Using an Accountability Tool to Improve the Quality of Outcomes on Individual Family Service Plans

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Abstract

This study investigated using a state's Part C early intervention accountability tool to increase the number of outcomes meeting compliance within IFSPs. The Case Review Tool (CRT) was used to examine differences from year one to year three on three measures of quality outcomes. There was no evidence of change in two of the measures, but there was evidence that IFSP outcomes increased in the components of functional and measureable after three years of using the CRT. There was also an increase in the number of outcomes from year one to year three.

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Federal programs require monitoring and accountability systems at the state level to assure that early intervention services are delivered to families and their child with disabilities according to standards outlined in the Individuals with Disabilities Education Improvement Act (IDEA, 2004). Accountability serves an important purpose in early intervention programs under Part C of IDEA, the birth to three early intervention systems for infants and toddlers with developmental delays and their families. Every child eligible for Part C services must have an Individualized Family Service Plan (IFSP) based on their strengths and challenges, including outcomes outlining the goals of the upcoming year. Early interventionists, those who work in the birth to three Part C programs, work with families to write outcomes based on the needs of the child and family.

The assessment of functional outcomes embedded in routines is often difficult (Bradley et al., 2007; Jung & Baird, 2003) due to the qualitative aspect of the process. Early interventionists continue to struggle to create quality outcomes on a consistent basis (NECTAC, 2008). The development of outcomes for the IFSP is "complicated by the fact that most professionals in early intervention programs have little training in assessing family needs," which is vital to the determination of meaningful outcomes (Bailey & Simeonsson, 2001, p. 117).

The outcomes are the foundation for services within the IFSP and serve a vital role in meeting the needs of the child. According to IDEA 2004, IFSP's must include measurable results and be developmentally appropriate. In order to this outcomes must

be embedded in family routines, but this is challenging. The early interventionist's role is to assist the team in formalizing outcomes, but teams continue to need performance support in order to meet compliance standards set forth by the federal government to write meaningful, quality outcomes. Despite single professional development training events, early interventionists continually struggle to write quality IFSP's with functional and measurable outcomes (Jung, 2010; McWilliam, 2010).

The purpose of this study is to determine if a tool used for state accountability purpose can increase the quality of IFSP outcomes for early interventionists in the field. One state's monitoring process uses a quantitative tool to merge professional development, technical assistance, and accountability systems. This targets increased adherence to federal regulations and quality outcomes within IFSP's over time.

Literature Review

State Models

Over the years, state systems have used varied approaches to increase the overall quality of IFSP as well as comply with federal regulations. The National Early Childhood Technical Assistance Center (NECTAC) provides resources and guidance to state systems to create improved early intervention and accountability programs. For example, in 2007, Wyoming worked with NECTAC to improve its Part C monitoring and general supervision system. The system included, "multiple methods to: ensure implementation of IDEA and the accountability of regional programs and their providers; identify and correct noncompliance; facilitate improvement; and support practices that improve results and functional outcomes" (Kasprazak, Hurth, Lucas, Marshall, Terrell & Jones, 2010). The result was a new monitoring manual and a procedure manual to help staff understand new state procedures (Kasprazak, et al., 2010).

The state of Missouri also worked with NECTAC to improve Part C services. The focus of the technical assistance from NECTAC was to build family capacity in everyday routines and activities. A plan was made to "include a component to increase the knowledge and skills of local programs and practitioners so that they were better able to develop high quality IFSPs in strengthened partnership with families" (Kasprazak, et al., 2010). As a result, Missouri First Steps IFSP Quality Indicator Rating Scale (QIRS) was developed in 2005 to train staff about quality indicators in IFSPs and the monitoring process. The new system using the QIRS created a monitoring system with built-in training materials for staff and real-time data sharing with the ultimate goal of improving the quality of IFSPs and family centered services (Kasprazak, et al., 2010).

Many states rely on IFSP guidance documents to give support to early intervention teams writing IFSP's in the field. The National Early Childhood Technical Assistance Center (NECTAC, 2008) links together many states' IFSP forms along with supplemental documents on their website for states to access. Some of the IFSPs also include prompts within the document to help teams better understand what information should be included in each IFSP section.

