Training Primary Grade Teachers to Organize Teacher-Student Communication to Support Students With Speech, Language and/or Communication Needs

Former les enseignants à l'élémentaire à organiser la communication enseignant-élève de façon à soutenir les élèves ayant des besoins en orthophonie et en communication

Shalini F. Wickremesooriya

Abstract

This paper focuses on inclusion of students with Speech, Language and Communication Needs (SLCN) in regular classrooms through altered teacher-student communication using an action research approach. The paper discusses two action cycles with four phases: critical reflection, planning, action, and evaluation.

Six primary grade teachers in a private school for boys in Sri Lanka participated in the research. Teacher participants under the guidance of a consultant Speech-Language Pathologist (S-LP) elected to practice specific inclusive communication strategies whilst refraining from engaging in pre-identified exclusionary communication strategies. They also chose to follow a knowledge and skill enhancement programme during this period.

At the conclusion of the action cycles it was evident that consultant S-LPs can help schools, specifically teachers to adjust to the demands that arise from inclusion of students with SLCN.

Results highlight that the popular inclusionary teacher-student communication practices are giving single directions, praising student attempts to communicate, maintaining eye contact whilst addressing the student, assigning a 'communication buddy', rephrasing instructions, and giving specific feedback.

Abrégé

Cette communication porte sur l'inclusion d'élèves ayant des besoins en orthophonie et en communication dans les classes ordinaires par le truchement d'une communication enseignant-élève modifiée à l'aide d'une approche de recherche-action. L'article discute de deux cycles d'action divisés en quatre étapes : la réflexion critique, la planification, l'action et l'évaluation.

Six enseignants à l'élémentaire d'une école privée pour garçon du Sir Lanka ont participé à la recherche. Sous la direction d'un orthophoniste consultant, les enseignants ont choisi de pratiquer des stratégies de communication inclusives spécifiques tout en s'interdisant de s'engager dans des stratégies de communication d'exclusion pré-identifiées. Ils ont également choisi de suivre un programme de perfectionnement des connaissances et des techniques pendant cette période.

À la conclusion des cycles d'action, il fut évident que des orthophonistes consultants peuvent aider les écoles, et particulièrement les enseignants, à s'ajuster aux demandes qui découlent de l'inclusion d'élèves ayant des besoins en orthophonie et en communication.

Les résultats font ressortir que les pratiques d'inclusion les plus populaires dans la communication enseignant-élève sont de donner des consignes uniques, de renforcer les tentatives de communication des élèves, de maintenir un contact visuel en s'adressant à l'élève, d'assigner un « copain de communication », de reformuler les consignes et de donner des commentaires spécifiques.

Shalini F. Wickremesooriya
Consultant Speech & Language Therapist
& Counselling Psychologist
PhD (UK), M.Ed. SpLD(UK),
ADPsyC (SL),
Lict Dip (Communication & Drama; SL)
regSLMC (SL), certMRCSLT (UK)
No: 5, Sea View Avenue,
Colombo 3
SRI LANKA

INTRODUCTION

With the advent of inclusive education the number of students with Speech, Language and Communication Needs (SLCN), has increased in regular classrooms the world over (Wellington & Wellington, 2002). School based speech and language services are designed to support students with SLCN to become effective communicators in their classrooms (Wegner, Grosche & Edmister, 2003). Communication however, lies in the hands of both partners. Therefore, teachers are also expected to engage in communication practices that aid inclusion of students with SLCN (McCartney & Ellis, 2010).

INCLUSIVE EDUCATION

Just as political beliefs and governments have changed throughout history, so has the concept of disability and education of disabled children (Singh, 2006). Literature reveals that education for disabled children has moved through several stages some of which were denial that these children require adaptation, combining segregation and integration throughout the school day, and the present day concept of inclusion.

Inclusive education requires that all children regardless of disability to be educated alongside their peers (Schwartz, 2005). Exclusion due to 'learning, language, cultural, racial, class, religious, or behavioural differences' is discouraged (O'Hanlon, 2003, p.13). Inclusive education therefore challenges the medical or deficit perspective and introduces the social model of thinking (Slee, 2011; Tregaskis, 2004). The social model advocates that communities and establishments create and maintain practices that enable individuals with disabilities to play an active role in society (Mittler, 2000). Inclusive education, which promotes the social model of thinking, is expected to develop inclusive societies (Slee, 2011).

Currently a varied number of students with disabilities including those diagnosed with SLCN are enrolled in inclusive schools the world over.

STUDENTS WITH SLCN IN INCLUSIVE CLASSROOMS

Children are considered to have SLCN, when there is a mismatch between age appropriate developmental expectations and development of their ability to communicate (Beitchman & Brownlie, 2010). Different modes of speech and language therapy services along different parameters are pursued in school settings. These include pull out and classroom based models (McGinty & Justice, 2006).

