

Engineering Management  
Field Project

**Developing a Customer Feedback Instrument to Improve  
Quality and Increase Usage of Special Education Goal  
Measurement Software**

By

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Spring Semester, 2010

An EMGT Field Project report submitted to the Engineering Management Program  
and the Faculty of the Graduate School of The University of Kansas  
in partial fulfillment of the requirements for the degree of  
Master's of Science

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## Executive Summary

A software programmer at the Southeast Kansas Education Service Center has developed the Skill Demonstration (SD) software for the Special Education classroom. SD has been used by 25 school districts for the past three years. A recent analysis of 'last user login dates' was performed revealing a great decline in usage. The goal of this field project was to create an instrument to communicate with SD users to determine reasons for usage decline. The instrument contained 14 questions, which were selected based on SD user interviews and literature research performed about customer/user information satisfaction.

The instrument received 21.5% response rate. More than 89% of respondents supported SD being user friendly, conveniently available, providing sufficient information to make useful decisions, displaying clear formatted graphs, tables and data accuracy, keeping data confidentiality, and users were willing to recommend SD to colleagues. The instrument responses also suggested that SD was marketed online very poorly with 2.6% of participants discovering SD online. Forty-one percent of participants initiated communication regarding SD questions, leaving room for encouraging more communication with SD staff. The in-person training was believed to be effective by 79.5% of participants, which can be improved.

The participants' comments provided reasons for SD's usage decline. SD is currently lacking user-desired features such as additional graphing features, data collection methods

and having a bank of pre-entered skills. The conclusion of the project was the programmer would have to meet participants in-person to discuss adding desired features. A recommendation for additional work was for the programmer to encourage users to participate in the instrument again next year and compare next year's results with the current results.

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## Chapter 1- Introduction

### Background

The Southeast Kansas Education Service Center (SEKESC) is funded by the Kansas State Department of Education grants that involve working with schools and universities. The Project Supporting Teachers and Youth (STAY) grant helps schools with students exhibiting challenging behavior in the Special Education (SPED) classroom. Student behavior is monitored using data collection. Several schools still collect data using paper and pencil methods due to lack of resources. The current STAY grant includes funding for a software programmer to develop free software for the SPED classroom since 2005. The programmer has developed the Skill Demonstration (SD) software for the SPED classroom that helps determine whether student Individualized Education Plan (IEP) goals are being achieved.

### Problem

Staff members from approximately 25 school districts have been trained on the software during the past three years. A recent analysis of 'last user login dates' was performed. The SD software is hosted on a SEKESC server that saves the users' login dates on the server's database system. A database query was performed to obtain the users' login dates. The login dates ranged from January 2008 to the present indicating a great decline in software usage. The login dates were acquired on 20<sup>th</sup> January 2010 and are shown in Appendix 5.

## **Goal**

The goal is to create an instrument to communicate with school staff to determine reasons for the decline of usage. The instrument will cover factors such as software effectiveness, user-friendliness, training quality, marketing awareness and much more. The instrument will help STAY improve SD software quality along with introducing SD to more school staff.



## Chapter 2 – Literature Review

The literature review includes two components. The first component is an introduction to SPED that will cover SPED practices and explain how SD is used to measure SPED IEP goals. The second component will involve scholarly articles and papers that discuss creating an instrument to measure customer satisfaction.

### 2.1 Introduction to Special Education

SPED refers to “educational instruction that is specifically designed to meet the needs of a child with a disability” (Wilmshurst and Brue 2005,3). The child’s needs are satisfied with the use of “special materials, teaching techniques, or equipment and/or facilities” (Hallahan and Kauffman 1996,13). Legislation has played a big role in SPED. The Individuals with Disabilities Education Act (IDEA) “ensures that all children and youths with disabilities have the right to a free, appropriate public education”(Hallahan and Kauffman 1996,26). IDEA makes educators focus on the needs of individual students with disabilities.

IEP is a critical part that focuses on the disabled student’s needs. The IEP spells out “what teachers plan to do to meet an exceptional student’s needs”(Hallahan and Kauffman 1996,30). An IEP must include a “statement of present education performance, instructional goals, educational services to be provided, and criteria and procedures for determining that the instructional objectives are being met”(Hallahan and Kauffman 1996,30). The SD software helps measure the attainment of IEP instructional goals. Figure 1 (next page) is a sample IEP goal: “Having fewer detentions”. Figure 2 (next page) is a

screenshot of SD measuring an IEP goal: “Count to Five”. SD can generate charts and tables to measure IEP goal attainment progress. Figure 3 (next page) illustrates a detailed analysis of eight data sessions collected for the goal “Count to Five”. Figure 4 (next page) shows a graphical analysis of the same eight data sessions.

Measurable Annual Goals & Short-Term Objectives or Benchmarks	
<ul style="list-style-type: none"> <li>To enable student to participate in the general curriculum</li> <li>To meet other needs resulting from the disability <i>(including how progress toward goals will be measured)</i></li> </ul>	
<u>Goal:</u>	During the last quarter of the academic year, Curt will have 2 or fewer detentions for any reason.
Obj. 1:	At the end of the 1st quarter, Curt will have had 10 or fewer detentions.
Obj. 2:	At the end of the 2nd quarter, Curt will have had 7 or fewer detentions.
Obj. 3:	At the end of the 3rd quarter, Curt will have had 4 or fewer detentions.

**Figure 1: Sample IEP Goal (Hallahan and Kauffman 1996,32)**

15-November-2009 20:43:11

**Skill Demonstration**

Name: Amin, Akshaya  
Username: akshaya

Main Menu (Cancel) Save Observation

Print Friendly

Task Observation

Student: Akshaya Test\_Student

Task: Count to 5

Session Title: (Optional)

Step	Yes	No
Says 'One'	<input type="radio"/>	<input checked="" type="radio"/>
Says 'Two'	<input type="radio"/>	<input checked="" type="radio"/>
Says 'Three'	<input type="radio"/>	<input checked="" type="radio"/>
Says 'Four'	<input type="radio"/>	<input checked="" type="radio"/>
Says 'Five'	<input type="radio"/>	<input checked="" type="radio"/>

Main Menu (Cancel) Save Observation

Please contact [Project Stay](#) for Help or technical issues.

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**Figure 2: Collecting IEP Goal Data Using SD Software (Goal: Count to Five)**

Skill Demonstration									
15-November-2009								22:28:40	
Name:Amin, Akshaya Username: akshaya									
Akshaya Test_Student 'Count to 5' Completion Table									
Step/Session Name	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	
1: Says 'One'	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	87.5%
2: Says 'Two'	No	No	Yes	No	Yes	Yes	Yes	Yes	62.5%
3: Says 'Three'	No	No	No	No	Yes	No	No	Yes	25%
4: Says 'Four'	No	No	No	No	Yes	No	No	Yes	25%
5: Says 'Five'	No	No	No	No	No	No	No	Yes	12.5%
	0%	20%	40%	20%	80%	40%	40%	100%	

Figure 3: IEP Goal Measurement Table Data Using SD Software (Goal: Count to Five)

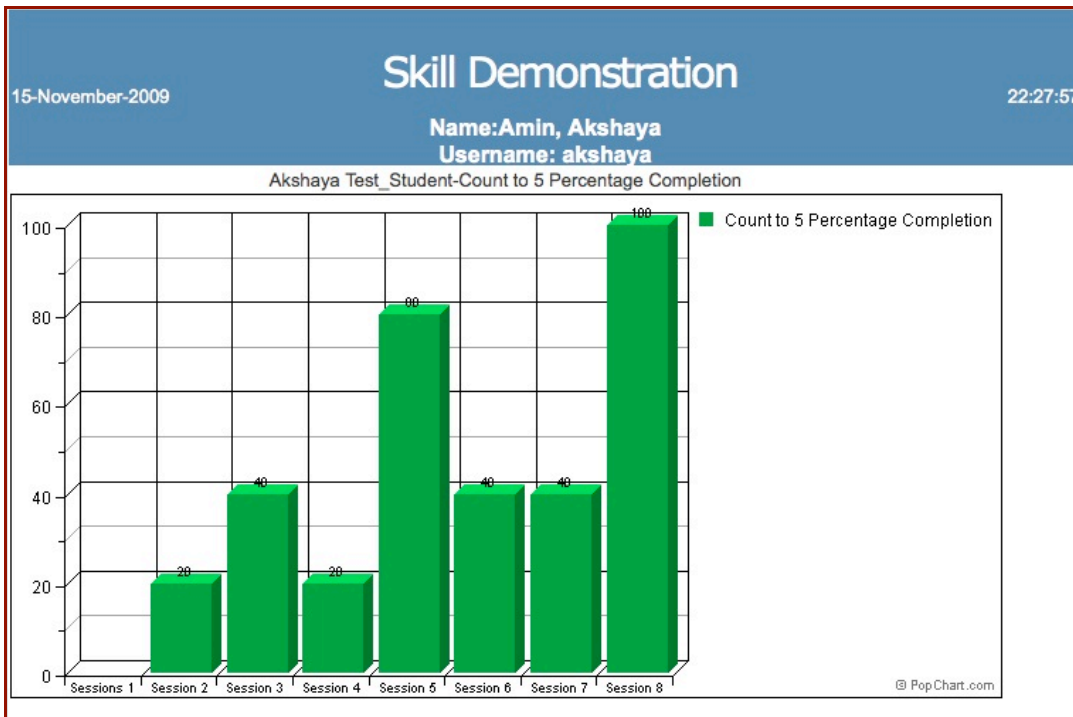


Figure 4: IEP Goal Measurement Graph Using SD Software (Goal: Count to 5)

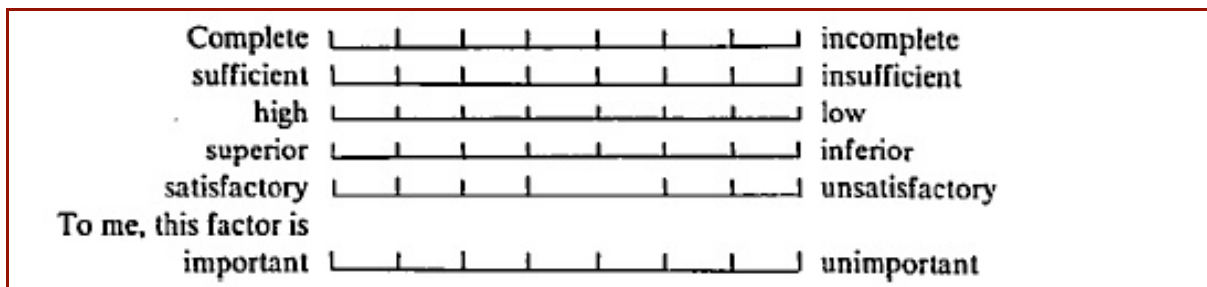
## 2.2 Developing Instrument To Measure User Satisfaction

Scholarly articles and papers were researched in the realms of End-User Computing Satisfaction, User Information Satisfaction and Customer Information Satisfaction. The

research provided guidance toward creating an instrument to measure customer satisfaction. The literature research helped answer four questions the programmer had:

- How long should the customer satisfaction instrument be?
- What factors should the instrument's questions focus on? (E.g. data accuracy, user-friendliness, etc.)
- What type of questions should be utilized? (E.g. closed-ended, open-ended, etc.)
- What type of measurement scales and ranges should be used? (E.g. Likert, semantic differential, etc.)

