A Comparison of Traditional and Checklist Individualized Education Programs for Articulation Disorders

A Thesis
by
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ABSTRACT

A Comparison of Traditional and Checklist Individualized Education Programs for Articulation Disorders (May 1986)

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The purpose of this study was to compare the efficiency, the time economy, and the individuality of a student's program, of a checklist Individualized Education Program (IEP) and a handwritten IEP for articulation disorders. The subjects, a group of Speech-Language Pathologists, were asked to select the checklist IEP or the handwritten IEP as their preferred choice of developing IEPs.

The subjects were 30 Speech-Language Pathologists (SLPs) from Forsyth and Watauga Counties. These SLPs examined the checklist IEP for articulation disorders which was developed for the study, and completed a questionnaire in October 1985.

The data were analyzed by means of the Student's t-test and Chi Square for association. Frequency distribution was also used to describe the data. The Student's t-test and Chi Square showed positive correlations between several pairs of items from the
questionnaire. The frequency distribution showed that the handwritten IEP was no better at providing individuality of a student's program than the checklist IEP. Subjects were almost equally divided on this aspect. It was also shown that the checklist IEP does save time and is more efficient. Finally, the subjects preferred the checklist IEP instead of the handwritten IEP.
ACKNOWLEDGEMENTS

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abstract</strong></td>
<td>iii</td>
</tr>
<tr>
<td><strong>Acknowledgements</strong></td>
<td>v</td>
</tr>
<tr>
<td><strong>List of Tables</strong></td>
<td>viii</td>
</tr>
<tr>
<td><strong>Chapter</strong></td>
<td></td>
</tr>
<tr>
<td><strong>I. Introduction</strong></td>
<td>1</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>4</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>4</td>
</tr>
<tr>
<td><strong>II. Review of Related Literature</strong></td>
<td>6</td>
</tr>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>What the IEP is</td>
<td>7</td>
</tr>
<tr>
<td>The IEP Process and Requirements According to Public Law 94-142</td>
<td>8</td>
</tr>
<tr>
<td>The Teacher's View of the IEP</td>
<td>13</td>
</tr>
<tr>
<td>Foundations of the IEP</td>
<td>15</td>
</tr>
<tr>
<td>Alternate Means of Implementing the IEP</td>
<td>15</td>
</tr>
<tr>
<td>Conclusions</td>
<td>16</td>
</tr>
<tr>
<td><strong>III. Methods and Procedures</strong></td>
<td>18</td>
</tr>
<tr>
<td>Introduction</td>
<td>18</td>
</tr>
<tr>
<td>Subjects</td>
<td>18</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>18</td>
</tr>
</tbody>
</table>
Methods ........................................... 21
Statistical Methods .................................. 21
IV. RESULTS ............................................ 25
V. SUMMARY, DISCUSSION, AND RECOMMENDATIONS ......... 30
  Summary ............................................. 30
  Discussion .......................................... 30
  Recommendation for Further Study .................. 33
BIBLIOGRAPHY ......................................... 35
APPENDICES ............................................. 39
  A. Cover Letter ..................................... 41
  B. Checklist IEP Questionnaire ...................... 43
  C. Checklist IEP for Articulation Disorders ....... 46
VITA .................................................. 51
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identification Information of SLPs</td>
<td>23</td>
</tr>
<tr>
<td>2. Frequency Distribution</td>
<td>29</td>
</tr>
<tr>
<td>3. Chi Square for Association</td>
<td>30</td>
</tr>
</tbody>
</table>
Chapter I

INTRODUCTION

Communication is a process by which everyone functions and survives. Children who do not have effective communication skills suffer in every aspect of life, most importantly in their academic and social lives (Dublinske, 1978a). The handicap experienced by speech and language impaired children is extremely subtle. Although these children appear normal, and may be of average intelligence, they are prevented from communicating effectively.

Currently, children with handicaps are receiving considerable attention in federal legislation. There is a greater awareness of this group of children, once ignored, prompting America's government and people to deal with them. Communicatively handicapped persons have emerged as an identifiable group for whom programming and special services are being provided in the public school system (Britt, 1984).

As required by Public Law 94-142, passed in November 1975, (United States Office of Education, 1977), persons who provide special services, including speech-language pathologists, are required to develop an individualized education program (IEP) for every student served in their caseloads. While IEPs are valuable management tools, developing them is an extremely time consuming
task for the SLP (Dublinske, 1980). The IEP is a valuable device and will probably remain in the public schools. However, when SLPs are mandated by state or local policy to work with caseloads of 60, 80, or more students, it becomes too time consuming (Dublinske, 1980). It appears that the SLP is overworked with 1) caseloads that are too large, 2) excessive paperwork for all of these students, including IEPs, diagnostic findings reports, lesson plans, and daily data records, and 3) additional time consuming duties such as traffic duty, teachers meetings, professional meetings, and continuing education sessions. The IEP has become yet one more clerical matter that reduces available therapy time. SLPs do not have sufficient time to generate a handwritten IEP for so many children, and do it efficiently.