The pullout model involves organising individual or small group intervention sessions outside the classroom in a designated space. It is based on the traditional model of service delivery practiced by Speech and Language Pathologists (SLPs) in clinical settings (Cirrin & Gillam, 2008). The classroom-based model involves intervention within classroom settings using either the direct or indirect models (McGinty & Justice, 2006). Within the direct model S-LPs collaborate with teachers and engage in team teaching or teach certain lessons such as language, to the class as a whole (McGinty & Justice, 2006).

The consultancy model, which was developed in response to the global drive to achieve inclusive education, is considered as indirect intervention (Mercow, Beckwith & Klee, 2010). S-LPs, who are employed as consultants, guide teachers with their expert knowledge on adapting goals and strategies to meet the needs of students with SLCN. In the UK, the Royal College of Speech & Language Therapists produced a policy statement concerning S-LPs working in consultant role. According to this statement a consultant is "an expert in a specific area of clinical practice with responsibility to lead and develop staff and services through active involvement in research and contribution to and use of the evidence base for the S-LP profession" (Royal College of Speech & Language Therapists 2010, p.5). Other studies suggest that school based consultant S-LPs ought to engage in teacher training programmes to educate teachers on topics including speech and language development (Sadler, 2005), the link between speech, language and communication difficulties and learning (Martin & Miller, 2003), and common speech and language disorders (Gascoigne, 2006). The consultancy model is encouraged due to the view that the pull out model, which highlights student deficits, does not provide acceptable outcomes for children with SLCN (Lindsay, Dockrell, Desforgest, Law, & Peacey, 2010). This model is also favoured when S-LPs cannot meet the demands of a large community (Wegner, et al., 2003).

CLASSROOM COMMUNICATION

Classrooms are dynamic entities where communication takes place continuously (Wood, 2008). Adult communication within classrooms is goal oriented (Farrell, 2006) and focused at meeting pedagogic goals (Walsh, 2006) or directed at classroom management (Nayak, 2004). Good teaching involves teacher-student communication; verbal and non-verbal, which is clearly understood by all learners (Clifton, 2004). Maintaining a classroom environment, which encourages

communication, is ideal to motivate and engage students with SLCN (McCartney & Ellis, 2010).

The standards of a culture or subculture often determine teacher-student communication routines within classrooms (Newman & Newman, 2009). The cultural roots of teachers influence the manner in which they interact with their students (Kogut & Silver, 2009). In Asian cultures where the value of education is drawn from the Confucian heritage (Abboud & Kim, 2005), students listen with respect to the authoritative voices of their teachers and refrain from asking questions or presenting opposing views (Xiao-yan, 2006; Zhang, 2008) because they revere and worship their teachers as experts (Nystrand, 2006). Students in Sri Lanka also display their respect for teachers by refraining from interrupting the teacher's explanation and from challenging teacher views (Alwis, 2005). This is in contrast to classrooms in Western and Western influenced cultures where students are encouraged to use talk, to learn, and understand (Walsh, 2006). Further, teacher choice of discourse is also dependent on institutional and personal preference, age of students, the experience teachers possess, the subjects they teach, and the purpose of lessons (Clifton, 2006).

ACTION RESEARCH

Action research embraces dual processes: research conducted in varied contexts to understand and improve knowledge and action directed at changing situations (Dick, 2002). The action researcher is therefore the practitioner and the practitioner is the researcher who applies theory to influence practice and practice to become theory (McNiff & Whitehead, 2002). The research process is intended to empower and liberate people by blending the academic world of research and actual practice through a democratic approach to transformation (Armstrong & Moore, 2004) thus, effectively diminishing the distance between those who decide and those who execute plans (Dick, 2002).

Action research is conducted as a cyclical process. Several models describing the cyclical process have been advocated since it was introduced by John Collier and Kurt Lewin in 1946 (Ferrence, 2000). Five basic processes - identifying a problem, collecting and organizing data, interpreting data, formulating a plan, and reflecting on the outcomes - are considered useful within each cycle (Winter & Munn-Giddings, 2001).

BACKGROUND TO THE RESEARCH

The research was conducted in Sri Lanka, an island located in the South Asian region. Statistics reveal that eight percent of Sri Lanka's population of 22 million is disabled and almost half of the disabled population is children (Asian Development Bank (ADB), 2002). Sri Lanka is committed to the global move towards inclusive education (World Bank Report, 2005). This is reflected in the National policy on disability (2003), which endorses inclusion as the basis for education (Rieser, 2008).

Although statistics pertaining to the prevalence of individuals with SLCN is unavailable in Sri Lanka, similar to other South Asian and African countries, it is estimated that at least 10% of the population display SLCN. Speech and language pathology services introduced in 1998 is also a relatively new profession with approximately 100 S-LPs working predominantly in clinical settings, in the capital and major towns (Gomesz, 2010). Amongst the general public, SLCN is not widely known or very well understood. Teacher training programs focusing on inclusion of students with SLCN is also limited (Wickremesooriya, 2012).

RESEARCH QUESTION

A set of questions often used in action research "*What is my concern? Why am I concerned? What do I think I can do about it? What will I do about it?*" (McNiff & Whitehead, 2002) was considered to articulate the research question. The broad question that emerged from the reflexive process reads as: "What guidance must a consultant S-LP provide teachers to ensure inclusion of students with SLCN?"

