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hereby submit this as part of the requirements for the degree of:
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**SUPPORTING THE GENERAL EDUCATION TEACHER IN FACILITATING
LANGUAGE LEARNING AND COMMUNICATIVE COMPETENCE IN STUDENTS
WITH LANGUAGE LEARNING IMPAIRMENTS**

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ABSTRACT

SUPPORTING THE GENERAL EDUCATION TEACHER IN FACILITATING LANGUAGE LEARNING AND COMMUNICATIVE COMPETENCE IN STUDENTS WITH LANGUAGE LEARNING IMPAIRMENTS

By: Kelly Lynn Smith

The major purpose of this study was to compare how two groups of teachers responded to the daily differential learning needs of students with language learning impairments in their classrooms. Group 1 (Identified Teachers) consisted of five classroom teachers who were identified by the school's speech-language pathologist as having specific skills and abilities in working with students with language learning impairments. Group 2 consisted of four classroom teachers each having four or more years of teaching experience that were considered to be more representative of typical classroom teachers. Data were collected from ethnographic interviews of the teachers. Strategies that were used by the teachers when working with students with language learning impairments were identified and broken down into ten strategies: attention, peer support models, response expectations, comprehension/extension, general cueing, schema building, confidence building, preplanning/preorganizing, practical examples, and break-down/simplification. Based on the findings of this study, it can be concluded that each teacher in the identified group had a higher percentage of using all of the ten strategies than the matched group. Also, identified teachers differentiated areas of content, process, and product whereas the matched group only differentiated process and product.

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CHAPTER I

Introduction

Children with language learning impairments often experience difficulty during school learning. The classroom context places demands on the language of students, which presents many problems for the student with a language learning impairment (Merritt & Culatta, 1998). According to Merritt & Culatta (1998), students with language learning impairments have a “ ‘mismatch’ between their language abilities and the curricular demands.” Because of this mismatch, these students often have tremendous problems in the classroom setting. The student with a language learning impairment may have listening difficulties, reading comprehension difficulties, speaking difficulties, writing difficulties, vocabulary development difficulties, pragmatic difficulties and/or metalinguistic difficulties, all of which may interfere with classroom learning (Secord, 2002).

Public Law 94-142: The Education For All Handicapped Children Act of 1975 mandated that all children are to have access to a “free and appropriate education,” and that they should be served in the least restrictive environment (Vinson, 2001). Public Law 101-476: The Individuals with Disabilities Education Act (IDEA), which was an amendment to Public Law 94-142, reinforced that all children with disabilities, including children with language impairments, have the right to a free and appropriate education (Vinson, 2001). Because of these laws, schools are held responsible for providing an appropriate education for students with language learning impairments by addressing their needs through an individual educational plan (I.E.P.).

Part of the individual education plan (I.E.P) of a student with a language learning impairment may be for the student to receive services from the speech-language pathologist each week (Vinson, 2001). Although speech and language therapy is one essential factor of this student's appropriate education, another part of an appropriate education for a student with a language learning impairment goes beyond working with the speech-language pathologist once or twice a week.

In addition to the speech-language pathologist, the other person who is closely involved in providing the appropriate education of the student with a language learning impairment is the most obvious, but also the most overlooked; she/he is the classroom teacher (Ehren, 2000; Miller, 1999). The classroom teacher has the advantage of being with the student for about thirty hours a week. Thus, support from the teacher is another necessary part of an appropriate education for the student who has a language learning impairment (Miller, 1999).

An educational theory that stresses the practice of addressing all students' needs in the curriculum is called differentiated education (Hall, 2002; Tomlinson, 1999). Differentiated education intends for the teacher to redefine her teaching methods to meet the needs of each student (Tomlinson, 1999). According to Hall (2002),

“the intent of differentiated instruction is to maximize each student's growth and individual success by meeting each student where he or she is, and assisting in the learning process (pg.2).”

This theory involves differentiating three areas of the curriculum including content, process, and product (Hall, 2002; Tomlinson, 1999). Differentiating the content involves providing the student with multiple routes to take in what he needs to learn. Teachers should teach broad based concepts which can be adjusted by degree of complexity

depending on the learner (Hall, 2002; Tomlinson, 1999). Differentiating the process entails providing multiple ways for the student to make sense of what is being learned through such methods as grouping and classroom management (Hall, 2002; Tomlinson, 1999). Differentiating the product includes providing multiple ways for the student to demonstrate what he/she knows through such methods as on-going assessment, challenging the student, and varying expectations (Hall, 2002; Tomlinson, 1999).

General Statement of the Problem

Differentiated teaching could be seen as an educational context where students with language learning impairments can be supported. Because of the nature of differentiated teaching, teachers are encouraged to meet the needs of all students including those with language learning impairments. For the teachers of students with language learning impairments, this means providing a language learning environment. Unfortunately, many teachers do not feel comfortable in the role as a language learning facilitator (Miller, 1999). Therefore, it is the speech-language pathologist's job to collaborate with the teacher (Giangreco, 2000; Hadley, Simmerman, Long & Luna, 2000; McCormick, Loeb and Schiefelbusch, 1997).

Public Law 94-142 defines the role of the speech-language pathologist as not only identifying, diagnosing, and providing services for students with speech and language disorders, but also states that it is part of the speech-language pathologist's role to provide "counseling, and guidance of parents, children, and teachers regarding speech and language disorders" (Vinson, 2001). This definition means going beyond the hour or so a week to support the student. Speech-language pathologists should also be supporting the teacher in working with students who have language learning impairments

(Giangreco, 2000; Hadley, Simmerman, Long & Luna, 2000; Vinson, 2001). As Public Law 94-142 infers, supporting the teacher indirectly supports the student (Vinson, 2001). Indirect services will reach more students than direct services. The ultimate goal for each speech language pathologist is to create a system that works when she is not there; thus, she empowers the teacher and supports her in their teaching of students with language learning impairments (Giangreco, 2000; Secord, 2002). In a sense, creation of a “therapeutic classroom” is desired.

Significance of the Problem

Tomlinson (1999) explained that expert teachers are generally comfortable using an array of teaching strategies that meet the students’ needs. However, not all teachers are expert teachers. In fact, many teachers do not feel comfortable in varying their teaching methods to meet the needs of students with language learning impairments (Miller, 1999). Tomlinson (1999) expressed many ways to generally differentiate instruction for all learners. This study investigated what teaching strategies best meet the needs of students with language learning impairments. Knowing strategies that are useful in meeting the needs of students with language learning impairments will not only help speech-language pathologist, but also the teachers that the speech-language pathologists work with.

Purpose of the Study

The major purpose of this study was to compare how two groups of teachers responded to the daily differential learning needs of students with language learning impairments in their classrooms. Group 1 (Identified Teachers) consisted of five classroom teachers who were identified by the school’s speech-language pathologist as

having specific skills in working with students with language learning impairments.

Group 2 consisted of four classroom teachers each having four or more years of teaching experience that were considered to be representative of typical classroom teachers. This study involved an ethnographic interview of the identified and typical matched teachers in order to determine and compare what strategies the identified teachers and matched typical teachers used when working with students with language learning impairments.

Consequently, this may help the children with language learning impairments to be better served by teachers and speech-language pathologists.

Experimental Questions

The current study was designed to answer the following experimental questions:

- 1) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use when working with children with language learning impairments?
- 2) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use that typical matched teachers did not use when working with children with language learning impairments?

CHAPTER II

Review of the Literature

The purpose of this study was to compare how two groups of teachers responded to the daily differential learning needs of students with language learning impairments in their classrooms. This review of the literature will demonstrate the need to discover what strategies were used by teachers that were identified as having specific skills and abilities in working with students with language learning impairments. This chapter reviews the current research in the collaboration of speech-language pathologists and teachers. The chapter will also inform the reader on the research of the teacher's role in the classroom and how students with language learning impairments need to be supported in the classroom.

