Indicator 13 Training for Transition Teachers: Comparison of Pre-And Post Test Scores on Writing of Goals

Christina B. Smith

Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/etd

Part of the Special Education and Teaching Commons

Recommended Citation
Smith, Christina B., "Indicator 13 Training for Transition Teachers: Comparison of Pre-And Post Test Scores on Writing of Goals" (2015). All Graduate Theses and Dissertations. 4608.
https://digitalcommons.usu.edu/etd/4608

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
INDICATOR 13 TRAINING FOR TRANSITION TEACHERS: COMPARISON OF
PRE-AND POST TEST SCORES ON WRITING OF GOALS

by

Christina B. Smith

A thesis submitted in partial fulfillment of
the requirements for the degree

of

MASTER OF SCIENCE

in

Special Education

Approved:

Robert Morgan, Ph.D.  Tim Riesen, Ph.D.
Major Professor   Committee Member

Jared Schultz, Ph.D.  Mark R. McLellan, Ph.D.
Committee Member   Vice President for Research and
                  Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah

2015
ABSTRACT

Indicator 13 Training for Transition Teachers: Comparison of Pre-and Post Test Scores on Writing of Goals

by

Christina B. Smith, Master of Science
Utah State University, 2015

Major Professor: Dr. Robert L. Morgan
Department: Special Education and Rehabilitation

Special education teachers sometimes experience problems with knowing how to construct and write transition goals that meet Indicator 13 requirements of the Individuals with Disabilities Education Act. This project examined the effects of teacher training in Indicator 13 requirements on the quality of transition goals. Participants included 17 special education teachers from one school district located in a western state. Target behaviors where increasing each participants’ post-test goal quality scores from individualized transition plans (ITP) written after they demonstrated knowledge about requirements through a post-instruction goal quality writing probe. Procedures involved (a) a pre examination of participants’ transition goals that were written for students prior to the training, (b) an instructional session on what needs to be included to meet Indicator 13 goal requirements, (c) a writing probe on a hypothetical student after the training to make sure the participants can write a goal statement, and (d) a post examination of
participants’ transition goals written after the training. The researcher noted that participants’ demonstrated adequate goal-writing on the writing probe (6.88 out of 7.00) and that data collector ratings of goal quality scores increased from 2.82 to 6.53 mean ratings on a zero-to-seven point scale. These results could have implications in terms of participants’ transition goals becoming consistent with Indicator 13 requirements.
PUBLIC ABSTRACT

Indicator 13 Training for Transition Teachers Comparison of Pre-and Post Test Scores on Writing of Goals

Christina B. Smith

Some special education teachers struggle with writing goals that project a successful future for students when they graduate out of public education and into the adult workforce. The Individuals with Disabilities Act set up certain requirements statistics has shown contribute to a person being successful out in the workforce. These requirements are listed in Indicator 13 of the Individuals with Disabilities Education Act.

This project examined the effects of teacher training on writing goals for successful transition out into the workforce. Participants included 17 special education teachers from one school district located in a western state. Each participant had previously written goals for student’s transition out into the workforce. These goals were graded according to a set scale that met Indicator 13 requirements. Next participants attended an instructional session on meeting the requirements and given a template to help them remember what needed to be included. Last participant’s transition goals, written in the three month after attending the instructional session, were graded according to the same scale.

The researcher noted that participants’ goal quality scores increased from 2.82 to 6.53 mean ratings on a zero-to-seven point scale. These results could have implications in terms of participants’ transition goals helping students transition into the workforce from school with more successful results.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>PUBLIC ABSTRACT</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>LITERATURE REVIEW</td>
<td>3</td>
</tr>
<tr>
<td>PURPOSE STATEMENT AND RESEARCH QUESTION</td>
<td>7</td>
</tr>
<tr>
<td>METHOD</td>
<td>8</td>
</tr>
<tr>
<td>Participants</td>
<td>8</td>
</tr>
<tr>
<td>Setting</td>
<td>9</td>
</tr>
<tr>
<td>Materials</td>
<td>9</td>
</tr>
<tr>
<td>DEPENDENT VARIABLE</td>
<td>10</td>
</tr>
<tr>
<td>Pre Examination of Participants’ Transition Goals</td>
<td>10</td>
</tr>
<tr>
<td>Post Examination of Participants’ Transition Goals</td>
<td>10</td>
</tr>
<tr>
<td>Goal Writing Probe Following Training</td>
<td>11</td>
</tr>
<tr>
<td>INTEROBSERVER AGREEMENT</td>
<td>12</td>
</tr>
<tr>
<td>FIDELITY OF IMPLEMENTATION</td>
<td>13</td>
</tr>
<tr>
<td>EXPERIMENT DESIGN</td>
<td>14</td>
</tr>
<tr>
<td>PROCEDURES</td>
<td>15</td>
</tr>
<tr>
<td>Permission to be Included in Study</td>
<td>15</td>
</tr>
<tr>
<td>Indicator 13 Goal Instruction</td>
<td>15</td>
</tr>
<tr>
<td>Examination of Participant Performance at the End of the Instructional Session</td>
<td>16</td>
</tr>
<tr>
<td>Examining Post Instruction ITP’s</td>
<td>17</td>
</tr>
<tr>
<td>DATA ANALYSIS</td>
<td>18</td>
</tr>
<tr>
<td>Comparison of Pre- to Post Training Goals</td>
<td>18</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demographic Information</td>
<td>29</td>
</tr>
<tr>
<td>2. Postsecondary Goal Quality Scale</td>
<td>30</td>
</tr>
<tr>
<td>3. Pre Instruction and Post Instruction Goal Scores</td>
<td>31</td>
</tr>
</tbody>
</table>
INTRODUCTION

The Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2004) has 21 indicators whose purpose is to ensure compliance with federal regulations related to the law. Indicator 13 is specific to transition requirements and lists eight main items that need to be considered for a transition plan to be in compliance. These items address: (a) goals that are measurable, (b) goals with annual updates, (c) goals based on transition assessment, (d) services that enable the student to meet postsecondary goals, (e) courses of study that enable the student to meet postsecondary goals, (f) goals related to transition service’s needs, (g) student invitation to the transition meeting, and (h) agency invitation to the meeting with prior consent (IDEIA, 2004). The National Secondary Transition Technical Assistance Center (NSTTAC, 2009) devised an Indicator 13 checklist to assist professionals in meeting the legal requirements of IDEIA 2004. This checklist transforms the previous eight items into questions for teachers to facilitate improved individualized transition program (ITP) compliance.

Meeting IDEIA mandates requires that educators write goals using transition directed guidelines (deFur, 2003); specified in Indicator 13. These goals have a “pivotal placement” (Doren, Flannery, Lombardi, & Kato, 2013, pp. 216) in the ITP process of transition services, supports and skills needed for student post-school success and are associated with positive outcomes (Benz, Lindstrom, Yovanoff, 2000; deFur, 2003). Research examining 1,747 transition goals found students had goals in 4.38 of the 12 transition areas tested (Powers, et al., 2005). We can infer from this research by Powers et al. there is improvement needed before educators will meet these legal requirements. Accordingly, Finn and Kohler (2009) reported that educators see problems in
comprehending the federal law, lack of training and a shortage of effective transition models. To meet educator ITP shortfalls, research is needed to show educators can develop high quality, measurable post secondary goals given appropriate training.
LITERATURE REVIEW

Research in transition teacher training, specifically the quality of transition goals was evaluated for this study. Utah State Universities’ library search was used to find the articles using the terms, special education, post-secondary goals and teacher training. Similar searches were conducted in ProQuest dissertations, professional development collections, and Eric. Literature searches for the terms, teacher training, goal writing, writing goals and objectives, measurable postsecondary goals, Indicator 13, annual transition goals, training and in-service training were conducted in different combinations. Cited articles in literature that related to my topic were explored. Another source was the NSTTAC website (nsttac.org) which provides annotated bibliographies of transition research. The literature was sorted while examining for relationships between teacher training and transition outcomes. Searches resulted in these findings: (a) two dissertations were found on transition and post-secondary life opportunities, (b) four articles were located analyzing transition components, (c) two articles were found using post-school data to improve goals and services, and (d) six articles were identified on transition outcomes. Some articles were chosen to use as references. The three articles in this literature review closely resemble the research question I am evaluating. The number of articles published on this subject combined with transition law reflect a need for additional research in writing effective transition goals.

Previous research has shown that post school success is driven by several different factors, including implementation of a transition focused ITP (deFur, 2003;
Powers et al. 2005). The first article chosen for this review investigates this transition focus. Powers et al. (2005) examined 399 ITPs to check for transition compliance. Transition planning and self-determination goals were checked to see if any differences covaried on students’ demographics (e.g., race, gender, grade level, & disability qualification). Powers et al. addressed these questions: (a) does the ITP transition plan meet IDEA requirements? and (b) does ITP compliance change depending on a student’s race, gender, grade level or disability? Two large urban school districts from a western state were selected to participate. Students were 16 to 22 years old and transition goals were rated on quality with a zero to three rating scale with three meaning the goal showed an action step that was measurable. Intercoder agreement was assessed with two independent raters checking 35% of the ITPs. Results of intercoder agreement was 86.5%, indicating high levels of agreement across coders. Researchers sorted 1,747 goals taken from the 399 ITPs into 12 transition categories that included: integrated employment, adult education, transportation, and leisure. Integrated employment defined by the Office of Disability Employment Policy (ODEP), included jobs in which a person with a disability obtained pay, at least minimum wage, through their employer in a setting that most of the people working did not have disabilities (2006). The results showed ITPs included goals in the following areas: integrated employment (63.7%), transportation (60.9%), housing (40.4%), independent living (33.1%), adult education (1.7%) and leisure (50.4%). No action steps were included for 33% of the goals. No statistical differences were found in goals of females/males or race/ethnicity. Students with developmental disabilities were less likely to have employment goals (10.4%) and
postsecondary education goals (8.5%). Researchers noted that the ITP may not reflect all of the transition services a student receives. An average of 50% of the ITP’s did not include all of the transition goal requirements. This finding illustrates the need for improvement in ITP goal improvement. Powers et al. stated that improvement in transition planning compliance may not happen “without considerable personnel training” (2005, p.58).

