ABSTRACT

At the Catholic Education Office Melbourne (CEO-M) training parents or another person (an agent) to provide the repeated opportunities of practice, is part of the philosophy of the speech pathology service delivery. The effectiveness of such a model in bringing about positive gains in phonological awareness skills in primary school aged children was considered in this study. One method of agent training occurs through Agent Training Courses run by speech pathologists. This study investigated the effectiveness of the phonological awareness Agent Training Courses run by the Catholic Education Office - Melbourne. Effectiveness was considered through children's improvement in phonological awareness skills as assessed by the Sutherland Phonological Awareness Test. Effectiveness was also considered through parents perceptions of their ability to complete practise tasks with their child. This was measured through parental surveys immediately after the course and then at the review session following implementation.

The results of the study supported the hypothesis that students improve their phonological awareness skills following implementation of the program by agents who have attended Agent Training Courses. Results from parental surveys suggested that parents valued the courses and did feel empowered to complete practise tasks with their child. Greater levels of confidence were reported following the implementation phase. This would suggest that parents may have been unsure of how they were going to cope with implementing the program until they actually did it with their child. After working through the program with their child they tended to value the Agent Training Course more highly.

Agent training Courses are only way in which the agent training philosophy is demonstrated in the CEO-M speech pathology service delivery. Agent training can also occur through individual sessions with the parent at the school. Data from this study was also compared to data from Decker's (2005) study which looked at Agent training through individual sessions with parents at the school. While both forms of agent training resulted in improvements in student outcomes, greater improvements were noted with the Agent Training Courses.

INTRODUCTION

Children with phonological awareness difficulties resulting in literacy delay require explicit practice in phonological awareness in order to improve literacy outcomes (Rohl & Milton, 1993). There are numerous ways to provide repeated practice opportunities for children in the area of phonological awareness; the school context. speech pathology sessions and the home setting. As speech pathologists if we expect repeated practise in the home setting to occur we need to ensure that parents feel empowered to implement the practise. At the Catholic Education Office Melbourne (CEO-M) training parents or another person to be an agent of change, and to provide the repeated opportunities of practice, is part of the philosophy of the speech pathology service delivery.

Phonological awareness is important in literacy as it incorporates a focus on sounds in written and spoken words. As speech sounds are fleeting, the ability to sound out words is an important strategy in learning to read (Bishop & Adams, 1990). Phonological awareness is an important skill in reading as it enables the beginning reader to segment words into individual sounds in order to decode a new word in reading tasks or encode words in spelling tasks (Ball & Blachman, 1988; Bishop & Adams, 1990; Hatcher, 1994; Hurford, 1990). Phonological Awareness is an unfamiliar procedure to most students starting school. While some students will pick up these skills naturally as part of general literacy intervention in the classroom, other students need explicit training in the area (Rohl & Milton, 1993).

Training parents (or another agent) to implement a phonological awareness program with a child is a useful way to establish repeated practice opportunities. Dodd and Barker (1990) claim that the person carrying out the repeated practice tasks does not require in depth knowledge about the theory of the tasks. Rather they need to know how best to implement the tasks. Explicit training of the agent rather than just modelling activities in a session, would better equip them to implement the practice with their child (Ferguson 1985).

At the time of setting up the CEO –M speech pathology service in 1995, much of the research in the area of parent training for intervention with children had occurred in the area of behaviour management by psychologists. Koegel et al. (1983), compared

a behaviour intervention program provided by clinicians (where no parent training occurred) to a behaviour intervention program by trained parents and found that while both groups showed improvement post intervention, greater maintenance of the improvement occurred in the group where parents had been trained. This would likely be the case as parents are often in a better position to aid the ongoing generalization of a skill in a variety of contexts compared to the clinician in a clinical context. O'Dell et al. (1982) found that the control group where parents received minimal instruction performed significantly lower than the other groups where the parents received a variety of other training methods. Training with written material and live modelling of tasks were found to show the greatest results.

Ferguson (1985), a speech pathologist, did a literature review of parent training models and conceded that much of the research in the area had been done in the area of behavioural disorders. Ferguson claimed that while speech pathologists have been trained to provide therapy to a child, there had been little specific training on teaching others to do so. Many speech pathologists see an importance in parents observing a speech therapy session and will use home practice work books but may not explicitly train parents to work through the programs.

In July 1995 when setting up the a speech pathology service for the Catholic Education Office – Melbourne, an agent training model was selected. In this model the crucial role of the speech pathologist is in undertaking diagnostic assessments, determining intervention needs and designing intervention programs as well as implementing and monitoring the intervention process. The role of an agent (usually the parent but sometimes an aide of volunteer) is to do the ongoing repeated practise of skills students required to bring about change. The agent training focus is an important feature of the speech pathology service delivery model (Roberts, Ferdinando & McCusker 2000). Training of the agent then was required to empower them to work through the programs prescribed by the speech pathologist.