This paper considers the sub-question: "How can consultant S-LPs support teachers to alter teacher-student communication practices to include students with SLCN?"

The research question is answered by following two action cycles (AC1 and AC2). Each cycle consists of four phases; critical reflection, planning, action, and evaluation (Figure 1).

PREPARING FOR ACTION RESEARCH

The preparation stage included selecting a research location, gaining ethical approval, choosing research participants, organizing a validation group, determining a writing style, and identifying data collection and analysis methods.

Selecting a research location

The focal school is a private school for boys, located in the suburbs of the commercial capital, Colombo. Until 2004 the school sought to improve the quality of
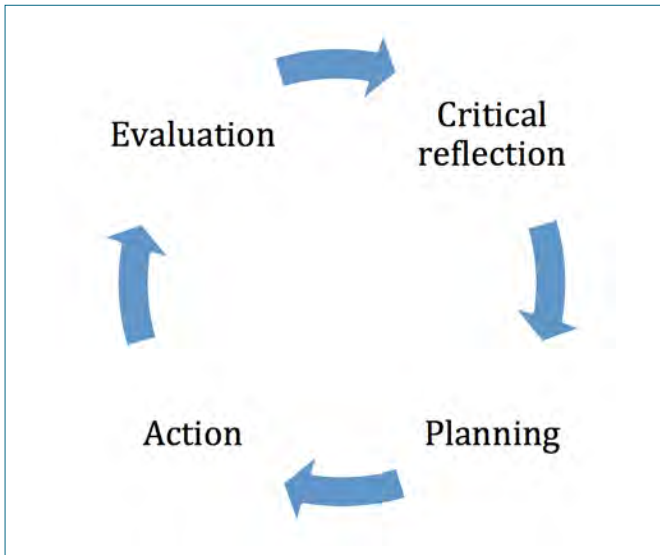
Figure 1: Action research model

experiences for its disabled student population through physical and social integration. In 2004, a collaborative team approach was adopted to facilitate inclusion of a wider range of students. The support team comprised of the school's sub-warden, student counselor, psychologist, social worker, special education teachers, and a senior teacher. The author joined the team as a S-LP consultant, in 2005.

Gaining ethical approval

This paper is extracted from a research project conducted towards the award of a doctorate. Ethical clearance was obtained from the faculty of medicine of the University of Sheffield, UK.

Choosing research participants

The students were selected from amongst those who currently receive student support. The potential recruits were identified as primary grade students aged between 6-12 years. Their degree of difficulty was judged through a rating scale developed for this purpose. The scale comprised of four levels (0-3) with skill level descriptions of; never [0], sometimes [1], often [2], always [3]. The skills assessed are an expanded and simplified description of the specific skills indicated in the Bercow Report UK (Bercow, 2008) definition. These include [i] speaks fluently (without stammering), [ii] speaks clearly without articulation errors, [iii] describes stories and events sequentially, [iv] uses age appropriate grammar and vocabulary, [v] expresses needs clearly, [vi] follows whole class instructions perfectly, [vii] answers questions accurately, [viii] interacts with peers, [ix] participates in classroom activities such as group recitation, and [x] works in groups. The need for SLCN to be the only or primary impairment was ruled out.

The special education teachers were educated regarding the skill description and the manner in which the rating ought to be recorded. Six students of different ages with the lowest total scores, which indicated those with greater needs and their classroom teachers, were selected. Students' names were changed to maintain anonymity (Table 1). Teachers are referred to by their

Table 1. Student and Teacher profiles

Student Name (Pseudonym)	Age	Score	Deficit skills – scores 0 &/or 1	Teacher's age	Years of teaching experience
Shanuth	6	12	iii, iv, v, vi, vii, viii, ix, x	32	6
Josh	7	12	iii, iv, v, vi, vii, viii, ix, x	35	7
Yadesh	8	14	iii, v, vi, vii, ix, x	37	10
Amal	9	13	iii, vi, vii, ix, x	34	8
Heshan	9	14	iii, vi, vii, ix, x	28	4
Yovaan	10	16	iii, vi, vii, x	55	30

student's pseudonyms (e.g. the teacher who teaches Shanuth is referred to as Shanuth's teacher).

Organizing a validation group

A validation group was organised to ensure reliability when analysing data. The three special education teachers on the school support team were selected and trained for this purpose.

Determining the writing style

As a post-modern action researcher, I challenge the traditional view regarding 'silent authorship' (Charmaz and Mitchell, 1997 in Quicke, 2008) and use a first person narration (Macintyre, 2000; Oliver, 2004). The first person narrative is advocated within action research because the researcher is an active participant in the dual processes of research and action (McNiff & Whitehead, 2002).

Identifying methods of data collection and analysis

Data was collected via classroom observations and semi-structured interviews. Classroom observations were selected because it is an effective method to study classroom talk (Ary, Jacobs, Razavieh & Sorensen, 2009). Teacher and student participants were interviewed via semi-structured interviews. This interview method involves a predetermined set of questions that can be amended according to the type of responses given by the interviewees (Kember 2000).

