



**Early ACCESS Family Survey Process  
Final Report**

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## **Purpose**

The Bureau of Early Childhood Services of the Iowa Department of Education (DE) commissioned the author to undertake a study of their Family Outcomes Survey. This survey is conducted annually on a sample of families using the services of Early ACCESS; the results of the survey are used in the Annual Performance Report submitted to the Federal government.

The goals of the project were to

1. Compare the current survey instrument, the NCSEAM, to another widely used family outcomes survey, the ECO, to determine which best met the needs of Early ACCESS.
2. Review the current sampling and survey administration strategy and suggest improvements.
3. Determine whether switching to an online survey was feasible.
4. If feasible, conduct a pilot test of an online survey, and if switching instruments, propose a set of benchmarks for the new instrument.
5. Consult with Early ACCESS stakeholders about proposed changes during the project.

## **Current survey process**

First, a sample of families from each Area Education Agency is drawn from DE databases.<sup>1</sup> The number of families is such that any estimate falls within a 95% confidence interval of +/- 10 percentage points. For example, if the estimate for a particular AEA is that 90% of families agree that Early ACCESS is accomplishing a specific task, DE could conclude that the actual percentage of families in that AEA agreeing falls between 80% and 100%.

AEAs are given this number of families as their target size for the survey. For example, in 2009 AEA 7 was given a target sample size of 79 families, drawn randomly from 462 families in that AEA.

Next, service coordinators provide families in the sample with a copy of the survey, and an envelope to return the survey. Nonrespondents are contacted by telephone to complete the survey over the phone. If a family still does not respond, another family is randomly drawn and contacted, until the AEA has fulfilled its target of a certain number of completed surveys. Each AEA then enters the survey responses into the I-STAR system.

Currently, DE reports a 100% response rate for the survey.

## **Problems with the process**

There are several problems with the current sampling and survey administration process.

First, it is not clear why the sample sizes are based on a 95% confidence interval of +/-10. Results that are

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<sup>1</sup> See *Annual Performance Report, IDEA Part C, FFY 2009 (2009-2010)* for details.

reported in the Annual Performance Report do not report confidence intervals, and instead report point estimates. The current process is quite burdensome for service coordinators, and it is likely that in the past someone made a decision that these were the minimum tolerable sample sizes for each AEA, given the burden of data collection.

Second, DE reports a response rate that does not conform to accepted standards for surveys. The current rate is calculated as

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For example, the most recent Annual Performance Report states that 701 surveys out of a needed 701, or 100%, were collected. But there is no mention of how many families were contacted and declined to participate, which is the standard approach for reporting survey response rates.

Instead, DE should report

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This number will likely be much smaller than 99%. In 2006, Michigan reported a response rate of 41% for their family survey.

Third, the family survey asks families to rate how well early intervention services have been provided. Many of these services are provided via the service coordinators. Given their relationship with their service coordinators, families may be reluctant to provide poor ratings on a survey that indirectly rates the performance of their coordinator. Some coordinators may remain in the room as the families fill out the survey, affecting how families respond. Families also may be reluctant to provide honest answers to another person via a telephone survey. In general, DE has little oversight as to how the ten AEAs are administering the survey, and it is likely that actual methods of administration vary across the AEAs.

Fourth, the survey responses are inputted into the data systems by the AEAs themselves, yet these data are used to rate AEA performance. This is a clear conflict of interest, and it is possible that negative responses might be changed by the AEA when the data are entered. Because the survey is a paper survey, some judgment is needed to interpret marks that may cross multiple response options, and the method for handling editing of responses likely varies across AEAs.

### **Current survey instrument and benchmarks**

DE uses the NCSEAM (National Center for Special Education Accountability Monitoring) survey, which asks families to rate early intervention services in a variety of areas, using a six-point response scale, ranging from very strongly disagree, strongly disagree, disagree, agree, strongly agree, and very strongly agree.

Responses from the 21 items used in the current survey are combined into three scales that are reported to the Federal government:

- services helped families know their rights

- services helped families effectively communicate their needs
- services helped families help their children develop and learn

The measurements reported are the proportions of families reporting that they agreed, strongly agreed, or very strongly agreed with the relevant items.

