vary from GCE OL qualification to a Master's degree or above. At present, prospective ESL teachers are given two-year academic and professional training at the National Colleges of Education (NCOE) (Nanayakkara, Neumann & Pohlenz, 2015). Teachers are also recruited as untrained teachers and later trained at Teachers' Training Colleges. In addition, graduates can join the profession directly and later complete the Post-Graduate Diploma in

Education (PGDE) at a recognized university. All of the above subgroups of ESL teachers have been included in this study.

MOE and the NIE have a mechanism to offer in-service training to all teachers, and there are also School-Based Professional Teacher Development (SBPTD) programs aimed at keeping the teachers updated on the current trends in the learning-teaching process. However, the NEC report of 2016 records that those recruited without pre-service teacher education, i.e., general degree or diploma holders, fall short in their performance due to their inability to identify the potentials and weaknesses of the students.

SBA in ESL classroom

MOE, Sri Lanka in their latest circular on SBA issued in 2017 has recommended 31 Learning, Teaching and Assessment Modalities (LTA Modalities) to be used in the classroom. In their 2008 circular, the MOE had recommended only 24 LTA Modalities which were referred to as Evaluation/Assessment Modalities then. Those techniques that motivate student learning, contribute to the development of competencies, and enable establishing whether the competencies have been developed are referred to as LTA Modalities. The teachers are expected to select the most suitable modalities according to the subject and the level of the students. The list of LTA Modalities recommended by MOE are as follows:

- Assignments
- Projects
- Field Visits
- Debates
- Impromptu Speeches
- Speech Tests
- Practical Activities
- Exhibitions/Presentations
- Creative Activities
- Innovations
- Role Plays
- Listening Tests
- Observations
- Explorations
- Self-Creation Manuals
- Surveys
- Concept Maps
- Team Activities
- Oral Tests
- Double-Entry Journals

- Concept Cartoons
- Simulations
- Wall Newspapers
- Portfolios
- Quiz Programs
- Discussion Panels

- Problem-Based Learning
- Math Trail
- Case Studies
- Stories
- Reading Tests

Out of these 31 LTA Modalities debates, impromptu speeches, speech tests, presentations, roleplays, listening tests, oral tests, and stories can be identified as directly related to assessment and improvement of listening and speaking skills in language learning. Most of the other LTA Modalities are related to reading and writing skills. For example, wall newspapers, double-entry journals, and assignments can be used to assess writing skills while reading tests and case studies can be used to assess reading skills. Some of the recommended LTA Modalities are not relevant for language learning. Therefore, assessment literacy is very important for a teacher to be able to select the most appropriate modality according to the level of students and skill in focus.

Language assessment literacy

Al-Bahlani (2019) examines that teacher assessment literacy is essential for the success of the teaching process, the quality of student learning and student motivation. However, studies have consistently shown inadequate levels of assessment literacy for both pre-service and in-service teachers in both language teaching and general education. (Xu & Brown 2017)

Brookhart (2011) has proposed several skills that language teachers should possess in order to be competent in formative assessment. Al-Bahlani (2019) has summarized Brookhart's proposals as follows in her research report on Assessment Literacy of EFL Teachers in Oman:

- Teachers should understand learning in the content area they teach.
- Teachers should be able to articulate clear learning intentions that are congruent with both the content and depth of thinking implied by standards and curriculum goals, in such a way that they are attainable and assessable.
- Teachers should have a repertoire of strategies for communicating to students, what achievement of a learning intention looks like.
- Teachers should understand the purposes and uses of the range of available assessment options and be skilled in using them.
- Teachers should have the skills to analyze classroom questions, test items, and performance assessment tasks to ascertain the specific knowledge and thinking skills required for students to do them.
- Teachers should have the skills to provide effective, useful feedback on student work.
- Teachers should be able to construct scoring schemes that quantify student performance on classroom assessments into useful information for decisions about students, classrooms, schools, and districts. These decisions should lead to improved student learning, growth, or development.
- Teachers should be able to administer external assessments and interpret their results for decisions about students, classrooms, schools, and districts.
- Teachers should be able to articulate their interpretations of assessment results and their reasoning about the educational decisions based on assessment results to the educational populations they serve (student and his/her family, class, school, community).
- Teachers should be able to help students use assessment information to make sound educational decisions.
- Teachers should understand and carry out their legal and ethical responsibilities in assessment as they conduct their work.