There is a need to assist the SLP to perform more effectively. The SLP's first priority is the student and the student's problem. Therefore, therapy must take precedence over all the activities a clinician must perform. After therapy, the time remaining is used for additional duties. For most clinicians, this is a small amount of time, and there is a need to execute these duties as quickly and effectively as possible. In the ideal situation, an attempt should be made to reduce paperwork and thus allow time for the primary obligation.
The purposes of this study were to 1) examine which IEP the SLPs chose, the checklist or the handwritten, 2) to determine whether the checklist format was more efficient than the handwritten IEP, and 3) to ascertain whether the checklist IEP adequately individualized the program for a student. This IEP issue is of major concern to a large percentage of SLPs, since PL 94-142 affects 43 percent of American Speech and Hearing Association (ASHA) membership (Sarnecky, Dublinske, & Laney, 1980). The checklist format was compared to the less structured format of general IEPs currently used. The questions asked were: 1) do the SLPs prefer the checklist IEP over the handwritten IEP? 2) is the checklist IEP more efficient than the handwritten? 3) does the checklist IEP individualize the child's program more than the handwritten? The comparison was made through the use of selected teachers' attitudes and rating scales comparing the two formats.

Many professionals are searching for and attempting to develop better ways to implement PL 94-142. To be more productive, the SLP needs to find more efficient means of managing non-therapy time. A means of being more productive is to develop an IEP that individualizes a child and requires less time to complete.

This study was extremely important because, currently, teachers are under close scrutiny by supervisors and the American
public concerning teaching competencies. When all of the paperwork and extra activities teachers must accomplish is considered, it becomes difficult for the teacher to polish teaching skills. It is important to provide a more effective and efficient means to plan for students. Paperwork is a part of every job, but for the SLP, if it is reduced, then more time is spent in therapy, helping those children for whom therapy is now mandated.

Hypotheses

To facilitate the analysis of the data, the hypotheses were tested at the .05 level of significance.

Hypothesis 1: SLPs will prefer the checklist IEP format over their handwritten IEP format.

Hypothesis 2: SLPs will find the checklist IEP more efficient than the handwritten IEP.

Hypothesis 3: SLPs will find that the checklist IEP provides more individuality of a student than the handwritten IEP.

Null Hypothesis: There will be no significant difference in SLP's preferences between the checklist IEP format and the IEP format currently used.

Limitations of the Study

1. The subject population was limited to SLPs in Forsyth and Watauga Counties, North Carolina.
2. The study included a small number of clinicians for making a statistical comparison. Random sampling was not feasible under these limitations.

3. Due to time restraints, the questionnaire was administered by mail.
Chapter II
REVIEW OF RELATED LITERATURE

Introduction

Although physically handicapping disorders are usually thought of when the word "handicapped" is mentioned, speech-language impaired students account for the largest percentage of all handicapped students. On a national basis, speech impaired children account for 37.4 percent of all handicapped children receiving services. Deaf, hearing impaired, and speech impaired together total 39.2 percent of all handicapped children. Each state and local education agency receives PL 94-142 funds based on speech and language impaired child count figures. Communicatively handicapped children generate the largest amount of funds (Dublinske, 1978b). Communicatively handicapped students have problems such as stuttering, impaired articulation, language deviance, or aberrant voice production, which adversely affect a child's academic performance (Sarnecky, Dublinske, & Laney, 1980).

Four years before the passage of PL 94-142, Chapter 766 in Massachusetts State Law was passed, and it served in part as a model for the Education of All Handicapped Children Act. Therefore, it could be evaluated to see what kind of effect PL 94-142 would have. In a survey concerning Chapter 766, given to
211 SLPs attending workshops in Massachusetts, definite professional activity changes were illustrated. The results showed that one of the most obvious increases occurred in paperwork and report writing.

What the IEP is

The IEP is a key component of PL 94-142 (Ballard & Zettel, 1978). Teachers are mandated by law to develop a written document for each handicapped child, regardless of the severity of the handicap (Dublinske, 1978a). The law mandated extensive identification and evaluation procedures for children, as well as a full services goal including programs for speech and language impaired, learning disabled, visually handicapped, and emotionally handicapped. It guaranteed due process procedures, regular parent consultation, comprehensive personnel development, the least restrictive educational environment, nondiscriminatory testing and evaluation, confidentiality of data and information, and a written IEP for each child.

The IEP is a management tool designed to ensure that each handicapped child is provided an appropriate special education. As a management tool, the IEP can be used to direct the development of a more detailed instruction plan. The detailed plan is not required for federal compliance (Dublinske, 1980).

Many state and local education agencies (LEAs) require procedures that exceed the requirements of PL 94-142. Congress did not
intend for the IEP process to become a burdensome activity. Unfortunately, some school systems have become over-conscious about compliance, and have complicated matters (Sarnecky et al. 1980).

One important effect of the demand for accountability and documentation in making IEP decisions has been excessive concern over compliance with the procedural requirements of PL 94-142 and its regulations, with some loss of concern for substantive compliance. While procedural compliance ensures (as some wits have put it) "staying out of jail," it does not guarantee substantive compliance—the development of a successful program for an individual student. The distinction between procedural and substantive compliance is important because it reminds us that it is possible to meet the letter of the law, without meeting its intent (Deno & Mirkin, 1980, p. 95).

The IEP Process and Requirements According to PL 94-142
PL 94-142 regulations do not specify format or length of the IEP. These aspects have been left to the discretion of state and local agencies (Dublinske, 1980).