The speech pathologists from the CEO-M put together a number of programs for agents to work through. The phonological awareness program was drawn from materials by Love and Reilly (1995) and Catts and Vartianen (1993) An agent training course was devised to introduce these skills to agents through a spaced

learning approach where a set format is followed. Agents are then provided with the phonological awareness program which includes a variety of activities and games to be implemented with their child.

The Agent training focus of the CEO-M speech pathology service sought to provide explicit training to parents to work through programs with their children. Agent training at the CEO-M occurs in a number of ways. In one instance, Agent training occurs through set courses the agents attend to be shown (and to practice) the activities to work on with their child. In this instance agents are also taught how to implement these skills with their child. Another way agent training occurs is through individual sessions where activities are modelled and explicit implementation guidelines provided. Given the important role that parents can play in the intervention of their child Eiserman et al (1992) concluded that therapists needed to be trained to work with parents as well as with the child. The Agent training focus of speech pathology service delivery at the CEO-M sought to provide guidelines to clinicians on what skill parents needed to learn and how activities could be demonstrated.

During the last decade, while the CEO-M speech pathology service was introduced and refined, further research in the role of parents in intervention occurred within the speech pathology profession. Tetreault et al. (2003), considered parental perceptions of Home Activity Programs provided by occupational therapists, physical therapists and speech therapists. They found that out of forty one families in the study thirty one of them were still using the Home Activity Program after seven months and had a positive perception of the program. While Tetreault et al. (2003), evaluated the ongoing utilization of the program and parental perceptions of using it they did not evaluate actual skill improvement as a result of the Home Activity Program. Following feedback from parents, Tetreault et al. (2003), concluded that support should be provided to parents on how to create a good learning environment for the child and that support be provided to parents on how to implement and better understand the activities in the program. These features were incorporated into the CEO-M agent training courses.

A number of other speech pathology based programs (Bowen & Cupples 1999, Al Otaiba & Smartt 2003, Farber & Goldstein 1998) have been implemented with

explicit training of parents being a focus in the treatment plan. All concluded that the ongoing need to involve parents home practise and that explicit training of parents was required. Eiserman et al. (1992) compared a home parent training group with a clinic based low parent involvement group for pre-schoolers with speech disorders and found that like the behavioural adaptation study by Koegel et al. (1983), the home parent training group performed at least as well as the clinic based group. Eiserman et al. (1992) concluded that parents can be given significant responsibility in the speech therapy intervention of their child. Law (2004), in a meta-analysis of twenty five different articles on the treatment of speech and language disorders found no significant differences between intervention carried out by trained parents and clinicians.

This study aims primarily to evaluate the effectiveness of the phonological awareness Agent Training Courses (ATC) run by the Catholic Education Office - Melbourne. When devising the speech pathology service delivery of the CEO-M ten years ago the research available at the time suggested parent involvement particularly in the area of behavioural management was a useful tool. More recently speech pathology research in the area has further supported this premise and recommended explicit training of parents. While regular monitoring of individual student outcomes has occurred as part of speech pathology service delivery at CEO-M, this study aims to consider the Agent Training Course and evaluate its effectiveness in the area of improved student outcomes in the area of phonological awareness.

Secondly if the focus of the Agent Training Course is parent empowerment, it will be important to determine if parents do feel empowered to implement the program as a result of taking part in the courses. It is predicted that the Agent Training Courses in phonological; awareness will not only bring about feelings of empowerment by parents but also result in improved phonological awareness skills of students.

HYPOTHESIS:

The following hypotheses were tested in this study:

 Students improve their phonological awareness skills following implementation of the program by agents who have attended Agent Training Courses. 2. Agent Training Courses empower an agent to implement the phonological awareness program with their student

METHOD

Design

The first hypothesis, that student skills in phonological awareness will improve as a result of the ATC, was tested using an OXO intervention design. While Agent Training Courses generally involved parents or teacher's aides, only the students who had parents attending the ATC were considered. This was done to try and minimise extraneous variables in the study.

The second hypothesis, that the Agent Training Course would empower parents to implement the phonological awareness program, was tested using a survey. While this is more subjective qualitative data, a five point scale was used in the survey to enable data to be quantified. A survey was used with parents following the completion of the ATC. Parents were asked to evaluate how effective they felt the course was in supporting them to complete the practice tasks with their child. A follow up survey was also used following the post intervention assessment. This enabled parent to comment on the how effective they felt the Agent Training Course was after they had the opportunity to implement the program with students. The questions in the two survey were similar and the same rating scale was used in order to enable comparison in parent perceptions of empowerment immediately after the course to after they had implemented the practice activities with their child. Any other comments parents added to the evaluation were included and discussed qualitatively.

Participants

Students on the speech pathology caseload were assessed in the area of phonological awareness. If students achieved a score of more than one standard deviation below the mean for their grade level and phonological awareness was seen to be a primary goal, parents were given the opportunity to attend the Agent Training Course.

Students selected for the intervention group were students whose parents attended the ATC in phonological awareness. Only students who had the parent as their sole agent were selected. One student was eliminated from the study as no pre intervention data

had been collected. This student had been placed in the group following recommendations from the class teacher based on work samples.