Several scholarly articles referred to two main instrument models. Bailey and Pearson published the first model in 1983. Doll and Torkzadeh published the second model in 1988. Bailey and Pearson's model consisted of 39 questions that considered 39 possible factors that were important to the customer. Bailey and Pearson gathered and analyzed participants' responses that revealed the top five important factors: Accuracy, Reliability, Timeliness, Relevancy and Confidence in the system. Bailey and Pearson used a semantic differential technique to measure the factors' importance that involved five adjective pairs to describe a factor as shown in Figure 5.



**Figure 5: Semantic Differential Technique (Bailey and Pearson 1983,533)**

Doll and Torkzadeh published their model in 1988. The model consisted of 40 questions that considered 40 potential important factors to the customer. The analysis of the participants' responses revealed the five most important factors to be Content, Accuracy, Format, Ease of Use and Timeliness. The model implemented a five-point Likert scale where "1 = almost never; 2 = some of the time; 3 = about half of the time; 4 = most of the time; and 5 = almost always"(Doll and Torkzadeh, 263).

Tables 6, 7 and 8 summarize the instrument details discovered in the papers and articles. Table 6 focuses on the instrument length, measurement scale and range. Table 7 (next page) shows the instrument factors considered important. Table 8 (next page) shows which factors occurred most frequently within the papers.

<b>AUTHOR(S)</b>	<b>NUMBER OF QUESTIONS</b>	<b>MEASUREMENT SCALE</b>	<b>SCALE RANGE</b>
Abdinnour-Helm, SF, BS Chaparro, and SM Farmer	12	5 point Likert	5
Bailey, James E. and Sammy W. Pearson.	39	Semantic differential, 4 adjective pairs	7
Baroudi, JJ and WJ Orlikowski	13	Semantic differential, 2 adjective pairs	7
Chin, WW and MKO Lee.	128	7,9 & 11 point Likert	7,9 & 11
Doll, WJ and G Torkzadeh	40	5 point Likert	5
Galletta, DF and AL Lederer	17	Semantic differential, 1 & 2 adjective pairs	7
Ilias, A, MZA Razak, RA Rahman, MR Yaso, and UM Sabah	<i>No survey</i>		
Ives, B, MH Olson, and JJ Baroudi	41	Semantic differential, 2 & 4 adjective pairs	4 & 7
Leclercq, A.	<i>No survey</i>		
Wang, YS, TI Tang, and JE Tang	43	5 point Likert	5

**Table 6: Literature Review Instrument Number of questions and measurement scale**

<b>Author</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>
Abdinnour-Helm et. al	Content	Accuracy	Format	Ease of Use	Timeliness
<b>Bailey et. al</b>	<b>Accuracy</b>	<b>Reliability</b>	<b>Timeliness</b>	<b>Relevancy</b>	<b>Confidence in System</b>
Baroudi et. al	Relationship with EDP staff	Processing of requests	Degree of EDP training	Users understanding of system	Users sense of participation
Chin et. al	Content	Accuracy	Format	Ease of Use	Timeliness
<b>Doll et. al</b>	<b>Content</b>	<b>Accuracy</b>	<b>Format</b>	<b>Ease of Use</b>	<b>Timeliness</b>
Galletta et. al	Relationship with EDP staff	Changes Request	Training	Understanding	Participation
Ilias et. al	<i>NO</i>	<i>SURVEY!</i>			
Ives et. al	Confidence in system	Training provided users	Scheduling of EDP products and services	Convenience of data	Technical Competence
Leclercq	<i>NO</i>	<i>SURVEY!</i>			
Wang et. al	Customer Support	Security	Ease of use	Information Content	Digital Products/services, transaction and payment, innovation

**Table 7: Literature Review Instrument Top Five Factors**

<b>Factor</b>	<b>Number of scholarly papers mentioning factor</b>
Processing of requests/Timeliness	6
Accuracy	4
Content	4
Ease of use	4
Training	3
Format	3
Confidence in System	2
Relationship with edp staff	2
Users sense of participation	2
Users understanding of system	2
Convenience of data	1
Customer Support	1
Digital Products/services, transaction and payment, innovation	1
Relevancy	1
Reliability	1
Scheduling of EDP products and services	1
Security	1
Technical Competence	1

**Table 8: Literature Review Factor Frequency**

The scholarly articles and papers also revealed three cautions to consider when developing a customer satisfaction instrument. The first caution was to decide whether the participants' identities would be left anonymous. It is "important to explain that the results are intended to identify ways to improve computer services and not to identify dissatisfied users"(Bailey and Pearson 1983,539). The second caution was to decide whether the instrument referred to the software's past or present capabilities. Users should not be confused whether their answers will "reflect present conditions or an aggregate of past conditions"(Bailey and Pearson 1983,539). The third caution was that each user's measurement perspective is different. "It is impossible to ascertain if subjects interpret the meanings of adjective pairs consistently"(Galletta and Lederer 1989,423). Users tend to "approach the attitude objects with their own scales"(Galletta and Lederer 1989,423). These three cautions were taken into consideration when creating the instrument.

## Chapter 3 – Research Procedure

The research procedure consisted of four segments. The first segment was interviewing school staff users. The second segment was developing a customer satisfaction instrument. The instrument was developed based on the information gathered from interviews and from scholarly papers and articles discovered in the literature review section. The third segment was gathering and analyzing participants' responses to the instrument which is covered in the results section. The fourth segment was key findings of the participants' responses which is also covered in the results section.

### 3.1 Interview Procedure

#### **Factors and Format**

The staff interview was a stepping-stone towards creating the instrument to measure customer satisfaction. The interview helped the programmer gain the users' perspective. The content of the interview questions was developed based on the programmer's interaction with users while developing and maintaining SD along with concepts acquired in EMGT classes. The interview factors are discussed in the results section. All 17 interview questions were open-ended.

#### **Method and Participants**

The programmer typed the interviewees' responses on a laptop using Microsoft Word during the interviews. The programmer considered using a voice recorder; however, the programmer believed the process of converting recorded audio files into text was more time consuming. Only four staff members were interviewed to optimize time-management.



The staff members are listed in the references section. The interview questions are shown in Appendix 1 along with interview responses in Appendix 2.

### **3.2 Instrument Procedure Factors and Format**

The content of the instrument questions was developed based on information gathered from interviews and the literature review section. The instrument had 13 close-ended questions along with one open-ended question for user comments. The details of how the instrument's factors were decided along with the analysis of participants' responses are presented in the results section. The instrument is shown in Appendix 3. The participants' responses are shown in Appendix 4.

### **Method and Participants**

The instrument was setup on the Survey Monkey website that provided the capability to send email invitations to participants. Email invitations were sent out to registered SD users only. The instrument invitation email was sent on behalf of the Project Stay grant along with an online link to the instrument. The invitation mentioned that the user's input would be anonymous, the instrument contained 14 questions, and would help improve SD quality along with being part of the programmer's EMGT field project. The invitation was sent out on 10<sup>th</sup> January 2010 and responses were collected until the end of January.

## **Cautions**

The programmer created the instrument considering the three cautions mentioned in the literature review. The first caution was whether the users' identities would be left anonymous, the programmer decided to leave the users' identities as anonymous. The second caution was whether the users should consider past or present capabilities of the SD software. The programmer gave instructions in the instrument to focus on the current SD capabilities.

The third caution was that each user's measurement perspective is different which the programmer struggled handling. The programmer settled on utilizing a six-point Likert scale containing the following options: Strongly Agree, Moderately Agree, Slightly Agree, Slightly Disagree, Moderately Disagree and Strongly Disagree. The reasoning was that the six-point Likert scale was almost similar in range to five scholarly papers in the literature review section that implemented a seven-point Likert scale. The programmer believed going beyond a six-point Likert scale would not improve analyzing the participants' responses. The programmer also believed that providing a neutral option would not be beneficial as the programmer needed to know whether participants supported or didn't support a factor.

## Chapter 4 Results

The results section contains five segments. The first segment is the factors that the interview questions focused on. The second segment is a recap of the factors discovered in the literature review section. The third segment is the creation of the instrument based on combining the interview and literature review factors. The fourth segment is the gathering and analysis of participants' responses to the instrument along with key findings. The fifth segment is conclusions.

### 4.1 Interview Factors

The interview consisted of 17 open-ended questions that covered 12 factors considered important by the programmer. The programmer cultivated the 12 factors based on knowledge gained from certain EMGT classes and user interaction that occurred when developing and maintaining SD. The 12 factors were SD Effectiveness, Strengths, Weaknesses, Training, Marketing and Awareness, Data Security and Confidentiality, User-Friendliness, Technical Support, Recommendation and Comments. A breakdown of the questions and factors is shown in Table 9. The interview questions were not arranged in any particular order, as each factor was considered equally important.

<b>Factor</b>	<b>Question focusing on factor</b>	<b>Question Type</b>
Software Effectiveness	1,7,8	Open-ended
Software Strengths	2	Open-ended
Soft Weaknesses	3	Open-ended
Training Required	4	Open-ended
Marketing and Awareness	5,6	Open-ended
Data Accuracy	8	Open-ended
Security and Confidentiality	9,10	Open-ended
Software User Friendliness	11,12	Open-ended
Competitor	13	Open-ended
Technical Support and Response time	14	Open-ended
Cost knowledge	15	Open-ended
Recommendation	16	Open-ended
Comments	17	Open-ended

**Table 9: Interview Factors**

#### 4.2 Literature Review Factors

Table 8 (page 14) in the procedure section summarizes the top 19 factors discovered in the literature review section. The table was sorted based on which factor appeared most frequently in the papers and articles. The programmer decided to utilize the top six most used factors towards the instrument: Processing of Requests/Timeliness, Accuracy, Content, Ease of Use, Training, and Format.

#### 4.3 Instrument Factors

The instrument contained 14 questions that covered 12 factors. The factors were a mix of interview and literature review factors, as shown in Table 10 (next page). Table 10 illustrates each factor along with its source and question type. The instrument had one yes/no question, three multiple-choice questions, and nine six-point Likert scale questions along with an open-ended question for comments. The instrument can be viewed in Appendix 3 and the instrument's responses are shown in Appendix 4.