There are many studies around the world related to assessment literacy of both pre-service and in-service teachers in the literature. The majority of the studies have generally used questionnaires to measure teachers' assessment literacy levels (Öztürk and Aydin, 2018). Teacher Assessment Literacy Questionnaire (TALQ), Classroom Assessment Literacy Inventory (CALI), and Assessment Literacy Inventory (ALI) can be listed as some of the popular instruments. The TALQ was developed by Plake and Impara (1992) and it was later revised by Mertler and Campbell (2005) into the ALI. Both instruments consist of 35 items that have been used to measure pre-service and in-service teachers' assessment literacy in many studies, which mostly found that literacy levels of teachers were unsatisfactory (Al-Bahlani, 2019).

In the above study, Al-Bahlani had used quantitative instruments such as survey-based questionnaires and assessment knowledge tests, as well as qualitative instruments such as test evaluation tasks, classroom observations, semi-structured interviews, and assessment of teacher-produced tests to study the assessment literacy of English as a Foreign Language (EFL) teachers. In contrast, Zulaiha, Mulyono, and Ambarsari (2020) had used only a survey-based questionnaire and semi-structured interviews in their study titled *An Investigation into EFL Teachers' Assessment Literacy: Indonesian Teachers' Perceptions and Classroom Practice*. In a similar study conducted in Turkey, Öztürk, and Aydin (2018) had developed an instrument called the Language Assessment Knowledge Scale consisting of 112 items that covered all the four skills -- reading, writing, listening, and writing.

After going through various studies conducted on assessment literacy of language teachers, it was decided that Al-Bahlani's survey-based questionnaire would be ideal for the requirements of the current study that focuses on the assessment literacy and practices of ESL teachers in Sri Lanka.

Studies on SBA in Sri Lanka

As mentioned earlier, the studies on SBA are quite rare in Sri Lanka, but the handful of literature that is available provides a comprehensive understanding of the nature of SBA in the country. A recent study on the existing status of the SBA system in upper school chemistry that involved 350 students and 170 teachers from all nine provinces has revealed that teachers need more guidance and proper training (Perera, Bandara & Ekanayake, 2020). Their findings tally with the results of a study on SBA in Sri Lanka conducted by Selvaruby, O'Sullivan, and Watts way back in 2008. In their research article named *School-Based Assessment in Sri Lanka: Ensuring Valid Processes for Assessment for Learning Physics*, Selvaruby et al. observe that as a result of insufficient training, teachers were unable to plan and conduct assessments as expected. NEC (2016) and Ginige (2019) have similar stories to report regarding the status of SBA in the country.

In addition, NIE (2015) also has revealed similar issues concerning SBA after research conducted in four provinces representing 36 schools. The most popular assessment methods used by teachers had been writing-inclined evaluation techniques such as Written Tests, Assignments, and Open Book Tests. More than 50% of the teachers had resorted to quizzes, creative activities, listening tests, speech, and wallpapers. As per the teacher responses, discussion panels, projects, explorations, exhibitions, debates, concepts maps, seminars, double-entry journals, and surveys that inspire students' creativity had been rarely used. In the classrooms, evaluation had been mostly implemented monthly and at the end of a unit, although SBA is supposed to be a formative form of assessment.

It is noteworthy that none of the above-mentioned studies have directly addressed the SBA literacy of ESL teachers. For example, Perera, Bandara, and Ekanayake (2020) had focused on Chemistry subject while Selvaruby, O'Sullivan and Watts (2008) had focused on Physics.

The foregoing studies have employed both qualitative and quantitative research methods to inquire into the operational situation of SBA.

Questionnaires and interviews have been mainly utilized to collect data on perceptions of the teachers, students, and other stakeholders. The recommendations of the above-mentioned studies appear almost similar. Although there are success stories from around the world, almost all the studies conducted in Sri Lanka highlight the need for further training for teachers to be able to execute the SBA to deliver the expected outcomes. It means that the SBA literacy of teachers in Sri Lanka is not up to the expected levels. However, it would be interesting to find out whether it was correct to generalize the aforementioned research results to ESL teachers in the country.