A mixed methods approach was adopted for data analysis. This process involves the combining of qualitative and quantitative analysis. A combination method was chosen because it provides different and useful perspectives that enrich decisions made during the research process (Axinn & Pearce, 2006), the school administrators' request for quantitative data and my personal belief that subtle qualitative changes in teacher-student communication will be missed in the absence of qualitative data.

ACTION RESEARCH METHODS AND RESULTS

The following sections report on the methods and results of the pre-action stage, action cycle one and action cycle two. Since each cycle depends on the results of the previous cycle, it is important to present both the methodology and the results before describing the next step of the research process.

PRE-ACTION METHODS AND RESULTS

This stage was introduced to evaluate the current status, consider the results, and prepare for action cycle one. Data was collected via teacher and student interviews and classroom observations. The results assisted in determining the action required, prior to embarking on action cycle one.

METHODS

Interviewing teachers

The interviews followed a semi-structured interview format. The teachers were interviewed individually. Each teacher was given the freedom to choose a convenient time and location. Five teachers agreed to audio recording while one opted for manual recording. All teachers chose the library as the interview location.

Interviewing students

Group interviews were organised for students because children feel more comfortable and supported when peers are present (Gwynn, 2004; Wellington, 2000). Group 'A' consisted of Shanuth, Josh, and Yadesh. Amal, Heshan, and Yovaan were allocated to group 'B'. The interviews were held at the Student Support Unit (SSU), a place familiar to the students. The students sat in a semi-circle while I sat in close proximity, directly opposite them to capture student attention, encourage active participation, and reduce opportunities of students losing focus during the interview. Being interviewed was a new experience for all the students. Therefore, I began by explaining the process, encouraging them to engage in a sample voice test, and listening to a replay.

Observing classrooms

Observations took place in the six classrooms that the student participants belonged to, to ascertain communication practices their teachers engage in when addressing all pupils including student participants. Although the research focused on encouraging teachers to change communication directed at student participants, data pertaining to whole classrooms were gathered because teachers and student participants communicate within the broader context of their classrooms. A data collection grid was designed to document the interactional dimension that enables quantitative and qualitative analysis. The grid comprised of Time, Turn, Speaker Direction, Dialogue, and Commentary (Table 2).

Every select classroom was observed on two separate occasions, during a lesson; which lasted for half an hour. I chose an unobtrusive seating location to avoid disturbing the classroom activities whilst having a clear

Table 2. Data collection grid for classroom observations

Time	Turn	Speaker Direction	Dialogue	Commentary
Interactions were recorded as they occurred, free from a rigid time pattern	A record of each turn, to count total number of turns during a lesson	With the sign ">". Speakers were allocated abbreviations; Teacher (T), Student with SLCN (S), Whole Class (C) and other student (P). If the teacher addressed the whole class it was recorded as T>C	Exact words as spoken	Information that gives life to the classroom and helps to hear distinct voices

view of student participants. Interactions that teachers directed at participants and participants contributions to classroom talk were recorded by hand. Manual recordings were used, as requested by the administrators, to capture as many of the interactions as possible.

The manually recorded data was word processed and scrutinized to identify communication practices that the teacher participants engage in. The validation group independently scrutinized the written version of the recorded data to identify the same. When results were compared both groups had identified a similar number of communication practices. The manner in which two practices were phrased differed. By revisiting the data we were able agree on the suitable phrases.

The eleven strategies identified on day one [D1] and two [D2] were then categorized as inclusionary [I] and exclusionary [Ex]. The inclusionary communication strategies identified included asking questions to engage the student [I_1], providing reminders to keep the student on task [I_2], engaging the student in 'whole class' lessons [I_3], conveying modified expectations to the student [I_4], stating expectations firmly [I_5], articulating positive evaluative remarks [I_6], and answering student questions and giving explanations briefly and clearly [I_7]. The exclusionary communication strategies that emerged include providing negative evaluative remarks [Ex_1], using threats to move students to act [Ex_2], ignoring student-initiated conversations [Ex_3] and rushing through explanations with several steps in a single turn [Ex_4].

RESULTS

Teacher and Student interviews

Data from both sets of interviews were scrutinized for themes. The results were then tabulated (Table 3). Teacher interviews highlighted that teachers lacked knowledge regarding including students with SLCN and engagement with research. However it was evident that teachers were using existing knowledge and skills to include students with SLCN. The most popular strategy was organising peer support. Individual teachers also sought help from the assistant teacher, used picture cues and seated the student in close proximity. Popular reinforcers teachers use to encourage students with SLCN communicate more effectively from the most popular to the least include stickers, verbal praise, and requesting peer acknowledgement. The students identified two ways in which their teachers helped them understand. These include assigning a peer buddy and informing individually. The students also expressed concern about certain communication practices that they believed prevented them from communicating. The practices that occurred most often to the least include speaking very loudly, using 'big' words or complex speech that is beyond the student's comprehension level, threatening students with punishment for non-completion of tasks during allocated time, and speaking fast.