Students in the control group were five students who had difficulty with phonological awareness (more than one standard deviation from the mean for their grade level), but who received no further speech pathology intervention in this area during the term.

Parents of the five students in the intervention group completed the survey forms. Four parents completed survey forms immediately after the Agent Training Course. At the time of the post intervention survey it was found that one parent had only attended the first session of the three course program (E4). It was decided to keep this child and the parent in the study and discuss the data accordingly. Four mothers attended the course and one father (E3) attended. All parents were competent in English and had finished school to at least year 10. No parent involved in the study had done tertiary studies.

Materials

The Sutherland Phonological Awareness Test -SPAT (Neilson 1995) was used as a pre and post test measure. Parents were trained in Agent Training Courses (ATC) using a set course format. The phonological awareness programs were provided to parents and were made up of tasks from Love and Reilly's (1995) "A Sound Way: Phonological Awareness – Activities for early Literacy" and Catts and Vartianen (1993) "Sounds Abound."

Two separate survey forms were used. The first was given to agents at the end of the last agent training course session and the second form used following post intervention of the student (see APPENDIX 1).

Procedure

The students were initially assessed in a 1:1 situation by the speech pathologist. Information about student performance was discussed in a feedback session with the class teacher, the parent and the speech pathologist. If phonological awareness was considered the primary goal for intervention, parents were given the opportunity to attend the Agent Training Course. Parents who felt it was feasible for them to attend

were given an invitation. Parents who did not feel they could attend the sessions were given the opportunity of an appointment to discuss the program - the same format of intervention as discussed in Decker's 2005 study.

Agent Training Courses occurred at a central location. Parents and aides attended the three weekly sessions run by a speech pathologist. Between each session home practice tasks from the session were assigned to trial with their child. At the following session home practice tasks were discussed. Following the last session parents would go back to the start of the program and work through the activities at their child's pace. About 6-8 weeks worth of activities were included in the phonological awareness program. After this time a review session with the speech pathologist was organised where the child's phonological awareness skills were reassessed. Feedback was again provided to the parent and class teacher.

The ATC was made up of a group of 5-10 parents and aides. The ATC ran for three weekly one hour sessions. The phonological awareness skills included activities of sound segmentation and sound blending in simple words and in words with consonant blends. Deletion of sounds from consonant blends in words was also covered. See APPENDIX 2 for the contents page from the phonological awareness program which lists the activities in the program.

During the first session information was provided to agents about the concept of phonological awareness and the lay out of the program was discussed. Parents were also asked to complete an action plan (see APPENDIX 3) where they had to determine how often they would implement practice tasks, where in the house they would implement practice, when (what time) they would implement practice, what sort of reward or reinforcement would they use with their child and who else would they involve in the practice sessions (spouse, siblings, friends). Parents were encouraged to try and implement practice between 3-5 times a week, and to work out a reinforcement schedule at fortnightly intervals with their child. The concept of using labelled praise with their child was also discussed (APPENDIX 3).

Each activity in the program was discussed and parents had the opportunity to role play a number of the activities with a partner where one played the role of parent and

the other the role of child. This enabled parents to attempt the task they would implement with their child as well as practise implementation skills such as labelled praise. The phonological awareness skills covered in session 1 included segmenting two to three sound words into individual sounds (e.g. cat = c-a-t) and blending two to three sounds to form words (e.g. c-a-t = cat). The complete phonological awareness Agent Training Course is provided in APPENDIX 4. Reference is made in this to other handouts provided. One of these is APPENDIX 3 the Action Plan and information about labelled praise.

During the second session a review of action plans and home practice occurred. The importance of regular ongoing practice was stressed. In session three the action plans for home practice were again discussed. Agents had the opportunity to discuss home practice tasks they trialled with their child. Once again modelling of tasks by the speech pathologist and role plays with parents occurred. The phonological awareness skills covered in this session included segmenting cluster sounds (e.g. sp in spot is made up of s-p) and linking phonological awareness to reading and spelling tasks.

During the third session the action plan was again reviewed and parents had opportunity to discuss home practise tasks. The phonological awareness skills covered in session three included deleting sounds in spoken words (e.g. cat without the c is at) and substituting sounds in spoken words (e.g. cat change the c to b = bat).

Everyone who completed the Agent Training Course was asked to complete a feedback form at the end of session 3. After the post intervention assessment parents were contacted by phone and given the post intervention questionnaire. Parent profile information was also collected at this time.

RESULTS

The average amount of improvement of students in the experimental group was 13.4. Given a test ceiling of 62 this is a 20.9% increase. No student achieved full marks even post intervention so no ceiling effect was noted. The range of improvement was from 0 to 24 (see Table 1). The fourth child from the Experimental group (E4) who achieved the score of 0 improvement showed some change in the items he got correct however his overall score did not change. This was the child whose parent only

attended the first session of the program. Without this child the average improvement of students in the intervention group was 16.75. Which is an 27% increase. The range of improvement would then be from 5 to 24 (see Graph 1).