Finn and Kohler, (2009) extended the study by Powers et al. and examined whether efficacy of transition required elements improved after teacher training. Representatives from 13 school districts in a Midwestern state participated. A Transition Requirements Checklist was used before and after training to evaluate ITPs for transition compliant items. Each district identified areas of need and conducted trainings to address any non-compliance. Two years later the ITPs were evaluated again to see if transition compliance had improved. The scoring was performed so researchers could see each question and noted the percentage of compliance. The over-all mean score for compliance before training was (46.2%) and after training (74.6%). The largest improvements were students’ post school vision in employment and parent notice of meeting. The increase in post school employment vision met IDEA 2004 requirements for transition goals based on age appropriate assessment. The percent of compliance for including present levels of performance relating to post school outcomes improved from around 10% to 44%. Although the post training percentage is higher, there were two problems. First, it was still inadequate as a measure for present levels of performance (which sets the stage for developing goals). Second, it was far below the requirement for
Indicator 13 compliance. Overall, the researchers concluded that specific training in ITP transition requirements can improve teacher’s compliance with Indicator 13 but does not necessarily bring ITP’s into complete compliance.

Doren et al. (2013) had a similar research question as the Finn and Kohler (2009) study. They both examined the impact of professional development and student characteristics on the quality of written postsecondary goals. However, Doren et al. (2013) investigated teacher characteristics on the quality of these goals. Participants included 18 secondary special education teachers from 12 high schools across five school districts. Between three and five ITPs were evaluated from each teacher totaling 137 documents. A post secondary goal quality scale was developed for scoring purposes ranging from 0 (no goal was present) to 8 (goal was present, observable, based on assessment and student input). Teacher training included two half-day sessions and four practice sessions conducted a month apart. The results of the study showed a point increase of 0.58 on employment goals and 1.76 on post secondary education goals. Even with the improvement, teachers did not consistently include all the aspects of the highest level of goal rating. Teachers working in self-contained classrooms or with more experience scored higher than teachers placed in resource settings or with less experience. There was no significant difference in student characteristics and their goals. Two half-day sessions and multiple practice sessions were inadequate to develop high quality ITPs. Extensive teacher training and practice may be necessary to meet Indicator 13 requirements.
After studying these three articles I concluded that ITPs in general, (a) did not include all of the transition required elements, (b) showed a marked improvement after teacher training and, (c) did not ensure top-rated goals even after teacher education. Further research was needed that investigates teacher education in producing high quality ITP components (e.g., goal writing) with training.

**PURPOSE STATEMENT AND RESEARCH QUESTIONS**

The purpose of this study was to conduct research with secondary transition teachers to determine whether training in goal writing produces improved ITP-goals (measurable post-secondary and annual goals). The research questions were:

1. Given 17 transition teachers, what effect will a transition goal training package (training and goal template) have on the quality of their goals particularly whether (a) the goal is observable and measurable, (b) the goal is based on a transition assessment, and (c) the goal is based on student input?

2. Given a present level of performance statement on a hypothetical student, what effect will training have on participants’ performance in writing a goal at the conclusion of the training session?
METHOD

Participants

Participants were 17 special education teachers from one school district in a western state. Demographic data show all participants were Caucasian including four males and 13 females. Thirteen had a bachelor’s degree in mild/moderate special education, two had severe special education bachelors and two had master’s degrees. Seven participants had 1 to 5 years’ experience teaching while two had over 21 years’ experience. Two of the participants were functional skills teachers serving students with significant cognitive and other developmental disabilities and 15 were resource teachers serving students with mild/moderate disabilities (Appendix A, Table 1).

Participants taught in the same district and attended based on a requirement from their district special education director to take the studies class on transition goals. All 25 transition special education teachers from the district were encouraged to participate. One teacher deselected herself by not filling out the form giving permission to the researcher to include her in the study. Seven teachers deselected themselves by not attending the meeting where the class on transition goal writing was taught. Seventeen teachers who attended the meeting were included in the study. Participant’s names were known only to the researcher. The study deleted all reference to individual names and referred to participants by a number. The access to participant’s GoalView data (a data base where ITP goals were stored) was released to the researcher upon presentation of signed permission forms to special education district administrator.
Setting

Two sections of the same class were taught in “south” and “north” locations within the district. The south meeting was at the district office in the boardroom with six 6-ft tables that seat four to six people. The north meetings were in a teacher’s classroom using desks with five participants in attendance and one additional student teacher. Each room included a smart board and a computer with PowerPoint software.