Improving IFSP Quality

There have been few studies that have addressed the development of quality IFSPs. One of these studies addressed the use of IFSP prompts to increase the overall quality of IFSP's. Lee Ann Jung's 2010 study compared IFSP's written before and six months after the IFSP form was revised with added instructions, or prompts. The prompts were added to aid staff to know what needed to be included in each section of the IFSP. The staff received an IFSP manual with a written narrative and guidance in completing the form. The form's outcomes section was revised to include "prompts helping staff to connect routines, priorities, and outcomes" (Jung, 2010, p. 205). The IFSP prompts increased the family-centered language, but the "outcomes written using the revised form were not measurable and remained far below criteria" (Jung, 2010, p. 210). The outcomes improved in their relation to family routines, but their measurability continued to lack progress.

In 2003, Jung & Baird completed a study on IFSP quality. The study reviewed 120 IFSP's and rated the quality of nine indicators using the IFSP Rating Scale (McWilliam & Jung, 2001). Some of the IFSP's in the study were submitted by service coordinators who had attended a three-day training on IFSP development. Jung & Baird note that "although the training might be useful in improving IFSP writing skills, it is not sufficient to result in adequate competency." The three-day training was a much more costly event than the inclusion of IFSP prompts with much the same results.

Performance Support

Studies (Dunst & Raab, 2010; Trivette, Dunst, Hamby & O'Herin, 2009; Dunst & Trivette, 2009) indicate that learning opportunities for professionals that include components of self-assessment, active involvement, and learning over time create effective learning. The best gains in training happen when the professional learner is actively engaged in the process. Also, "the more the learner is engaged in reflection on those opportunities using some external set of standards, the greater the likelihood of optimal benefits" (Dunst et al, 2009, p. 11). Early intervention training opportunities need to be mindful of integrating an evidence-based approach to professional development. Using this information, accountability and professional development could be merged to create an active, ongoing process that integrates with a state's accountability system.

Case Review Tool

In a mid-western state, the accountability system used a Case Review Tool (CRT) to rate compliance measures in IFSP's. The CRT was used to increase overall IFSP quality, including the quality of functional and measurable outcomes, although the CRT's main purpose is for yearly monitoring and compliance checks in all of the state's regional early intervention programs. Individual regions in the state also used the CRT as a training method with their staff to review the varied components of compliance. The state required all regions to use the CRT once a year for compliance accountability. Within each region, local early intervention staffs were internal reviewers. External reviewers also reviewed IFSP's for compliance using the CRT. The state Part C office provided feedback to the regions with both sets of data.

All regional staff had access to the CRT, which provides guidance in writing the IFSP through a narrative rubric. The CRT was also used for yearly accountability purposes. This makes the CRT a tool that integrated the professional development, accountability, and technical assistance systems of the state to improve quality outcomes over time.

Purpose of Study

The purpose of this study was to determine if using an accountability measurement tool over time increased the number of outcomes meeting compliance within IFSP's. Specifically, did the use of this tool make a difference from year one to year three in IFSP outcomes that (a) correlate with family priorities and concerns, (b) are functional, measurable, and related to everyday routines, and (c) are developmentally appropriate?

Method

Participants

This was a retrospective study reviewing data extracted from the mid-western state's accountability tool. In total, 40 charts were chosen randomly from the early intervention system case review process for yearly accountability monitoring. A comparison of 20 charts from 2007, year one of implementation of the accountability tool, and 20 charts from 2010, year three of the process, was completed.

Procedures

Instrument. The instrument is the Case Review Tool (CRT) which contains a 4-point rating scale with ratings of 1-unacceptable, 2-minimally acceptable, 3-practice standard, and 4-best practice. The CRT was adapted from the Missouri First Steps IFSP Quality Indicator Rating Scale (2005). There were three measures from the CRT included in this study. The first measure, Measure A, was child and family outcomes correlate with family priorities and concerns relative to the child's development. The second measure, Measure B, was child outcomes are functional, measureable (including criteria, procedures, and timelines) and related to participation in everyday routines. The third measure, Measure C, was child outcomes are developmentally appropriate and can realistically be achieved in the given review period. A summary of each of the three measures as well as a description of a 1, 2, 3, and 4 rating are provided in Figure 1 (Figure 1 was unable to be uploaded online—Please contact the author for image).

This rating was used on each outcome included on the IFSP. For example, if an IFSP had five outcomes, items from the three measurements were used for each of the five outcomes. Furthermore, the second measure includes a rating on two individual components (functional and measurable). Functional was defined as related to participation in every day routines and activities. Measurable was defined as including criteria, procedures, and timelines. Using the comments section of the tool, data was collected identifying whether each of the components of functional and measurable were contained in each outcome on the IFSP.