The required components of the IEP are:

1. Statement of the child's present level of performance
2. Statement of annual goals
3. Short-term instructional goals
4. Statement of the specific educational and related services to be provided to the child
5. Extent to which the child will be able to participate in the regular educational program
6. Projected date of initiation of services
7. Anticipated duration of services
8. Appropriate objective criteria to determine if instructional objectives are achieved
9. Evaluative procedures to determine if instructional objectives are achieved
10. Schedule of annual review (Dublinske, 1978a, p. 388)

The steps involved in developing an IEP are:

1. Referral
2. Notice of assessment
3. Assessment
4. Notice of IEP team meeting
5. IEP team meeting
   a. report assessment findings
   b. determination of eligibility
   c. selection of goals
   d. selection of short term objectives
   e. determination of placement
   f. consent to placement
6. Annual review
   a. assessment
   b. team meeting
      1. report assessment findings
      2. determination of placement
      3. long-term goals
      4. short-term goals (Enell & Barrick, 1983, p. 233)

As a part of the IEP team, the SLP should serve as:
1. Provider of information--the clinician has a knowledge of district programs, and can give the parents information on what is possible for the child.
2. Advocate for each child--because the clinician sees the student individually or in small groups, he or she is best qualified to suggest program choices to benefit the child.
3. Consultant for the parents in program planning.
   (Miller, 1980, p. 80)

It has been conservatively estimated that the amount of time involved in the planning, writing, and meeting stage of the IEP is nearly five hours per child, if everything goes smoothly (Gerardi, Crohe, Benedict, & Coolidge, 1984). In the case of reluctant or uncooperative parents, this single provision can add five additional hours per child to the IEP process. A child's IEP can involve from five to fifteen pages, depending on the extent of the child's involvement in regular education (Gerardi
et al., 1984). It is almost comparable to a job change, i.e., from SLP to secretary (Glick & Schubert, 1981). The following is a time line description of the IEP process:

After the referral and consent to assessment, it takes one to two weeks to complete assessment. It also takes another one to two weeks to hold the IEP meeting. Teachers report that the IEP is usually written within four weeks, "with no problem" (Enell & Barrick, 1983, p. 233). It appears that the authors are not thinking about the intent of PL 94-142. It is a problem when a child is not seen in therapy for two months because of procedures.

The extra work required by LEAs only complicates procedures. It also adds to paperwork and time away from therapy with students who truly need their teachers (Sarnecky et al., 1980). The following are quotes from authors who believe the IEP process adds paperwork and is too time consuming:

"The problem of IEPs for SLPs is that the IEP process requires considerable paperwork" (Dublinski, 1980, p. 68). "Another major issue in developing IEPs is time" (Turnbull & Turnbull, 1978, p. 127).

"Increases occurred in paperwork and report writing" (Blanchard & Nober, 1978, p. 81).
"There is an increase of paperwork required to comply with federal, state, and local program standards" (Sarnecky et al., 1980, p. 131).

"The IEP process is usually described as a paperwork 'monster' and an inefficient time consumer" (Gerardi et al., 1984, p. 40).

People originally hired to facilitate mainstreaming are spending enormous amounts of time on paperwork and the demands of due process spelled out in PL 94-142; students and teachers are not getting all the assistance they anticipated. (Glick & Schubert, 1981, p. 327)

"High caseload requirements in many state and local education agencies prevent SLPs and audiologists from providing appropriate services" (Sarnecky et al., 1980, p. 131.)

"Many state and local education agencies require IEP procedures that exceed the requirements of PL 94-142" (Sarnecky et al., 1984, p. 133).

"ASHA indicated also that SLPs and audiologists spend an inordinate amount of time developing IEPs" (Dublinske, 1980, p. 70).

When are IEP committees going to meet for planning? How can time for parent conferences be found? When will committee members actually write the plan? Will
time be available to conduct the annual review?
(Turnbull & Turnbull, 1978, p. 12)

"When all the tasks of IEP development are considered, one wonders if teachers will have time to teach" (Turnbull & Turnbull, 1978, p. 127). At least ten authors are in agreement; IEPs create paperwork and consume too much time.

The Teacher's View of the IEP

In weighing the value of IEPs, a study was conducted to evaluate special education techniques. In general, there seemed to be considerable dissatisfaction with various aspects of the IEP process and format, such that the majority of the staff felt that the time spent working on the IEP was not worth the effort (Skokie School District 68, Ill., 1983). Some people feel strongly about the ill effects of PL 94-142 (Gerardi, et al., 1984).

Hailed by some of its supporters as a "giant step for handicapped children," a closer analysis of its implementations indicates that it might more reasonably be evaluated as the single most critical detriment to appropriate education for these children (Gerardi, et al., 1984, p. 40).

Teachers' attitudes and perceptions about IEPs vary, ranging from enthusiastic to annoyed. In the study done in Skokie School District (1983), the majority of the special education teaching
staff viewed IEPs as being mildly to moderately useful in working with their students. However, a significant minority view IEPs as not useful at all. Only 26 percent felt that the time spent on an IEP was clearly worth the effort (Skokie School District 68, Ill., 1983).

Bogdan (1983) talked about the degree of seriousness with which teachers view the IEP. He reported that some take it quite seriously and others see it as an administrative formality. He also reported that while the IEP is the official plan for the student, most teachers develop an unofficial IEP. The official IEP is used to placate all those involved, while the unofficial IEP represents what is actually employed. Bogdan (1983) even suggested that the diagnoses and pupil descriptions may be manipulated to have the official IEP align with desired placement. He called the committee and the IEP a "front stage" (Bogdan, 1983). To what avail is all that work, if the IEP is not followed?

As for manipulation, da Silva (1982) reported on a teacher who was told by an administrator that because funds were unavailable, she could not put anything in an IEP that would cost money for the school district. This illustrates a very real problem faced by school districts: cost of compliance with PL 94-142. Having to stay within a certain budget, but still being
responsible for providing an appropriate education only makes IEP writing harder for the SLP.