METHODOLOGY

This study was solely based on a survey-based online questionnaire administered to a sample of 250 ESL teachers. The questionnaire consisted of 70 items under three sections. Section One consisted of 14 items designed to collect the background information related to the teachers, their schools, and the SBA program they are involved in. Section Two consisted of 27 items aimed at collecting information on teacher-perceived assessment skills, while Section Three consisted of 29 items designed to collect information on teacher assessment practices.

There were several reasons to select a survey-based online questionnaire for this study. Since the research questions were aimed at finding out how teachers perceived their SBA literacy and how they practiced their SBA literacy, it was believed that a survey-based questionnaire would be the best method to elicit this kind of data. Another reason to select a survey-based online questionnaire for this study was that the schools were closed until further notice from the Director General of Health due to the Covid-19 pandemic prevailing in the country. However, it must be stated that the teacher perspectives on SBA could have also been studied through qualitative methods using structured or semi-structured interviews and class observations too. For example, Malakolunthu and Hoon (2010) have

conducted such a study on *Teacher Perspectives of School-based Assessment in a Secondary School in Kuala Lumpur* using semi-structured interviews and classroom observations.

It is widely accepted that surveys allow researchers to generalize from a sample to a larger population (Al-Bahlani, 2019). In this study, the sample is the ESL teachers who are registered at the DOE as GCE OL marking examiners, and the larger population is the ESL teachers in Sri Lanka and beyond.

It should be mentioned that the DOE has a screening/grading system to select marking examiners based on their teaching experience, professional and educational qualifications, results of their students, previous marking experience, and recommendations of the Chief Examiners, etc. There is a huge competition to get selected for marking, and it is widely accepted that only the best gets selected. Therefore, the teachers who get selected for marking have a considerable demand for private tuition in the society. The DOE keeps the selected marking examiners updated on the best marking practices through training programs. In addition, the statistical reports which include item analysis data prepared by the DOE after each examination help teachers improve their assessment literacy.

The questionnaire was piloted with a group of 200 ESL teachers from one of the districts in the North Central Province. The In-service Advisor for English in the said district volunteered to share the link of the online questionnaire in her WhatsApp group of ESL teachers and invited them to submit their responses. Fifty-two responses had been submitted within the given one week's time period.

The 250 selected participants of the actual study included 10 ESL teachers from each district. There were 190 female teachers and 60 male teachers in the sample. The percentage of the female participants selected was 76% while the male participants' percentage was, 24%. Their ages, teaching experience, or type of school were not taken into consideration when sampling. For the researchers' convenience, the teachers who had a Dialog

phone number were given priority. Participants of the pilot study may have been included in the actual study too as there was no way of identifying them.

The online questionnaire was open for two weeks for responses, and a reminder was sent after a week. It did not collect any email addresses so that the participants would feel free and comfortable to express their views. Further, the participants were not forced or encouraged in any way to respond. The researcher could have sent the invitation through the official mail and SMS facility or given some presents to force or encourage the participants.

Statistical analysis was carried out with the quantitative data through descriptive statistics, and thematic analysis was used mostly with the qualitative data. Descriptive statistics (frequency) were carried out to analyze the quantitative data relevant to both the research questions while the responses to open-ended questions in Section One were manually coded and categorized into themes or groups in a non-hierarchical manner to examine the data.

RESULTS

The results of the study include the details of the sample of ESL teachers who responded to the survey-based online questionnaire, how the ESL teachers in Sri Lanka perceive their SBA literacy, and how they practice their SBA literacy in their day-to-day teaching. Fifty-eight responses had been received within the given two weeks' period out of which two responses were blank. Therefore, only 56 responses were available for analysis, and the actual response rate is calculated as 22%. The sample included 60 males and 190 females. The percentage of males in the sample was 24% while the percentage of females was 76%. Responses were also received at almost the same rates, i.e., Male 25%, Female 75%. Table 4.2.1 illustrates the above-mentioned rates in detail.