Collaboration of Speech-Language Pathologists and Teachers

In the last decade, an emphasis has been placed on the importance of collaboration between speech-language pathologists and teachers. The reasoning behind this collaboration is to further benefit students with language learning impairments that are in the general education classroom. Merritt and Culatta (1998) reported that students with language learning impairments might have had difficulties in the classroom because they could not meet the curricular demands. These authors found that students with language learning impairments had difficulty with understanding text, fast paced interactions of teachers and other students and written texts (Merritt & Culatta, 1998). These problems occurred across all subject areas (Merritt & Culatta, 1998). It is important that speech-language pathologists collaborate with teachers to provide the students with language learning impairments with the most beneficial learning

environment. The context-centered/collaboration approach is based on the fact that language users rely on context daily as a resource for understanding behavior and speech of others and as a manner in which to make themselves understood. Giangreco (2000) reported that studies have shown that supporting the teacher in a collaborative “in-class” approach rather than an expert “pull-out” approach has benefited the student with a language learning impairment. The speech-language pathologist’s involvement was necessary; however, the supports provided by the teacher may have been most appropriate (Giangreco, 2000).

Several studies emphasized that the importance of collaboration of professionals is to provide beneficial services to the student. Hadley, Simmerman, Long & Luna (2000) studied the collaboration model. The study reported that it was important to recognize that no single professional (whether teacher or speech-language pathologist) had sufficient expertise to provide all the appropriate assistance necessary. The general education teacher had expertise about the curriculum, and the speech-language pathologist had expertise about language development/difficulties (Giangreco, 2000; Hadley, Simmerman, Long & Luna, 2000). When speech-language pathologists collaborated with the teacher, they asked important questions, provided inside information and problem solved with the teacher. According to McCormick, Loeb and Schiefelbusch (1997), another role of a speech-language pathologist was to demonstrate for, teach, and assist teachers to implement language and communication intervention procedures. Not only should there be collaboration between the teachers and the speech-language pathologists, but there should also be collaboration between the teachers and the

students; only then can real learning occur (Silliman, Bahr, Beasman, & Wilkinson, 2000).

Teacher as a Language Learning Facilitator

Teachers know more about teaching than they do about learning, and learners may not learn what the teachers meant for them to learn (Roberts, 2001). Thus, it is important for the speech-language pathologist and the teacher to gain a better understanding of how the student with a language learning impairment will be successful at learning in the classroom. Although the views and backgrounds of teachers and speech-language pathologists have been shown as different, they have also been shown as being complementary; an integration of the two enabled them to provide the best learning support for the student (Miller, 1999).

Teachers interact with language in different ways than do speech-language pathologists (Ehren, 2000). Ehren (2000) suggested that the teaching of language is a continuum from instruction to therapy, and general education teachers and speech-language pathologists are on different parts of that continuum. A study observed that teachers showed a lack of confidence in how to organize curriculum in order to facilitate language development (Miller, 1999). This was because the typical ways for stimulating language development in a child with normal language may not have been the same as with a child with a language learning impairment. General education teachers may have continued to do the same methods over and over again even if those methods have already failed to support language skills in the child with a language learning impairment (Miller, 1999). Therefore, it is necessary for general education teachers to be informed as

to how their instructional methods can be modified for the child with a language learning impairment.

Supporting Students with Language Learning Impairments

Silliman, Bahr, Beasman, and Wilkinson (2000) proposed that the more capable teacher of a child with a language learning impairment provided graduated levels of support, which helped the child attain higher levels of language and communicative competence. It is hoped that all teachers learn to implement effective instruction and monitor the student's level of functioning in the classroom (Merritt & Culatta, 1998).

The classroom teachers' role should be as a language learning facilitator according to Secord (2002). As a language learning facilitator, the teacher should provide a language learning environment, be a mediator in the language learning process, and respond to the students needs in a variety of ways through direct assistance, extending, and encouraging (Secord, 2002). Silliman, Bahr, Beasman, and Wilkinson (2000) suggested that for a child with a language learning impairment to be successful in the classroom, the teacher or speech-language pathologist must have first modeled a skill and then assessed how the child responded. The teacher mediated the interactions with the curriculum through supportive scaffolding techniques.

From the speech-language pathologist's point of view, scaffolding, shaping, reinforcement, milieu language teaching, interactive modeling, prompting and fading were all teaching techniques that could have made a difference for a student with a language learning impairment, and may have been appropriate in the classroom setting (McCormick, Loeb and Schiefelbusch, 1997). However, teachers may not have had the knowledge about these techniques or how they may have benefited a student with a

language learning impairment. In fact, it would be highly unlikely that a teacher would have acquired the in-depth knowledge about language disorders in order to provide the necessary supports for these students without guidance from a speech-language pathologist (Ehren, 2000). According to Merritt and Culatta (1998):

The goal of collaboration can be to increase the effectiveness with which language is used to model, assist, clarify, establish and direct a lesson, provide feedback about the progress of a student, and reinforce a desired outcome (p.40).”

Therefore, it is important that speech-language pathologists share this knowledge with teachers. The success of a student with a language learning impairment may depend on the shared knowledge of the teacher and speech-language pathologist. If students with language learning impairments are going to be included in general education classrooms, then it is the speech-language pathologist’s responsibility to provide support and services to the teacher and in the classroom (Merritt & Culatta, 1998). Prelock (2000) stated that careful scaffolding of instruction to make the curriculum reachable and understandable was critical for students with language learning impairments because otherwise they would not be successful in the classroom environment.

In this chapter, three themes were discussed: the collaboration of speech-language pathologists and teachers, the teacher as a language learning facilitator, and supporting students with language learning impairments. In the next chapter, the methods of discovering what strategies teachers who were identified as extraordinarily successful when working with students with language learning impairments will be discussed.

CHAPTER III

Methods and Procedures

The purpose of this study was to compare how two groups of teachers responded to the daily differential learning needs of students with language learning impairments in their classrooms. In the previous chapter, through a review of the literature, it was made clear the need for this study. In this chapter, the methods, procedures, data reduction and data analysis of this study will be discussed.

Subjects

A total of nine general education teachers participated in this study. Speech-language pathologists identified two groups of teachers who were employed in school districts in southwestern Ohio: those who were identified as specific skills or abilities in working with children with language learning impairments and a matched group of typical teachers.

Subject Criteria

The five teachers who were identified as having specific skills or abilities were identified because they were highly effective teachers who had strong skills in working with students with language learning impairments; they were sensitive to these students' needs as well as advocated for them. These teachers were responsive to the needs of children with language learning impairments by modifying teaching strategies that might help the children attain higher levels of language and communicative competence.

The four teachers who were identified as matched typical teachers taught the same grade as the teachers who were identified as having specific skills in working with students with language learning impairments and had at least four years of teaching

experience. These matched teachers were chosen on the basis that they were not chosen as one of the teachers who were identified as having specific skills or abilities when working with students who had language learning impairments. Teachers who were classified as “typical” may have been good teachers, but were chosen simply because they were not chosen for the identified group. Nothing about the identification of teachers in the second group implied anything negative about the teachers in that group.

None of the teachers knew whether or not they had been identified as a teacher having specific skills or abilities in working with students with language learning impairments or identified as a matched typical teacher. All teachers taught from first grade to sixth grade. Identified teachers had a range of years of teaching experience: nine years to thirty-four years. Matched teachers had a range of years of teaching experience: four years to thirty-one years.

Procedures

Permission was obtained from the University of Cincinnati’s Instructional Review Board to complete this research study. All participants received written and verbal explanations of the purposes of the study and signed a consent form agreeing that they understood the procedures of the study as well as consented that their information could be used in the study, but that their identifying information would not be used.

The speech language pathologists were asked to identify general education elementary school teachers with whom they had collaborated or observed that had a reputation for having specific skills or abilities in working with and supporting children with language learning impairments as well as a matched teacher. The criteria for choosing these teachers were described above.