Rating procedures. Use of the CRT was implemented in 2007 in a mid-western state. The CRT is used by external and internal evaluators within the state. The external evaluators consisted of contracted technical assistance team made up of a minimum of three expert early intervention consultants. The internal evaluators were at the program level. These internal evaluators were made up of a team of a minimum of three early interventionists in the following roles: early intervention program staff, service coordinator, and experienced parent (regionally hired parent working with the early intervention program).

Each year, a random number of charts, depending on the size of the program, are sampled across the state. The external and internal evaluation teams each review one third of the sample. The final third of the sample is reviewed by both sets of evaluators to establish inter-rater reliability. Each team submits the CRT ratings electronically to the state Part C office. The results of the rates are compiled by the Part C data officer into a regional report.

Data Collection

The outcome measure ratings and comments from the three identified measures were collected from 20 random charts from year one and 20 random charts from year three. The rating measurements of one, two, three, or four, were placed into an excel spreadsheet for further analysis. The comments on each outcome were reviewed to determine whether it contained functional and measurable components. If the component was present, it was coded as a 1, and if it was not present, it was coded as a 0.

Data Analysis

Descriptive statistics were generated for year one and year three of the CRT items. An univariate analyses of variate (ANOVA) was used to investigate the change in individual items between groups year one and year three. In this analysis, the three measures from the CRT were used to compare year one to year three. Further analysis was completed to understand the impact of the components of functional and measurable on the CRT measures, and the relationship between the number of outcomes in year one and year three was examined. All analyses were conducted using PASW 18.0.

Results

Descriptive statistics for each outcome are presented in Table 2 for the components of measurable and functional based on a zero or one scale (zero, not met and one, met) including means and standard deviations for year one and year three. Table 3 presents the descriptive statistics for the individual measures from the CRT of (a) family concern, (b) functional/measurable, and (c) developmentally appropriate, based on the 1-4 scale used in the CRT.

Univariate results are presented in Table 4 and 5. Table 4 showed no significance between the CRT measures of family concerns, F (1,38) = .060, p = .807, and developmentally appropriate, F (1,38) = .069, p = .794 from year one to year three. Significance was indicated for the measure of functional/measurable, F (1,38) = 4.77, p =

.035, but this was a decrease from year one to year three with use of the CRT. There was a significant difference from year one to year three in the number of outcomes, F (1,38) = 11.37, p = .002, indicating that more outcomes were written per IFSP in year three than year one.

The functional/measurable item on the CRT includes both functional and measurable components in the score for the rating, and the rating encompasses all of the outcomes for the specific IFSP being rated. Since there was significance in this exploratory study, the components were analyzed individually to determine the impact of each component on the rating, and to analyze each individual outcome. The data from year three on Table 5 showed significance for both functional and measurable components of outcomes with measurable, F (1,228) = 10.287, p = .002, and functional, F (1,228) = 19.124, p = .000. More data was available in year three due to the increased number of outcomes on IFSP's.

Since there was significance for the number of outcomes increasing from year one to year three, a follow-up analysis of linear regression was completed for the number of outcomes (Table 6) in comparison to the average score. Even though this linear model proved to be a poor fit when looking at Figure 1 for estimated marginal means, there was a slightly higher increase for scores for IFSP's with five or more outcomes. It appeared that five or more outcomes indicated higher scores on the CRT than four outcomes or less. Therefore, a univariate test was completed for average score (Table 7) of the three measures on the CRT with the number of outcomes, F (1,39) = 5.198, p = .028. The results were significant, in that there was an increase in average IFSP score when there were five or more outcomes versus four or fewer outcomes.