#### Problems with the survey instrument and performance indicators

There are several problems with the current instrument and benchmarks.

First, the NCSEAM survey uses an agree-disagree response scale, the use of which many survey research methodologists discourage. Questions using these scales can result in acquiescence, especially among less-educated respondents. Acquiescence occurs when respondents agree or provide a positive response to a survey question, regardless of their actual opinion.

A second, and related point, is that response scales for survey questions are best created so that they directly tap what the survey question is asking. Rather than asking families if they agree or disagree with statements about the helpfulness of early intervention services, one could simply ask them directly, with a response scale indicating varying degrees of helpfulness.

Third, the three performance indicators are created using responses from multiple items (see Table 1). This is a standard practice in survey research. The issue with the current process is that several of the same items are used to create different indicators, leading to some confusion among stakeholders as to how these indicators are constructed and how they relate to survey responses. It is also not clear why some items are used. For example, the item “understand my child’s special needs” is used for all three benchmarks. While this item is clearly related to effectively communicate their children’s needs, it is less clear what this item has to do with families knowing their rights.

Fourth, the benchmark appears to have been set quite low. Currently, if every family chooses any of the top three response choices (agree, strongly agree, or very strongly agree), then the DE reports 100% of families as reporting that early intervention services helped them. Given acquiescence due to the use of the agree-disagree scale, and that half of the scale is used to measure compliance, it would be surprising if much less than 100% of families report that early intervention services have been helpful. The most recent Annual Performance Report reports that 97% of families find services helpful, for all three benchmarks.

#### **Pilot test**

To gain a better understanding of what it would mean for Early ACCESS to change to a web survey administration of the ECO survey instrument, a pilot test was conducted in August 2011. Early ACCESS provided email addresses that it had collected from 191 families. Respondents were initially contacted via email, with nonrespondents contacted up to three additional times, for a total of four contacts. Fifty-eight families responded, yielding a response rate of 30%.

The web survey used the ECO survey instrument, with one change. A “don’t know” response was added at the request of the survey workgroup (see below).

#### **Suggested changes**

### *1. Administer the family outcomes survey via the Internet*

Web administration would resolve several issues. Because the marginal cost of adding families to a web survey is almost zero, DE can survey all families that use early intervention services, rather than rely on samples generated from every AEA (3,772 versus 701). Web administration could be centralized within the DE, ensuring that the same survey process is used for each AEA. Importantly, service coordinators could be removed from the data collection process, allowing them to focus on the main aspects of their jobs while providing families a more confidential process for responding to the survey. Because survey responses are entered by the respondent into a webpage, which is then saved on a server, AEAs would no longer have the responsibility to enter survey data, or the opportunity to alter responses.

Moving to a web survey would require Early Childhood Services to collect email addresses for every family using early intervention services. This would most easily be accomplished at entry. Email addresses ideally would be verified annually. DE would also have to administer the web survey itself, or contract this to a vendor. There are many commercial web survey packages available that would allow DE to easily (and probably more cheaply) conduct the web survey itself. One popular (and powerful) survey software package that I have used is Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)).

One concern with web surveys is respondent Internet access. Survey data collected in 2010 by Connect Iowa indicate that statewide, 87% of Iowa residents have access to the Internet, either at home or someplace else. For families with annual household incomes of less than \$25,000, about 70% have Internet access. Web surveys appear feasible for the family outcomes survey. To ensure coverage of all families without Internet access, DE should consider a mail follow-up survey to web survey nonrespondents.

Finally, the web survey should be set up so that respondents can be assured of confidentiality. This can be accomplished by 1) making sure the respondent dataset cannot be accessed by AEAs or 2) setting up the web survey so that responses are anonymous. Given the nature of the survey topic, and that families are indirectly rating the services of people who are providing much needed services for their children, the family outcomes survey questions should be viewed as sensitive questions. In other words, these are questions where respondents worry about who will see their answers and what they will think (much like survey questions about drug use and sexual behavior). Anonymity is the best approach to obtaining truthful responses to sensitive questions.

### *2. Calculate an appropriate response rate*

Response rates are viewed as a rough proxy of data quality. Currently, the Annual Performance Report makes it seem as if the response rate to the survey is 100%. Instead of reporting how close the DE came to meeting the completed survey sample size requirements, DE should report what percentage of contacted families actually completed the survey.