After being identified, these specified general education teachers were sent a letter asking them to participate in the study. Then, they were interviewed individually using an ethnographic approach in order to compare how the two groups of teachers respond to the daily differential learning needs of students with language learning impairments .

The ethnographic interviews followed the guidelines and types of questions recommended by Spradley (1979) in *The Ethnographic Interview* as well as Westby (1990) in her article, "Ethnographic Interviewing: Asking the Right Questions to the Right People in the Right Ways."

The ethnographic interviews began with an explanation for the interview as recommended by Spradley (1979) and Westby (1990). The explanation for the interview was read at the beginning of each interview and said as follows:

I want to talk with you about the children you teach that have language learning impairments as well as your teaching methods. There are no right or wrong answers to the questions I will ask. I just want to get some feedback on these topics.

The interviews were conducted using a hierarchy of questioning on topics that were relevant to the research questions (Spradley, 1979; Westby, 1990). Questioning consisted of a couple grand tour questions in which the teachers were asked to generalize about topics asked (Spradley, 1979; Westby, 1990). The teachers' answers to the grand tour questions prompted mini-tour questions in which the teachers were asked to describe a specific event or activity related to the grand tour question (Spradley, 1979; Westby, 1990). The teachers' responses to the mini-tour questions prompted example questions which were specific to an example of what is being discussed (Spradley, 1979; Westby,

1990). Experience questions were also prompted in which the teachers will be asked to discuss specific experiences that took place in a certain setting (Spradley, 1979; Westby, 1990). Lastly, native-language questions were occasionally asked in order to understand the terms the teachers use in their answers and what the terms mean to them (Spradley, 1979; Westby, 1990).

The following is a list of the grand-tour questions that were asked of all teachers in the interviews:

1. Tell me about a typical class period with a child with a language learning impairment.
2. Tell me about teaching children with language learning impairments.

The other questions asked in the interview were asked according to the ethnographic interviewing hierarchy as explained by Spradley (1979) and Westby (1990) and were based off of the answers given by the teachers in response to the grand tour questions.

A total of nine teachers were interviewed. Of those, five were identified as successful in working with children with language learning impairments, and four were the identified group's matched counterparts. Each interview varied in length from twenty-five minutes to seventy-five minutes. Ethnographic interviews took place in each teacher's classroom and were tape recorded onto an audiocassette.

Data Reduction

After all the ethnographic interviews were completed, the data was analyzed and reduced. Detailed notes were taken while reviewing the audio taped interviews. Next, the primary researcher created a list of every strategy that was mentioned by all of the teachers. From this list, groups were created of strategies that had similarities in how

they responded to the needs of the students with language impairments. Often strategies fell into more than one group. Once strategies were grouped, the primary researchers scrutinized each approach in order to decipher what the strategy was intended to do. Based on the intent of the strategy, the strategies were named. For example, if the strategy worked on facilitating comprehension, it was a comprehension strategy. Groups of strategies were combined if their purpose was similar. The ten strategies which were derived from the teachers' responses were as follows: attention, peer support models, response expectations, comprehension/extension, general cueing, schema building, confidence building, preplanning/preorganizing, using practical examples, and breakdown/simplification. Appendix A provides definitions of the aforementioned strategies.

Data Analysis

Once the ten strategy categories were identified, the responses of each teacher were classified under one of the ten strategy categories. Identifying what strategy categories each teacher used was determined by charting which teachers used what strategy categories. Percentages were then found of how often each group used each strategy category. Lastly, the approaches that the teachers used in each group were tallied to discover which categories the identified group as well as the matched group used the most and the least.

In this chapter, the methods and procedures of this study were discussed including: the criteria for subject selection, ethnographic interviewing procedure, data reduction and data analysis. In Chapter IV, the results of all descriptive analyses will be presented.

CHAPTER IV

Results

The purpose of this study was to compare how two groups of teachers responded to the daily differential learning needs of students with language learning impairments in their classrooms. In this chapter the results of the data analysis and descriptive statistics are presented. The results will be discussed relative to the experimental questions this study sought to answer:

- 1) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use when working with children with language learning impairments?
- 2) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use that typical matched teachers did not use when working with children with language learning impairments?

Data Analyses

Results will be presented in the order of the research questions.

- 1) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use when working with children with language learning impairments?

After the strategies were formed using the teachers' responses, the responses of the group that was identified as having specific skills and abilities in working with students with language learning impairments were evaluated for which responses she/he reported using when working with children with language learning impairments. Table 1

indicates which teachers in the identified group used what strategies. Three of the five of the teachers in the identified group mentioned strategies that fell in all of the ten strategy categories. The other two teachers mentioned strategies that fell in eight of the ten strategy categories. The strategies that were used by all of the teachers in the identified group were peer support models, response expectations, comprehension/extension, confidence building, preplanning/preorganizing, general cueing, and break-down/simplification. 80% of the identified group used schema building strategies. 60% of the identified group used practical examples.

Table 1: Identified Teacher Group's Use of Strategies

Strategies:	I1	I2	I3	I4	I5
Attention	X	X	X	-	X
Peer Support Models	X	X	X	X	X
Response Expectations	X	X	X	X	X
Comprehension/Extension	X	X	X	X	X
General Cueing	X	X	X	X	X
Schema Building	X	-	X	X	X
Confidence Building	X	X	X	X	X
Preplanning/Preorganizing	X	X	X	X	X
Using Practical Examples	X	-	X	-	X
Break-Down/Simplification	X	X	X	X	X

("X" indicates that a strategy that falls within this category was mentioned at least once by the teacher.)

("-" indicates no strategies that fall within this category were mentioned by the teacher.)

2) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use that typical matched teachers did not use when working with children with language learning impairments?

In order to compare the two groups, the teachers' responses in the matched group were evaluated for which responses she/he reported using when working with children with language learning impairments. These results were compared to those of the

identified group. Table 2, demonstrates that none of the teachers in the matched group used all of the strategies which strongly contrasts that of the identified group, in which three of the five teachers used all of the strategies. The strategies that the teachers in the identified group used that the teachers in the matched group did not use were as follows: confidence building strategies, preplanning/preorganizing strategies, and break-down/simplification strategies.

Table 2: Matched Teacher Group's Use of Strategies

Strategies:	M2	M3	M4	M5
Attention	X	X	X	-
Peer Support Models	X	X	-	-
Response Expectations	X	X	X	-
Comprehension/Extension	X	-	-	-
General Cueing	X	-	X	X
Schema Building	X	-	-	-
Confidence Building	-	-	-	-
Preplanning/Preorganizing	-	-	-	-
Using Practical Examples	-	-	-	X
Break-Down/Simplification	-	-	-	-

("X" indicates that a strategy that falls within this category was mentioned at least once by the teacher.)

("-" indicates no strategies that fall within this category were mentioned by the teacher.)

After the strategies were formed using the teachers' responses and it was discovered what strategies the individual teachers used, the responses were then evaluated using descriptive statistics. Percentages were found as to how often each group of teachers used a particular strategy category. As Figure 1 and Table 3 demonstrated, across the board, the teachers in the identified group had a higher percentage of mentioning a strategy that fell into each strategy category than did the teachers in the matched group.