Materials

At the beginning of the instructional session, the researcher distributed an Indicator 13 checklist, a copy of the PowerPoint presentation and three different templates for writing effective ITP goals. The template to writing effective ITP goals was developed by the researcher and reviewed by two district special education technical assistants (Appendix D, E, & F). A computer copy of the templates was emailed to each teacher following the instruction with a suggestion that it be placed on their computer desktop. A post-test that checked for goal writing was completed by each participant before exiting the class (Appendix C).
DEPENDENT VARIABLE

Pre Examination of Participants’ Transition Goals

Each participant developed IEPs, including the ITP, using a commercially available program called GoalView (Publishing Consulting Group, 2014). Using a random numbers generator, the researcher first identified two students’ ITPs for each participant. Numbers corresponded with the number of students in the participant’s classroom for whom they developed an ITP. Student last names were arranged alphabetically. For example, if the researcher drew numbers 3 and 7, the researcher started at the beginning of the alphabet and selected “Anderson” and “Williams,” respectively. Second, the researcher reviewed all ITP goals for these students using the GoalView program. Each participant’s ITP measurable postsecondary goals for these selected students were accessed via GoalView and rated according to the Postsecondary Goal Quality Scale developed by Doren et al. (2013, pp. 218) as shown on Table 2. All measurable postsecondary goals developed by selected participants (n=2 to 6) were examined, assuming they were written between January 2014 and December 2014. All identifying information from ITPs was removed for scoring and inter-scorer reliability.

Post Examination of Participants’ Transition Goals

The researcher examined post training ITP measurable postsecondary goals of participants by getting a list of ITPs written by each teacher dated between the date of goal training (either the middle of February or March) and the middle of April 2015.
Four participants had more than two ITPs from which to select. Using a random numbers table, the researcher randomly selected two students, then rated all goals on those students' ITPs. Some had one goal with the education and employment combined. Others had up to six goals with goals in all three categories; education, employment and independent living. The other participants wrote two ITPs during this time period; both ITPs were used in the post examination scoring. The researcher accessed GoalView to view the ITPs written and checked for goal quality using the same scale (Doren et al., 2013).

**Goal Writing Probe Following Training**

At the conclusion of the Indicator 13 goal training, the researcher measured the extent to which participants wrote an ITP measurable postsecondary goal in accordance with the Postsecondary Goal Quality Scale. Participants were provided with a brief statement of present level of functioning for a hypothetical student (Appendix C) and given the following instructions:

> Before you leave, here is an exercise. Read thoroughly this description of a student’s present level of performance. Based on the information provided, write a measurable postsecondary goal using the guidelines and templates we’ve talked about for the last 40 min. Any questions?

The researcher scored all participants’ measurable postsecondary goal using the same Doren et al. (2013) Postsecondary Goal Quality Scale.
INTEROBSERVER AGREEMENT

The researcher served as the primary observer and recorded data from each of the ITPs examined. Additionally, two independent observers recorded ITP goal data using the Doren et al. (2013) scale. The independent observers were given a list of all ITP goals the researcher scored. Prior to examining ITPs, the researcher and data collectors practiced a sample of scoring measurable postsecondary goals until agreement reached 90% across five consecutive scorings. At this point, the researcher and data collectors independently scored ITPs. Each observer scored all the goals to check for interobserver agreement. Interobserver agreement was calculated by dividing the total number of rating agreements by the total number of rating disagreements plus agreements and multiplying by 100. For the pre training examination, inter-rater agreement was 81 out of 89 goals, or 91% agreement. For the post training examination, inter-rater agreement was 56 out of 62 goals, or 90% agreement. Participants who had filled out a participation form and were included in the original set of goals, de-selected themselves after the class by not attending. This accounted for the greater number of goals checked for inter-rater agreement in pre-training. These extra scores were eliminated in the final comparison (Appendix A, Table 3).
FIDELITY OF IMPLEMENTATION

An independent observer attended the Indicator 13 goal instruction sessions to determine whether the researcher conducted training as indicated. The observer scored whether the researcher (a) named the goal of training, (b) called on at least 10 participants as a group or as individuals for responses, (c) demonstrated the steps to a measurable post-secondary goal, and (d) arranged for practice and feedback opportunities. The researcher named the goal of the training and demonstrated the steps to measurable postsecondary goals. The feedback and responses from each training were recorded as follows: Thirty individual verbal answers were given in the first training and 14 were given in the second training. Forty-seven individual verbal comments were given in the first training and 95 in the second. There were no whole group answers given in the first training and four in the second. Four participants left 10 min early in the first training and turned in their end of class goal writing exercise at a later time. One participant came in late at the second training.
EXPERIMENTAL DESIGN