<b>Question Number</b>	<b>Instrument Factor</b>	<b>Source</b>	<b>Question Type</b>
1	Marketing Awareness	Interview	6-option multiple choice
2	Usage	Interview	6-option multiple choice
3	Training	Interview	4-option multiple choice
4	Training	Interview	6-point Likert
5	User Friendly	Literature Review	6-point Likert
6	Content Usefulness	Literature Review	6-point Likert
7	Data Format	Literature Review	6-point Likert
8	Convenience of data	Interview	6-point Likert
9	Data accuracy	Literature review	6-point Likert
10	Support	Literature Review	yes/no
11	Support	Literature Review	6-point Likert
12	Confidentiality	Interview	6-point Likert
13	Recommendation	Interview	6-point Likert
14	Comments	Interview	Open-ended

**Table 10: Instrument Factors**

#### 4.4 Instrument Results – Gathering, Analysis Data and Key Findings

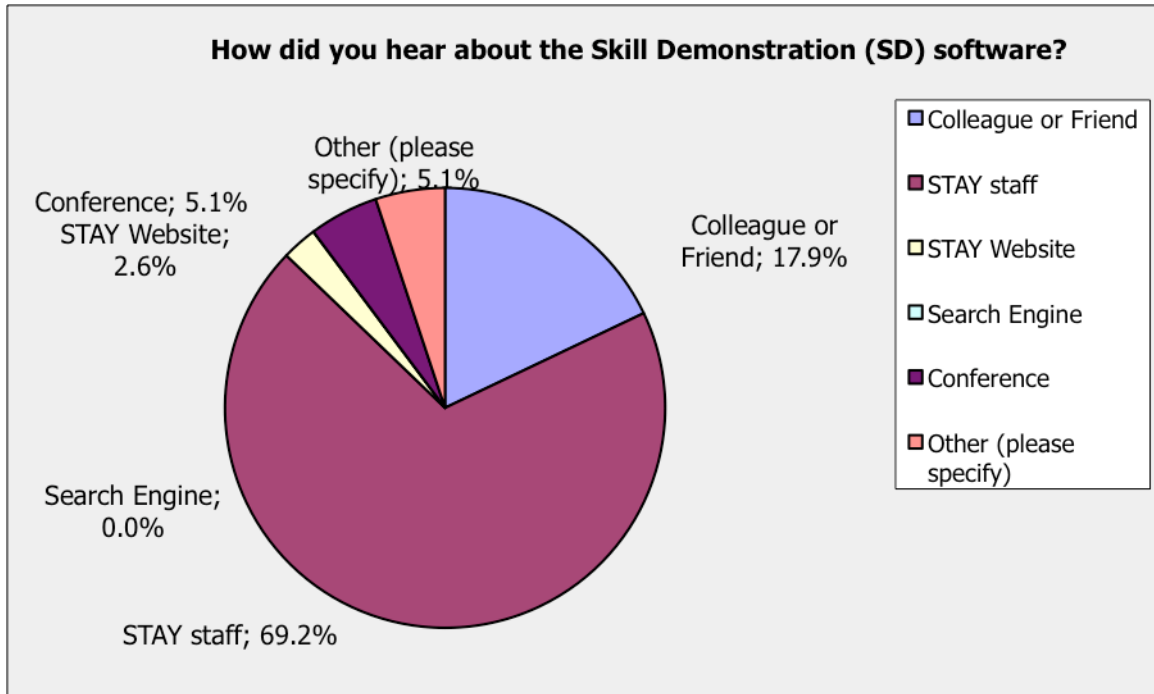
##### **Participation**

A breakdown of instrument participation is shown in Appendix 5 by school district. Survey Monkey recorded 39 complete responses out of a possible 181. The 39 responses represented only 21.55% instrument participation providing a small data set for analysis. Appendix 4 shows the full details of the participants’ responses. The next few segments cover the majority details of the participants’ responses.

##### **Marketing Awareness and Training Effectiveness – Questions 1,3 and 4**

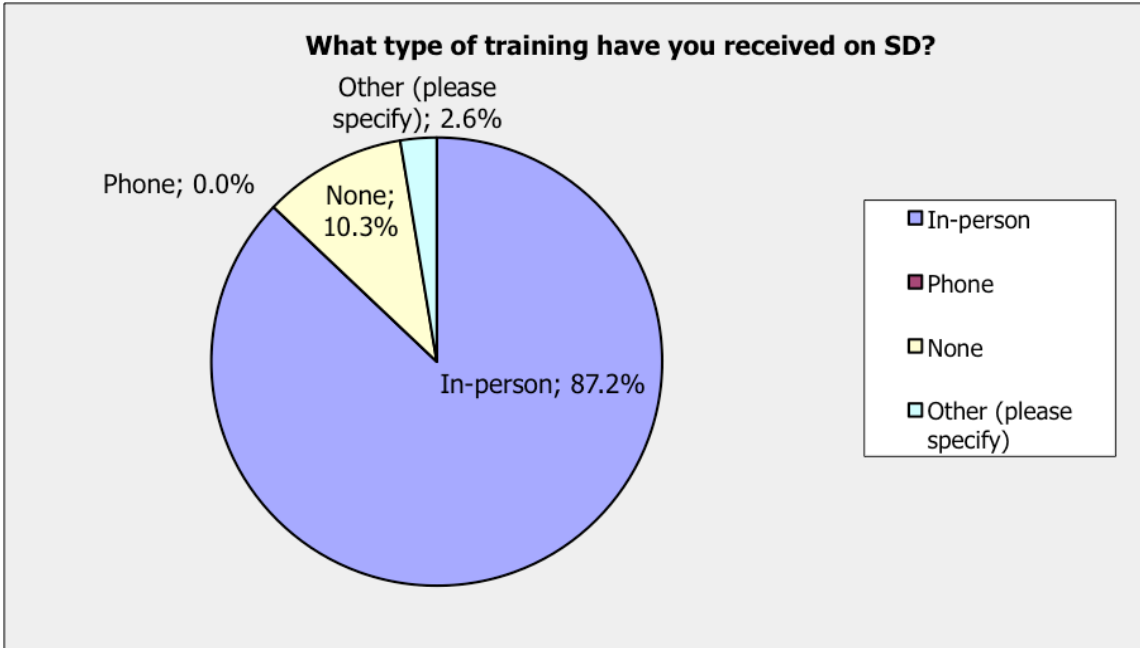
Only 2.6% of participants discovered SD through Project STAY’s main webpage. The majority of participants discovered SD by word-of-mouth channels such as STAY staff interaction (69.2%), colleague interaction (17.9%) and conferences (5.1%). The low online discovery percentage suggests that the STAY team must put in more effort to promote SD

through their main webpage. Figure 11 illustrates the marketing and awareness percentages in a graphical form.

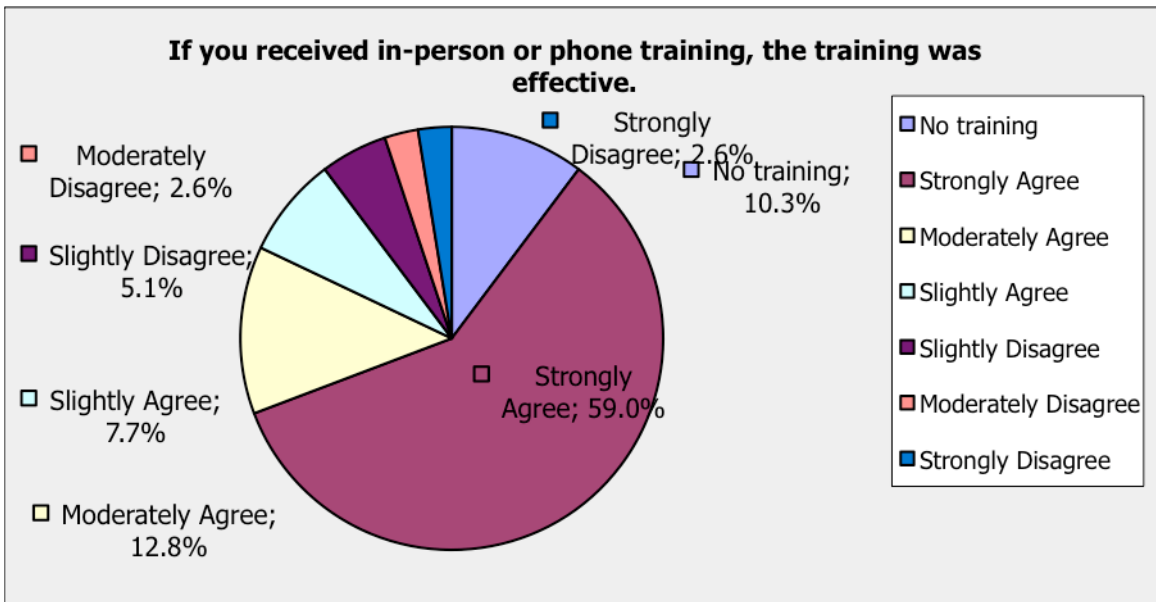


**Figure 11: SD Marketing and Awareness**

The majority of participants received in-person training. Out of the 87.2% participants that received in-person training, 59% strongly agreed, 12.8% moderately agreed and 7.7% slightly agreed that the training was effective. The summation of the three percentages is 79.5%, supporting the effectiveness of in-person training. However, in comparison to other factors' results, 79.5% isn't very high and in-person training can be improved. Figures 12 and 13 (next page) shows the training type and training effectiveness percentages in a graphical format.



**Figure 12: SD Type of Training**



**Figure 13: SD In-person Training Effectiveness**

## User Friendliness and Convenience of Data – Questions 5 and 8

In terms of user friendliness, 28.2% participants strongly agreed, 48.7% moderately agreed and 12.8% slightly agreed that SD was easy to use. The three percentages add up to 89.7%, favoring SD being easy to use. Figure 14 illustrates the user friendliness percentages in a graphical format.