Figure 1: Percentage of Teachers in Each Group that Used the Strategies

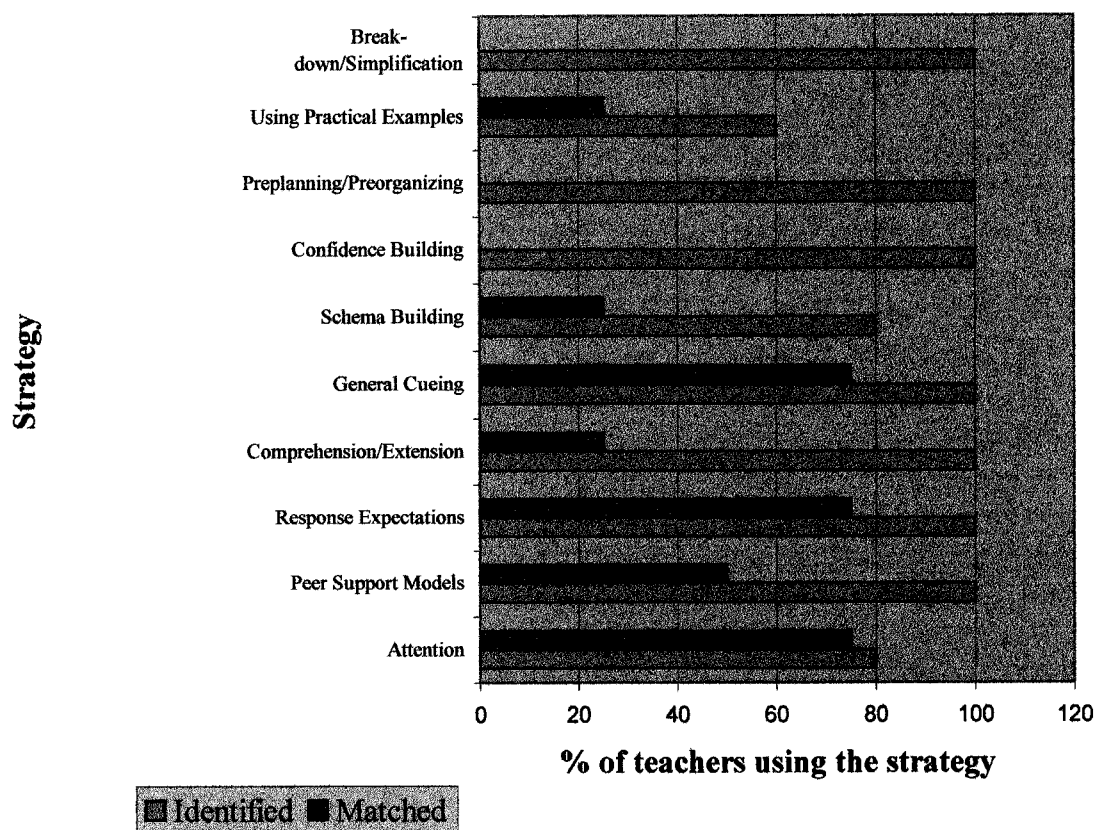


Table 3: Percentage of Teachers in Each Group that Used the Strategies

Strategies:	% of Identified Group	% of Matched Group
Attention	80%	75%
Peer Support Models	100%	50%
Response Expectations	100%	75%
Comprehension/Extension	100%	25%
General Cueing	100%	75%
Schema Building	80%	25%
Confidence Building	100%	0%
Preplanning/Preorganizing	100%	0%
Using Practical Examples	60%	25%
Break-Down/Simplification	100%	0%

Lastly, the two groups of teachers were examined to identify which strategies were mentioned the most by each teacher. The number of times that the approaches that fell under the strategy categories were mentioned was tallied for each group. Then, the strategies were ranked according to how often they were mentioned by each group. Table 4 displays the rank order results for the five most mentioned strategies in each group in order to discover their preference.

Table 4: Rank Order of Five Most Mentioned Strategies in Each Group

Rank Order	Identified Group	Rank Order	Matched Group
1	Comprehension/Extension (39 times)	1	Response Expectation (11 times)
2	General Cueing (24 times)	2	General Cueing (6 times)
3	Response Expectations (20 times)	4	Attention (3 times)
4	Confidence Building (16 times)	4	Peer Support Models (3 times)
5	Peer Support Models (15 times)	5	Comprehension/Extension (2 times)

Table 5 displays the rank order results for the five least mentioned in each group.

Table 5: Rank Order of Five Least Mentioned Strategies in Each Group

Rank Order	Identified Group	Rank Order	Matched Group
6	Attention (13 times)	7	Schema Building (1 time)
8	Schema Building (10 times)	7	Using Practical Examples (1 time)
8	Using Practical Examples (10 times)	10	Confidence Building (0 times)
9	Preplanning/Preorganizing (8 times)	10	Preplanning/Preorganizing (0 times)
10	Break-Down/Simplification (6 times)	10	Break-Down/Simplification (0 times)

Summary of Results

Several conclusions can be made based on the results of the present study. First, it can be concluded that the identified group used a variety of strategies when working with students with language learning impairments. Each teacher used at least eight out of ten strategies. Next, it can be concluded that the identified group had a higher percentage of using all of the ten strategies than the matched group. The strategies were tallied for each group in order to discover which strategy categories were mentioned most and least by each group. The identified group mentioned comprehension/extension strategies the most, whereas the matched group mentioned response expectation strategies the most. The identified group mentioned the break-down/simplification strategies the least whereas the matched group mentioned the confidence building strategy, the break-down/simplification strategy and the preplanning/preorganizing strategy the least.

In this chapter, the results of the study were discussed in reference to the experimental questions that were asked. In Chapter V, the results that were determined in this chapter will be discussed further and explained.

CHAPTER V

Discussion

This study involved an investigation of the strategies that teachers who were identified as successful mentioned using compared to those that the matched teachers mentioned using when working with students with language learning impairments. As before, this chapter will present a discussion of the results relative to each experimental question. It will provide a description and some examples of the strategies that were mentioned by the teachers who were identified as successful when working with students with language learning impairments. Descriptions of strategies and examples were obtained by conducting ethnographic interviews and analyzing the interviews using descriptive statistics. Finally, the results of the current study demonstrated that there were strategies that identified teachers mentioned using that matched teachers did not mention using, as well as other strategies, which were mentioned more often by the identified teachers. A discussion of each research question now follows.

1) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use when working with children with language learning impairments?

As discussed in Chapter IV, the identified teachers mentioned using all ten strategies: peer support model strategies, response expectations strategies, comprehension/extension strategies, confidence building strategies, preplanning/preorganizing strategies, general cueing strategies, break-down/simplification strategies, schema building strategies, and using practical example strategies. Each strategy category will be discussed as to the types of strategies mentioned by the identified teachers. As Merritt and Culatta (1998) stated, "strategies are scaffolds,

assistance that the teacher or speech language pathologist provides to support children so that they can experience success.” Strategies will be discussed in regards to the three curricular areas, content, process, and product as mentioned by Tomlinson (1999) as a necessary part of differentiated teaching. Differentiated teaching based practices requires expert control over making the content accessible to all students, over the process by helping all students make sense of the content, and over the product by providing ways for all students to demonstrate their knowledge about the content.

Content

According to Hall (2002) and Tomlinson (1999), differentiating the content is what the teacher does to facilitate the students’ understanding of the lesson. Merritt and Culatta (1998) reported that supportive strategies that fall within the instruction of content help the student better understand the content. The strategies that were mentioned by the identified teachers that fall under differentiating the content are preplanning/preorganizing strategies, break-down/simplification strategies, general cueing strategies, attention strategies, and confidence building strategies.

Break-down/Simplification Strategies

All of the teachers who were identified as having specific skills or abilities in working with students with language learning impairments mentioned a strategy that fell in the break-down/simplification strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked tenth out of the ten strategies. Even though this strategy was mentioned by all of the identified teachers, it was the least mentioned strategy by the identified group. Break-down/simplification strategies include those strategies that simplified or broke down the

concepts into more understandable ways in order to facilitate learning of the lesson.

Merritt and Culatta (1998) stated that break-down strategies such as those that support decoding support comprehension of the content.

Controlling the amount of material learned in one session is important when working with students with language learning impairments (Merritt & Culatta, 1998). A break-down/simplification strategy that the identified teachers mentioned involved starting small when working through a lesson. An identified teacher used the example of when she read a book to the class, instead of reading the whole book and then discussing it, she would discuss the book after each page that was read. Therefore she broke down the content so that it was more attainable to students with language learning impairments because they did not have to recall and process as much information at one time.