Classroom observations

When considering the number of instances each identified communication strategy was observed (Table 4), the inclusionary strategies used more often than others

Table 3. Teacher and student interviews combined results

PARTICIPANT	THEMES	RESPONSES	NUMBER
TEACHER	Prior engagement with research	None	6
	Attendance at workshops or seminars focused on including students with SLCN	Attended a single workshop	2
		Did not attend a workshop or seminar	4
	Coping strategies teachers engage in when students with SLCN are present	Intervention by assistant teacher	1
		Using visual cues (e.g. picture)	1
		Organising peer support	3
		Seating student in close proximity	1
	Popular reinforcers teachers use to encourage students with SLCN communicate more effectively	Star stickers	6
		Verbal praise	2
		Asking peers to acknowledge student success	1
STUDENT	Ways in which teachers help students understand teacher talk	Assigning a peer buddy to help students follow instructions	4
		Informing students individually	3
	Features of teacher talk that students with SLCN consider prevents them from communicating	Speaking very loudly	5
		Using 'Big' words or complex speech that is beyond the student's comprehension level	4
		Speaking at a very fast pace	1
		Threatening students with punishment for non-completion of tasks during allocated time	2

Table 4. Real-time results of classroom observations

Teacher	DAYS	INCLUSIONARY STRATEGIES							EXCLUSIONARY STRATEGIES			
		I_1	I_2	I_3	I_4	I_5	I_6	I_7	Ex_1	Ex_2	Ex_3	Ex_4
Shanuth's teacher	D1	1	3			2			1			1
	D2	3	5			6		2	1	1		
Josh's teacher	D1		6	1		3		1	4	1		1
	D2		2			1		1				
Yadesh's teacher	D1	1	5			4			1		1	
	D2		2			2		2			1	
Amal's teacher	D1		9	1		1						1
	D2	1	4			7		2				1
Heshan's teacher	D1		4	1	2	3					1	
	D2		3		1						1	
Yovaan's teacher	D1					1		1	4			
	D2		3	1		2		3	2			
Total		6	46	4	3	32	0	12	13	2	4	4

were providing reminders to keep students on task (I_2), stating expectations firmly (I_5), answering student questions and giving explanations briefly and clearly (I_7), and asking questions to engage the students (I_1). A single exclusionary strategy, providing negative evaluation (Ex_1) was noted most frequently.

PREPARING TEACHER PARTICIPANTS

Since teachers are participants to the action research process it was important that they be equipped with the knowledge and skills required. By considering the results from teacher interviews it was decided that teachers would be educated through workshops on two themes, action research and inclusion of students with SLCN. Hence, two hour workshops were conducted along these themes, bi-weekly, during after school hours, for three consecutive weeks.

The first action cycle commenced thereafter.

ACTION CYCLE 1 (AC1) METHODS AND RESULTS

AC1 was comprised of the four phases in the action research cycle, critical reflection, planning, acting, and evaluating outcomes (Figure1). A discussion on each phase in the cyclical process follows.

METHODS

Critical Reflection

This stage was twofold: self-reflection and collaborative critical reflection. The participant teachers engaged in self reflection by considering dialog recorded during classroom observations and findings that emerged through the interview process. Critical reflection as a collaborative team activity followed. The participant teachers concluded that some communication strategies practiced by them are barriers to including students with SLCN.

Planning

The research focus is to alter teacher-student communication by reducing exclusionary strategies and practicing new inclusionary strategies. The participant teachers therefore selected new inclusionary communication strategies that they would incorporate into their practice, by considering insights gained at the workshops. The newly introduced inclusionary strategies were coded as an extension of the existing inclusionary strategies (Table 5: $I_8 – I_{14}$). The teachers also elected to avoid the currently practiced exclusionary communication strategies (Table 4: Ex_1-Ex_4).

Table 5. Inclusionary and Exclusionary communication strategies selected by teachers

Teacher	Inclusionary Strategies to follow	Code	Exclusionary Strategies to avoid	Code
Shanuth's teacher	Giving single directions	I_8	Providing negative	Ex_1
	Maintaining eye contact	I_9	evaluative remarks	
	Assigning a 'communication buddy'	I_{10}	Using threats	Ex_2
	Praising student attempts to communicate	I_{11}	Rushing through explanations	Ex_4
	Encouraging communication via picture cards / single word answers	I_{12}		
Josh's teacher	Giving single directions	I_8	Providing negative evaluative remarks	Ex_1
			Using threats	Ex_2
			Rushing through explanations	Ex_4
Yadesh's teacher	Giving single directions	I_8	Rushing through explanations	Ex_4
	Maintaining eye contact	I_9		
Amal's teacher	Giving single directions	I_8	Providing negative evaluative remarks	Ex_1
	Rephrasing instructions in simple language	I_{13}	Ignoring student initiated conversation	Ex_3
Heshan's teacher	Giving single directions	I 8	Ignoring student initiated conversation	Ex_3
	Assigning a 'communication buddy'	I 10		
	Praising student attempts to communicate	I 11		

| Yovaan's teacher | Praising student attempts to communicate | I_{11} | Providing negative evaluative remarks | Ex_1 |
| | Giving specific feedback | I_{14} | | |

Action

Plans were implemented by the participant teachers for two months. I supported the teachers through weekly meetings and other modes of communication such as telephone and e-mail.