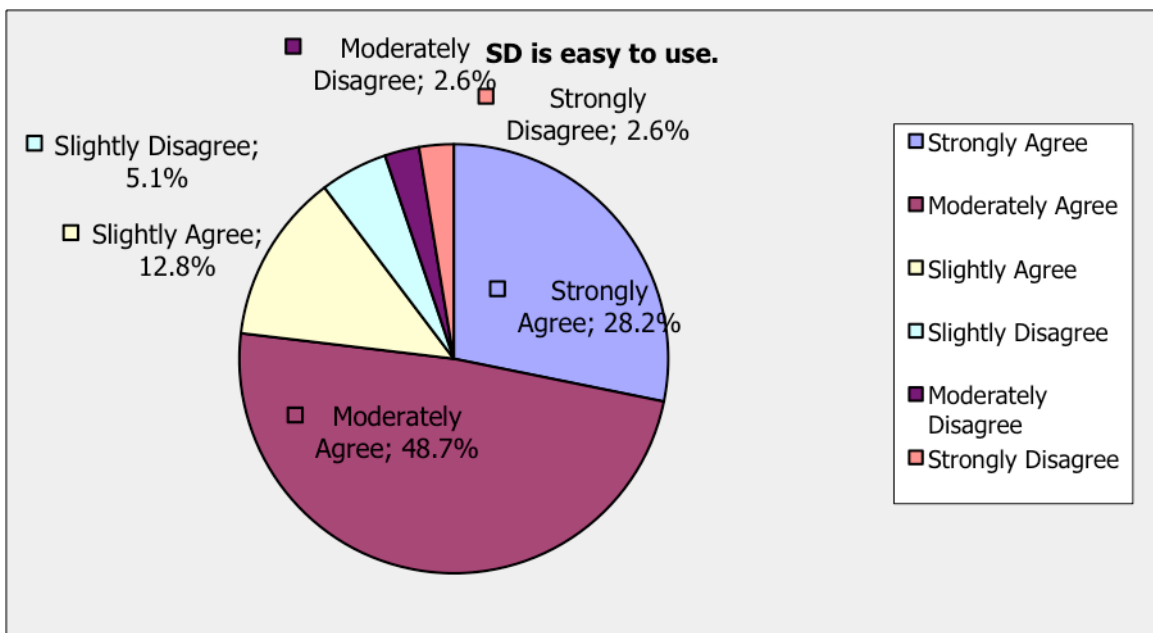


Figure 14: SD User Friendliness



In terms of convenience of data, 51.3% strongly agreed, 33.3% moderately agreed, and 10.3% slightly agreed that SD data was accessible when needed. The three percentages add up to 94.9%, supporting SD being accessible when needed. Figure 15 shows the convenience of data percentages in a graphical format.

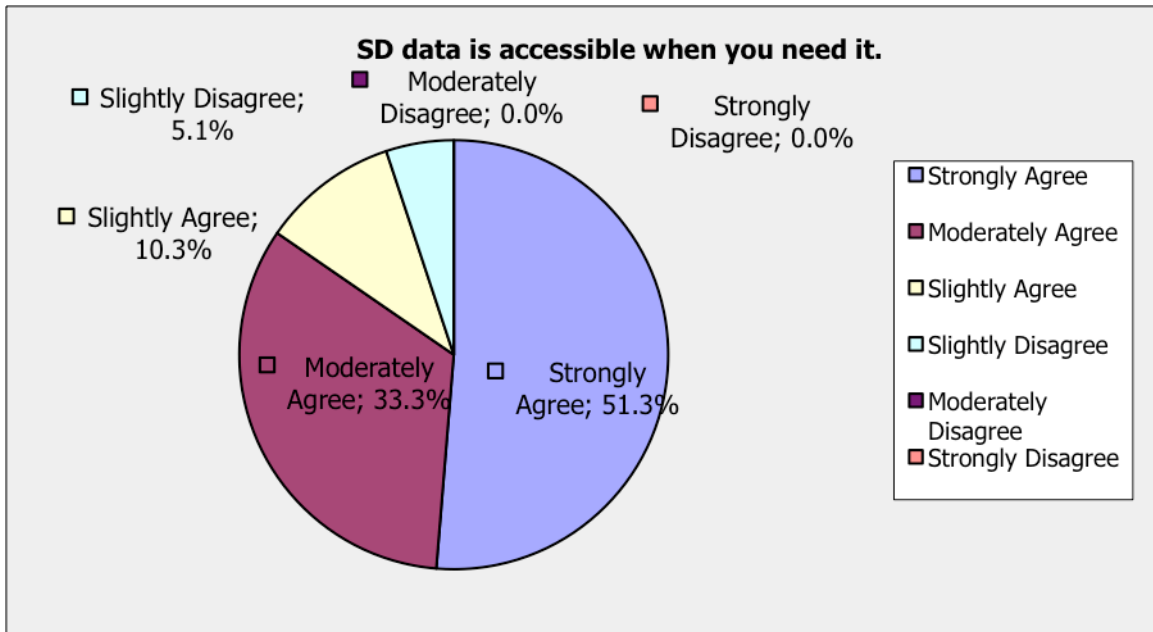


Figure 15: SD Convenience of data

## Format of Graphs and Tables, and Usefulness – Questions 7 and 6

A total of 94.9% of participants believed the SD graphs and tables were displayed in a clear and useful format. The total consisted of 35.9% strongly agreeing, 38.5% moderately agreeing, and 20.5% slightly agreeing. Figure 16 illustrates the graphs and tables format percentages in a graphical format.

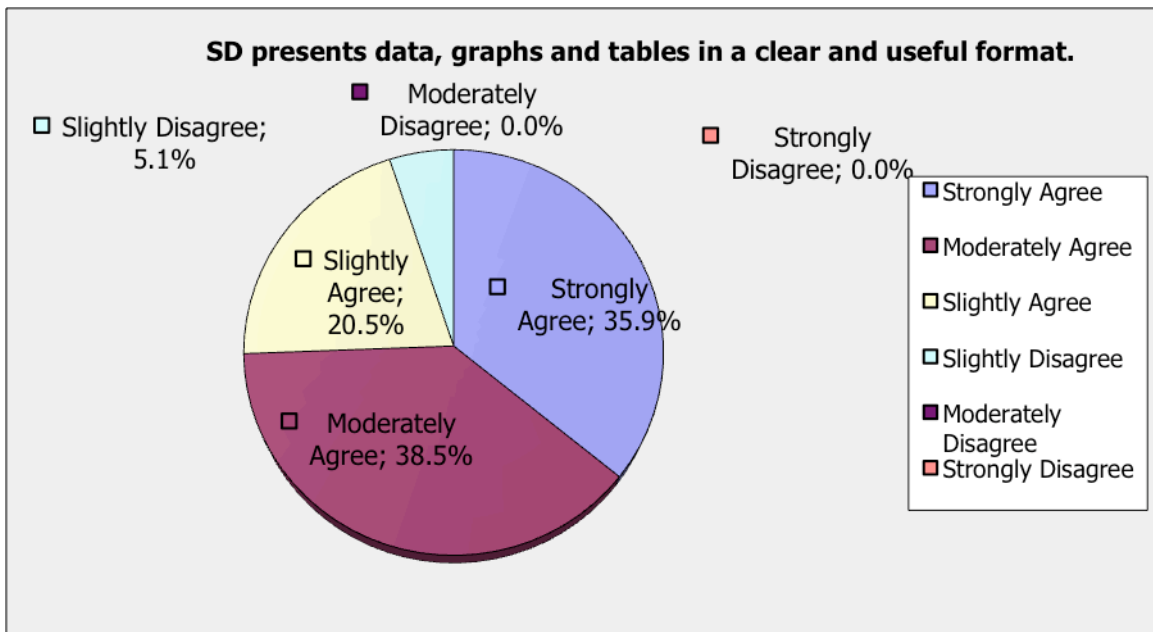
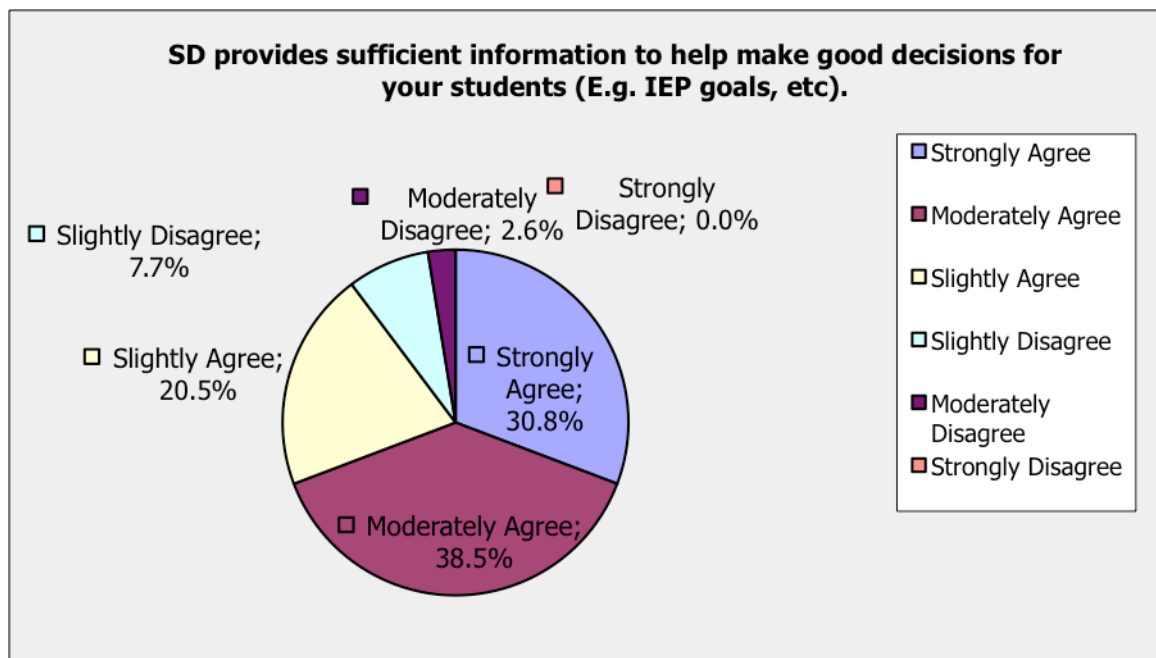


Figure 16: SD Graphs and Tables Format

30.8% of participants strongly agreed, 38.5% moderately agreed, and 20.5% slightly agreed that SD provided sufficient information to make useful decisions. The total addition of the percentages is 89.8%, supporting SD providing sufficient information to make good decisions. Figure 17 shows usefulness percentages in a graphical format.



**Figure 17: SD Usefulness**

### Data Accuracy and Confidentiality – Questions 9 and 12

56.4% of participants strongly agreed that data time stamping provided higher data accuracy, while 23.1% moderately agreed and 17.9% slightly agreed. The three add up to 97.4%, suggesting time stamping to be important. Figure 18 illustrates data accuracy percentages in a graphical format.