The average amount of improvement of students in the control group was negative 0.4. Which indicates a regression trend. The range of improvement was from 2 to negative 5. Again no ceiling effect was evident and as the average percentage of improvement was negative, the control group had an average regression of 0.6. (see Table 2)

Table 1. Experimental Group results

	E1	E2	E3	E4	E5
Pre Assessment	9	28	20	36	34
Post Assessment	30	33	44	36	51
Difference	21	5	24	0	17

Graph 1: Experimental Group Performance

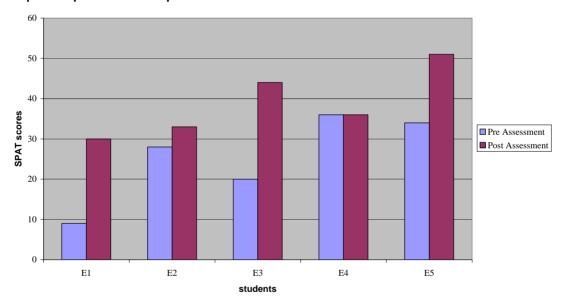
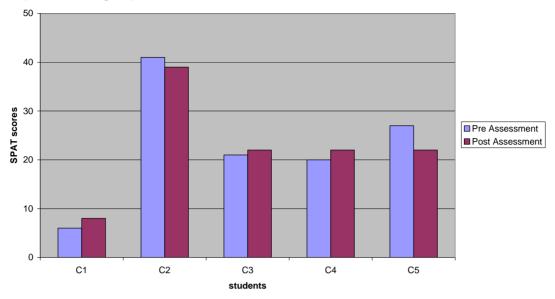


Table 2. Control Group results

	C1	C2	C3	C4	C5
Pre Assessment	6	41	21	20	27
Post Assessment	8	39	22	22	22
Difference	2	-2	1	2	-5

Graph 2: Control group



Parent Survey (see Appendix 1)

- Question 1 asked "How confident are you in your ability to implement the program with your child?"
- Question 2 asked "Were you provided with enough information on the program and practice activities?"
- Question 3 was "Were you provided with enough information on how you can help your child learn?"

The lowest score on the parent satisfaction survey following the Agent Training Course was 4 (out of a possible 5). A total of 3 scores of 4 were recorded out of a possible 12 (one parent did not attend all the sessions so did not complete this form). So 9 out of a possible of 12 scores recorded were the maximum score of 5. No parents scored question 3 with a score less than 5 (see Table 3). These scores suggest parents felt empowered to commence the home programs with their children after completing the Agent Training Courses.

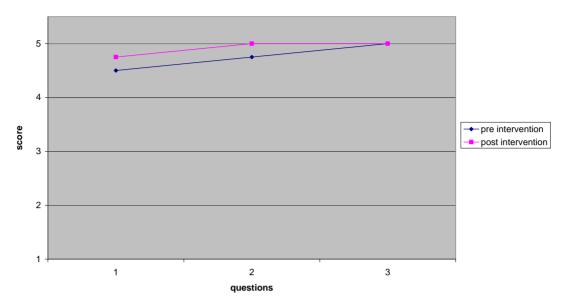
Table 3. Parent satisfaction survey

pre intervention										
survey										
	I1		I2		I3		I4	I5	1	Average
question 1		4		4		5		ţ	5	4.5
question 2		5		4		5		ţ	5	4.75
question 3		5		5		5		ļ	5	5
post intervention										
survey										
	I1		I2		I3		I4	I5	1	Average
question 1		5		4		5		Į	5	4.75
question 2		5		5		5		ļ	5	5
question 3		5		5		5		ļ	5	5

The lowest score on the parent satisfaction survey following intervention was again 4. Only 1 score of 4 out of a possible 12 was recorded. The parent of E4 who only attended one session was asked to complete the post intervention survey however the data was not included in the evaluation of the course as she did not complete the course. This parent however rated the program as 5s with a 4 for the final question were you provided with enough information on how you can help your child learn.

The average score for each question using data from the four parents who completed the Agent Training Course was calculated. Higher average scores were generally evident in the post intervention (see Graph 3).

Graph 3:Parent Survey data



DISCUSSION:

The results of this study supports the first hypothesis that students improve their phonological awareness skills following implementation of the program by agents who have attended Agent Training Courses. The Agent Training Courses were successful in bringing about an average improvement of 27% in performance on phonological awareness skills. The control group in comparison made no gains and in fact had a trend towards a regression. The child of the parent who did not complete the Agent Training Course was the only one in the experimental group not to make gains. This suggests that completion of the Agent Training Course by the parent is a powerful predictor of improved outcomes in the child.

It is likely that the one parent who did not complete the course did not implement the program with the child. From a speech pathology service delivery point of view this is an important factor to consider when implementing an agent training focus to therapy. If the parent did not find the Agent Training Course empowering it is necessary to consider if they would find an individual session at the school to go through the program more empowering. It might be that the parent is not a suitable agent for change and alternatives such as school based opportunities for practising the skills might need to be considered. The importance of a team approach to meeting the speech pathology needs of the students is highlighted in this case. If a student is not making gains alternative strategies can be problem solved in the feedback sessions

with the parent, class teacher and speech pathologist. These feedback sessions occur as part of the ongoing review process.