Evaluation

Data was collected from the six participant teachers via classroom observations. The observations were conducted in the pre-action stage. Data was analysed by counting the number of turns teachers practiced the inclusionary strategies and the number of turns teachers did not avoid the identified exclusionary strategies as they addressed the student participants. The total for each category was calculated as a percentage of the total number of communication turns that occurred between the teacher and student participant on both occasions. The percentile values were rounded off for ease of analysis. Strategies not applicable to the participant teachers are indicated with the colour grey (Table 6).

RESULTS

Analysis pertaining to success at implementing inclusionary strategies indicated that success rates ranged from 0% to 100% (Table 6). The inclusionary strategies teachers practiced most often to the least often are maintaining eye contact [I_9], giving single directions [I_8], praising student attempts to communicate [I_{11}], and assigning a communication buddy [I_{10}].

Analysis of engagement in exclusionary strategies revealed that failure rates ranged from 0% to 100%. The exclusionary strategies that occurred most often to the least are ignoring student-initiated conversation [Ex_3], providing negative evaluative remarks [Ex_1], and using threats [Ex_2].

With the conclusion of AC1 the cyclical process of action research, required embarking on AC2.

ACTION CYCLE 2 (AC2) METHODS AND RESULTS

AC2 consisted of critical reflection, planning, acting, and evaluating the outcomes, similar to AC1. The manner in which these phases unfolded is discussed below.

METHODS

Critical Reflection

The teachers were provided with a detailed summary of data collected and analysed in the evaluation phase of AC1 for self-reflection. Collaborative critical reflection as a group activity followed. The teachers concluded that they often forgot their commitment to change within the busy school day and resorted to the authoritarian voice. They agreed that whilst their understanding of inclusion of students with SLCN improved during AC1, they require a longer period of time to practice newly learned communication strategies.

Planning

The teachers decided to continue with strategies selected in AC1. Further, they requested for a professional development programme directed at enhancing knowledge regarding inclusion and skills required for inclusion of students with SLCN.

Action

This phase lasted for two months. The teachers practiced the same inclusionary communication strategies they chose in AC1. They also chose to refrain from engaging in the exclusionary communication strategies identified in AC1.

Teachers also engaged in an in-house professional development programme. The programme was a collaborative team effort between the consultant teacher trainer of this school and me. The sessions were held after school, every other Friday for two hours. It was designed to be light on theory but heavy on delivering opportunities to

Table 6. AC1 results of real-time observations

Teacher	Total turns	Day	INCLUSIONARY							%	EXCLUSIONARY				%
			I_8	I_9	I_{10}	I_{11}	I_{12}	I_{13}	I_{14}		Ex_1	Ex_2	Ex_3	Ex_4	
Shanuth's teacher	12	1	1	2	1	1	0			75	0	1		0	25
		2	1	1	1	1	0				1	1		0	
Josh's teacher	7	1		3						100	0	0		0	0
		2		4							0	0		0	
Yadesh's teacher	9	1	2	2						100				0	0
		2	2	3										0	
Amal's teacher	4	1	0					0		0	1		1		100
		2	0					0			0		2		
Heshan's teacher	6	1	2		0	0				50			2		50
		2	1		0	0							1		
Yovaan's teacher	6	1				1			0	50	2				50
		2				2			0		1				
Total			9	15	2	5	0	0	0		5	2	6	0	

acquire practical skills and learn new techniques. Methods such as role-play, discussions, pair work, independent practice, active dialogue, and honest sharing of views were included to engage the teacher-learners.

Evaluation

Data was gathered from the six classrooms via observations. It was thereafter organised using a table format (Table 7) similar to AC1.

RESULTS

Analysis of classroom data (Table 7) indicated that success rates at implementation of inclusionary strategies varied from 80% to 0%. Inclusionary strategies teachers engaged in from the most popular to the least are praising student attempts to communicate [I_{11}], giving single directions [I_8], maintaining eye contact [I_9], rephrasing instructions in simple language [I_{13}], assigning a communication buddy [I_{10}], and giving specific feedback [I_{14}].

Failure rates at avoiding exclusionary strategies ranged from 20% to 100%. The exclusionary strategies that occurred most often to the least are providing negative evaluative remarks [Ex_1], ignoring student-initiated conversation [Ex_3], using threats [Ex_2], and rushing through explanations [Ex_4].