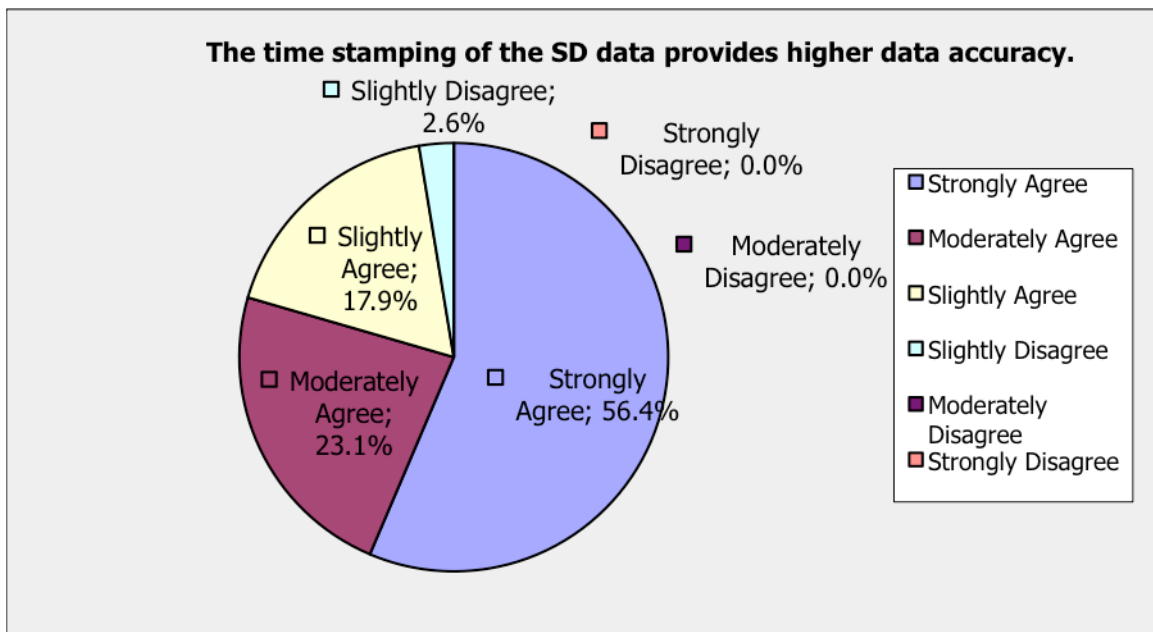
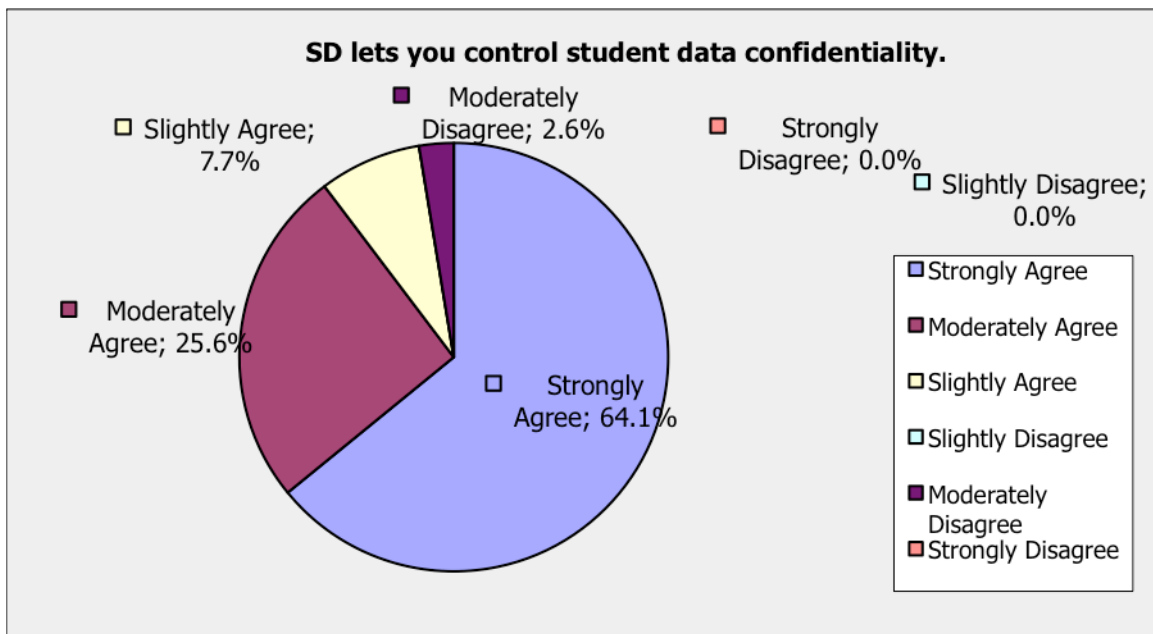


Figure 18: SD Data Accuracy

The participants' responses showed that 64.1% strongly agreed, 25.6% moderately agreed, and 7.7% slightly agreed that SD allowed participants to control student data confidentiality. The summation of the three percentages add up to 97.4% participants supporting SD providing data confidentiality. Figure 19 shows confidentiality percentages in a graphical format.



**Figure 19: SD Confidentiality**

### STAY Support and Recommendation – Questions 10, 11 and 13

Forty-one percent of participants contacted STAY staff regarding questions. From the 41% of participants that contacted STAY staff, 28.2% strongly agreed, 10.3% moderately agreed and 2.6% slightly agreed that their questions were answered successfully. The summation of the three percentages is 41% (100% of the 41% participants that contacted STAY staff), suggesting that STAY staff were able to successfully answer customer questions. The programmer observed 41% as a low percentage and believed that the STAY team needs to initiate more communication with customers. Figures 20 and 21 (next page) illustrate STAY-support percentages in a graphical format.

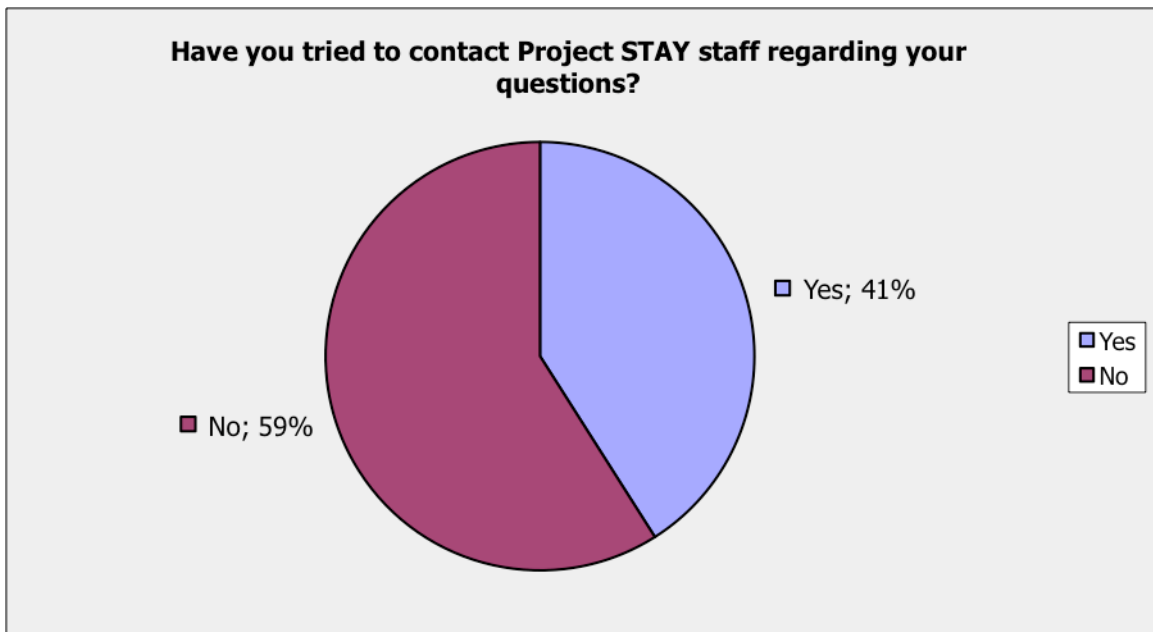
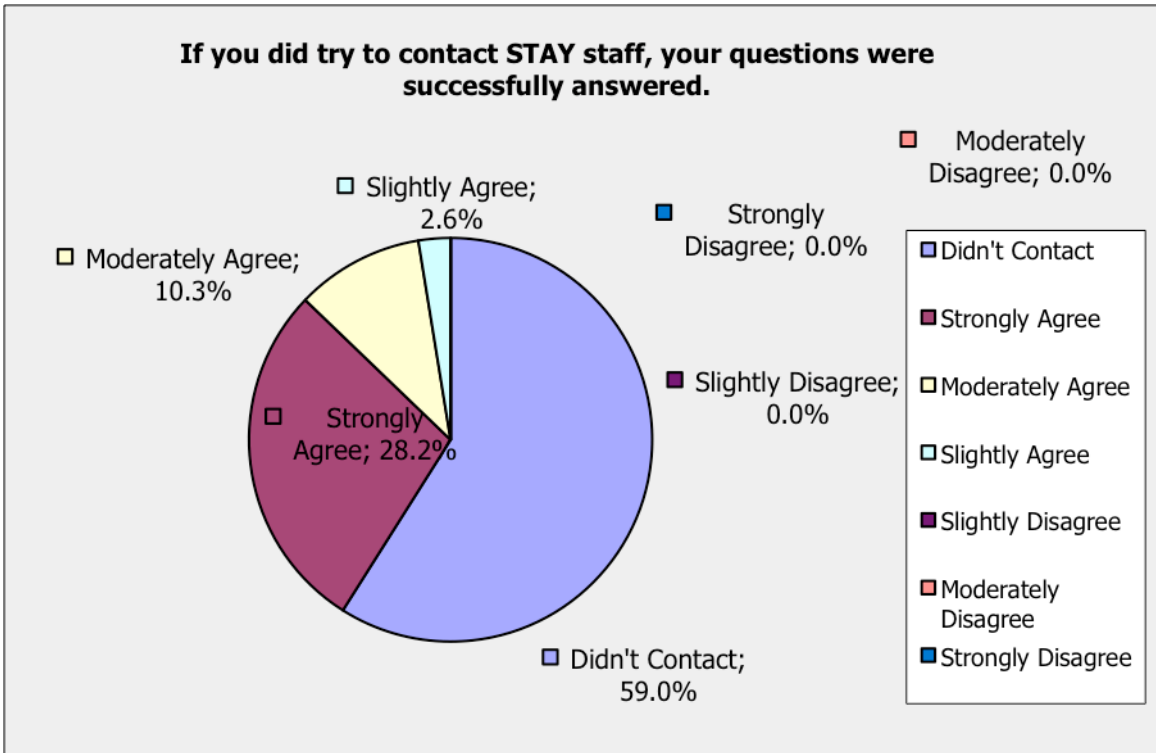
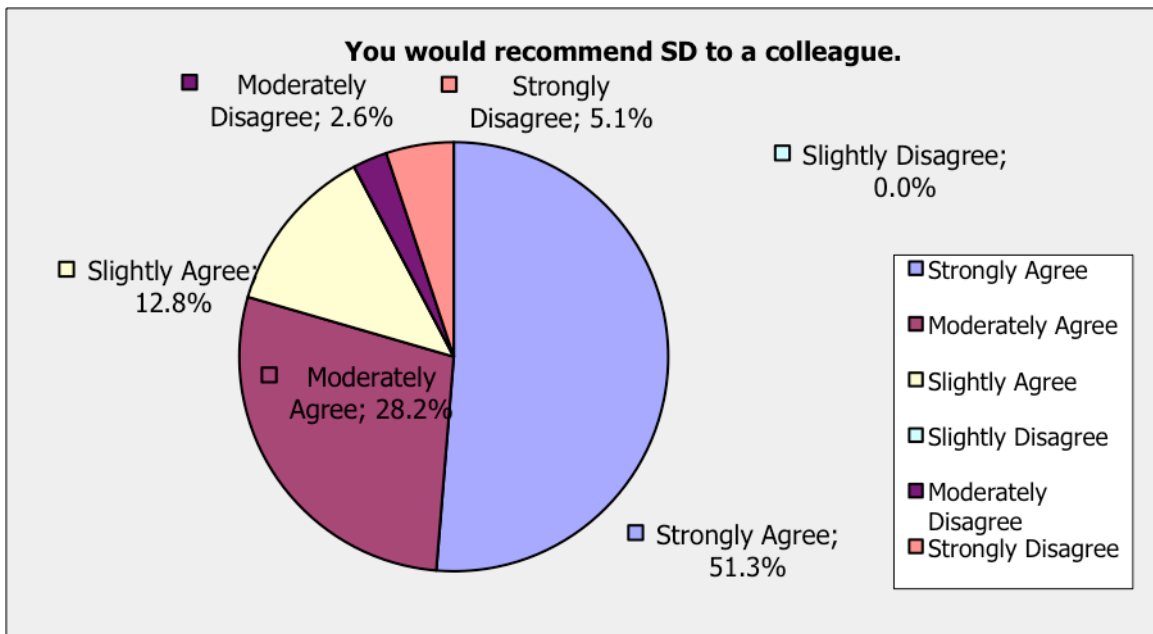