Table 4.2.1: Gender-wise Response Rate

	Male	Percentage	Female	Percentage
Selected	60	24%	190	76%
Responded	14	25%	42	75%

As shown in the above table 14 out of 60 males invited had responded to the questionnaire, while 42 out of 190 invited females had responded. The response rates were almost the same for both males and females. The rates were 23.33% and 22.10% for males and females respectively. It was quite interesting to note that the response rate of the pilot questionnaire and the actual one was almost the same. It may be an indication of the IT literacy of ESL teachers and also of the IT facilities available to them. It can also be a reflection of their attitude towards online surveys.

Out of these participants, 74.54% had more than 10 years of teaching experience and 25.46% had less than 10 years of experience in the field. In detail, 41.8% had more than 20 years of experience, while 32.7% had 11 to 20 years, and 21.8% had 6 to 10 years of experience. Only 3.6% of the participants had less than 5 years of experience.

Figure 4.2.1 shows the rates of their highest educational qualifications. According to it, the majority of the teachers have GCE AL as their highest educational qualification. It is noteworthy that 44.6% have a degree or above as their highest educational qualification.

Highest educational qualification

56 responses
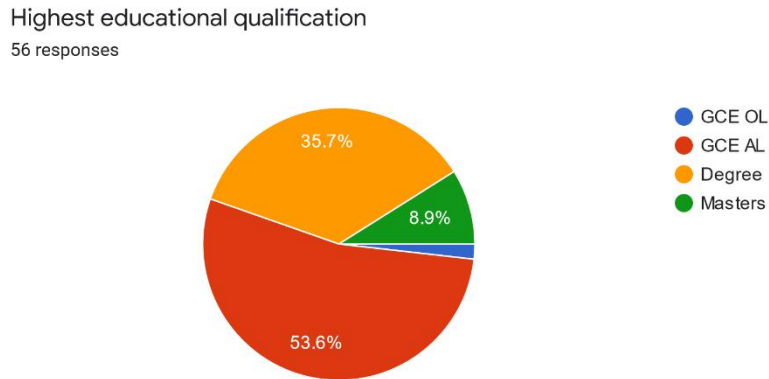
Figure 4.2.1: Educational Qualifications of Participants

According to the above chart, 20.7% of the participants had B.Ed. or M.Ed. as their highest professional qualification while all the others (79.3%) had teacher training as their highest professional qualification. There were no untrained teachers among the participants because the DOE does not select untrained teachers for marking.

When it comes to IT literacy, 73.22% of the participants had taken some kind of IT training. Most of them had ICDL or IPICT licenses. 26.78% had mentioned that they did not have any kind of IT training.

The following table (Table 4.2.2) shows the types of schools the participants come from. According to the table, the majority of the participants represent 1AB schools. These are the schools that have the facilities to teach all four streams – science, commerce, arts, and technology. Also, these are the schools that are recognized as reputed schools in the country. The student population of these schools exceeds 2000. These schools usually have more facilities than an average school. How the ESL teachers of these schools perceive and practice their SBA literacy would indicate the actual situation of the SBA literacy of ESL teachers in the country.

Table 4.2.2: Types of Schools

School Type	Participation
1AB	60%
1C	27.3%
2	10.9%
3	1.8%

The highest number of responses were received from Jaffna District. Eight out of ten invitees had submitted their responses to the online questionnaire. There were no submissions from Polonnaruwa, Hambantota, and Badulla. There were up to four responses from all the other districts. The response rate of Jaffna District is commendable.

The majority of the participants (56.4%) represent schools controlled by the Provincial Councils, while 41.8% represent the National Schools controlled by the MOE. The balance of 1.8% represent semi-government schools.

It was surprising to note that 80% of the participants have said that they did not have any pre-service training on SBA, and 70.4% say that they have not taken any professional development on SBA. They may have meant that they haven't taken any training other than the in-service training programs organized by the respective authorities.

The majority of the participants had said that they updated their SBA knowledge through quality circles, in-service training, colleagues, and circulars. They used school-based professional teacher development programs, books, or magazines too. The least popular source was the internet.