The regression noted in the control groups suggests that not only does explicit phonological awareness training bring about improved phonological awareness skills in students but not providing explicit training for students with difficulties in the area of phonological awareness, results in an inability for students to consolidate existing skills.

The range of scores in the experimental group was 19 and for the control group was 7 however there was no overlap of scores. The experimental group consistently made greater improvements that the control group who made minimal improvements or actually regressed. This suggests that the improvements noted in the experimental group were not likely due to chance or natural improvements over time.

The results of the study also support the second hypothesis that Agent Training Courses empower an agent to implement the phonological awareness program with their student. This empowerment was evident through the survey immediately following the Agent Training Course but was even more evident in the survey following parents implementation of the phonological awareness program. Overall parents seemed to value the Agent Training Course more after implementing the program with their child than they did immediately after completing the training course. This would suggest that parents may have been unsure of how they were going to cope with implementing the program (despite the spaced learning approach) until they actually did it with their child. After working through the program with their child they tended to value the Agent Training Course more highly.

None of the parents from the experimental group had a tertiary education, the lowest level of education of parents in the group was completion of year 9. The highest level of education was completion of high school. This did not impact on parents' ability to implement the program and bring about improved performance in their children. The parent with the lowest level of education (E2) was the one who brought about the greatest gains in his child. This supports Dodds and Barkers (1990) claim that the person carrying out the practice tasks does not require in depth knowledge in the area.

As O'Dell (1982) claims it is the structured support to parents that is integral to the process. The Agent Training Courses therefore were successful as a form of intervention. By providing opportunities to role play and modelling of skills, parental level of prior knowledge on phonological awareness and educational skill levels did not affect student outcomes. The spaced learning approach of sessions over a three week period enabled parents to discuss any issues they had with implementation of activities.

There was no parent profile taken for the students in the control group. It is therefore not possible to determine if the parents of both groups were similar and if potential for bringing about change in their students was similar. The fact that parents in the experimental group did not have high levels of education suggests that this is unlikely to have affected the control groups ability to bring about change. If this study were to be extended a cross over design could be used to further rule out the possibility of differences between the experimental group and the control group. In a cross over design the control group would now take part in a phonological awareness Agent Training Course while no further intervention would occur with the experimental group. This would determine if similar improvements were possible for the control group as well as establish if ongoing gains would continue for the experimental group. The potential for ongoing gains for the experimental group is there, as no ceiling effect has been noted in the current results. It would also be interesting to note if ongoing intervention from the speech pathologist is required to establish ongoing phonological awareness gains for students who had started to show gains.

While phonological awareness gains have been evident in the experimental group as a result of the Agent Training Course no measure of reading or spelling were taken. As improvement in these skills is the aim of improving phonological awareness skills the study could be further developed to include a pre and post test measure for reading and spelling.

The optional comments section on the feedback forms following the program resulted in the following comments from parents: games makes learning fun, having the structured material as a guide will be very helpful, the program combined with the follow up from the speech pathologist at school were very helpful. Even the parent

from the experimental group who did not complete the Agent Training Course and whose child did not make any gains (E4), commented positively on the course. The comment about the follow up at the school by the speech pathologist (the review session) suggests that despite attending the Agent Training Course parents still had an ongoing relationship with their speech pathologist that they highly valued. There were no negative comments recorded in the feedback forms which suggests that parents who attended the courses valued them.

From a service delivery point of view it is interesting to compare the results of this study with the results of Decker's (2005) study which looked at the gains students made with an agent training focus through individual sessions for parents. The control group was shared between this study and Decker's study. Decker found that while gains were made in comparison to the control group the gains tended to be smaller than those noted in this study where parents completed the Agent Training Course. O'Dell (1982) found that the greater the training the parents received the better the improvement evident. While Decker did train parents it is possible that the spaced learning approach of the Agent Training Course over the three weeks encouraged parents to stay on task with the program and resulted in the greater improvements shown in the present study. O'Dell (1982) also commented that there is little training for speech pathologists in how to train parents. The Agent Training Courses have the added advantage of providing a structured guideline for the speech pathologists on the skills and strategies to introduce to parents as well as practise tasks.

The comparison between the results here and the results of Decker's study enable a comparison of agent training approaches. It would also be useful to compare the results with other school based speech pathology service delivery models where parents may not always be present. It would also be interesting to compare the data with students who have the school (aide, class teacher of student support teacher) as an agent.

It can therefore be concluded that the Agent Training philosophy of the Catholic Education Office Melbourne speech pathology service delivery shows a positive trend for improvement in students' outcomes. The Agent Training Course approach results

compared to the agent training session results (Decker 2005) suggests that the amount of training a parent receives may impact on the level of improvement the child makes. The study however used only a very small sample and it is difficult to generalise further from this amount of data.