Figure 20: SD STAY Support – Contact Regarding Questions



**Figure 21: SD STAY Support – Questions Were Answered Successfully**

In terms of recommending SD to colleagues, 51.3% participants strongly agreed, 28.2% moderately agreed, and 12.8% slightly agreed that they would recommend SD to a colleague. These three percentages show evidence that 92.3% of participants were willing to recommend SD. Figure 22 shows recommendation percentages in a graphical format.



**Figure 22: SD Recommendation**

#### **Comments – Question 14**

The participants’ comments provided useful feedback to the programmer. Some comments were general supportive responses as shown in Table 23 (next page). Other responses as shown in Table 24 (next page) were comments that the programmer considered as potential improvements to be implemented. Some examples of possible improvements were additional graphing features, additional data collection options that were more than simply ‘yes’ and ‘no’, having a bank of pre-entered skills and more (see Appendix 4). The



comments revealed that the programmer would need to meet participants in-person to pursue the implementation of the possible mentioned improvements. The creation of another instrument would not help achieve detailed responses that the programmer requires to make improvements.

<b>Comments</b>
I love this and can't wait to use it and share it with my co-workers!
Setting the program up is very time consuming. Other than the time it takes, the program is wonderful and very helpful when making programing decisions.
I appreciate the resource
Great program!

**Table 23: Supportive Comments**

<b>Comments</b>
My difficulty is finding the time to initially enter the information. I would use it A LOT more if there was a larger bank of skills pre-entered. There are so many skill weaknesses that numerous students have in common that it would be wonderful to have the bank of skills available with the ability for modifications to individualized the task.
Some additional graphing features would be nice. There is one table which would be really helpful if it were in graph format as well.
At times, it may be nice to have more than 2 options (yes/no) in order to customize the program a bit more. We do not use the time stamping feature of the program as we just put in the daily data and use the title to date it.
Due to my students and the in-depth need for data, I have a need for more variety of different types of data for my students. Due to this, I am not sure I will be able to use it as much due to my students' specific needs
I was wondering if it would be possible to create a graph in which we could enter specific scores, total number of sight words read, etc. I found that the data was not always portrayed in the best way due to the "yes/no" format. For i nstance, I would like to graph accuracy rates for math test scores to see if the student is showing improvement in a specific skill area over time.

**Table 24: Possible Improvement Comments**

## **Summary of Results – Key Findings**

Overall, the instrument results provided interesting percentages regarding various SD aspects. SD has been poorly marketed online, and there has been a limited amount of interaction between users and STAY staff regarding SD questions. The evidence for poor online marketing was only 2.6% of participants discovering SD through Project STAY's main webpage. The evidence for limited customer communication was 41% of participants contacting STAY staff regarding questions.

The in-person training was a factor that can be improved as 79.5% of participants suggested in-person training to be effective. Over 89% of participants favored the following factors: user friendliness, convenience of data, providing sufficient information to make useful decisions, clearly formatted graphs and tables, data accuracy, data confidentiality, and recommendation to colleagues. The participants' comments were very valuable to the programmer as it varied from general supportive comments to comments suggesting modifications to existing features and adding new features.

## 4.5 Conclusions

The goal of creating an instrument to communicate with school staff to determine reasons for SD usage decline was achieved. The instrument contained 14 questions based on user interviews and literature review. The instrument received 21.5% responses from invitations sent out. Over 89% of responses supported SD in terms of user friendliness, convenience of data, providing sufficient information to make useful decisions, clearly formatted graphs and tables, data accuracy, data confidentiality, and recommendation to colleagues.

The instrument responses suggested that SD was marketed online very poorly as only 2.6% of participants discovered SD online. Users' interaction was limited with 41% of participants contacting STAY staff regarding questions. The in-person training could also be improved as 79.5% of participants believed the training to be effective. The participants' comments provided reasons for SD's usage decline. The comments covered aspects such as requesting additional graphing features, data collection methods and having a bank of pre-entered skills. SD is not currently meeting all the needs of school staff, and the programmer will need to meet participants in-person to gather full details regarding the additional graphing features, data collection methods and a bank of pre-entered skills.

## Chapter 5 - Suggestions for Additional Work

As the programmer pursues tackling poor online marketing, encouraging user interaction with STAY staff, improving in-person training and gathering details regarding modifications from users, the programmer should also keep monitoring usage trend over the next year. The programmer could encourage participants to participate in this field project's instrument again next year. The comparison of next year's results with this field project's results will help determine whether the programmer was successful at delivering the users' needs and increasing SD usage. Then STAY may be able introduce an improved SD to more school districts, and SEKESC may be able pursue more state department grants that require the programmer's assistance.

## Glossary

CIS - Customer Information Satisfaction

EMGT – Engineering Management

EUCS – End-User Customer Satisfaction

IDEA - Individuals with Disabilities Education Act

IEP - Individualized Education Plan

SEKESC – Southeast Kansas Education Service Center

SD – Skill Demonstration Software

SPED – Special Education

STAY – Supporting Teachers and Youth

UIS - User Information Satisfaction

## Appendices

### Appendix 1: Interview Questions

**Q1. Does the program help measure IEP goals?**

**Q2. What are 5 good things about the Skill Demonstration (SD) program? (e.g. ease of use, data accuracy, etc)**

**Q3. What are 5 not-so good things about the SD program? (e.g. ease of use, data accuracy, etc)**

**Q4. What sort of training do you think is required to use the SD program? (e.g. in person, over the phone, none, etc)**

**Q5. Is the SD program branded or marketed in any certain way? If not, how can branding/marketing be improved?**

**Q6. How did you find out about the SD program? How does the average teacher find out about the program? (by word of mouth?, projectstay staff? etc)**

**Q7. Who mainly uses the SD program? (Paras? Teachers?)**

**Q8. Are the SD graphs and tables useful and accurate? How are they useful to staff?**

**Q9. Do you feel the SD program is secure?**

**Q10. Does the SD program take student confidentiality into consideration?**

**Q11. Do you know that there is a HELP powerpoint after logging in? Do you think users refer to it?**

**Q12. Is using the SD program time-consuming, as some staff members input their data at the end of day?**

**Q13. Is there a competitor software to the SD program?**

**Q14. Does technical/educational support exist for the program? What is the estimated response time regarding problems/questions from users?**

**Q15. What is the cost of the program? (for a normal user)**

**Q16. Would you recommend the program to School staff members?**

**Q17. Please list any other comments about the program.**

## Appendix 2: Interview Responses

### **Interviewee: David Eichler**

**Q. Does the program help measure IEP goals?**

It can. It depends on the definition. E.g. works for a binary action

**Q. What are 5 good things about the Skill Demonstration (SD) program? (e.g. ease of use, data accuracy, etc)**

- Can be trained in under 15 mins
- A trained person can train another person
- Flexible in ability to collect data on multiple kids
- Can be accessed anywhere
- Sharing data from anywhere

**Q. What are 5 not-so good things about the SD program? (e.g. ease of use, data accuracy, etc)**

- No mobile interface
- Cumbersome interface, not super intuitive
- Graphs Tables aren't polished functionally
- No easy feedback system
- No automated monitoring (user usage info/report)
- No end-user survey

**Q. What sort of training do you think is required to use the SD program? (e.g. in person, over the phone, none, etc)**

- Don't know yet
- Mainly done in person
- Easy, try video tutorials

**Q. Is the SD program branded or marketed in any certain way? If not, how can branding/marketing be improved?**

- Not well
- Get is polished first before marketing it (a little cumbersome, less will use)

**Q. How did you find out about the SD program? How does the average teacher find out about the program? (by word of mouth?, projectstay staff? etc)**

- Made it
- Stay staff or word of mouth

**Q. Who mainly uses the SD program? (Paras? Teachers?)**

- Teachers set it up, teachers/paras/itinerary staff (e.g. speech person) use the program

**Q. Are the SD graphs and tables useful and accurate? How are they useful to staff?**

- Accurate, but limited
- Unknown
- Communicate IEP goals to the team

**Q. Do you feel the SD program is secure?**

- No, not on a secure server
- Need more a simple password
- E.g. govt websites get hacked, hackers are a problem of today's generation

**Q. Does the SD program take student confidentiality into consideration?**

- Yes

**Q. Do you know that there is a HELP powerpoint after logging in? Do you think users refer to it?**

- Not sure, users don't

**Q. Is using the SD program time-consuming, as some staff members input their data at the end of day?**

- No, it's time saving, a benefit

**Q. Is there a competitor software to the SD program?**

- Don't know (joke: maybe one will appear next week)

**Q. Does technical/educational support exist for the program? What is the estimated response time regarding problems/questions from users?**

- Yes, usually within 24 hrs (mainly email)

**Q. What is the cost of the program? (for a normal user)**

- Free to all kansas schools

**Q. Would you recommend the program to School staff members?**

- Yes

**Q. Please list any other comments about the program.**

- No

**Interviewee: Lindsay Mckanna**

**Q. Does the program help measure IEP goals?**

- Yes



**Q. What are 5 good things about the Skill Demonstration (SD) program? (e.g. ease of use, data accuracy, etc)**

Ease of graphing  
Ease of readability to an outside eye  
Easy to enter in data  
Simple to train  
Easy to navigate through

**Q. What are 5 not-so good things about the SD program? (e.g. ease of use, data accuracy, etc)**

Time consuming to put in all the skills – though rewarding at end

Don't have anything else

**Q. What sort of training do you think is required to use the SD program? (e.g. in person, over the phone, none, etc)**

I have trained over the phone and in person and it was easy each time. It is a simple way to take data that is easy to teach

**Q. Is the SD program branded or marketed in any certain way? If not, how can branding/marketing be improved?**

We need to hit it more with sped teachers for IEP use.