It is noteworthy that only 49% of the participants have had some kind of in-service training on SBA within the last five years. It means that more

than half of them have not had a chance to improve their knowledge of SBA during the said period. It bears witness to the nature of dedication of the authorities concerned towards improving SBA in the education system.

Only 34 participants out of 56 had submitted their proposals to improve the SBA program. 17 of them (50%) had mentioned that more training is needed to improve the SBA program. 10.2% of the participants had expressed the need to give SBA due recognition by adding a certain percentage of marks from SBA to the national level examinations. Nearly 40% did not have any ideas to propose.

Under the general comments, the majority of the participants had expressed their dissatisfaction regarding the SBA program. Their negative feelings had been expressed through the words such as unsuccessful, useless, time-wasting, etc. These comments would be useful in understanding their perceptions on assessment literacy and practices.

Teacher perceived school-based assessment literacy

Table 4.3.1 presents teacher self-perceived competence in school-based assessment. The analysis indicated that 43% of the teachers perceived themselves as competent or very competent in constructing and administering the assessment, while the majority (57%) thought they were somewhat, a little or not competent at all. It means that they are not competent at choosing appropriate methods for language assessment, writing clear instructions, using assessment for developing treatment plans for low-achieving students, and writing questions to assess higher cognitive levels.

Table 4.3.1: Descriptive Analysis of Teacher-Perceived SBA Competence

(N=56)

Assessment Competency	Not competent *f (%)*	A little competent *f (%)*	Somewhat competent *f (%)*	Competent *f (%)*	Very Competent *f (%)*
1. Constructing and Administering Assessment	8	17	32	33	10
2. Performance Assessment	7	15	31	37	10
3. Grading	10	13	35	35	7
4. Communicating Assessment Results	8	17	29	39	7
5. Assessment Ethics	17	13	20	38	12
6. Digital Language Assessment Skills	14	23	33	19	11

Competence in performance assessment also tended to lean towards incompetent levels as 53% perceived themselves as somewhat, a little, or not competent at all. Only 47% thought of themselves as competent or very competent in assessing the performance of students. Performance assessment involves assessing students' participation in class, assessing students' learning through oral questions or observation, developing performance assessment methods based on clearly defined objectives, communicating performance assessment criteria to students in advance, and assigning authentic activities.

A teacher should be able to determine grades according to students' average performance, identify different factors to be considered when

grading and identify different factors that should not be used when grading. The analysis of the responses received indicated that the majority of the teachers perceived themselves as incompetent at it too, as 58% thought that they were somewhat, a little or not competent at all in this aspect.

In terms of communicating assessment results also the participants tend to lean more towards the incompetent side as 54% perceived themselves somewhat, a little or not competent at using portfolios to assess students' progress, providing written or oral feedback to students, or communicating assessment results to students and parents.

When it comes to assessment ethics, 50% perceived themselves as competent while the balance 50% perceived themselves as incompetent at it too. Ethics include informing students of the objectives before applying the assessment, keeping the assessment results of each student confidential, avoiding the use of assessment as a way to punish students for their behavior, preventing students from cheating on tests, and avoiding teaching to the test when preparing students for tests.

Digital language assessment competence is the worst of all according to the analysis. Exactly 70% of the participants perceived themselves as incompetent at it. It indicates that the majority of teachers cannot use computer software to design language skills tests, give computerized course tasks, assess students' language skills using online tools, or use computerized assessment data to plan future teaching.

Overall summary of the data collected under the research question one given in Table 4.3.2 shows that the teachers perceived themselves as moderately competent in performance assessment (M = 3.93), communicating assessment results (3.18), and recognizing assessment ethics (3.15). They have reported lower levels of competence in constructing and administering assessment (M = 2.54), digital language assessment skills (2.31), and grading (M = 1.90). It is noteworthy that although they are qualified marking examiners, the participants perceived themselves as having

the lowest competence in grading SBA with a mean of 1.90 and standard deviation of 1.51.