Separating the steps for children with language learning impairments was central to their learning according to the identified teachers. They often provided written checklists for the children to work through to ensure they went through the process of learning what they needed to learn whether it be math or science. Identified teachers also broke down the vocabulary words into smaller words, attached visuals to the words and made the definitions simpler to understand. By breaking down and simplifying the definitions of the words, identified teachers helped the students with language learning impairments learn the content in a simpler way.

Another way identified teachers broke down and simplified the content to make it more understandable was during reading class. They would break down the decoding methods so that they were more understandable and more manageable for the students with language learning impairments. In other words, the teachers would simplify the

strategies that are used in decoding. Merritt and Culatta (1998) reported that this is a good way to support comprehension in students with language learning impairments.

Attempting to do anything that would make students with language learning impairments take the tiny step to learn more was another strategy endorsed by identified teachers. One teacher said that in her experience with language learning impairments, improvement sometimes happened in slow and small increments, and it was very important to encourage them at each step of the way. She said that even if students with language learning impairments correctly answered only one out of five comprehension questions, that it should be applauded and encouraged. Her philosophy was that taking the small steps was vital to learning the content being taught.

All identified teachers endorsed the use of break-down/simplification strategies when working with students with language learning impairments. These break-down/simplification strategies differentiated content because they supported students with language learning impairments in the learning of content by separating the steps out so that comprehension was possible (Merritt & Culatta, 1998; Tomlinson, 1999). Another strategy category that identified teachers used that differentiated content was the preplanning/preorganizing strategy.

Preplanning/Preorganizing Strategies

All of the teachers who were identified as having specific skills or abilities in working with students with language learning impairments mentioned a strategy that fell in the preplanning/preorganizing strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked ninth out of the ten strategies. Even though this strategy was mentioned by all of the identified

teachers, it was almost the least mentioned strategy by the identified group. The preplanning/ preorganizing strategy could be described as preparing a foundation for the students so that they were successful in learning by doing such things as consciously thinking about the students while planning the lessons. Merritt and Culatta (1998) maintain that planning ahead is essential when working with students with language learning impairments (Hadley, Simmerman, Long, & Luna, 2000).

The identified teachers reported that when they planed their lessons, they thought about what the students' needs were and planned their lessons around their needs. This teaching strategy corresponds with the educational theory of differentiated education in which the teacher plans the lesson so that it is accessible to students with varying needs (Tomlinson, 1999). Identified teachers said that it was extremely important for teachers to be one step ahead of students with language learning impairments, which is a strategy Silliman, Bahr, Beasman, and Wilkinson (2000) support. Teachers reported that they consistently thought about how they were going to ask questions or how they would teach topics so that it would reach the students. Preselecting supports and strategies to be used when teaching students with language learning impairments is essential for content comprehension (Merritt & Culatta, 1998).

The identified teachers commented that keeping the students scheduled and organized was very important for students with language learning impairments. These teachers recommended routinely posting a detailed schedule to show what needs to be accomplished during the day because they said it was necessary to keep the children with language learning impairments on task and organized.

Lastly, another preplanning/preorganizing strategy that was mentioned by the identified teachers was recognizing that the language learning impairments cross over subject areas (Merritt & Culatta, 1998; Silliman, Bahr, Beasman, & Wilkinson, 2000). These teachers said that realizing that students with language learning impairments have difficulties in subject areas other than reading was key and that those needs should be planned for and addressed in the classroom (Merritt & Culatta, 1998).

Because teachers know that there are students in the classroom with language learning impairments, it is essential that they plan ahead for these students by organizing the classroom, selecting strategies to be used during instruction, and generating supports that will support comprehension (Hadley, Simmerman, Long, & Luna, 2000; Merritt & Culatta, 1998; Silliman, Bahr, Beasman, & Wilkinson, 2000). Preplanning/ preorganizing strategies that were mentioned by all of the identified teachers differentiated the content by addressing it ahead of time to ensure that comprehension was facilitated (Merritt & Culatta, 1998; Tomlinson, 1999). Another strategy category that identified teachers mentioned using with students with language learning impairments that differentiated the content was the attention strategy.

Attention Strategies

Eighty percent of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the attention strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked sixth out of the ten strategies. This means the attention strategy was the sixth most mentioned strategy by the identified group. Attention strategies were those strategies that directed the student's

attention to the lesson, which facilitated understanding of the content (Merritt & Culatta, 1998).

The most common attention strategy mentioned by the identified teachers was the placement of students with language learning impairments close to the teacher. The teachers reported that placing the students with language learning impairments close to the teacher and the board helped the students to remain focused on the material and learn more.

Another attention strategy that was mentioned by the teachers was having the children look at the teacher while she was speaking. Several teachers emphasized focusing the student's attention on what the teacher was saying. They did this by repeating questions so that the students with language learning impairments could focus their attention on what was being asked. They also had the students with language learning impairments repeat what they asked as well as say what they said back to them. Lastly they often had other students who are more able to answer repeat their answers so that the students with language learning impairments could hear the answers and focus their attention on them.

Identified teachers also believed that keeping the attention of the students with language learning impairments on the content that was being taught was critical to their learning. They did this during reading by using placeholders to follow along in the text to ensure the student was following along and on the correct page. The identified teachers also helped focus the students' attention on the text through highlighting text in order to draw the attention of the students with language learning impairments to critical content material.

An attention strategy that all of the identified teachers mentioned using was working one on one with students with language learning impairments during class time. They noted that working one on one with students helped the students to focus on what needed to be learned.

A strategy that was mentioned under the preplanning/preorganizing strategy category that was also an attention strategy was putting a schedule up on the board and letting the students know where in the schedule the class was. The teachers noted that maintaining a schedule helped the students keep their attention focused on the task.

Attention strategies differentiated the content by helping the student focus and attend to what needed to be learned (Merritt & Culatta, 1998; Tomlinson, 1999). Another strategy that the identified teachers mentioned using was the confidence building strategy category.

Confidence Building Strategies

All of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the confidence building strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked fourth out of the ten strategies. This means the confidence building strategy was the fourth most mentioned strategy by the identified group. Confidence building strategies were those strategies that encourage the student in his pursuit of understanding the content. Merritt and Culatta (1998) maintain that students with language learning impairments need support and motivation when they become discouraged with the content.

All of the identified teachers mentioned that empowering the student was a very important part of teaching children with language learning impairments. The teachers mentioned that the children needed to be encouraged that they could do what was being asked of them. Several teachers mentioned that they really worked on self-concept with students with language learning impairments because in the teachers' view in order for the students to be successful, they needed to know that they were special and loved. Identified teachers mentioned that often students are talked at and not to, so she tried to let the students know they were special by having conversations with them on topics other than school.

Identified teachers reported that one of the most important things when working with students with language learning impairments was to make them feel supported and that it was okay if they did not understand the content when other students did. They said that if the teacher did not have the students feeling comfortable, they would not be honest or willing to tell the teacher when they were having difficulties understanding the content.

The identified teachers reported that it was extremely important to encourage students with language learning impairments in every step that they make no matter how small the step. They said that reinforcing and praising whatever they could was beneficial for students with language learning impairments. Another confidence building strategy that was reported was including the student in the classroom discussions as much as they could. The teachers reported that if the teacher set the student up to be successful, it would be more likely that the student would participate in classroom discussion.

Confidence building strategies differentiated the content by making the student feel supported and empowered so that she would attempt learning the content even though she might be frustrated (Merritt & Culatta, 1998; Tomlinson, 1999). Another strategy category that was mentioned by all of the identified teachers was the general cueing strategy.