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APPENDIX 1

Agent training course feedback

Na Pr	pent: ame of student: ogram: ate:				Parent Aide Other
1.	How confident an program with you		ity to implement th	ne speech	pathology
1 not	2 confident	3 very confident	4		5
2.	Were you provide practice activities		formation on the l	anguage p	orogram and
1 not	enough information	3	4 adequate information		5
3.	Were you provide child/student lear		formation on how	you can h	elp your
1 not	enough information	3	4 adequate information		5
4.	Did you find the	mix of parents and	d aides:		
	,	·		k lifficult	
Ar	ny other commer	its or suggestion	ns:		

Thank you for your participation in the course and for filling out this form.

Agent training course feedback 2

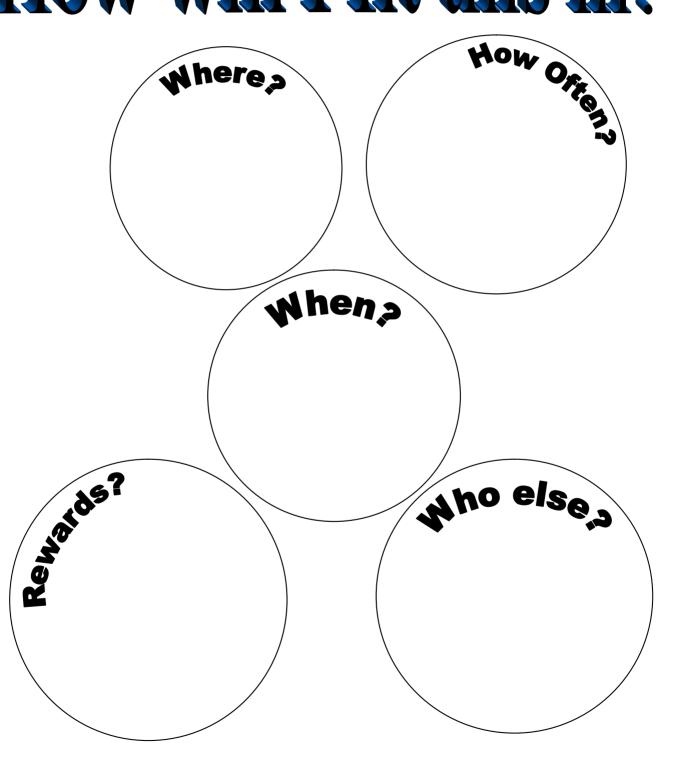
Agent: Name of student: Program:					Parent Aide Other
Date:					Other
1. How useful did program with you		course	in supporting you to v	work th	rough the
1 not useful	2 very useful	3	4		5
2. Were you prov practice activities		ough info	ormation on the langu	ıage pr	ogram and
1 not enough information	2	3	4 adequate information		5
3. Were you prov child/student lear		ough info	ormation on how you	can he	lp your
1 not enough information	2	3	4 adequate information		5
Any other comm	nents or sug	gestion	s:		

Thank you for your participation in the course and for filling out this form.

APPENDIX 2

CONTENTS		
Section	Time	Page no.
		1
introduction to Phonological Awareness Subskills 2		
A. Segmenting Two and Three Sound Words	(2 weeks)	2
1. Segmenting activity 1-4		2
Work sheets Segmenting 1-4		3
2. Segmenting activity 6 Work sheet Segmenting 6		
B. Blending Two and Three Sound Words	(2 weeks)	5
Blending activity		5
Worksheets 1-8 2. Instructions for 3 Sounded Words A & B Activity		6
Work sheet 3 Sounded Words A (x2 copies)		
Work sheet 3 Sounded Words B (x2 copies)		7
3. Instructions for Blending 9 Activity		
C. Segmenting Cluster Sounds	(2 weeks)	9
Segmenting activity 8		9
Work sheet Segmenting 8		
D. Using Phonological Awareness in Reading	and Spelling	10
E. Deletion of Sounds - in spoken words	(2 weeks)	11
Deletion of first sound	•	11
Deletion of Instable Deletion of last sound		13
Deletion of first sound in initial consonant blends		14
4. Deletion of last sound in final consonant blends		15 16
Deletion of second sound in initial consonant blends		17
Deletion of first sound in final consonant blend		17
F. Deletion and Substitution of Sounds - in w	vritten words	
r. Deletion and Substitution of Substitution	(2 weeks)	18
1. Letter and Sound Activity		18 18
Work sheet Letter & Sound 1-6		19
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2. Letter Tricks Activity Work sheet Letter Tricks 1		
Work sheet Letter Tricks 2 3. Tricky Triangles Activity		21
2 Level U Levangles ACHVIIV		21
Work sheet Tricky Triangles		

How will I fit this in?



Fitting 'extra homework' into your family's life can be difficult. If you feel your child has too much homework, talk to your child's teacher. Remember that it was also the teacher's decision that you and your child needed to do this program.

Some things to think about:

Practice needs to be REGULAR - you need to practice about 4-5 times a week for the best results. Three times is the minimum. Set the days you want to do the activities - and set the days when you and your child will rest. Try and space the days across the week.

Practice needs to be part of your family's ROUTINE. If you have a regular time to practice, you are more likely to remember than if you just try and 'fit it in'.