Table 2
Descriptive Statistics of Measurable and Functional Components for Each Outcome

	Year 1			Year 3		
	M	SD	N	M	SD	N
Measurable	.54	.50	94	.74	.44	136
Functional	.37	.49	94	.65	.48	136

Table 3
Descriptive Statistics for Measures of Family Concerns, Functional/Measurable, and Developmentally Appropriate Outcomes

	Year 1			Year 3		
	M	SD	N	M	SD	N
Family Concerns	2.80	.62	20	2.85	.67	20
Functional/ Measurable	2.45	.76	20	1.95	.69	20
Developmentally	2.80	.62	20	2.85	.587	20

Appropriate Number of Outcomes	4.70	1.78	20	6.80	2.14	20

Table 4
Univariate Results for Effects of the Family Concerns, Functional/Measurable, and Developmentally Appropriate Measures from the Case Review Tool (CRT)

		Sum of Squares	Df	Mean Square	F	Sig
Family Concerns	Between Groups	.025	1	.02	.060	.807
	Within Groups	15.75	38	.41		
	Total	15.77	39			
Functional/ Measurable	Between Groups	2.50	1	2.50	4.77	.035
	Within Groups	19.90	38	.52		
	Total	22.40	39			
Developmentally Appropriate	Between Groups	.025	1	.025	.069	.794
	Within Groups	13.75	38	.362		
	Total	13.77	39			
Number of Outcomes	Between Groups	44.10	1	44.10	11.37	.002
	Within Groups	147.40	38	3.88		
	Total	191.50	39			

Table 5
Univariate Results for the Effects of the Measurable and Functional Components on Individualized Family Service Plan (IFSP) Outcomes

		Sum of Squares	Df	Mean Square	F	Sig
Measurable	Between Groups	2.225	1	2.225	10.287	.002
	Within Groups	49.322	228	.216		
	Total	51.548	229			
Functional	Between Groups	4.422	1	4.422	19.124	.000
	Within	52.725	228	.231		

Groups			
Total	57.148	229	

Table 6

Linear Model of Number of Outcomes vs. Average score of the Family Concerns, Functional/Measurable, and Developmentally Appropriate Measures from the Case Review Tool (CRT)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig
Corrected Model	1.814[a]	8	.227	.846	.571
Intercept	207.045	1	207.045	772.503	.000
Outcome Number	1.814	8	.227	.846	.571
Error	8.309	31	.268		
Total	284.00	40			
Corrected Total	10.122	39			

a. R Squared = .179 (Adjusted R Squared = -.033)

Table 7

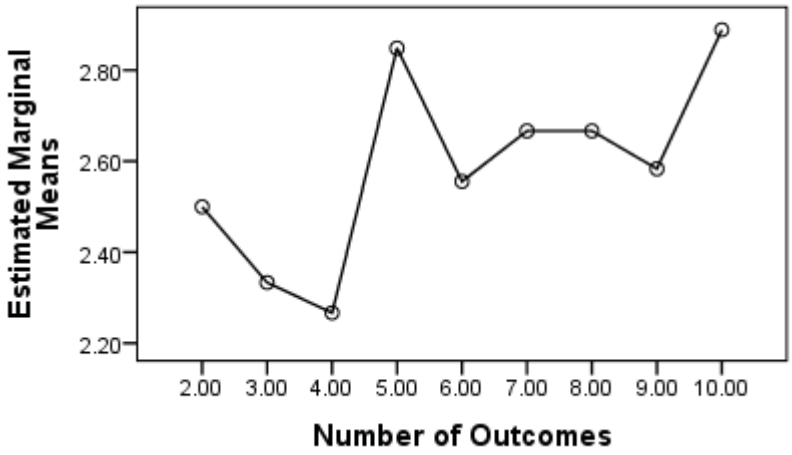
Univariate results of Estimated Marginal Means for Average Scores of the Three Case Review Tool (CRT) Measures of Small, less than four, and Large, five or more, Cases.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig
Corrected Model	1.218[a]	1	1.218	5.198	.028
Intercept	203.985	1	203.985	870.534	.000
Outcome Number	1.218	1	1.218	5.198	.028
Error	8.904	38	.234		
Total	284.00	40			
Corrected Total	10.122	39			

a. R Squared = .120 (Adjusted R Squared = -.097)

Figure 1

Estimated Marginal Means for Average Score of the Three Case Review Tool (CRT) Measures



Discussion

Results of this study indicate that using a state accountability system did not show evidence of improving Measures A or C. Significance was found in the measure (b) child outcomes that are functional, measurable, and related to everyday routines, but this indicated a decrease in the rating on the CRT.

IFSP Outcome Components

It is important to note that there was more data in year three (N=136) than in year one (N=94) as seen in Table 2. This was due to an increase in the number of outcomes in IFSP's in year three. In year one, the outcomes were very broad and general. As staff skill increased in year three, the outcomes were more specific, functional, and tied to everyday routines, thus requiring additional outcomes.