Table 4.3.2: Mean Scores and Standard Deviation for Participants' SBA Competence

Competence	Mean Score	Standard Deviation	Level of Competence
1. Constructing and Administering Assessment	2.54	1.74	Low
2. Performance Assessment	3.93	3.04	Medium
3. Grading	1.90	1.51	Low
4. Communicating Assessment Results	3.18	2.60	Medium
5. Assessment Ethics	3.15	2.38	Medium
6. Digital Language Assessment Skills	2.31	1.13	Low

Teacher perceived assessment practices

Table 4.4.1 presents teacher self-perceived school-based assessment practices. The analysis indicated that the majority of the teachers do not use the traditional methods such as true/false questions, multiple-choice questions, fill-in-the-blank questions, matching questions, and short-essay questions. 63% of the participants have mentioned that they never, rarely, or sometimes use the above-mentioned methods of assessment. Nearly half of the participants (47%) had mentioned that they used the traditional methods sometimes, while 37% percent had mentioned that they use them the most of the time or always.

However, the analysis also reveals that they do not use the learning, teaching, and assessment modalities either. For example, 72% of them had indicated that they never, rarely, or sometimes use the LTA Modalities. The

items included the modalities such as role-play, listening tests, presentations, impromptu speeches, debates to get an overview of how much attention was given to listening and speaking skills in language assessment by the ESL teachers. The majority of them used the above modalities only sometimes (50%), and only 28% had indicated that they use these modalities most of the time or always.

Table 4.4.1: Descriptive Analysis of Teacher-Perceived SBA Practices (N=56)

Assessment Practice	Never *f (%)*	Rarely *f (%)*	Sometimes *f (%)*	Most of the time *f (%)*	Always *f (%)*
1. Using Traditional Assessment methods	7	9	47	34	3
2. Using Learning, Teaching & Assessment Modalities	5	17	50	26	2
3. Communicating Assessment Results to Students	5	6	28	38	23
4. Assessment Standards and Criteria	8	9	44	29	10
5. Non-Achievement-Based Grading	16	11	39	25	9
6. Digital Language Assessment Practices	27	20	42	10	1

Nearly 61% of the participants had indicated that they communicated assessment results to students most of the time or always. About 6% had mentioned that they did it rarely while 5% of the participants had mentioned that they never communicated assessment results to their students. This 5% never provided feedback to students regarding the progress they make or about the areas they need to pay more attention to.

Similarly, 61% of the participants had indicated a lower rate of practice concerning assessment standards and criteria. They never, rarely, or sometimes provided students with suggestions to enable them to monitor their progress in learning or allowed the students to self-assess their work. Also, these teachers paid less attention to training students to assess tasks done by their peers. In addition, the students are not allowed to choose the assessment task they would like to perform.

Non-achievement-based grading practices of the participant teachers also lean more towards a lower rate of practice as 66% of them indicated they never, rarely, or sometimes practiced non-achievement-based grading. Simply put, these teachers have mentioned that they did not consider students' good conduct in class or their task organization when assigning their overall grades. Also, they say they did not consider students' performance to each other, their participation in class, or their absenteeism when assigning their overall grades.

Digital language assessment practices of the participants were detected to be at the lowest level of all practices. Here, only 11% of the participants had expressed that they used digital assessments most of the time or always. 89% of the participants had mentioned that they used digital tools at lower rates. This tallies with the teacher perceived digital language assessment literacy rates that they had expressed under the first research question, but it contradicts with their self-expressed IT qualifications.

Overall summary of the data collected under the research question two given in Table 4.4.2 shows that the teachers practiced communicating assessment results to students most frequently (M = 3.66), (SD = 2.82),

followed by using traditional assessment methods (M = 3.15), (SD = 3.05), and using learning, teaching and assessment modalities (M = 3,03), (SD = 2.84) respectively. However, teachers have indicated only a medium level of practice of all the three practices above. They claimed less frequent practice of non-achievement-based grading (M = 2.97), (SD = 2.07), and assessment standards and criteria (M = 2.59), (SD = 2.03), with digital language assessment practices being the least practiced (M = 0.85), (SD = 0.73).