WHERE will you practice? You will need to try and find somewhere that is quiet and free from distraction (ie: away from the TV).

What will your other children be doing? Brothers and sisters will be able to join in for some activities and games, but at other times you may need to work alone with your child.

How will you REWARD your child? stickers and stars, promises to play games, or a trip to McDonalds can be used to help motivate and reward your child. You need to choose something appropriate that works for your child.

REMEMBER to PRAISE your child - this encourages your child to keep trying. Think about what you say when you praise your child:

- ✓ LABELED PRAISE tells your child what they did that was good. For example:
 - your room looks great thanks for tidying it up!
 - that was a lovely k'sound in car!
 - that was a great story you told me everything in the order it happened!
 - you described the apple really well I knew exactly what you were talking about!
- ✓ This is more effective than UNLABELED PRAISE (for example: great, beautiful, good boy/girl) that just makes your child feel good.

Good Luck with your speech pathology program!

APPENDIX 4

PHONOLOGICAL AWARENESS 2



AGENT TRAINING COURSE

CEOM Speech Pathologists



SESSION ONE

GOAL:

- 1. To educate agents in assisting their child/student to segment words into sounds.
- 2. To educate agents in assisting their child/student to blend sounds into words.

INTRODUCTION:

- * Discuss the purpose of the course:
 - course runs over 3 sessions, 1 hour each.
 - provides agents with a program targeting the specific area their child/student has difficulty with.
 - the 3 weeks will enable you to become familiar with how to use the program.
 - at the conclusion of the course, agents have the opportunity to work with their child/student through the program.
 - the agent's child/student will be reviewed the next term (approx. 10 weeks).
- * Introduce members of the group.
- * Use general introduction format (<u>Refer to sheet "How many sy llables...?"</u>).

* Prepare Activity:

- Introduce the concept of phonological awareness (<u>Refer to</u> "<u>Development of Phonological Awareness</u>" handout buff <u>coloured paper</u>).
- Discuss layout of PA2 program (<u>Refer to "Phonological Aw areness 2" program contents page</u>).
- Highlight that there are four sections in the program each with its own activities.
- Each activity has an aim, material required and steps to follow.
- All materials are provided in the program.



SEGMENTING WORDS INTO SOUNDS

- Students need to be aware of individual sounds within words in order to learn how the alphabet corresponds to those sounds. Once again this is an important skill for reading and writing.

* Present Activity:

- Present and explain activities of segmenting words into sounds to the group.

Section A: Segmenting 2 & 3 Sound Words

Activity 1 Segmenting with Pictures ($\underline{pg 2}$) –

(counters needed)

Activity 2 Segmenting with Words (pg 3) – (counters

needed)

* Practice Activity:

- Role play parent/student interaction for segmenting words into sounds.
- Give agents opportunity to practise activities of segmenting words into sounds, in pairs, using the materials provided.

BLENDING SOUNDS INTO WORDS

 Once students are aware of individual sounds within words, they need to be able to blend sounds together to form the whole word. This is important for reading.

* Present Activity:

- Present and explain activities of blending sounds into words to the group.

Section B: Blending 2 & 3 Sound Words

Activity 1 Blending Phonemes (cards provided, use

program for further practise **pg** 5)

Activity 2 3 Sounded Words with Pictures (**pg** 6) –

(counters needed)

Activity 3 3 Sounded Words without Pictures (pg 7) –

(counters needed)

* Practice Activity



- Role play parent/student interaction for blending sounds into words.
- Give agents the opportunity to practise activities of blending sounds into words, in pairs, using the materials provided.

* Personalise Activity:

- Therapists to outline specifically what needs to be done for homework and how this relates to the content of the session.
- Agents attempting activities of segmenting and blending with their child/student during the week.
- Get agents to think of other activities that incorporate the concept of segmenting and blending to share with the group during the following week.
 - e.g. 1. Hiding the picture cards around the room. As the student finds a word, they are required to segment the word into sounds and then blend the sounds to form the word.
 - 2. Using a board game, the student must give the requested response before moving forward.
 - 3. Using picture books or student's reader to identify words to segment and blend.
- Complete ACTION PLAN (<u>Refer to "How will I fit this in?'- white</u> <u>paper</u>). Discuss labelled vs. unlabelled praise and reward systems.
- Refer to "Phonological Awareness Program: Working with your Child" green paper.
- Refer to "If your child has difficulty" pg 8.



SESSION TWO

GOAL:

- 1. To educate agents in assisting their child/student to segment cluster sounds.
- 2. To educate agents in assisting their student to use phonological awareness skills when reading and spelling.

PERSONALISE ACTIVITY:

- Review action plans and home practise activities. Identify any difficulties/issues and discuss.
- Review concept of phonological awareness (refer to "Development of Phonological Awareness" handout buff coloured paper).

SEGMENTING CLUSTER SOUNDS

* Prepare Activity:

- The definition of "cluster" is where 2 or 3 consonants are placed together within a word without a vowel break (e.g. <u>spoon</u>, <u>scratch</u>, <u>mask</u>, <u>stamp</u>).
- Often children have difficulty in perceiving individual sounds within clusters. E.g. They might read or write "dink" for "drink" or "sot" for "spot". The second or third sound may be the most difficult for children to perceive.