A one group pre-test post-test design was selected for this study (Martella, Nelson, Morgan, & Marchand-Martella, 2013). The criterion for choosing this design included (a) the district wanted all teachers included in the class so comparing to a control group was not an option, (b) once the participants attend the class there was no return to baseline, and (c) there was one treatment (the ITP class using the template). The pre examination preceded training on ITP goals through GoalView, and the post examination followed training. The post examination involved goals written within a 3-month period after the class, in GoalView. The goal written during the class demonstrated each participant’s understanding of what was expected in continued transition goal writing.
PROCEDURES

Permission to be Included in Study

The IRB informed consent form was distributed to each secondary special education teacher for signature at the participants’ January district-wide special education meeting. For those who did not return their consent or did not attend, an email copy was sent to them. Consent forms were picked up by district representatives and delivered to the researcher.

Indicator 13 Goal Instruction

The researcher presented a 1-hr training session using slides of the power-point presentation on transition goal quality (http://nsttac.org) and also included slides written by the researcher. The instructional slides were set up in I-do, we-do, you-do format. The researcher showed the participants how to write a goal using the templates (I do: see Appendix D, E & F); she led participants in writing one together (we do); participants wrote a goal with a neighbor; and finally, they wrote a goal independently (you do). The slides included the following: (a) Indicator 13 requirements, (b) a transition requirements map linking transition goals to annual goals, (c) good postsecondary goal description, (d) types of postsecondary destinations, (e) three templates for writing postsecondary goals in education, employment and independent living, (f) three different present level of performances after each of the prior template sections having participants write a goal.
together, with a neighbor and by themselves and (g) examples of good and bad postsecondary goals. During presentation of writing the goals in I-do, we-do, you-do format, the researcher asked the group of participants for individual responses on whether examples are good/poor, why they judged goals as good/poor, and what individuals would change to improve goal quality. This process was applied to all instructional areas listed above. The researcher asked individual or group questions at least 10 times during the session. The templates included three steps in each area (education, employment and independent living) following the same format. The first step is the assessment. The participant listed the type of assessment taken to produce the data for the goal. Then the participant follows the pattern on the template stating what area of education, employment or independent living the student was interested in or had strengths in. The second step has the participant write that this goal is to happen after high school. The third step has the participant write down specifically what the student indicated they would like to do after graduation. The template includes an example of a finished goal.

**Examination of Participant Performance at the End of the Instructional Session**

To determine whether participants could write goals at the end of the instructional period, each participant was given a present level of performance statement of a hypothetical student (Appendix C) and asked to write a measurable postsecondary goal based on that information. They were allowed to use their notes and the templates distributed during the instruction. The researcher used the same postsecondary goal
quality scale (0-7) by Doren et al. (2013) to score each individual participant’s goal-writing performance.

**Examining Post Instruction ITPs**

Participants were notified that writing ITPs as instructed would be checked in their GoalView individual education plans for the next few months but the end goal was making the ITP a usable, accomplishable document for students.
DATA ANALYSIS

Comparison of Pre- to Post Training Goals

The researcher compared pre-training to post training goal quality for each participant (Appendix A, Table 3). Pre- and post training rating scores were compared using the zero-to-seven goal quality scale. The researcher computed means and mean difference scores on pre-and post training correct steps in goal writing (Appendix A, Table 3).

The effect size shows the magnitude of the influence the class presentation had on improvement of goal writing. The larger effect size shows the magnitude of training on Indicator 13 goal writing. Scores between 0.5 and 0.8 show a medium effect size. Scores 0.8 and larger show a large effect size. An effect size was computed on pre- and post training goals and calculated as Mean post rating minus Mean pre rating divided by the pre score standard deviation.

Goal Writing Probe During Training

The researcher computed data on quality of goal writing that participants produced during the training using the goal quality scale.
RESULTS

Indicator 13 Goal Instruction

Goal-writing Questions/Answers

Participants were asked four questions regarding their background knowledge in postsecondary goal writing (Appendix B). A scale from one to seven was used with one being not at all and seven representing high degree of relationship. Participant’s questions and answers are as follows:

- To what extent do you feel that time pressures force you to alter the quality of your goal writing? Ten of the participants rated a four or five indicating a mid-level relationship between time constraints and quality goal writing. The other participants rated between one and three indicating time constraints are not an issue for their goal writing quality.

- What is your perceived skill level in writing transition goals? Two of the participants rated their skills a six, noting a high skill level in transition goal writing. Five participants rated their skill level a three. The median rating was 4, indicating a perception of mid-level skill.

- Are there other factors that might compromise your goal writing? Nine of the 17 participants noted they had not received training in transition goal writing and another six stated they lacked skill in interpreting assessment data. Two stated no compromises.