General Cueing Strategies

All of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the general cueing strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked second out of the ten strategies. This means the general cueing strategy was almost the most mentioned strategy by the identified group. The general cueing strategies that fell under differentiating the content were those strategies that directed the student to understanding and remembering the content. Merritt and Culatta (1998) stated that students with language learning impairments may need support from cueing by the teachers.

A cueing strategy that was also mentioned in the attention strategy category was having the students follow along in the text by using placeholders while the teacher read the story. This strategy cued the children to the text and helped them follow along in the fast-paced classroom (Ehren, 2000). A similar cueing strategy that was mentioned was highlighting important parts of the text in books and directions in order to cue the students with language learning impairments to important information. Students with language learning impairments benefit from cues that help them identify the text and direct their comprehension of the text (Ehren, 2000; Merritt & Culatta, 1998).

Another general cueing strategy that was mentioned by identified teachers was writing the answers on the board so that the students could use the teacher's answer as a reminder on to how to complete the task. This strategy cued the students to the correct way to complete the task. Additionally having written checklists for the students to use to work through processes and go through the steps often were helpful in cueing the students to remember concepts and processes. Providing verbal and visual cues during instruction was beneficial for students with language learning impairments (Ehren, 2000; Merritt & Culatta, 1998).

Another cueing strategy that several identified teachers found as being helpful when working with students with language learning impairments was to post several useful cueing strategies on the wall. For example, if the students were having difficulty remembering how to complete a task or how to figure out a word, they could look on the wall for reminders of the steps to take to figure out the answer. All of the teachers who were identified as successful in working with children with language learning impairments had classrooms that had walls filled with important information and hints for the students. Teachers had familiar questions that might be asked about the story posted on the walls. An identified teacher said that when she introduced a new concept such as on a word web, she left it up for several days so that the students could continually refer to it. This teacher said that this was especially helpful with the students with language learning impairments because they often needed the content to be graphically represented to cue them (Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000).

One of the identified teachers said that students with language learning impairments often benefit from the teacher involving the student's senses in the learning

process. She noted that motion especially helped cue several of her students to learning the content. When she introduced new concepts, she also introduced a key picture or motion. Whenever the children were asked to remember the concept, she used the motion they learned with the concept to cue them to the answer. This teacher also involved movement in remembering vocabulary words. She said that movement not only helped cue the students, but also made learning fun for them. Another teacher used visuals in place of movement in which she included a visual picture with a vocabulary word to help the students with language learning impairments remember the definitions. Students with language learning impairments needed such scaffolds as visuals cues to cue them in understanding the content (Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000).

Several identified teacher mentioned that recall was often an area of struggle for students with language learning impairments. Merritt & Culatta (1998) stated that providing cues for students with language learning impairments reduces the demand on memory and allows students better access to the content. The way the identified teachers often cued students to remember concepts was through anything that they found that was motivating to the students such as flashcards, pictures or movement. An identified first grade teacher said that a cueing strategy that was helpful in reading class when working with students with language learning impairments was to use visual cues to signify certain types of sounds. For example, sounds that “bounce” such as /b, d/ were represented by a basketball and sounds that “stretch” such as /f, v/ were represented by a rubber band.

General cueing strategies differentiated the content by making the content more accessible to students with language learning impairments through providing visual and verbal supports (Ehren, 2000; Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000; Tomlinson, 1999). Strategies mentioned by the identified teacher also fell under differentiating the process.

Process

According to Hall (2002) and Tomlinson (1999), differentiating the process means ensuring that the student is learning the content by giving her multiple ways to make sense of what is being learned. Merritt and Culatta (1998) reported that supportive strategies that fall within differentiating the process help support thinking and assimilating information. The strategies that were mentioned by the identified teachers that come under differentiating the process include: general cueing strategies, using practical examples strategies, schema building strategies, comprehension/extension strategies, and peer support models strategies.

Schema Building Strategies

Eighty percent of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the schema building strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked eighth out of the ten strategies. This means the schema building strategy was tied with the using practical examples strategy for the eighth most mentioned strategy by the identified group. Schema building strategies are those strategies that support the student in his pursuit of making sense of the content by providing background knowledge and routines

in activities (Merritt & Culatta, 2000; Miller, 1999; Silliman, Bahr, Beasman & Wilkinson, 2000). Merritt and Culatta (2000) reported that providing students support in the area of schema helps them to be successful in processing the content.

One of the schema building strategies that teachers in the identified group mentioned was maintaining a scheduled routine. The teachers reported that maintaining a scheduled routine helped students with language learning impairments because it gave them a foundation to build on. Students must know the schema of how learning takes place in order to facilitate the processing of the content (Merritt & Culatta, 1998). Having a set routine gave the students knowledge about how the school day progressed and how different activities were completed (Merritt & Culatta, 1998). The teachers said that when students had a routine, they were able to focus on, complete, and understand class work.

Another schema building strategy that was mentioned by the identified teachers was presenting expository information for the children on the topic that was being read about in class. For example, if the book was about a collie, the teacher would bring in a book about dogs to explain what a collie was and how it was the same and different from other dogs. This schema building strategy helped the students with language learning impairments make sense of the content through providing necessary background information (Merritt & Culatta, 1998; Miller, 1999). One of the identified teachers mentioned that she generally read from expository books on all subjects because she said that usually students with language learning impairments crave and need that support. Teachers also brought in books by the same author so that they could become familiar with different books by the author.

A similar schema building strategy that helped children make sense out of the content was when teachers would bring in items that coincided with the story. For example, if the story was about camping, the identified teacher brought in a sleeping bag, pillows, and a campfire burner. She made pretend logs with flames and had the children pretend they were roasting marshmallows. This identified teacher reported that many students with language learning impairments did not have the background knowledge to work from. Therefore, if the story was about camping, they would not have any old knowledge to pull from. She thought it was important not only to explain the concept, but also give them experience in interacting with things that helped them make sense of the concept. By giving them a conceptual framework to look at the story with, the students were able to better make sense of the content of the story (Merritt & Culatta, 1998; Miller, 1999).

A schema building strategy that another identified teacher used was making sure that she told the students what the humorous parts of the story were. She said that generally students with language learning impairments had difficulty understanding when something was funny. Merritt and Culatta (1998) reported that it is necessary to support students with language learning impairments by making them aware of emotional points in the story. The identified teacher reported that once she told the students what parts of the story was funny, she would hear students laugh the next time she read that part of the story. Giving the children a sense of what feelings are present in the story helped them to better make sense of the content of the story (Merritt and Culatta, 1998).

Giving students a way to think about the content so that they remembered it was another schema building strategy that identified teachers used. This organizational

framework would help them better make sense out of what was important to know about the content (Merritt & Culatta, 1998; Silliman, Bahr, Beasman & Wilkinson, 2000). One identified teacher said that she was always telling the students with language learning impairments to put a picture in their head about what the story was about or what the spelling word looked like. She reported that this really helped students with language learning impairments. Another example of helping the students think about the content was during vocabulary learning. Each time the students with language learning impairments learned a new set of vocabulary words, they would use the word in a sentence and draw a picture of it. Often the teacher would have other students draw a picture on the board and the students with language learning impairments copy the picture down. Having the other students model this schema building skill helped the students with language learning impairments look at the content in a way in which they were able to make sense of it.

Schema building strategies differentiated the process by providing the student with a framework and background knowledge that helped the student process the content by making sense of it (Merritt & Culatta, 1998; Miller, 1999; Silliman, Bahr, Beasman & Wilkinson, 2000; Tomlinson, 1999). Another strategy category that was mentioned by the identified teachers was the using practical examples strategy.

Using Practical Examples Strategies

Sixty percent of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the using practical examples strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was

ranked eighth out of the ten strategies. This means the using practical examples strategy category was tied with the schema building strategy category for the eighth most mentioned strategy by the identified group. Using practical examples strategies are those strategies that helped the student make sense of the content by providing activities that allowed the student to synthesize and build on his knowledge about the content (Merritt & Culatta, 1998; Miller, 1999; Palinesar, Collins, Marano, & Magnusson, 2000).