* Present Activity:

- Present and explain activities of segmenting cluster sounds to the group.

Section C: Segmenting Cluster Sounds

Activity 1 Segmenting (pg 9) - (counters needed)

* Practice Activity:

- Agents to practise segmenting cluster sounds in words using their individual programs.
- This can be done in pairs.



PHONOLOGICAL AWARENESS & LITERACY

* Prepare Activity:

- Discuss the links between phonological awareness and literacy.
- Explore (**pg 10**) of the program which highlights the relationship between these 2 areas.

* Present Activity:

- Encourage group discussion of personal experiences of when phonological skills were used to assist reading and spelling.

Questions which may be asked include:

- 1. What does your child/student do when attempting to read or spell unfamiliar words?
- 2. What do you do to assist them?
- 3. What are some of the skills that your child/student displays when reading or spelling that we have covered in this course?

* Practice Activity:

- Introduce a non word paragraph using an overhead for agents to read (*Refer to "Non Word Reading" pink paper*).
- Introduce a non word paragraph verbally for agents to write (*Refer to handout in folder "Non Word Spelling"*).
- As a group, discuss the strategies used to attempt such tasks.

* Personalise Activity:

- Therapists to outline specifically what needs to be done for homework and how this relates to the content of the session.
- Agents attempting activities of segmenting clusters in words with their child/student during the week.
- Get agents to think of other activities that incorporate the concept of segmenting clusters to share with the group during the following week.
 - e.g. 1. Reading story books with their child/student and identifying words with clusters and then asking them to segment the cluster.



2. Finding items around the house/school which contain clusters at the beginning or end of the word.



SESSION THREE

GOAL:

- 1. To educate agents in assisting their child/student in being able to delete sounds in spoken words and to identify the word that is left.
- 2. To educate agents in assisting their child/student in being able to delete and substitute sounds in written words and to identify the word that is left or created.

₽ PERSONALISE ACTIVITY:

- Review action plans and home practise activities. Identify any difficulties/issues and discuss.

DELETING SOUNDS IN SPOKEN WORDS

- This skill assumes competence in the areas of segmenting and blending of sounds. This skill involves removing a sound from a word to create a new word.
- Sounds may be removed from the:
 - beginning of the word
 - end of the word
 - cluster at the beginning of the word
 - cluster at the end of the word

* Present Activity:

- Present and explain activities of segmenting words into sounds to the group. If possible, divide the group into 3 in order to explore 2 activities per group for a period of time. Rotate groups.

Section D: Deletion of First Sound

Activity 1 Identifying sound that has been taken away

 $(\underline{\textit{pg 11}})$ – (counters needed)

Activity 2 Deleted first sound and say new sound (**pg**

<u>12</u>) – (counters needed)

Section E: Deletion of Last Sound

Activity 3 Delete last sound and say new word (**pg 13**)

- (counters needed)



Section F: Deletion of First Sound in Initial Consonant Blends

Activity 4 Delete first sound in the cluster and say new

word (*pg 14*) – (**counters needed**)

Section G: Deletion of Last Sound in Final Consonant Blends

Activity 5 Delete last sound in cluster and say new

word (pg 15) – (counters needed)

Section H: Deletion of Second Sound in Initial Consonant Blends

Activity 6 Delete second sound in the cluster and say

new word (**pg 16**) – (**counters needed**)

Activity 7 Delete first sound in final cluster and say

new Word (**pg 17**) – (**counters needed**)

* Practice Activity:

- Agents in their 2 groups (if possible) are then given the opportunity to practise activities in groups or in pairs.

- Agents to use individual programs to complete activities.

DELETING & SUBSTITUTING SOUNDS IN WRITTEN WORDS

- This skill assumes competence in all previous areas covered. The skill involves removing or substituting a sound from a word, to create a new word.
- Sounds may be removed from the:
 - beginning of the word
 - end of the word
 - cluster at the beginning of the word
 - cluster at the end of the word

* Present Activity:

- Present and explain activities of segmenting words into sounds to the group. If possible, divide the group into 2 in order to explore 3 activities per group for a period of time. Rotate groups.



Section I: Deletion and Substitution of Sounds in Written Words

Activity 1 Letter and Sounds (pg 18)

Activity 2 Letter Tricks 1 & 2 (**pg 20**)

Activity 3 Tricky Triangles (pg 212)

Activity 4 Brainstorming (pg 213)

* Practice Activity:

- Agents in their 2 groups (if possible) are then given the opportunity to practise activities as a group or in pairs.

- Agents to use individual program to complete activities.

* Personalise Activity:

- Therapists to outline specifically what needs to be done for homework and how this relates to the content of the session.
- Agents attempting activities of deleting and substituting sounds in written words with their child/student during the week.

CONCLUSION

- Summarise skills developed in the 3 sessions. Allow for any questions.
- Discuss home practise and review process.

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