Foundations of the IEP

Paradoxically, despite some teacher's negative perceptions, the underlying concepts of the IEP are sound—both philosophically and educationally. "The problem is that 'truth' carried beyond its logical relevance results in decisions that frequently are far removed from the basic knowledge that served as its foundation" (Gerardi et al., 1984, p. 41). Philosophically, the IEP is based on participatory democracy; the legal right or political opportunity of those affected by a public agency's decision to participate in making these decisions (Turnbull & Turnbull, 1978). The educational base is the trend toward individualization of instruction (Gerardi et al., 1984).

Alternate Means of Implementing the IEP

The only way to make something exceptional and keep it exceptional, is to continuously evaluate it, and make improvements if necessary. Since the IEP is relatively new and has not been proven completely dependable, professionals cannot perceive it, in its present form, as the most efficient way. Teachers, administrators, and researchers all over the country see the need to develop a more efficient means of implementing PL 94-142, and managing IEPs (Deno & Mirkin, 1980). Already, some alternatives are being tested. Data based IEPs represent one
person's attempt (Deno & Mirkin, 1980). Computerized IEPs have also made the process more efficient (Enell & Barrick, 1983). In the Skokie study, teachers were asked to make suggestions for improving the IEP. The two main suggestions were to use a consistent format and to spend less time filling out IEPs. Another innovative idea is a project called the Kentucky Individualized Kindergartens (KIK) which is a program for high risk children. In this program, there is a group of individual specialists composed of kindergarten teachers, LEA personnel, and Field Service Consultants (Bright & Cansler, 1983). Some studies actually suggest taking therapy time to perform the tasks of the IEP (Turnbull & Turnbull, 1978). This defeats the purpose if the teacher is not there to teach what is in the IEP.

Conclusion

A model form is necessary for all educators to use. Sarnecky et al., (1980) report that SLPs and audiologists are searching for one model of THE model to follow in developing an IEP. Maher (1980) suggests that training in the development of complete IEPs would be useful in improving overall team effectiveness and efficiency. This would be good especially for older teachers who did not get the IEP concept in their education. Lack of preparation at the college level, lack of experience, and lack of training may prevent teachers from feeling competent with IEPs (Glick & Schubert, 1981). Some
programs have even hired consultants. In this way, after information is given through inservice training, the consultant is available to the teacher who is actually preparing the IEP. ASHA has invited SLPs with concerns over the amount of paperwork and time involved in developing IEPs and implementing PL 94-142, to submit them to ASHA school service program (Dublinske, 1980).
Chapter III

METHODS AND PROCEDURES

Introduction

This chapter describes the subjects and methodology involved in the study. The instrument employed for data collection and statistical procedures used for the analysis of data are also presented.

Subjects

Thirty subjects were employed in this study, 29 female and 1 male. The subjects were SLPs from two North Carolina counties (Forsyth and Watauga). The total number of clinicians in Forsyth County was 25 and Watauga County employed 5. All SLPs in both counties were involved in the study. As described in Table 1, the caseload range was 21 to 90 students, with a median of 54. The mean number of years spent practicing speech-language pathology in the public school by these SLPs was 7.85, with a range of experience from 1 year to 23 years.

Instrumentation

This study employed a checklist IEP which was developed by the author to satisfy the requirements of an IEP by PL 94-142 (Office of the Federal Register, 1985). The checklist IEP was designed to save time and to generate more complete IEPs. The
following are the IEP requirements of PL 94-142 and where it appears on the checklist IEP:

1. Statement of the child's present level of performance - Section V.
2. Statement of annual goals - Section VI part A.
3. Short term instructional goals - Section VI part B.
4. Statement of the specific educational and related services to be provided to the child - Section VII.
5. Extent to which the child will be able to participate in the regular program - Section VII part B.
6. Projected date of initiation of services - Section VII part B.
7. Anticipated duration of services - Section VII part B.
8. Appropriate objective criteria to determine if instructional objectives are achieved - Section IV & VI.
9. Evaluative procedures to determine if instructional objectives are achieved - Section IV.
10. Schedule of annual review - Section I.

A questionnaire was developed to measure the SLP's acceptance of the checklist IEP. This 23-item questionnaire consisted of questions regarding the subject's identification information and opinions of the checklist format. Fowler's book,
**Survey Research Methods**, was used in the development of the questionnaire (Fowler, 1984).

To satisfy the design of this study, questions IIm (regarding individuality), IIn (regarding time), IIo (regarding efficiency) and IIr (regarding preference) were asked. Additionally, many of the questions dealt with time, some more directly than others. The examiner wanted to measure the degree to which the subjects were concerned about time and paperwork. Subjects were also asked about duplication of IEPs, to see if there was a waste of time. Several questions dealt with inservice training on the IEP process, the year the highest degree was completed, and how many years the subject had practiced speech pathology in the public schools. These questions were used to ascertain whether the subject had received inservice training and therefore had a full knowledge of IEPs. The subjects were also asked if they were satisfied with the handwritten IEP and which IEP was preferred. Identification questions were asked such as the number of students in the subject's caseload, how long it takes to complete an IEP, and how long (in pages) the IEP is. A few adjunctive questions were posed. Subjects were asked how long at the beginning of each school year it was before students were seen and whether therapy time had been used for IEP completion. Subjects were also asked if they wanted ASHA to develop guidelines for IEP writing.
Methods

A cover letter, a description of the project, the checklist IEP developed for the study, and the questionnaire were mailed to each of the Forsyth County subjects on October 4, 1985. These documents appear in the Appendix. The examiner was present at a Forsyth County monthly meeting of SLPs on October 10, 1985, and collected the questionnaires personally. Similar packets were delivered to the Watauga County SLPs on October 15, 1985 and responses were collected by the examiner on October 18, 1985.