A practical example strategy that the identified group used that was also classified as a schema building strategy was when the identified teachers brought in items that corresponded with the content. This was a practical example strategy because the children could participate in activities that built on their knowledge about the content. The hands on experience activated prior knowledge and affected the students' ability to understand what was being discussed (Merritt & Culatta, 1998; Miller, 1999; Palinesar, Collins, Marano, & Magnusson, 2000). Identified teachers mentioned that it was important to do hands-on activities as much as possible. They reported that abstract concepts were very difficult for students with language learning impairments and those students needed to see the concept written down or used in a hands-on example. Making abstract ideas more salient and concrete is vital for many students with language learning impairments (Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000). One teacher often included multi-sensory activities in her lessons so that the students could synthesize the content through writing the answers out. She wrote answers on the board so that they could see the answer in addition to hearing the answer. She would also have the students come to the board at times to copy the problems or provide answers. This strategy helped the student to better make sense of the content by having multiple

experiences with it (Merritt & Culatta, 1998; Miller, 1999; Palinesar, Collins, Marano, & Magnusson, 2000).

Using practical examples strategies differentiated the process by providing the student with background knowledge and making abstract parts of the content more concrete so that the student with language learning impairments could make sense out of it (Merritt & Culatta, 1998; Miller, 1999; Palinesar, Collins, Marano, & Magnusson, 2000; Tomlinson, 1999). Another strategy that was mentioned by the identified teachers was the peer support models strategy.

Peer Support Models Strategies

All of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the peer support models strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked fifth out of the ten strategies. This means the confidence building strategy was the fifth most mentioned strategy by the identified group. The peer support models strategies included those in which students with language learning impairments were supported by other students in making sense of the content (Brinton, Fujiki, Montague, & Hanton, 2000; Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000).

Identified teachers reported that pairing students with language learning impairments with other students was critical to their processing of the content. During grouping activities, the other students provided necessary models for the students with language learning impairments (Brinton, Fujiki, Montague, & Hanton, 2000; Merritt & Culatta, 1998). Often these teachers mentioned that they paired the students with

someone who was patient and who was just above them academically, so that students could work together, guide each other and each be successful in the pair (Brinton, Fujiki, Montague, & Hanton, 2000; Palinesar, Collins, Marano, & Magnusson, 2000). A study conducted by Palinesar, Collins, Marano, & Magnusson (2000) suggests that matching students according to ability is necessary for their success in peer groups. Teachers mentioned that when students were paired, they often felt more comfortable asking questions and thus learned more. Often identified teachers would have typical students read orally so that the students with language learning impairments could hear their fluency and spontaneity because they provide good models for students with language learning impairments.

Pairing the students in cooperative groups during assignments was also a strategy mentioned by the identified teachers, which they thought benefited students with language learning impairments. Cooperative groups benefited students in that even though the students may not have been able to come up with any ideas about how to process the content on their own, in the cooperative group they would have been able to be successful through using someone else's ideas (Merritt & Culatta, 1998; Brinton, Fujiki, Montague, & Hanton, 2000). Working in cooperative groups also helps students with language learning impairments to understand the content through interaction with the students. One identified teacher stated that her students knew that a rule of cooperative groups was to ensure that all members of the group understood what is going on. Therefore, the students with language learning impairments were automatically supported.

The identified teachers also reported that having other students teach the children with language learning impairments was often beneficial. Because the teacher was only one person and could not help everyone at the same time, teachers reported that this technique helped solve that problem. Teachers also stated that sometimes other students could explain the content to the student with a language learning impairment in a way that the teacher could not explain it. Using any methods that were successful was the motivation of these identified teachers.

Peer support models strategies differentiated the process by providing the student with additional models and support from others to help the student make sense out of what she was learning about (Brinton, Fujiki, Montague, & Hanton, 2000; Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000; Tomlinson, 1999). Another strategy category that was mentioned by the identified teachers was the general cueing strategy.

General Cueing Strategies

All of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the general cueing strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked second out of the ten strategies. This means the confidence building strategy was the second most mentioned strategy by the identified group. The general cueing strategies that fell under differentiating the process included those that facilitated generalization of the content (Merritt & Culatta, 1998)

Identified teachers mentioned that general cueing strategies that helped students with language learning impairments understand the content were by giving them ways to remember to content concepts. They explained that cueing strategies were those that built on previous knowledge. An identified teacher who taught second grade gave the example, if a student knew how to spell the word “ice” then she knew how to spell the word “nice.” This general cueing strategy has the students with language learning impairments think of what they knew and then use it to help them with the new (Merritt & Culatta, 1998).

The other general cueing strategy that differentiated the content was when the identified teachers talked to the students through what they were doing. Talking through what content needed to be learned or assignment needed to be completed cued the students in thinking about the content. Identified teachers also differentiated the process by having the students put a picture in their head about the content. Cueing them by putting a picture in their heads about the content helped them to understand the content (Merritt & Culatta, 1998).

General cueing strategies differentiated the process by facilitating generalization of the content through cueing the students to the material (Merritt & Culatta, 1998; Tomlinson, 1999). Another strategy category that was mentioned by the identified teachers was the comprehension/extension strategy.

Comprehension/Extension Strategy

All of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments mentioned a strategy that fell in the comprehension/extension strategy category at least once. When evaluated for how

often this strategy was mentioned by the identified teachers, it was ranked first out of the ten strategies. This means the confidence building strategy was the most mentioned strategy by the identified group. The comprehension/extension strategies included those in which students with language learning impairments were supported by providing extra practice and more experience with the content in order to make sense of it (Merritt & Culatta, 1998; Palinesar, Collins, Marano, & Magnusson, 2000; Silliman, Bahr, Beasman, & Wilkinson, 2000).

Identified teachers stressed the importance of repetition when working with students with language learning impairments (Merritt & Culatta, 1998; Silliman, Bahr, Beasman, & Wilkinson, 2000). Repetition could be done through many methods including tellings, retellings, discussions, summaries, overviews, and homework (Merritt & Culatta, 1998). Several of the identified teachers mentioned that it was necessary to reteach content in order to help students assimilate the information. Identified teachers often presented concepts several times in order for the students with language learning impairments to learn them by restating concepts and highlighting concepts for students with language learning impairments. Often teachers would reread texts and relook at concepts as a group and individually.

All of the identified teachers mentioned working one on one with students with language learning impairments. They often worked one on one with them to go over concepts presented in class to ensure the students understood the concepts and to further explain the instructions. Teachers reported that working one on one with students individually and in small groups helped students with language learning impairments to make sense of what they were learning. Concepts, strategies or skills that the students

might not have been picked up by the students with language learning impairments would be worked on individually (Miller, 1999; Silliman, Bahr, Beasman, & Wilkinson, 2000). Individual time would also allow the teacher to provide a supportive model, which provided further redundancy (Merritt & Culatta, 1998).

As was mentioned before, identified teachers often include expository information to build on the topics that have been read about. This strategy supports the comprehension of texts and allows students to extend and apply knowledge that they have (Ehren, 2000; Merritt & Culatta, 1998). Another way that identified teachers supported the comprehension of the content was through sending extra practices home as homework to reinforce what was done in class. Sometimes, identified teachers sent home a blank sheet of a worksheet that was worked on in class so that the children had enough confidence to complete it at home. Generally identified teachers also sent home concepts ahead of time so that parents know what to work on with the students.

Often times identified teachers modified the texts so that the students with language learning impairments would be successful. Students with language learning impairments were often given lower level reading books to choose from. Teachers also provided stories on audio-tape so that the students would be able to understand the texts. Modifying texts is often a beneficial comprehension strategy for students with language learning impairments (Merritt & Culatta, 1998).