This study found that the individual components of functional and measurable increased with use of an accountability tool. This may be due to the North Dakota early intervention system's use of internal evaluators at the program level using the CRT tool. Since the internal evaluators are early intervention staff, it is more likely that the CRT is used for guidance when writing IFSP's as a team. In addition to this, the state Part C staff promotes the use of the CRT in training and supporting staff performance.

Number of Outcomes

Earlier studies (Jung & Baird, 2003; McWilliam, Ferguson, et al., 1998; and McWilliams 2010) report that early interventionists need additional help in writing meaningful outcomes. McWilliams (2010) reports that measurability and quality are compromised

when there are fewer than three outcomes, and the outcomes written tend to be more general. When there are fewer outcomes, it seems that the outcomes may be less specific with little meaning to the family. Broad, general outcomes also provide less information useful for programming.

The findings of this study, as discussed earlier, show that prior to using an accountability tool in year one, early interventionists had developed fewer outcomes. Over time with the use of the accountability tool, the IFSP's were written with more functional and measurable outcomes related to everyday activities. Figure 5 demonstrates that when IFSP's had five or more outcomes, they received higher ratings on the CRT. When early interventionists write outcomes related to participation in everyday family activities, more outcomes are necessary. When outcomes are meaningful, the number of outcomes increase as necessary to meet the family's needs. The increase in the number of outcomes may also provide more specific guidance for programming to the early intervention team.

Conclusion

Following the three year use of an accountability tool describing the specific criteria to meet compliance with federal and state regulations, IFSP's in this study included more outcomes that met the criteria for (b) child outcomes that are functional, measurable, and related to everyday routines. No change was noted in (a) outcomes that correlate with family priorities and concerns and (c) outcomes that are developmentally appropriate.

One finding that came out of this study is that when five or more outcomes were included on an IFSP, the measurable and functional components increased. This needs further study to determine why this happened and how to support teams to create outcomes that are not so general they could appear on any IFSP.

Implications for Practice

This study highlighted the need to review all measures of the CRT to examine the connection between the measures and meeting compliance. The focus should be on further investigating whether using an accountability measurement tool over time increases early interventionists' ability to write IFSP's that meet state and federal compliance measures. In addition to this, it will be important to determine is if this makes a difference in the quality of services the family receives.

Family assessment is an important step in creating specific, meaningful outcomes. Each of the three measures studied were related to information the IFSP team gathers from family assessment. Since the state in this study has recently emphasized incorporating the use of a formalized family assessment, the Routines-Based Interview (McWilliams, 2009), there may be opportunities to look at the link between these measures and family assessment in the future.

Previous studies focused on intensive in-person training and IFSP prompts to promote quality IFSP's, including well-written, functional, measurable outcomes. The key to improving IFSP quality may be in using a state's available accountability and monitoring structures to train staff in a connected system that can be used for broader purposes, such as also increasing the quality of the IFSP and the outcomes within it. Jung suggests that although the "revision of the IFSP form may improve quality, it is not a substitute for high-quality professional development and technical assistance" (2010, p. 207). Thus, one method may not be the answer to improving the quality of IFSP's, but a well-coordinated effort including many of the state's resources might lead to better results.

Research in professional development gives us evidence-based information about how to effectively train early intervention professionals. The CRT integrates accountability and professional development into an active, ongoing process over time. Using the CRT in daily work makes it a functional, dynamic tool that aids interventionists in continually framing what is needed to write a quality IFSP. The CRT is used for monitoring purposes on a yearly basis, and regional teams are actively involved in the process. The ongoing use of the CRT in the field and for accountability builds relevance to staff at the local level.

Perhaps state systems need to find what Dunst & Trivette (2009) refer to as a "middle ground" where accountability is merged with training and technical assistance experiences. Accountability should be a part of the continuum of professional development to increase quality of the IFSP and service delivery to families.

References

Able-Boone, H., Sandall, S. R., Loughry, A., & Frederick, L. L. (1990). An informed, family-centered approach to Public Law 99-457: Parental views. *Topics in Early Childhood Special Education, 10*, 100-111.

Bailey, D. B., Jr., Winton, P. J., Rouse, L., & Turnbull, A. P. (1990). Family goals in Infant intervention: Analysis and issues. *Journal of Early Intervention, 14*, 15-26.