Statistical Method

The frequency distribution was obtained from the data in order to analyze questions IIm, IIIn, II Io, and IIIr. Item IIm dealt with whether or not the SLP thought the checklist IEP individualized a student's program more. Item IIIn dealt with whether the checklist IEP took less time to complete than the handwritten IEP. Item II Io asked if the checklist was more efficient than handwritten IEPs. Finally, item IIIr simply asked which IEP the subject preferred, the checklist or the handwritten IEP.

Correlations between certain questionnaire items were also examined. The one-tailed Student's t-test (.05) and Chi Square for association were employed to determine the relationship between two particular items. The Student's t-test (.05) was used to examine the relationship between the amount of years
practicing speech pathology in the public schools and whether or not the SLP had ever received inservice training. Items Id and Ij were employed here. The Chi Square for association was used to examine correlations between several pairs of items from the questionnaire. First of all, a correlation between the preference of the SLP and whether the SLP thought there was ever any duplication of IEPs was drawn. Items IIr and IIIf were used. Then, a correlation between the preference of the SLP and whether or not the SLP was concerned about time and paperwork involved was studied. Items IIr and IIIi were used. Finally, a correlation between the SLP's satisfaction with their current IEP and whether or not there was a concern about time and paperwork was examined. Items III and IIIi were used.
Table 1

Identification Information of SLPs

<table>
<thead>
<tr>
<th>Subject</th>
<th>Years of Pub. School Experience</th>
<th>Year of Highest Degree</th>
<th>Caseload Size *</th>
<th>Time to Complete an IEP **</th>
<th>Average Length (in pages) of an IEP</th>
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<td>2</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>1973</td>
<td>8</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

KEY: *
1 = Less than 20  6 = 61-70  1 = less than 1 hour  6 = 5-6 hours
2 = 21-30          7 = 71-80  2 = 1-2 hours        7 = more than
3 = 31-40          8 = 81-90  3 = 2-3 hours        6 hours
4 = 41-50          9 = more   4 = 3-4 hours
5 = 51-60          than 90   5 = 4-5 hours
<table>
<thead>
<tr>
<th>Subject</th>
<th>Years of Pub. School Experience</th>
<th>Year of Highest Degree</th>
<th>Caseload Size *</th>
<th>Time to Complete an IEP **</th>
<th>Average Length (in pages) of an IEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>7</td>
<td>1978</td>
<td>5</td>
<td>1</td>
<td>4</td>
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<tr>
<td>17</td>
<td>9</td>
<td>1980</td>
<td>6</td>
<td>1</td>
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<td>18</td>
<td>1</td>
<td>1985</td>
<td>3</td>
<td>2</td>
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<td>1982</td>
<td>3</td>
<td>1</td>
<td>5</td>
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<td>7</td>
<td>1979</td>
<td>7</td>
<td>1</td>
<td>3</td>
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<tr>
<td>23</td>
<td>8</td>
<td>1979</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>1977</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25</td>
<td>2</td>
<td>1980</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>5</td>
<td>1978</td>
<td>4</td>
<td>3</td>
<td>3</td>
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<td>27</td>
<td>10</td>
<td>1975</td>
<td>3</td>
<td>1</td>
<td>2</td>
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<tr>
<td>30</td>
<td>10</td>
<td>1977</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

KEY: *
1 = Less than 20  6 = 61-70  1 = less than 1 hour  6 = 5-6 hours
2 = 21-30  7 = 71-80  2 = 1-2 hours  7 = more than
3 = 31-40  8 = 81-90  3 = 2-3 hours  8 = more than
4 = 41-50  9 = more  4 = 3-4 hours  9 = more than
5 = 51-60  than 90  5 = 4-5 hours  10 = more than
Chapter IV
RESULTS

Results

The frequency distribution was obtained in order to address the three main questions of the study; 1) did the subjects prefer the handwritten IEP or the checklist IEP? 2) did the subjects think the checklist IEP was more efficient and took less time to complete? and finally 3) did the subjects think that the checklist IEP adequately individualized the program for a student?

The frequency distribution of subjects concerning hypothesis one is presented. Hypothesis one tested whether the SLPs preferred the checklist IEP over the handwritten IEP. Twenty-seven subjects (90%) preferred the checklist IEP while only three subjects (10%) preferred the handwritten IEP. Hypothesis one can therefore be accepted.

Hypothesis two dealt with the assumption that SLPs will think the checklist IEP is more efficient than handwritten IEPs. Twenty-seven subjects (90%) thought that the checklist IEP would be more efficient, while only three subjects (10%) thought the checklist IEP would not be more efficient. Hypothesis two can therefore be accepted. The subjects were in almost total agreement on the aspect of time. Twenty-nine (96.7%) thought the
checklist IEP would save time, while only one subject (3.3%) thought the checklist IEP would not save time.

Hypothesis three stated that there would be more individuality of a student's program with the checklist IEP. The subjects were almost equally divided in their attitudes concerning individuality. Fourteen subjects (46.7%) thought that the checklist did provide individuality, while 16 subjects (53.3%) did not think that the checklist provided individuality. Hypothesis three cannot be accepted. Table 2 demonstrates these frequency distributions.