Pre- and Post Examination Goals
My research examined the effect of transition goal training on the quality of participants’ ITP goals. As shown in Table 3, there were 62 goals rated in each category. Participants’ goals were rated at a higher level (Mean = 6.53) in post examination than the pre examination (Mean = 2.82) for Indicator 13 goal quality. All participants showed positive post examination difference scores. Seven participants’ showed a mean difference score of over 4.0. Four participants with less than 2.0 mean difference scores had ratings of 4 or higher in pre examination, indicating a ceiling effect. One exception was Participant 2, whose mean scores for pre- and post examination goals were 3.20 and 4.33, respectively. Although the post training score was higher, this participant’s mean difference score of 1.33 was lowest of 17 participants.

There were notable differences between the south and north area scores. The South area pre instruction mean was 2.75 compared to the north area mean score of 3.34. South area post instruction mean was 6.52 compared to the north are mean score of 6.83. However, the spread between the mean pre- and post instruction scores for South and North (3.77 and 3.49, respectively) were comparable.

Pre examination ratings (2.82) compared to post examination ratings (6.53), which suggested the presentation on ITP goals with a template was an effective strategy to improve goal writing. Pre examination percent of zero ratings compared to post examination percent of zero ratings in individual categories indicate the areas of common deficits:

- Was it written to occur after exiting district services?
  
  Pre examination (32%) Post examination (2%)
Was the goal observable and specific?
Pre examination (47%)  Post examination (2%)

Did the goal include language that indicated the goal was based on student interests?
Pre examination (79%)  Post examination (19%)

Was the goal based on transition assessment?
Pre examination (68%)  Post examination (6%)

The questions about student interest and transition assessment showed the largest deficits in pre examination goals. The goals based on student interest showed a deficit of 19% zero ratings in post examination suggesting this was a weaker area in participant’s goal writing after the instruction and using the template.

Using a paired t test, a statistically significant difference was evident between post and pre examination ratings ($t = 10.38$, $df = 61$, $p < .001$).

**Effect Size**

Differences between pre and post examination ratings evidenced a *Cohen’s d* effect size of 1.315 (6.53 – 2.83/2.81). The effect size associated with training was large.

**End-of-training Session Goal Writing Probe**

The data show participants’ scores on their goal writing at the end of the training session with high rating scores. On the zero to seven-point scale, 15 participants’ goals were rated at seven and two were rated at six with a mean score of 6.88.
DISCUSSION

This study showed that transition goal training for teachers was associated with an increase in ratings. These findings add to the literature on teacher training in postsecondary goals, showing that brief instruction on goal writing with a guideline/template can be effective. Even though all participants showed an understanding of how transition goals should be written at the end of the class, the data show two participants were not rated at a level of six or above on all of their post examination goals. The remaining 15 participants were rated six or above on all of their post examination goals. The improvement from pre to post examination prompted my district secondary technical assistant to say, “Our teachers are very smart they just did not know what transition goals were supposed to look like. Once they had the training and template they knew what was expected and did it.” In addition, the researcher received three comments from different teachers saying how much they liked the template and how easy it is to use.

In the pre training participant questionnaire, 11 participants rated themselves as having a higher skill level in transition goal writing when compared to their pre-instruction goal scores. Generally, participants rated their goal-writing skills at mid-level prior to training. Yet, data collectors rated participant pre instruction goals relatively low. Why did they rate themselves high? One reason could be they know how to write quality IEP goals, but did not discriminate the differences between IEP goals and ITP measurable postsecondary goals. Participants reported they were knowledgeable of goal-writing, but this did not translate into knowledge of how to write measurable
postsecondary goals. Results may indicate that knowledge of goal-writing requirements for IEP goals does not presuppose knowledge of goal-writing requirements for ITP measurable postsecondary goals. Future research and in-service training should note the distinction between IEP goals and ITP goal writing.

Part of the treatment results may have been due to observation effects. The participants knew their ITP goals were going to be scrutinized after the training. They were writing their post-instruction ITP goals with this in mind. It would be interesting to conduct a continuation of the study 1-2 years after the training to see if the results were temporary or long term. With this observation effect in mind, the independent variable may need to be broadened to include (a) the effects of instruction, (b) the template, and (c) effects of observation. With any of these factors missing, I believe I would not have received the same positive results.

IDEIA 2004 Indicator 13 requires eight main items be included in an ITP to be in compliance, including goals that are measurable and based on transition assessment. Both of these items were included in the templates and were met when the participants followed the guidelines they were taught in this study. This study’s instructional brought the participants closer to being in compliance with federal regulations related to transition in special education.