Comprehension/extension strategies differentiated the process by making the content more understandable to students with language learning impairments by providing lots opportunities to make sense of the content (Ehren, 2000; Merritt & Culatta,

1998; Miller, 1999; Silliman, Bahr, Beasman, & Wilkinson, 2000; Tomlinson, 1999).

Strategies mentioned by the identified teacher also fell under differentiating the product.

Product

Differentiating the product includes providing multiple ways for the student to demonstrate what she knows through such methods as on-going assessment, challenging the student, and varying expectations (Tomlinson, 1999; Hall, 2002). Merritt and Culatta (1998) reported that supportive strategies that fell under differentiating the product by altering expectations. The strategy that was mentioned by the identified teachers that fall under differentiating the product included: response expectation strategies.

Response Expectations Strategies

All of the teachers who were identified as having specific skills or abilities in working with students with language learning impairments mentioned a strategy that fell in the response expectations strategy category at least once. When evaluated for how often this strategy was mentioned by the identified teachers, it was ranked third out of the ten strategies. This means the response expectations strategy was the third most mentioned strategy by the identified group. The response expectation strategies included those in which students with language learning impairments were supported by providing alternate ways to demonstrate learning of the content (Merritt & Culatta, 1998).

Identified teachers often modified classroom questioning in order to support students with language learning impairments. To identified teachers, the style of questioning was essential when working with students with language learning impairments. Generally identified teachers would only call on the students with language learning impairments when they were sure that the child could either read what they

wanted them to read, or answer what they wanted them to answer (Merritt & Culatta, 1998). Identified teachers were sure to point out that it was important not to catch students with language learning impairments off guard so that they felt like they could not do what was being asked. Setting students with language learning impairments up to be successful was their priority. Identified teachers also set students up to be successful by rephrasing questions so that the teacher knew the students would be able to answer the questions. Identified teachers reported that generally the questions the students with language learning impairments were more successful with such questions as basic comprehension, knowledge, and application questions (Merritt & Culatta, 1998). If the questions were a higher level analysis, synthesis or evaluation question, the teachers would modify it to be a more basic question form. A similar strategy that identified teachers would use would be to answer comprehension questions as a group because students with language learning impairments often were not capable of answering them on their own.

Giving the students plenty of processing time to think when answering questions and discouraging other students from yelling out the answers was another strategy that identified teachers used. Teachers emphasized that it was important for students to have enough time to think about the answer and have a chance to come up with the answer. Merritt and Culatta (1998) also reported that students with language learning impairments need additional processing time.

Another way identified teachers modified expectations for students with language learning impairments was to give them additional time to complete assignments and tests.

Students with language learning impairments were often given spelling and vocabulary words ahead of time.

Tests and homework assignments were often modified for students with language learning impairments (Merritt & Culatta, 1998). Identified teachers did this through reading tests to students in the content area so that they were able to demonstrate their knowledge in the area aside from their reading ability. Teachers also provided alternatives for students with language learning impairments to demonstrate mastery of material by doing things such as modifying expectations on tests (Merritt & Culatta, 1998). Identified teachers did this by limiting the number of choices on matching tests, by not making students with language learning impairments complete the whole test, use their book while completing the test and/or letting them do essay tests orally. Identified teachers modified homework by having them complete only part of the homework questions, and/or giving them a rubric ahead of time so that they knew in advance how to complete the homework.

Lastly, identified teachers mentioned that even though they modify the expectations for students with language learning impairments, it was essential that the students participated. Teachers reported that they would help students through their answers by doing such things as writing them on the board so that they could copy them, but the teachers made sure that the students knew they were held responsible for the answers.

Response expectation strategies differentiated the product by providing alternate ways for students with language learning impairments to demonstrate their knowledge of the content (Merritt & Culatta, 1998; Tomlinson, 1999). As was demonstrated in this

section, identified teachers used several teaching strategies when working with students with language learning impairments.

2) What strategies did teachers who were identified by the school's speech-language pathologist as having specific skills and abilities use that typical matched teachers did not use when working with children with language learning impairments?

The strategies that the identified teachers used that typical matched teachers did not use were confidence building strategies, preplanning/preorganizing strategies, and break-down/simplification strategies. All of these strategies were ones that would be classified as differentiating the content according to Tomlinson (1999). The matched teachers did not differentiate the content by building the confidence of the students with language learning impairments in order to encourage them in their pursuit of understanding. They did not lay a foundation for the students so that they were successful in learning by doing such things as consciously thinking about the students while planning the lessons. Lastly, they did not break-down the concepts into more understandable ways in order to facilitate learning of the content. The matched teachers also did not use any general cueing strategies that differentiated the content. The only way which the matched teachers differentiated the content was when three of the four matched teachers mentioned that they use one attention strategy which was either sitting the student close to the teacher or having the student repeat what the teacher said.

Comparatively, almost all of the teachers who were identified as having specific skills and abilities in working with students with language learning impairments used all of the strategies that fell under differentiating the content. There was only one identified teacher who did not use all strategy categories that differentiated content. This teacher did not mention using an attention strategy. Strategies that differentiate the content are

important to use with students with language learning impairments. Teachers need to use strategies from differentiating all three curricular areas: content, process and product. When the identified teachers were asked which strategies were the most successful when working with students with language learning impairments, they all responded that there was not one strategy that works the best, but that it was all of them together. One teacher who had been teaching for twenty three years said it took her a long time to figure out that it was a combination of strategies that helped students with language learning impairments.

Clinical Implications

The findings of the current study may assist speech language pathologists in their efforts to support teachers of students with language learning impairments and in supporting the students themselves. One matched teacher that was interviewed told the researcher, “ nobody has ever approached me to have any different plan for her language, so I never had a different plan for her.” Hopefully, the findings of this study will help these teachers as well as the speech language pathologists who work with them to know what approaches work well for students with language learning impairments. Teachers and speech language pathologists now have support through this study that it is important to use strategies that differentiate the content, the process, and the product.

Limitations

The major limitation of this study was the small number of participants. A larger group of participants would have further distinguished which strategies are useful when working with students with language learning impairments. Another limitation of the study was that speech language pathologists were reluctant to recommend teachers

because of their busy schedules. Additionally, teachers who were asked to participate in the stories often did not participate because of the time requirement required.

Directions for Further Research

Many avenues for future research are possible from the results of this study. Completion of studies with a larger participant base would be beneficial. A larger participant group would help to better differentiate between the strategies that identified teachers and matched teachers use. Another way teachers' strategies could be investigated would be to complete observations in the classroom in order to observe the strategies that were used that the teacher mentioned as well as ones that she/he did not mention.

Another direction for future research is to evaluate speech language pathologists to identify what strategies they use when working with students with language learning impairments.

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APPENDIX A

Strategy Definitions

Attention Strategies: Strategies that directed the student's attention to the lesson, which facilitated understanding of the content.

-Peer Support Models Strategies: Strategies in which students with language learning impairments were supported by other students in making sense of the content.

-Response Expectations Strategies: Strategies that provided the student with alternate ways to demonstrate learning of the content.

-Comprehension/ Extension Strategies: Strategies in which students with language learning impairments were supported by the teachers by providing extra practice and more experience with the content in order for them to be able to make sense of what they were learning.

-General Cueing Strategies: Strategies that directed the student to understanding and remembering the content.

-Schema Building: Strategies that support the student in his pursuit of making sense of the content by providing background knowledge and routines in activities.

-Confidence Building Strategies: Strategies that encourage the student in his pursuit of understanding the content.

-Preplanning/Preorganization Strategies: Strategies that prepared a foundation for the students so that they were successful in learning by doing such things as consciously thinking about the students' needs while planning the lessons.

-Practical Examples Strategies: Those strategies that helped the student make sense of the content by providing activities that allowed the student to synthesize and build on his knowledge about the content.

-Break-down/Simplification Strategies: Strategies that simplified or broke down the concepts into more understandable ways in order to facilitate learning of the lesson.