Supplemental information was also obtained from the data analysis to examine certain relationships between questionnaire items. The Student's t-test was used to examine questionnaire items Ia and Iaj, which dealt with how many years the subject had been practicing speech pathology in the public schools and whether inservice training in the writing of IEPs had been received. There was no significant difference at the .05 level in the number of years spent practicing speech pathology in the public schools between those who had received inservice training and those who had not. The t-value was 1.36 with 28 degrees of freedom.

Chi Square for association was used to examine several pairs of questionnaire items. Items IIf and IIr looked at the correlation between which IEP the subjects preferred and whether
the subjects thought there was ever any duplication of IEPs. The raw Chi Square was 0.37 with one degree of freedom. Twenty-seven subjects (90%) thought there was duplication of IEPs. Twenty-seven subjects (90%) preferred the checklist IEP. The data suggested that the subjects who thought there was duplication in the completion of handwritten IEPs, tended to prefer the checklist IEP. Chi Square was also used to study a correlation between subject preference and whether the subjects were concerned about time and paperwork involved in handwritten IEP completion. Items III and IIr were employed. The raw Chi Square was 19.29 with one degree of freedom. Twenty-eight subjects (93.3%) were concerned about time and paperwork. Twenty-seven subjects (90%) preferred the checklist IEP. Results showed this to be significant at the .05 level. The data suggested that an SLP who was concerned about time and paperwork, also preferred the checklist IEP. Finally, Chi Square was used to examine the correlation between items III and III. These items dealt with the SLP's satisfaction with the handwritten IEP and whether or not there was a concern about time and paperwork. The raw Chi Square was 10.71 with one degree of freedom. Only five subjects (16.7%) were satisfied with their current IEP, while 28 subjects (93.3%) were concerned about time and paperwork. Subjects who were concerned about the time and paperwork tended to be dissatisfied with their current IEP.
Results showed that this relationship is significant at the .05 level. Table 3 demonstrates the Chi Square for association. The data suggested that SLPs are dissatisfied with handwritten IEPs and the amount of time and paperwork that is spent completing them.

Table 2.

Frequency Distribution.

<table>
<thead>
<tr>
<th>Items</th>
<th>Absolute Frequency</th>
<th>Relative Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item M</td>
<td>Y</td>
<td>14</td>
</tr>
<tr>
<td>Individually</td>
<td>N</td>
<td>16</td>
</tr>
<tr>
<td>Item N Less</td>
<td>Y</td>
<td>29</td>
</tr>
<tr>
<td>Completion Time</td>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>Item O</td>
<td>Y</td>
<td>27</td>
</tr>
<tr>
<td>Efficiency</td>
<td>N</td>
<td>3</td>
</tr>
<tr>
<td>Item R</td>
<td>HW</td>
<td>3</td>
</tr>
<tr>
<td>Preference</td>
<td>CL</td>
<td>27</td>
</tr>
</tbody>
</table>

HW = Handwritten  
CL = Checklist  
Y = Yes  
N = No
### Table 3.

**Chi Square for Association.**

<table>
<thead>
<tr>
<th></th>
<th>Count &amp; Percentage</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dup. by Pref.</strong></td>
<td></td>
<td><strong>HW</strong></td>
<td><strong>CL</strong></td>
</tr>
<tr>
<td><strong>Pref.</strong></td>
<td></td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td><strong>Dup.</strong></td>
<td>Y</td>
<td>11.1%</td>
<td>88.9%</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.0%</td>
<td>90.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td><strong>Chi Square = 3.7 with 1 degree of freedom.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                  | Count & Percentage |                  |                  |
| **Pref. by Con.**|                    | **HW** | **CL** |                  |
| **Pref.**        |                    | 1     | 27    | 28               |
| **Con.**         | Y                  | 3.6%  | 96.4% | 93.3%            |
|                  | N                  | 2     | 0     | 2                |
|                  | 100.0%             | 0.0%  | 6.7%  |
|                  | 2                  | 27    | 100.0%| 90.0%            |
| **Chi Square = 19.28 with 1 degree of freedom.** |                  |                  |                  |

|                  | Count & Percentage |                  |                  |
| **Sat. by Con.** |                    | **Y** |                  |                  |
| **Con.**         | 3                  | 25    | 28               |
| **Y**            | 10.7%              | 89.7% | 93.3%            |
|                  | 2                  | 0     | 2                |
| **N**            | 100.0%             | 0.0%  | 6.7%             |
|                  | 5                  | 25    | 16.7%            |
|                  |                    | 83.3% |
| **Chi Square = 10.71 with 1 degree of freedom.** |                  |                  |                  |

**KEY:**
- pref. = preference
- dup. = duplication
- sat. = satisfaction
- con. = concern
- HW = handwritten
- CL = checklist
- Y = yes
- N = no
Chapter V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Summary

This study had three purposes. The first purpose was to determine whether or not the checklist IEP individualized a student's program as effectively as the handwritten IEP. The second purpose was to determine if the checklist IEP was as efficient as the handwritten IEP. Finally, the third purpose was to identify which IEP the SLPs preferred, the handwritten or the checklist.

Thirty SLPs were the subjects involved in this study. Each subject read a description of the study and examined the checklist IEP developed for the study, and then completed a questionnaire concerning the checklist IEP.

The data were analyzed by means of frequency distribution, the Student's t-test, and Chi Square for association.