I would like to think there is a relationship between improved goal writing and improved transition outcomes. After all, educators’ main goal is to positively impact the lives of students. Future research should examine the relationship between improved goal-writing and long-term transition outcomes.
This study had limitations that should be considered. First, with only 17 participants, no generalizations to larger samples of teachers can be made. However, with multiple goals examined for each participant, this study compared over 60 goals pre and post examination. Nonetheless, future research should consider larger samples of teachers. Second, study participants were from one school district. Again, no generalization can be made to teachers in other districts. Third, although I gathered information on teachers’ education and training, no specific information was obtained on in-service training or formal education in goal writing. Future research should focus specifically on previous education. Also, no information was gathered on other classes these teachers had taken on transition topics. Other classes could have an impact on their background knowledge of the subject and affect ratings. Fourth, the data collectors who scored goals were not experimentally blind to pre and post examination conditions, which may have affected their ratings. Although trained to criterion levels prior to scoring goals, they were well aware of the pre and post conditions. Future research should require data collectors to rate goals without knowledge of pre and post examination conditions.

Future research should be conducted on a more diversified group that includes teachers from other districts and states. The control group would illustrate whether the improvements where the results of the instruction or some other factors occurring at the same time.
REFERENCES


enhanced-professional-development.


Appendix A

Tables
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Sub-Area</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Masters</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Current area of teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild/Moderate Disabilities</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Significant Cognitive Disabilities</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Age range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>35-44</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>45-54</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>55 and older</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Years Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 5</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>6 to 10</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>11 to 15</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>16 to 20</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Over 20</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Table 2

*Postsecondary Goal Quality Scale* (Doren et al. 2013, pp. 218)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No goal or not written to be accomplished after school services</td>
</tr>
<tr>
<td>1</td>
<td>Goal present</td>
</tr>
<tr>
<td>2</td>
<td>Goal present and written to be accomplished after school services</td>
</tr>
<tr>
<td>3</td>
<td>Goal present, after high school and one of the following: observable based on a transition assessment, and was based on student input</td>
</tr>
<tr>
<td>4</td>
<td>Goal present, after high school, and two of the following: observable (general and/or specific), based on a transition assessment, and was based on student input</td>
</tr>
<tr>
<td>5</td>
<td>Goal was present, after high school and three of the following: observable (general and/or specific), based on a transition assessment, and was based on student input</td>
</tr>
<tr>
<td>6</td>
<td>Goal was present, after high school and four of the following: observable (general and/or specific), based on a transition assessment, and was based on student input</td>
</tr>
<tr>
<td>7</td>
<td>Goal was present, after high school, observable and specific, was based on a transition assessment, and was based on student input</td>
</tr>
</tbody>
</table>
Table 3

Pre-instruction and Post-instruction Goal Scores

<table>
<thead>
<tr>
<th>Participant #</th>
<th>Goals (n)</th>
<th>Sum of rating scores</th>
<th>Mean</th>
<th>Goals (n)</th>
<th>Sum of rating scores</th>
<th>Mean</th>
<th>Post Mean minus Pre Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>18</td>
<td>4.50</td>
<td>4</td>
<td>26</td>
<td>6.50</td>
<td>2.00</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>16</td>
<td>3.20</td>
<td>6</td>
<td>26</td>
<td>4.33</td>
<td>1.13</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>14</td>
<td>2.80</td>
<td>6</td>
<td>37</td>
<td>6.17</td>
<td>3.37</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>7</td>
<td>3.50</td>
<td>2</td>
<td>12</td>
<td>6.00</td>
<td>2.50</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>12</td>
<td>4.00</td>
<td>5</td>
<td>35</td>
<td>7.00</td>
<td>3.00</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>3</td>
<td>0.60</td>
<td>4</td>
<td>28</td>
<td>7.00</td>
<td>6.40</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5</td>
<td>1.00</td>
<td>5</td>
<td>35</td>
<td>7.00</td>
<td>6.00</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>10</td>
<td>5.00</td>
<td>4</td>
<td>28</td>
<td>7.00</td>
<td>2.00</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>10</td>
<td>2.00</td>
<td>3</td>
<td>20</td>
<td>6.67</td>
<td>4.67</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>18</td>
<td>3.60</td>
<td>2</td>
<td>14</td>
<td>7.00</td>
<td>3.40</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>14</td>
<td>7.00</td>
<td>7.00</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>24</td>
<td>6.00</td>
<td>4</td>
<td>28</td>
<td>7.00</td>
<td>1.00</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>22</td>
<td>5.50</td>
<td>4</td>
<td>28</td>
<td>7.00</td>
<td>1.50</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>12</td>
<td>6.00</td>
<td>4</td>
<td>26</td>
<td>6.50</td>
<td>0.50</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>4</td>
<td>1.33</td>
<td>3</td>
<td>21</td>
<td>7.00</td>
<td>5.67</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>13</td>
<td>6.50</td>
<td>6.50</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>14</td>
<td>7.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>175.00</td>
<td>2.82</td>
<td>62</td>
<td>405</td>
<td>6.53</td>
<td>3.71</td>
</tr>
</tbody>
</table>
Appendix B

Demographic Information Questionnaire
Demographic Information Questionnaire

(Please note, your information will not be seen by anyone except the primary researcher. It is for statistical use only.)