Table 4.4.2: Mean Scores and Standard Deviation for Participants' SBA Practices

Practice	Mean	Standard Deviation	Level of Practice
1. Using traditional Assessment Methods	3.15	3.05	Medium
2. Using Learning, Teaching & Assessment Modalities	3.03	2.84	Medium
3. Communicating Assessment Results to Students	3.66	2.82	Medium
4. Assessment Standards and Criteria	2.59	2.03	Low
5. Non-Achievement-Based Grading	2.97	2.07	Low
6. Digital Language Assessment Practices	0.85	0.73	Low

DISCUSSION

The aim of this study was centered around examining the current levels of SBA literacy of ESL teachers, and the extent to which they practiced SBA literacy in the language classroom by conducting a comprehensive analysis of their perceptions on different aspects of SBA. It was hoped that the study

would be a valuable addition to the SBA as well as ESL research and that the findings would be an eye-opener towards future professional development programs.

Both the quantitative and qualitative data in this study offered a rich evaluation of SBA literacy levels and practices of ESL teachers in Sri Lanka. This perceptions survey provided information on teachers' self-perceived assessment competence, frequency of practice, and digital assessment perceptions and frequency of practice.

The teachers tend to perceive themselves as moderately competent in school-based assessment (M = 2.83), (SD = 2.0). On a Likert scale of 5 (Very competent) to 1 (Not competent), teachers reported slightly lower competence in constructing and administering language assessment tasks (M = 2.31, SD = 1.74) compared to their general assessment competence. They also had reported as having lower level of competence in digital language assessment (M = 2.31, SD = 1.13) and grading (M = 1.90, SD = 1.51) too. Medium level competence was reported in performance assessment (M = 3.93, SD = 3.04), communicating assessment results (M = 3.18, SD = 2.60), and in recognizing assessment ethics (M = 3.15, SD = 2.38) by these teachers.

In terms of teacher perceived frequency of assessment practices, the teachers reported practicing assessment communication (M = 3.66, SD = 2.82) more frequently followed by using traditional assessment methods (M = 3.15, SD = 3.05), and using learning, teaching, and assessment modalities (M = 3.03, SD = 2.84) respectively. They claimed less frequent use of non-achievement-based grading (M = 2.97, SD = 2.07), assessment standards and criteria (M = 2.59, SD = 2.03), with the digital language assessment being the least practiced (M = 0.85, SD = 0.73).

As illustrated in the above paragraph, the findings of this study evidenced that the teachers tended to generally perceive themselves as moderately competent in performing SBA. However, teachers showed variations in assessment competence concerning various aspects of SBA. For example, they perceived themselves as moderately competent in performance

assessment, communicating assessment results, and recognizing assessment ethics. Meanwhile, they perceived themselves as least competent in constructing and administering assessment, digital language assessment, and in grading SBA.

It is quite disturbing to note that the participants perceived themselves least competent in grading as the sample was selected from the marking examiners' database of the DOE. They are entrusted with the marking of national-level school examinations that are highly competitive.

The second least competent area according to their perception is the digital language assessment. This result contradicts what they had mentioned about their IT literacy in Section One of the questionnaire, as 73.22% of the participants had mentioned that they had taken some kind of IT training such as ICDL, IPICT, etc. However, if we consider the response rate to the online questionnaire which was less than 25%, we cannot be surprised at this finding.

The next least competent area, according to the analysis, is constructing and administering assessments. Yet, the truth is that 74.54% of the participants had more than 10 years of teaching experience. Only 3.6% had less than five years of experience in teaching. In addition, they are all trained or graduate teachers as the DOE does not employ untrained teachers for marking. Still, they have perceived themselves as low competent in constructing and administering assessment.

It is evident from the above findings that the ESL teachers mainly need training on constructing and administering assessment, digital language assessment, and in grading SBA. In fact, 50% of the participants had expressed that they need further training on SBA.

In line with the literature, the findings of the present study are similar to the findings of a study conducted by Al-Bahlani in 2019 regarding the assessment literacy of EFL teachers in Oman. Those teachers also had perceived themselves as moderately competent in assessment. However, there were certain aspects of assessment where the Omani teachers had

perceived themselves as competent, but the present study revealed a medium or low level of competence only in all the aspects.