Discussion

In order to have a successful and progressive speech-language program, the SLP should devote the major portion of time to providing direct service to students. Part of this portion of time must be spent creating workable lesson plans. The other part should be spent executing the lesson plans and doing it effectively. Paperwork is a part of every job, and SLPs
are no exception. However, for the SLP, if paperwork can be reduced, then more time is used creating and implementing effective lesson plans. SLPs and researchers see the need to reduce time and paperwork required to complete the IEP process. Only when SLPs have more time will they be able to better implement PL 94-142.

It appears from the results of this study that SLPs reacted positively to the checklist IEP. The data from this study implies the following:

1) SLPs prefer the checklist IEP instead of the handwritten IEP.

2) The checklist IEP is more efficient than the handwritten IEP.

3) The handwritten IEP is no better than the checklist IEP when the aspect of individuality is considered.

While it doesn't directly relate to the main questions of the study, analysis of the questionnaire does add other interesting information. For example, there was no correlation between the number of years subjects had been practicing speech pathology in the public schools and whether or not they had received inservice training in IEP completion. There was however, a positive correlation between the questions dealing with duplication of handwritten IEPs and the subject's preference. Results of the data analysis suggest that because a
large portion of subjects think that there is duplication of handwritten IEPs, they prefer the checklist IEP. There was also a positive correlation between the subjects' preference and their concern about time and paperwork, indicating that a large percentage are concerned, and therefore prefer the checklist. Indications of a correlation between the SLP's satisfaction with the handwritten IEP and their concerns about time and paperwork was also proven. SLPs who are concerned about time and paperwork are not satisfied with the current, handwritten IEP.

The results of this study suggest that the subjects are not satisfied with the handwritten IEP. Time and paperwork involved make it difficult, if not impossible, for SLPs to accomplish all the work that must be accomplished. When examining all the components of the SLP's responsibilities, the most important aspect is therapeutic time. SLPs know this and want a more efficient means of performing the job. Therefore, the subjects accepted the checklist IEP and gave encouraging comments. Over one-half of the subjects wrote emphatically that the checklist IEP would save time. The following comments were made by subjects when asked, "what did you like about the checklist IEP?"

"The efficiency of this IEP, yet it doesn't take long to do. I am not satisfied with the handwritten IEP."

"It is more specific, takes less time, and will improve the consistency of IEPs at various schools."
"It is more time efficient so that you can begin therapy sooner in the school year. Also, it is more uniform throughout the system."

"I liked all of it! Full of the details you would need. Would help us to be more uniform. Plus, it saves time."

"Gives concise information."

"The level of performance is in layman's terms."

"Everything!"

"Handwritten is ideally the best, but with caseload size--it is not feasible."

"Goals well-stated and would be easily followed for therapy. I like the phoneme errors broken down by phonological placement."

"Easier to read."

"More specific than handwritten IEPs."

"I'd like to see IEPs computerized."

Many comments were made about specific portions of the checklist IEP. Those sections liked best by subjects were the Present Level of Performance and Goals/Objectives sections.

Recommendations for Further Study

It was found that the checklist IEP did not individualize a student's program any better than the handwritten IEP. More work needs to be done to better provide individuality. More data should then be collected to examine this aspect.
An important consideration for further research would be to create a checklist IEP for voice, fluency, and language disorders. Language would be the most challenging of the three. A few SLPs who were consulted during this study expressed negative reactions to the idea of a language checklist IEP. These SLPs indicated that that would be too much of an undertaking because language was too broad for one IEP.

A longitudinal study is another possibility. The programs of students under a handwritten IEP and students under a checklist IEP could be compared to determine which is the most productive and successful program. This study could also be used to see under which program the SLP spent more time with the student.
BIBLIOGRAPHY


______. (1978b). Notes from the school services program. Language, Speech, and Hearing Services in the School, 9, 139-141.


Maher, C. (1980). Training special service teams to develop IEPs. Exceptional Children, 47, 206-211.


APPENDIX A

Cover Letter
Dear Speech-Language Pathologist:

I am currently working on my Master's Degree in Speech Pathology at Appalachian State University. In an effort to complete my degree requirements, I have recently started working on my Master of Arts Thesis.

Enclosed, you will find the abstract, a check list format of the IEP that I have developed, and a short questionnaire regarding your opinions on my check list IEP. Please take the time to review these and complete the questionnaire. I will be present at your meeting on Thursday October 10, 1985, and will collect them then. Please remember to bring them at that time.

Thank you for your time and cooperation.

Sincerely,

Amy Hood
APPENDIX B

Check List IEP Questionnaire
APPENDIX B

Check List IEP Questionnaire

I. a. Name of supervisor _____________________________.

b. Total number of clinicians in the school system ___.

c. Total number of students in therapy system-wide. ___.

d. How many years have you been practicing speech pathology in the public school? ___________.

e. What year did you finish your highest degree? _____

II. a. Do all of the clinicians within your school system use the same IEP? _______________

b. What is the average caseload per clinician? Please circle. Less than 20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, more than 90.

c. What is your caseload currently? Please circle. Less than 20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, more than 90.

d. Approximately how long does it take a clinician to complete each IEP? Please circle. Less than one hour, 1-2 hours, 2-3 hours, 3-4 hours, 4-5 hours, 5-6 hours, more than 6 hours.

e. How long is your average IEP? Please circle. 1 page, 2, 3, 4, 5, 6, 7, 8, 9, 10, 10+ pages.