### *3. Replace the NCSEAM survey with the ECO (Early Childhood Outcomes Center) survey*

Both the NCSEAM and ECO surveys are widely used by a number of states, and both have research into their underlying psychometric properties. This recommendation is based chiefly on the response scales used by the two instruments. Rather than an agree-disagree scale, the ECO asks families how helpful early intervention services have been, using this scale: not at all helpful, a little helpful, somewhat

helpful, very helpful, and extremely helpful (see Appendix B). This scale is more closely related to the topic of the questions than the agree-disagree scale.

The survey consists of 17 items divided into three sections that match the three benchmarks required by the Federal government. These items can easily be combined into three scales, similar to current practice. If items from each of the three subsections were combined into single scales, data from the pilot study indicate that the reliabilities for knowing your rights, communicating your child's needs, and helping your child develop and learn are .83, .94, and .88 respectively. These are all greater than the suggested minimum of .80.

The Early ACCESS survey working group, consisting of a variety of stakeholders, has looked at both instruments. The group agreed that the ECO survey better fit with their goals, and was easier to interpret than the NCSEAM.

Members of the working group suggested that a "don't know" category be included in any revised survey, because some items are not applicable for all families. For example, families just starting with early intervention services are not able to answer questions about transition. Table 2 suggests this is the case. One-third of respondents chose "don't know" when asked how helpful early intervention has been in terms of providing useful information when the child leaves the program. Percentages for other items are less than 10%, with three exceptions:

- Information about rights related to child's special needs (12%)
- Information about how to help child get along with others (33%)
- Information about how to help child take care of needs (16%)

The large percentage for "how to help child get along with others" is likely due to the age of children receiving Early Access services. A large percentage of these children are infants, so getting along with others is not a meaningful survey item for these families.

#### *4. Construct different benchmarks and performance indicators.*

Changing to the ECO would solve one problem with the current approach; namely, how to decide which item belongs to which of the three main benchmarks. Each of the items in the three subsections can be combined to create three benchmarks, with no repeated use of items.

Creating a relevant performance indicator is a more complex task. Ideally, one would like to develop an indicator that both AEAs and families agree is a reasonable measure. Recall that the ECO uses the following response scale:

- Extremely helpful
- Very helpful
- Somewhat helpful
- A little helpful
- Not at all helpful

Using the current approach of using all positive categories as a positive outcome (i.e., any response of agree, strongly agree, or very strongly agree), we could count any of the helpful responses as positive,

with “not at all helpful” as the sole negative response. It is unlikely that any family would choose this last response, so an indicator that guarantees an almost 100% result is not very useful.

Instead, we can ask the question, “What would DE and AEAs like to hear if they are doing a good job providing early intervention services?” With this perspective, hearing a family say that Early ACCESS has been extremely or very helpful would be well received, but some would probably be disappointed if the family replied “only somewhat helpful” or a “little helpful.” Thus, what categories DE should use to create the performance indicator depends on what goal the DE sets for itself: that all families respond extremely or very helpful, or perhaps that all families respond extremely, very, or somewhat helpful.

Data from the pilot test can shed some light on what these indicators would look like (see Table 3). Using only the top two categories would result in 70%-75% of families indicating helpfulness, while using the top three categories (i.e., counting “somewhat helpful” as helpful) would result in 79%-94% of families indicating helpfulness

## Appendix A – Tables

Table 1. Mapping of Current Survey Items to Federal Benchmarks

Survey Question	Know their rights	Communicate child's needs	Help child develop & learn
I was given choices concerning my family's services and supports.	X	X	X
My family's daily routines were considered when planning for my child's services.			X
<b><i>My family was given information about:</i></b>			
The rights of parents regarding Early ACCESS services.	X	X	
Community programs that are open to all children.	X		
Opportunities for my child to play with other children.			X
How to advocate for my child and family.		X	
Who to call if I am not satisfied with the services my child receives.		X	
<b><i>The Early ACCESS service provider(s) that work with my child:</i></b>			
Are good at working with my family.			X
I was given information to help me prepare for my child's transition.	X	X	X
<b><i>Over the past year, Early ACCESS services have helped me and my family:</i></b>			
Improve my family's quality of life.	X		
Know where to go for support to meet my child's needs.		X	X
Get the services that my child and family need.			X
Feel more confident in my skills as a parent.			X
Understand how the Early ACCESS system works.	X		
Feel that my family will be accepted and welcomed in the community.		X	X
Communicate more effectively with the people who work with my child and family.			X
Understand the roles of the people who work with my child and family.	X	X	X
Know about my child's and family's rights concerning Early ACCESS services.			X
Do things with and for my child that are good for my child's development.	X	X	
Understand my child's special needs.	X	X	X
Feel that my efforts are helping my child.			X