The findings also tally with the findings of several studies on SBA in Sri Lanka. For example, Selvaruby, O'Sullivan, and Watts (2008), NIE (2015), NEC (2016), and Perera, Bandara, and Ekanayake (2020), had the same story to report after their studies on SBA. What Selvaruby et al. revealed in 2008 regarding teachers has not changed over the years. They had said that the teachers were unable to plan and conduct an assessment as expected. The NCE (2016) reported the same as, "even a teacher who is designated as a trained teacher has no proven skills of test item writing or assessment" (p.66).

The findings on teacher-perceived SBA practices revealed that the teachers practiced communicating assessment results to students, using traditional assessment methods, and using LTA Modalities at moderate levels, while they practiced assessment standards and criteria, non-achievement-based grading, and digital language assessment at lower levels. The least practiced area which is digital language assessment goes in line with what they had perceived about their digital competence under the first research question. They perceived a low level of competence in that aspect and here it is reflected in their practices. This, quite unofficially reveals what they have been doing as online teaching over the last several months due to the pandemic situation, has not been successful.

The findings also reveal that the teachers less frequently practiced non-achievement-based factors in grading. The overall aim of SBA is not quite achieved as a result. SBA expects teachers to assess aspects that cannot be assessed through paper-pencil tests. For example, students' participation in class cannot be assessed by a summative examination.

Assessment standards and criteria demand enabling students to monitor their progress in learning, self-assess their work, or assess the tasks done by peers. The study revealed that the teachers practiced that rarely.

Although there are more than 30 prescribed LTA modalities that can be used to assess students' learning, the study reveals that the teachers depend more on traditional assessment methods than LTA modalities. This situation never seems to improve as evidence from previous studies on SBA reveals the same conditions. For example, NIE (2015) reports that the most popular assessment methods used by teachers had been writing-inclined evaluation techniques such as Written Tests, Assignments, and Open Book Tests. The NIE report further reveals that discussion panels, projects, explorations, exhibitions, debates, concepts maps, seminars, double-entry journals, and surveys that inspire students' creativity have been rarely used. In addition, Ginige (2021) also has revealed that the teachers continue to get their students to name, state, and list things or define, describe and explain things in assessment.

One positive note to share at the end is that the findings indicate that teachers understand the importance of communicating assessment results to their students. The highest frequency they have recorded for SBA practices is done for this aspect. It involves providing oral or written feedback and acknowledging students of their high achievement in front of their peers. It also involves informing students of assessment objectives, and considering student privacy when communicating assessment results, which are considered as principal steps in boosting learners' understanding of where they are going, and what they need to achieve what is expected from them.

The findings of the study, which supported the findings of several studies that were conducted in Sri Lanka and abroad, indicated that the teacher assessment literacy is limited and that it still has its deficits despite increased pre-service and in-service teacher training in assessment.

Professional training on SBA should be intensive and extended to cover all the teachers in the field as demanded by 50% of the teachers who participated in this study. Teachers also have a responsibility to improve their assessment knowledge and skills through self-study as we cannot expect the authorities concerned to take measures overnight to improve. The

education authorities have been trying their best to get the SBA program absorbed into the system ever since it was introduced. The number of circulars the MOE has issued, the host of guidelines circulated by the DOE, and the massive number of workshops and seminars conducted by the NIE would bear witness to it. Yet, it is in the hands of the teachers to implement it properly to enable the future generation to achieve their potential.

ESL teachers have a special responsibility to understand the importance of the subject they teach. Communication is one of the four Cs in the 21st Century Skills demanded of the future generation. Steps should be taken to integrate technology into the classroom and equip teachers with IT literacy. Also, it is time the teachers grabbed the IT skills required to face the challenges of the new era.

Research is necessary to further investigate why SBA has not been able to establish its due place in the education system in Sri Lanka. Future research may need to investigate the objectives, tasks, contents, and outcomes of assessment courses provided by teacher preparation institutions and professional development programs.

Research in education should be encouraged as only a few researches are found on SBA program in the country. Those that were found, were also mainly focused on science subjects. The low response rate received for the current study may also have indicated the poor research culture prevailing in the field. Teachers are not quite aware of the benefits they can personally gain in participating in education research, and the impact their honest participation can make in the education field.

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