1. **Name:** ______________________________________

2. **Formal Education:**
   - ___ Mild/Moderate Bachelor’s Degree
   - ___ Severe Special Ed. Bachelor’s Degree
   - ___ Master’s Degree ________________(Please Describe)
   - ___ Other___________________

3. **Age Group:** 18-24  25-34  35-44  45-55  over 55

4. **Gender:** Female  Male

5. **Race/Ethnicity (optional):**
   - ___ White
   - ___ Hispanic
   - ___ Black or African American
   - ___ Native American or American Indian
   - ___ Asian/Pacific Islander
   - ___ Other (Please list) ______________

6. **Years of experience teaching in special education:**
   - 1 to 5 Years
   - 6 to 10 Years
   - 11 to 15 Years
   - 16 to 20 years
   - 21 + Years

7. **In what area do you currently teach?**
   - Mild/Moderate
   - Severe
   - Other ______________

8. **What age group do you teach?**
   - Middle
   - High School
   - Post High

Answer the following questions using a scale of 1 to 7 with 1 being not at all and 7 representing a high correlation.

9. **To what extent do you feel that time pressures force you to alter the quality of your goal writing? (1  2  3  4  5  6  7)**

10. **What is your perceived skill level in writing transition goals? (1  2  3  4  5  6  7)**
11. Are there other factors that might compromise your goal writing, such as (check those that apply)…
   ___ my own knowledge or skill level (I haven’t had the needed training)
   ___ lack of my skill in interpreting assessment data
   ___ attitude about goal-writing process (I don’t think it’s that important
   ___ no compromises
   ___ other (describe) ____________________________

12. If you would like to see the study results please provide your e-mail address.

   ____________________________

   If you have any questions please contact Christina Smith at Christina.smith@besd.net or 435-230-2012.
Appendix C

Post Instruction Transition Goal Writing Exercise
Post Instruction Transition Goal Writing Exercise

Participant Name: ______________________

Transition Present Level of Performance:

According to PTF Likes Assessment, Alex would like to do work entering data into computers. At this time, he is working at a job sampling site at an office supply store entering numerical data to keep track of stock and services rendered by store staff. According to a job site checklist done in October 2014, his behavior is appropriate at work and he has expressed that he likes working. He is punctual each day, and he is willing to stay late when needed. Alex is detail-oriented and reviews each column of numbers several times before moving on to type another column. This results in slower production rates in comparison to other workers who complete similar tasks. In order to be more independent out in the community, Alex needs to increase his speed in accomplishing his tasks.

According to on-site work assessment; Alex’s boss would like to have him work for them after he graduates but has suggested that Alex attend a three week summer workshop that their company provides for workers. Alex is excited about the workshop and has expressed a desire to attend.

Using your goal template please write an employment or an education goal in the space below:
Appendix D

Transition Goal in Employment
Transition Goal in Employment

Follow each step:

(1)

**Assessment indicated** *(student’s name)* was interested in _______.
(List type of assessment) had strengths in _____.
would like to ____________.

(2)

**Therefore** after graduation from high school
graduation from post high
completing school services
within (time frame) of graduation from high school

(3)

**His/her goal** is to become a ____________ ...
He/she will work in the ___________ field.
He/she will be employed as a ____________ ...
He/she will be a ___________ ...

**Example:** Utah Futures assessment indicated Mary would like to work with dogs and other animals. Therefore within 3 years of graduation from high school, Mary will work in the veterinarian field with an emphasis on dogs.
Appendix E

Transition Goal in Education
Transition Goal in Education

(1) Follow each step

Assessment indicated (student’s name) was interested in _______.
(List Type of assessment) had strengths in _______.

(2)

Therefore after graduation from high school
graduation from post high
completing school services
within (time frame) of graduation from high school

(3)

His/her goal is to enroll at the ____ (taking, studying)___.
He/she will study/take (specific study or training area) .

Example: Utah Futures assessment indicated Kyle had strengths in auto mechanics. Therefore within 6 months of graduating from high school, he will enroll at BATC in auto mechanics.

Personal inventory assessment indicated Cindy was interested in interior decorating. Therefore after graduation from high school she will enroll at USU studying interior decorating.
Appendix F

Transition Goal in Independent Living
Transition Goal in Independent Living

Follow Each Step:

(1)

Assessment indicated (student’s name) was interested in _______.
(List type of assessment) had strengths in _______.
would like to ____________.

(2)
Therefore after graduation from high school
graduation from post high
completing school services
within (time frame) of graduation from high school

(3)

Student will live in an apartment with several roommates.
live in a house with (several roommates).
live alone in an apartment
remain living with parents at home.

Example: Personal Likes assessment indicated Joe would like to live in a dorm with lots of friends. Therefore after completing school services, Joe will live in a dorm with several roommates.