**Q. How did you find out about the SD program? How does the average teacher find out about the program? (by word of mouth?, projectstay staff? etc)**

Project STAY

**Q. Who mainly uses the SD program? (Paras? Teachers?)**

Teachers

**Q. Are the SD graphs and tables useful and accurate? How are they useful to staff?**

Yes – they are great data for IEP goals and for parents to view progress.

**Q. Do you feel the SD program is secure?**

Yes

**Q. Does the SD program take student confidentiality into consideration?**

Yes

**Q. Do you know that there is a HELP powerpoint after logging in? Do you think users refer to it?**

Yes – I think it is good to have but I think most people call/email when they have a question.

**Q. Is using the SD program time-consuming, as some staff members input their data at the end of day?**

Not for inputting data – creating multiple skills.

**Q. Is there a competitor software to the SD program?**

Not that I am aware of

**Q. Does technical/educational support exist for the program? What is the estimated response time regarding problems/questions from users?**

Very quickly – not sure a number.

**Q. What is the cost of the program? (for a normal user)**

free

**Q. Would you recommend the program to School staff members?**

Absolutely!

**Q. Please list any other comments about the program.**

Interviewee: Christin Sheldon

**Q. Does the program help measure IEP goals?**

Skill demonstration can assist in measuring IEP goals by providing data on skills that have been listed as goals.

**Q. What are 5 good things about the Skill Demonstration (SD) program? (e.g. ease of use, data accuracy, etc)**

- Flexibility of Program...in entering data specific information, etc
- Accuracy
- Graphs are easy to read
- The option to archive skills is helpful

**Q. What are 5 not-so good things about the SD program? (e.g. ease of use, data accuracy, etc)**

- The initial-time use may be confusing due to the number of options; however, with more use, this becomes much easier.

**Q. What sort of training do you think is required to use the SD program? (e.g. in person, over the phone, none, etc)**

Although it could be done over the phone, I believe the most effective training for the program is in person.

**Q. Is the SD program branded or marketed in any certain way? If not, how can branding/marketing be improved?**

To my knowledge, the SD program is only marketed by word-of-mouth from the Project STAY

staff.

**Q. How did you find out about the SD program? How does the average teacher find out about the program? (by word of mouth?, projectstay staff? etc)**

I found out about the SD program via Project STAY as a member of the staff. I believe the average teacher finds out about the program via Project STAY staff.

**Q. Who mainly uses the SD program? (Paras? Teachers?)**

I believe paras and teachers are the two populations who use the program most frequently.

**Q. Are the SD graphs and tables useful and accurate? How are they useful to staff?**

As a member of the PS staff, I believe the tables are both accurate and useful.

**Q. Do you feel the SD program is secure?**

Yes. As the program is password protected, I feel as though it is reasonably secure.

**Q. Does the SD program take student confidentiality into consideration?**

I think that since the user can input student data to the extent that they desire, this takes reasonable steps towards student confidentiality. If a user wanted to practice greater confidentiality, they could use initials for the student or possibly assign the student a number

**Q. Do you know that there is a HELP powerpoint after logging in? Do you think users refer to it?**

Yes, I know of the HELP powerpoint. I believe some users probably refer to it; however, many individuals will be more inclined to use trial and error or contact a member of PS staff.

**Q. Is using the SD program time-consuming, as some staff members input their data at the end of day?**

If staff members are inputting their data at the end of the day, I can understand how this might be slightly time consuming; however I believe the most time-consuming aspects involve inputting initial information (student information, new skill steps, etc), which could be entered in advance.

**Q. Is there a competitor software to the SD program?**

Not to my knowledge.

**Q. Does technical/educational support exist for the program? What is the estimated response time regarding problems/questions from users?**

Users can access the powerpoint or contact a member of the PS staff for assistance.

**Q. What is the cost of the program? (for a normal user)**

To my knowledge, the program is free to public school in the state of Kansas.

**Q. Would you recommend the program to School staff members?**

Yes, I believe it can be helpful in gathering data on skills and assessing progress.

**Q. Please list any other comments about the program.**

Interviewee: Sybella Morore

**Q. Does the program help measure IEP goals?**

I feel the program is a great tool for measuring IEP goals.

**Q. What are 5 good things about the Skill Demonstration (SD) program? (e.g. ease of use, data accuracy, etc)**

Allows for teacher/school faculty:

- To design their own task(s)
- The freedom to create steps unique to the students needs
- Provide visual graph/charts to present to parents and other stakeholders in IEP meetings
- Helps teachers pin point with more efficiency what instruction(s) within a task a student maybe struggling with
- 

**Q. What are 5 not-so good things about the SD program? (e.g. ease of use, data accuracy, etc)**

- It can be a challenge to maneuver through, if you are not familiar with basic computer terminology
- The set up time for being able to access (getting your login info) this program can be timely at different times of the year

**Q. What sort of training do you think is required to use the SD program? (e.g. in person, over the phone, none, etc)**

There should be at least an hour of training on how to use this program (if possible it would be nice to see a teacher and student using the application)

**Q. Is the SD program branded or marketed in any certain way? If not, how can branding/marketing be improved?**

I do think it has been branded/marketed at a very minimal level of word of mouth and on the Project STAY website. Not sure how to better market other than presenting at more multidimensional meetings and conferences

**Q. How did you find out about the SD program? How does the average teacher find out about the program? (by word of mouth?, projectstay staff? etc)**

The Project STAY

**Q. Who mainly uses the SD program? (Paras? Teachers?)**

I think any person who has direct contact with students for educational purposes.

**Q. Are the SD graphs and tables useful and accurate? How are they useful to staff?**

I find them to be useful in presenting evidence to persons involved with the student, by giving them a visual aid to illustrate the challenges a student may be experiencing during tasks of interest

**Q. Do you feel the SD program is secure?**

Yes, but I could see this being an issue for some who are overly concerned with confidentiality

**Q. Does the SD program take student confidentiality into consideration?**

My personal thought is that the responsibility falls on the person using the program, because anything information exchanged over the Internet or on a computer has the potential for a breach in confidentiality

**Q. Do you know that there is a HELP PowerPoint after logging in? Do you think users refer to it?**

No, I did not know there was a help PowerPoint after you login. Some faculty members are unaware/doubt possibilities this program offers. These are the staff members I feel are less likely not notice a HELP ppt simply because they are not motivate to learn more about it. Those who are aware of its benefits but find its application challenging, will either look for this HELP ppt or call to request further assistance. I thoughts on “troubleshooting” or a “helpdesk” is in general the school profession is familiar with a more personal approach to learning or problem solving. With this in mind, the HELP ppt could be seen as a double-edged sword in that it may help those who are “tech savvy” but further detour those who are not. I would continue and encourage the use of a mobile-technician to visit with schools expressing difficulty.

**Q. Is using the SD program time-consuming, as some staff members input their data at the end of day?**

I hesitate to say no just because other variables may apply. As long as all “computer issue” such as good Internet service are emplace, the end-of-day input doesn’t take long at all.

**Q. Is there competitor software to the SD program?**

I would not know this is the only program I am familiar with.

**Q. Does technical/educational support exist for the program? What is the estimated response time regarding problems/questions from users?**

Yes, technical/educational supports exist upon request, but estimated response time can vary.

**Q. What is the cost of the program? (For a normal user)**

I am unsure of the cost.

**Q. Would you recommend the program to School staff members?**

Yes! I would recommend this program to other professions found in and out of the school setting (i.e. occupational therapist, speech therapists, etc.). This program would be of great use to any persons interested in evaluating the progression of their measurable goals for clients.

**Q. Please list any other comments about the program.**

This is a great program that I hope you will continue to develop. Thanks for letting me be a part of it!

## Appendix 3: Instrument to measure Customer Satisfaction

### INSTRUCTIONS

- 1) This Skill Demonstration (SD) feedback survey has 14 questions and should take less than 5 minutes.
- 2) Answer based on your most recent SD software experience.
- 3) Your feedback will be left as anonymous.
- 4) Question 14 is for comments. Select one option for questions 1-13.
- 5) This survey will help Akshaya (SD programmer) with his Graduate School thesis.
- 6) Contact Akshaya if clarification is required: [akshaya@projectstay.com](mailto:akshaya@projectstay.com)

#### 1) How did you find the Skill Demonstration (SD) software?

- Colleague or Friend     STAY staff     STAY Website     Search Engine     Conference

#### 2) How long have you used SD?

- Less than 1 month     1-6 months     6-12 months     1-2years     More than 2 years

### Training

#### 3) What type training have you received on SD?

- In-person     Phone     Other     None

#### 4) If you received In-person or phone training, was the training effective?

- Strongly Agree     Moderately Agree     Slightly Agree     Slightly Disagree     Moderately Disagree     Strongly Disagree

**Ease of Use**

**5)SD is easy to use.**

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree

**Content**

**6)Does SD provide sufficient information to help make good decisions for your student? (E.g. IEP goals, etc)**

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree

**Format**

**7)SD presents data, graphs and tables in a clear and useful format?**

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree

**Convenience of data**

**8)SD data is accessible when you need it.**

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree

**Accuracy**

**9)The time stamping of the data provides more data accuracy**

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree

**Timeliness/Customer Support**

**10)Have you tried to contact Project STAY staff regarding your questions?**

<input type="radio"/>	<input type="radio"/>
Yes	No



**11)If you did try to contact STAY staff, were your questions ?**

Didn't Contact    Strongly Agree    Moderately Agree    Slightly Agree    Slightly Disagree    Moderately Disagree    Strongly Disagree

**12)Does the program let you control student data confidentiality?**

Strongly Agree    Moderately Agree    Slightly Agree    Slightly Disagree    Moderately Disagree    Strongly Disagree

**13)Would you recommend the software to a colleague?**

Strongly Agree    Moderately Agree    Slightly Agree    Slightly Disagree    Moderately Disagree    Strongly Disagree

**14)Please provide additional comments here:**

## Appendix 4: Instruments Results Summary

### Question 1

How did you hear about the Skill Demonstration (SD) software?			
Answer Options		Response Percent	Response Count
Colleague or Friend		17.9%	7
STAY staff		69.2%	27
STAY Website		2.6%	1
Search Engine		0.0%	0
Conference		5.1%	2
Other (please specify)		5.1%	2
<b>answered question</b>			<b>39</b>
<b>skipped question</b>			<b>0</b>
Number	Response Date	Other (please specify)	
1	Jan 15, 2010 7:58 PM	My principal	
2	Jan 22, 2010 6:42 PM	DeSoto School District	

### Question 2

How long have you used SD?			
Answer Options		Response Percent	Response Count
less than 1 month		25.6%	10
1-6 months		25.6%	10
6-12 months		12.8%	5
1-2 years		12.8%	5
More than 2 years		10.3%	4
Other (please specify)		12.8%	5
<b>answered question</b>			<b>39</b>
<b>skipped question</b>			<b>0</b>
Number	Response Date	Other (please specify)	
1	Jan 13, 2010 9:44 PM	I used it 3 years ago...	
2	Jan 15, 2010 6:44 PM	Used it a few times @ 1 yr. ago	
3	Feb 1, 2010 6:33 PM	not using it	
4	Feb 3, 2010 3:01 PM	Not able to use due to network issues on my school's end	
5	Feb 4, 2010 4:33 PM	Used it during an inservice presentation and experimented with it a few times after that. Have not used it since.	