f. Is there ever any duplication of IEPs (in other words, do you ever feel that you are writing the same thing over and over again?) Please circle Yes No

g. Approximately how long, at the beginning of each year, is it before you actually start seeing students? Please circle. 3 days, 1 week, 2 weeks, 3 weeks, 1 month, 1 & one-half months, more than 1 and one-half months.
h. Have you ever taken therapy time during the year to complete IEPs, have IEP conferences, or annual reviews? Please circle. Yes   No

i. Are you concerned about the amount of time IEPs consume and the paperwork involved? Please circle. Yes   No

j. Have you ever had in-service training in the content and writing of IEPs? Please circle. Yes   No

k. Would you like ASHA to develop guidelines for writing IEPs? Please circle. Yes   No

l. Are you satisfied with your current IEP? Please circle. Yes   No

m. Do you think that the check list IEP individualizes children more than "handwritten" IEPs? Please circle. Yes   No

n. Do you think that the check list IEP will take less time to complete than "handwritten" IEPs? Please circle. Yes   No

o. Is the check list IEP more efficient than your current IEP? Please circle. Yes   No

p. Do you like any aspect of the check list IEP? Please circle. Yes   No

q. Is yes, what do you like about the check list IEP?

r. Which IEP do you, as a professional, prefer? Please circle. Handwritten IEP   Check list IEP
APPENDIX C

Check List IEP for Articulation Disorders
APPENDIX C

Check List IEP for articulation disorders

I. Student

Address ________________________________
Grade ________________________________
DOB ____________________________________
Age ___________________________________
IEP from __________________ to ____________

II. Placement Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. _______________</td>
<td>Speech Pathologist</td>
</tr>
<tr>
<td>b. _______________</td>
<td>Referring Teacher</td>
</tr>
<tr>
<td>c. _______________</td>
<td>Principal</td>
</tr>
<tr>
<td>d. _______________</td>
<td>Parent</td>
</tr>
</tbody>
</table>

III. Parental Agreement

I have had the opportunity to participate in
the development of the Individual Education Program for my
child.

I agree with the IEP.

I disagree with the IEP.

_________________________  ____________________________
Parent's Signature        date

IV. Diagnostic Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>date tested</th>
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</thead>
<tbody>
<tr>
<td>a. Arizona Articulation Proficiency Scale</td>
<td>____________</td>
</tr>
<tr>
<td>b. Fisher-Logeman Test of Artic.</td>
<td>____________</td>
</tr>
<tr>
<td>c. Goldman Fristoe Test of Artic.</td>
<td>____________</td>
</tr>
<tr>
<td>d. Templin-Darley Tests of Artic.</td>
<td>____________</td>
</tr>
</tbody>
</table>
V. Present Level of Performance

A. Intelligibility

- speech is normal
- errors are occasionally noted in continuous speech
- speech is understandable although noticeably in error
- speech is difficult to understand
- speech is unintelligible

B. Phonemes in Error

- stops (p, b, t, d, k, g)
- fricatives (m, f, v, z, s, z)
- affricates (ts, d)
- liquids (l, r)
- glides (w, j)
- glottal (h)
- nasals (m, n, nj)
- bilabials (p, b, m, w)
- labiodentals (f, y)
- linguadentals (θ, ʌ)
- velars (k, g)
- s blends (sl, sm, sn, sk, sp, sw, st)
- r blends (fr, kr, dr, tr, br, pr, thr)
- l blends (sl, bl, pl, fl, gl)

VI. Goals/Objectives

A. General Goals

The student will be able to identify auditorily the target phoneme when:
- paired with the substituted sound.
- paired with other sounds.
- used in syllables.
- used in words.
- used in sentences.
The student will be able to describe the appropriate tongue, teeth, and lip placement for target phoneme.

The student will be able to produce the target phoneme both correctly and incorrectly, on command (to insure his/her ability to discriminate).

B. Correction of Phonemes

The student will use the target phoneme in isolation, vowels, and syllables with 80 percent accuracy during three consecutive sessions.

The student will use the target phoneme in words, phrases, and sentences with 80 percent accuracy during three consecutive sessions.

The student will use the target phoneme in reading with 80 percent accuracy during three consecutive sessions.

The student will use the target phoneme in conversation with the SLP with 80 percent accuracy during three consecutive sessions.

The student will use the target phoneme in conversation with someone other than the SLP with 80 percent accuracy during three consecutive sessions (to insure generalization).

The student will use the target phoneme in conversation after a two-week interval without therapy with 80 percent accuracy.

The student will use the target phoneme in conversation after a four-week interval without therapy with 80 percent accuracy.
VII. Placement

A. Therapy type

<table>
<thead>
<tr>
<th></th>
<th>Group therapy</th>
<th>Individual therapy</th>
</tr>
</thead>
</table>

B. Initiation and Duration of Services

1. Date therapy initiated ___________
2. Minutes in therapy per session ___________
3. Number of sessions per week ___________
4. Days of therapy ___________
5. Number of times consulting with classroom teacher per month ___________
6. Number of times consulting with parents per semester ___________
7. Estimated number of weeks of service ___________
8. Duration of service ___________
9. Percentage of time in regular classroom ___________
VITA

Amelia Toland Hood was born on September 11, 1961. She graduated from Providence Day School in June, 1980. The following August, she entered Appalachian State University, and in May, 1984 was awarded the Bachelor of Science degree in Speech Pathology and Audiology. Ms. Hood began graduate work at Appalachian State University in August 1984. She is a member of the National Student Speech, Language, and Hearing Association.

Ms. Hood's parents are Dr. and Mrs. Christopher Kennedy Hood of Charlotte, North Carolina.