When results from AC1 and AC2 are compared (Figure 2) it is evident that Shanuth and Amal's teachers increased the practice of inclusionary strategies as they moved through the two action cycles whilst decreasing the practice of exclusionary strategies. Shanuth's teacher was the most consistent in practicing inclusionary strategies on both days in AC1 and AC2. She recorded a five percent increase in AC2. Amal's teacher who did not practice any inclusionary strategies in AC1 recorded 50% success in AC2 thereby reducing exclusionary practices by 50% in AC2. Other teachers recorded losses in AC2. Josh's teacher recorded a 100% failure following her decision not to implement the single inclusionary strategy. Yadesh's teacher implemented a new inclusionary strategy, praising student's attempts to communicate, and recorded overall success 50% of the time. Heshan and Yovaan's teachers recorded a 10% drop in implementing inclusionary practices in AC2.

Discussions during the evaluation stage revealed two factors that influenced the quantitative measures. Firstly, although teachers were committed to change and were supported to transform their practice in teacher–student communication all other factors within the school remained the same. Teachers had to deal with day-to-day schedules, manage classrooms of thirty five students', meet the expectations of extensive curriculums, and
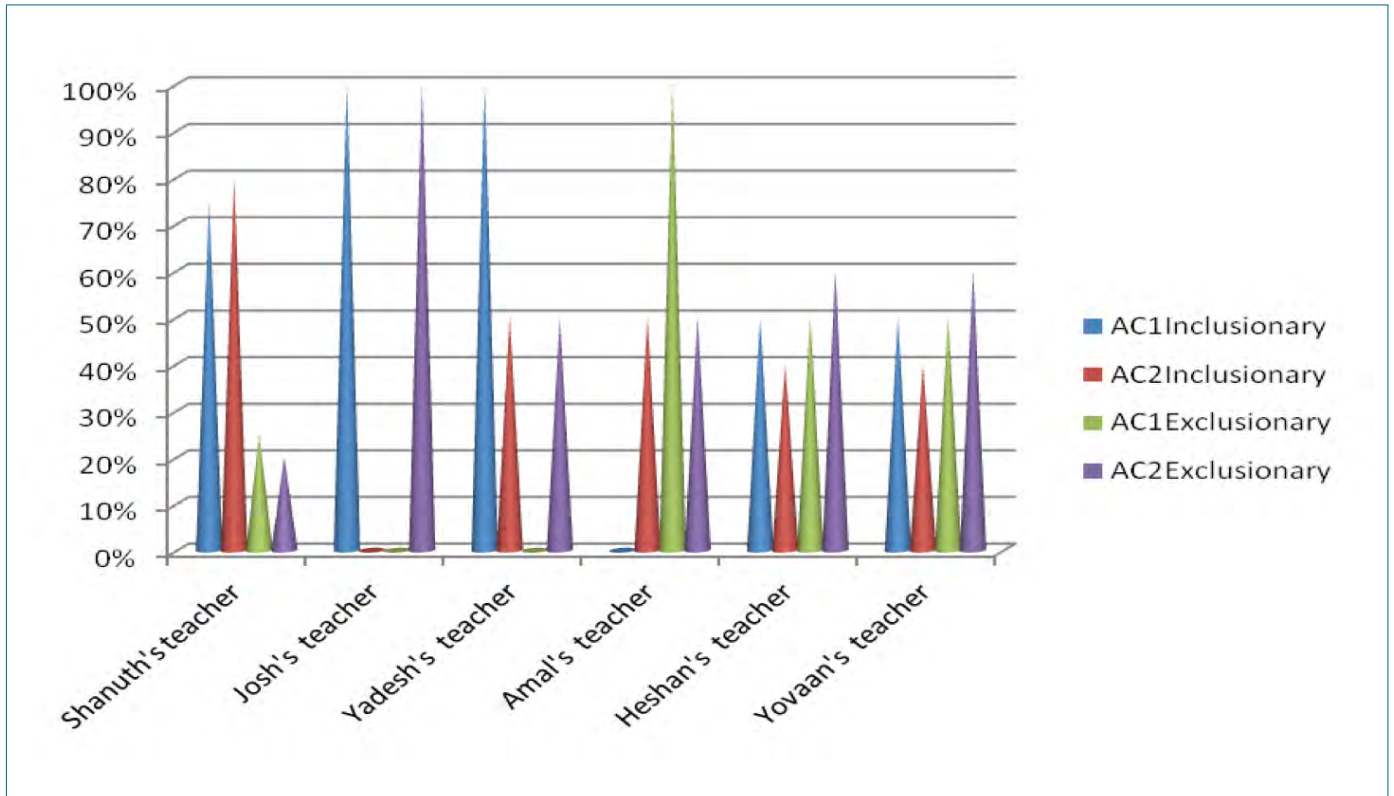
Figure 2: Teacher use of Inclusionary & Exclusionary strategies: A comparison of AC1 & AC2model