Question 3

<b>What type of training have you received on SD?</b>			
<b>Answer Options</b>		<b>Response Percent</b>	<b>Response Count</b>
In-person		87.2%	34
Phone		0.0%	0
None		10.3%	4
Other (please specify)		2.6%	1
<b>answered question</b>			<b>39</b>
<b>skipped question</b>			<b>0</b>
<b>Number</b>	<b>Response Date</b>	<b>Other (please specify)</b>	
<b>1</b>	<b>Jan 12, 2010 9:51 PM</b>	Guided training in school computer lab	

Question 4

<b>If you received in-person or phone training, the training was effective.</b>			
<b>Answer Options</b>		<b>Response Percent</b>	<b>Response Count</b>
No training		10.3%	4
Strongly Agree		59.0%	23
Moderately Agree		12.8%	5
Slightly Agree		7.7%	3
Slightly Disagree		5.1%	2
Moderately Disagree		2.6%	1
Strongly Disagree		2.6%	1
<b>answered question</b>			<b>39</b>
<b>skipped question</b>			<b>0</b>

Question 5

<b>SD is easy to use.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	28.2%	11
Moderately Agree	48.7%	19
Slightly Agree	12.8%	5
Slightly Disagree	5.1%	2
Moderately Disagree	2.6%	1
Strongly Disagree	2.6%	1
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 6

<b>SD provides sufficient information to help make good decisions for your students (E.g. IEP goals, etc).</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	30.8%	12
Moderately Agree	38.5%	15
Slightly Agree	20.5%	8
Slightly Disagree	7.7%	3
Moderately Disagree	2.6%	1
Strongly Disagree	0.0%	0
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 7

<b>SD presents data, graphs and tables in a clear and useful format.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	35.9%	14
Moderately Agree	38.5%	15
Slightly Agree	20.5%	8
Slightly Disagree	5.1%	2
Moderately Disagree	0.0%	0
Strongly Disagree	0.0%	0
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 8

<b>SD data is accessible when you need it.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	51.3%	20
Moderately Agree	33.3%	13
Slightly Agree	10.3%	4
Slightly Disagree	5.1%	2
Moderately Disagree	0.0%	0
Strongly Disagree	0.0%	0
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 9

<b>The time stamping of the SD data provides higher data accuracy.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	56.4%	22
Moderately Agree	23.1%	9
Slightly Agree	17.9%	7
Slightly Disagree	2.6%	1
Moderately Disagree	0.0%	0
Strongly Disagree	0.0%	0
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 10

<b>Have you tried to contact Project STAY staff regarding your questions?</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Yes	41.0%	16
No	59.0%	23
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 11

<b>If you did try to contact STAY staff, your questions were successfully answered.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Didn't Contact	59.0%	23
Strongly Agree	28.2%	11
Moderately Agree	10.3%	4
Slightly Agree	2.6%	1
Slightly Disagree	0.0%	0
Moderately Disagree	0.0%	0
Strongly Disagree	0.0%	0
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 12

<b>SD lets you control student data confidentiality.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	64.1%	25
Moderately Agree	25.6%	10
Slightly Agree	7.7%	3
Slightly Disagree	0.0%	0
Moderately Disagree	2.6%	1
Strongly Disagree	0.0%	0
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 13

<b>You would recommend SD to a colleague.</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Strongly Agree	51.3%	20
Moderately Agree	28.2%	11
Slightly Agree	12.8%	5
Slightly Disagree	0.0%	0
Moderately Disagree	2.6%	1
Strongly Disagree	5.1%	2
<b><i>answered question</i></b>		<b>39</b>
<b><i>skipped question</i></b>		<b>0</b>

Question 14

<b>Please prove additional SD comments here</b>		
<b>Answer Options</b>		<b>Response Count</b>
		16
<i>answered question</i>		<b>16</b>
<i>skipped question</i>		<b>23</b>
<b>Number</b>	<b>Response Date</b>	<b>Response Text</b>
<b>1</b>	<b>Jan 12, 2010 8:52 PM</b>	My difficulty is finding the time to initially enter the information. I would use it A LOT more if there was a larger bank of skills pre-entered. There are so many skill weaknesses that numerous students have in common that it would be wonderful to have the bank of skills available with the ability for modifications to individualized the task.
<b>2</b>	<b>Jan 12, 2010 9:26 PM</b>	Some additional graphing features would be nice. There is one table which would be really helpful if it were in graph format as well.
<b>3</b>	<b>Jan 12, 2010 9:54 PM</b>	Difficult to apply SD to students with very intensive articulation goals. There are too many variables within a goal to chart data in a concise manner.
<b>4</b>	<b>Jan 13, 2010 7:38 PM</b>	At times, it may be nice to have more than 2 options (yes/no) in order to customize the program a bit more. We do not use the time stamping feature of the program as we just put in the daily data and use the title to date it.
<b>5</b>	<b>Jan 14, 2010 3:20 PM</b>	I love this and can't wait to use it and share it with my co-workers!
<b>6</b>	<b>Jan 15, 2010 6:47 PM</b>	I have not used this program to track data. I used it to try computerized Task Analysis, but I have other ways to create them, so I do not access this program to do so.
<b>7</b>	<b>Jan 15, 2010 8:00 PM</b>	I have not known how to affectively use it with my 1st grade student
<b>8</b>	<b>Jan 22, 2010 6:46 PM</b>	Due to my students and the in-depth need for data, I have a need for more variety of different types of data for my students. Due to this, I am not sure I will be able to use it as much due to my students' specific needs
<b>9</b>	<b>Jan 22, 2010 9:08 PM</b>	I would like to be able to edit goals and steps once they are put in. The link doesn't work to allow us to do so.
<b>10</b>	<b>Jan 24, 2010 6:20 PM</b>	I was wondering if it would be possible to create a graph in which we could enter specific scores, total number of sight words read, etc. I found that the data was not always portrayed in the best way due to the "yes/no" format. For instance, I would like to graph accuracy rates for math test scores to see if the student is showing improvement in a specific skill area over time.
<b>11</b>	<b>Jan 26, 2010 4:41 PM</b>	Setting the program up is very time consuming. Other than the time it takes, the program is wonderful and very helpful when making programing decisions.
<b>12</b>	<b>Jan 28, 2010 2:59 PM</b>	I appreciate the resource
<b>13</b>	<b>Feb 3, 2010 2:05 PM</b>	I prefer using Excel.

Question 14 continued

<b>14</b>	<b>Feb 3, 2010 3:03 PM</b>	I wish that I could have used this in real life. The training was great and I learned a lot about data collection from the training and use a lot of the information I got from the STAY staff
<b>15</b>	<b>Feb 3, 2010 5:46 PM</b>	Great program!
<b>16</b>	<b>Feb 4, 2010 4:37 PM</b>	I forgot my login or something, then kind of forgot about the software. So, I have not used the Skill Demonstration on a consistent basis, so my answers reflect only what I could remember about the software.



## Appendix 5: Schools District Instrument Responses

District Name – USD Number	Sent	Complete Responses	Invitation Bounced	Incomplete/ Opt out	Response Percentage( %)
ANW Coop - 603	6	1			16.67
Auburn Washburn - 437	6		1		0.00
Blue Valley - 229	4				0.00
Clay Center - 379	21	5	2		23.81
Desoto -232	22	7	5	1	31.82
Fort Scott - 234	3				0.00
Garden City - 457	3	1			33.33
Garnett - 365	1		1		0.00
High Plains Coop - 611	3	1			33.33
Kansas City - 500	14	2	1		14.29
Marysville - 364	14	3	8		21.43
Newton - 373	11	3	4		27.27
Olathe - 233	2		1		0.00
Ottawa - 290	11	1	1		9.09
Paola - 368	1				0.00
Project STAY – 609	6	3	1		50.00
PSU – N/A	1	1			100.00
Salina - 365	5	1	1		20.00
Seaman - 345	6	2		1	33.33
SEK Interlocal - 637	2		2		0.00
Shawnee Mission - 512	4	1			25.00
Spring Hill - 230	15	1	1	1	6.67
Three Lakes Coop – N/A	2	1	1		50.00
Topeka – 501	10	1		1	10.00
Turner - 202	7	4			57.14
Wichita - 259	1				0.00
	181	39			<b>21.55</b>

## Appendix 6: Old and Recent User Login Dates

Acquired 20<sup>th</sup> January 2010

<b>District Name – USD Number</b>	<b>Oldest User Login (MM/DD/YY Hr:Min)</b>	<b>Recent User Login (MM/DD/YY Hr:Min)</b>
ANW Coop - 603	12/3/09 21:57	12/3/09 21:57
Auburn Washburn - 437	8/12/08 11:16	12/10/09 12:51
Blue Valley - 229	2/25/09 20:23	3/28/09 14:55
Clay Center - 379	1/8/08 9:41	12/14/09 14:09
Desoto -232	2/21/09 12:09	1/13/10 16:06
Fort Scott - 234	12/2/09 15:46	1/11/10 13:34
Garden City - 457	2/18/08 13:46	4/21/08 14:05
Garnett - 365	2/21/09 11:59	2/21/09 12:11
High Plains	2/18/08 13:46	2/18/08 13:47
Kansas City, KS	8/11/08 10:28	9/16/09 13:35
Marysville - 364	2/1/08 10:08	2/27/08 19:40
Newton - 373	11/13/09 13:58	12/18/09 14:54
Olathe - 233	2/21/09 11:59	3/2/09 13:18
Ottawa - 290	5/22/08 13:08	12/3/09 10:34
Paola - 368	2/19/09 15:44	2/19/09 15:45
Project STAY – 609	9/11/08 9:40	1/13/10 15:34
PSU – N/A	2/21/09 12:01	2/21/09 12:34
Salina - 365	5/22/08 13:40	11/4/09 15:17
Seaman - 345	1/22/09 8:24	12/18/09 11:02
SEK Interlocal - 637	8/28/08 15:00	9/4/09 14:53
Shawnee Mission - 512	2/21/09 12:52	5/6/09 20:37
Spring Hill - 230	4/18/08 14:02	1/13/10 14:58
Three Lakes – N/A	2/21/09 11:59	2/21/09 12:14
Topeka – 501	3/10/08 13:22	3/11/08 16:04
Turner - 202	9/4/08 13:29	12/17/09 9:01
Wichita - 259	12/8/08 11:29	12/8/08 16:22

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