Table 2. Percentage of Respondents Choosing “Don’t Know”

<b>How helpful has early intervention been in ...</b>	<b>% choosing don't know</b>
<i>Knowing your rights</i>	
giving you useful information about services and supports for you and your child?	0%
giving you useful information about your rights related to your child’s special needs?	12%
giving you useful information about who to contact when you have questions or concerns?	0%
giving you useful information about available options when your child leaves the program?	34%
explaining your rights in ways that are easy for you to understand?	7%
<i>Communicating your child’s needs</i>	
giving you useful information about your child’s delays or needs?	3%
listening to you and respecting your choices?	0%
connecting you with other services or people who can help your child and family?	3%
talking with you about your child and family’s strengths and needs?	2%
talking with you about what you think is important for your child and family?	2%
developing a good relationship with you and your family?	0%
<i>Helping your child develop and learn</i>	
giving you useful information about how to help your child get along with others?	33%
giving you useful information about how to help your child learn new skills?	2%
giving you useful information about how to help your child take care of his/her needs?	16%
identifying things you do that help your child learn and grow?	0%
sharing ideas on how to include your child in daily activities?	7%
working with you to know when your child is making progress?	2%

Source: 2011 pilot test data.

Table 3. Hypothetical Performance Indicators for ECO Survey

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Benchmark	% choosing extremely or very helpful	% choosing extremely, very, or somewhat helpful
Knowing your rights	73	79
Communicating your child's needs	70	92
Help your child develop and learn	75	94

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**Appendix B – ECO Survey Instrument**

**FAMILY OUTCOMES SURVEY  
Revised Version**

Section B: Helpfulness of Early Intervention

**Instructions:** Section B of the Family Outcomes Survey focuses on the helpfulness of early intervention. For each question below, please select how helpful early intervention has been to you and your family over the past year: Not at all helpful, a little helpful, somewhat helpful, very helpful, or extremely helpful.

	Not at all helpful	A little helpful	Somewhat helpful	Very helpful	Extremely helpful
<b>Knowing your rights</b>					
<b>How helpful has early intervention been in...</b>					
1. giving you useful information about services and supports for you and your child?	<input type="radio"/>				
2. giving you useful information about your rights related to your child’s special needs?	<input type="radio"/>				
3. giving you useful information about who to contact when you have questions or concerns?	<input type="radio"/>				
4. giving you useful information about available options when your child leaves the program?	<input type="radio"/>				
5. explaining your rights in ways that are easy for you to understand?	<input type="radio"/>				
<b>Communicating your child’s needs</b>					
<b>How helpful has early intervention been in...</b>					
6. giving you useful information about your child’s delays or needs?	<input type="radio"/>				
7. listening to you and respecting your choices?	<input type="radio"/>				
8. connecting you with other services or people who can help your child and family?	<input type="radio"/>				
9. talking with you about your child and family’s strengths and needs?	<input type="radio"/>				
10. talking with you about what you think is important for your child and family?	<input type="radio"/>				
11. developing a good relationship with you and your family?	<input type="radio"/>				
<b>Helping your child develop and learn</b>					
<b>How helpful has early intervention been in...</b>					
12. giving you useful information about how to help your child get along with others?	<input type="radio"/>				
13. giving you useful information about how to help your child learn new skills?	<input type="radio"/>				
14. giving you useful information about how to help your child take care of his/her needs?	<input type="radio"/>				
15. identifying things you do that help your child learn and grow?	<input type="radio"/>				
16. sharing ideas on how to include your child in daily activities?	<input type="radio"/>				
17. working with you to know when your child is making progress?	<input type="radio"/>				



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