Table 7. AC2 Results of real-time observations

Teacher	Turns	Day	INCLUSIONARY							%	EXCLUSIONARY				%
			I_8	I_9	I_{10}	I_{11}	I_{12}	I_{13}	I_{14}		Ex_1	Ex_2	Ex_3	Ex_4	
Shanuth's teacher	10	1	1	1	1	1	0			80	0	1		0	20
		2	2	1	0	1	0				1	0		0	
Josh's teacher	3	1		0						0	1	0		0	100
		2		0							0	2		0	
Yadesh's teacher	8	1	1	1		1				50	1		1	1	50
		2	0	0		1								1	
Amal's teacher	6	1	0					2		50	1		0		50
		2	1					0			1		1		
Heshan's teacher	5	1	0		0	1				40			1		60
		2	0		0	0	1						2		
Yovaan's teacher	5	1				1			0	40	2				60
		2			0				1		1				
Total			5	3	1	6	0	3	1		8	3	5	2	

prepare students for examinations which are held every four months or end of school term. Hence, the success level of practicing new teacher-student communication strategies and avoiding exclusionary strategies varied from day-to-day for each teacher. Secondly, changing established practices in communication requires much practice over a long period of time. Even though teachers willingly chose inclusionary strategies and identified strategies they needed to avoid they often resorted to familiar practices.

However, teachers reported that they acquired a heightened awareness regarding teacher-student communication as they moved through the action cycles. Teachers collectively voiced that although implementation of chosen communication strategies did not take place all the time they would regret a statement once it was said in the old familiar way. Hence, they were keen on continuing the journey of change after the research concluded.

With the conclusion of the evaluation phase in AC2 the dual cyclical process of this action research project, ceased.

DISCUSSION

The study was conducted in a country that lacks the number of S-LPs required to serve all schools in Sri Lanka. It also focused on a school that is at the beginning phase of embracing the philosophy of inclusive education. The teacher participants who had no prior experience as researchers, willingly engaged in the action research process. The teachers experienced personal, professional, and social change as they engaged in the systematic study of teacher-student communication and its impact on their students. The research process empowered the teachers as they gained further knowledge, learned new skills and implemented new strategies. It also liberated the teachers as they began to realise in their own ability to positively influence the lives of students with SLCN. Further, the atmosphere in the classrooms was transformed as teachers' attitude towards students who were labelled as 'disabled' changed. Finally, the democratic approach to transformation diminished the distance between the decision makers, administration and consultants, and those who execute plans, the teachers.

This research project also demonstrated that action research is a useful tool to bring about change within school settings. The results are evidence that knowledge enhancement and provision of guidance on a regular basis can facilitate teachers to alter teacher-student communication practices. It is therefore concluded that

the action research process supplied answers to the research question: "How can consultant S-LPs support teachers to alter teacher-student communication practices to include students with SLCN?"

Limitations and future directions for further research

This research demonstrates several limitations. The first limitation concerns the research setting and the ability to generalise evidence to the wider education system in Sri Lanka. The research was set in a private fee levying school, a setting different from the public schools that dominate the education system in Sri Lanka. Student to teacher ratio is lower in private schools, the percentage of trained teachers are lower than reported in public schools and majority of students are from a higher economic stratum in society.

The research was also conducted at a time of war and uncertainty. The psychological trauma and tensions experienced by the research participants who represented the multi ethnic community, influenced the outcomes of the research. The disruptions that hampered the smooth flow of research activities periodically caused a loss of momentum. Should a similar research be conducted at a time of peace the outcomes may be different.

The research was also influenced by the changes in school administration. Decisions for each action cycle were endorsed by different individuals as Principals changed in quick succession. Should the same Principal have remained throughout the research process the direction of the research would have been different.

When considering possibilities for future research one aspect that was not taken into account in this research; the non-verbal element in adult-child communication needs to be explored because non-verbal communication is as or more important than verbal communication. There is also a need for future research pertaining to inclusion of students with SLCN to be carried out in public school settings with a larger sample of teachers. Considering the multicultural nature of the Sri Lankan society it will also be beneficial to focus research on the manner in which teachers from different ethnic groups engage in adult-child communication when teaching students with SLCN.

Implications for consultant S-LPs working with teachers

Findings indicate that Consultant S-LPs play an important role within inclusive school settings.

Firstly they are in a key position to advise school administrators on the need to attend to collective factors to ensure inclusion of students with SLCN. Since S-LPs provide services to children with a wide range disorders they can influence school administrators to opt for a holistic approach when organising services for these students. For instance, instead of appointing a support assistant to assist all students with identified needs within a classroom, the administrators can be convinced to encourage the classroom teachers to consider options such as differentiation of curriculum, team teaching, and alternative communication.

Secondly consultant S-LPs can make significant contributions to develop and guide school staff in the implementation of inclusionary practices. S-LPs can organise continuous teacher training programmes by understanding the culture of a school and by spending time with small groups of teachers. They can organise small scale action research projects to encourage teachers to take ownership to change by reflecting on practice and planning for change.

These findings are not limited to the research context. It can be extended to any school environment where a consultant S-LP desires to promote the concept of inclusive education.

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Authors' Note

Correspondence concerning this article should be addressed to Shalini F. Wickremesooriya, No: 5, Sea View Avenue, Colombo 3, SRI LANKA. Email: shafel02@gmail.com.