Bailey, D. B., Simeonsson, R. J., Winton, P. J., Huntington, G. S., Comfort, M., Isbell, P.,O'Donnell, K. J., & Helm, J. M. (1986). Family-focused intervention: A functional model for planning, implementing, and evaluating individualized family services in early intervention. *Journal of the Division for Early Childhood, 10*, 156-171.

Boone, H. A., McBride, S. L., Swann, D., Moore, S., & Drew, B. S. (1998). IFSP practices in two states: Implications for practice. *Infants and Young Children, 10*(4), 36-45.

Bruder, M. B., Staff, I., & McMurrer-Kaminer, E. (1997). Toddlers receiving early Intervention in childcare centers: A description of a service delivery system. *Topics in Early Childhood Special Education, 17*, 185-208.

Dunst, C.J., & Raab, M. (2010). Practitioners self-evaluations of contrasting types of Professional development. *Journal of Early Intervention, 32* (4), 239-254.

Dunst, C.J., & Trivette, C.M. (2009). Let's be PALS: An evidence-based approach to professional development. *Infants and Young Children, 22*, 163-175.

Individuals with Disabilities Education Improvement Act of 2004, PL 108-446, 20 U.S.C. §§1400 et seq.

Johnson, B. H., McGonigel, M. J., and Kaufmann, R. K. (1989). *Guidelines and recommended practices for the individualized family service plan*. Chapel Hill, NC & Washington, DC:NEC*TAS and ACCH.

Jung, L. A. (2010). Can embedding prompts in the IFSP form improve the quality of IFSPs developed? *Journal of Early Intervention, 32*, 200-213.

Jung, L. A., & Baird, S. M. (2003). Effects of service coordinator variables on individualized family service plans. *Journal of Early Intervention, 25*, 206-218.

Kahn, L., Hurth, J., Diefendorf, M., Kasprzak, C., Lucas, A., & Ringwalt, S. (2009). *NECTAC technical assistance model for long-term systems change*. Retrieved from National Early Childhood Technical Assistance Center website: http://www.nectac.org/~pdfs/pubs/tamodel.pdf

Kasprzak, C., Hurth, J., Lucas, A., Marshall, J., Terrell, A., & Jones, E. (2010). *NECTAC technical assistance model for long-term systems change: Three state examples*. Retrieved from National Early Childhood Technical Assistance Center website: http://www.nectac.org/pubs/titlelist.asp#ltsc3states

McWilliam R.A. (2010). *Routines-based early intervention: Supporting young children and their families*. Baltimore, Maryland: Brookes Publishing Company.

McWilliam R.A. (2009). *Protocol for the routines-based interview*. Chattanooga, TN: Siskin Children's Institute.

McWilliam R. A. (1993). *The IFSP Family-Centeredness Rating Scale*. Unpublished instrument, Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill.

McWilliam, R. A. (1992). *Family-centered intervention planning: A routines-based approach*. Tucson, AZ: Communication Skill Builders.

McWilliam, R., Ferguson, A., Harbin, G., Porter, D. M., & Vaderviere, P. (1998). The family-centeredness of individualized family services plans. *Topics in Early Childhood Special Education, 18*, 69-82.

McWilliam, R. A., & Jung, L. A. (2001). *IFSP Rating Scale.* Unpublished instrument.

National Early Childhood Technical Assistance Center (NECTAC) (2008). State examples of IFSP forms and guidance. Retrieved from http://www.nectac.org/topics/families/stateifsp.asp

National Early Childhood Technical Assistance Center. (2005). *Missouri First Steps IFSP Quality Indicator Rating Scale*. Retrieved from http://dese.mo.gov/divspeced/FirstSteps/pdfs/MOIFSPRateScale.pdf

National Early Childhood Technical Assistance Center. (2008). *State examples of IFSP forms and guidance*. Retrieved from http://www.nectac.org/topics/families/stateifsp.asp

Siegel-Causey, E. et al. (1990). Examining the individualized family service plan process: What are family and practitioner preferences? *Topics in Early Childhood Special Education, 10*, 78-99.

Trivette, C.M., Dunst, C.J., Hamby, D.W., & O'Herin, C.E. (2009). *Characteristics and*

consequences of adult learning methods and strategies [Winterberry Research Syntheses,
Vol. 2, Number 2]. Asheville, NC: Winterberry Press.