

UC Riverside

UC Riverside Electronic Theses and Dissertations

Title

The Role of Teachers and their Training in the Development of Post-Secondary Skills in Students with Learning Disabilities

Permalink

<https://escholarship.org/uc/item/1t9273t8>

Author

Taylor, Sara Elaine

Publication Date

2019

Copyright Information

This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at <https://creativecommons.org/licenses/by-nc/4.0/>

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA
RIVERSIDE

The Role of Teachers and their Training in the Development of
Post-Secondary Skills in Students with Learning Disabilities

A Dissertation submitted in partial satisfaction
of the requirements for the degree of

Doctor of Philosophy

in

Education

by

Sara Elaine Taylor

September 2019

Dissertation Committee:
Dr. Rollanda O'Connor, Chairperson
Dr. Celeste Pilegard
Dr. Robert Ream

Copyright by
Sara Elaine Taylor
2019

The Dissertation of Sara Elaine Taylor is approved:

Committee Chairperson

University of California, Riverside

ABSTRACT OF THE DISSERTATION

The Role of Teachers and their Training in the Development of
Post-Secondary Skills in Students with Learning Disabilities

by

Sara Elaine Taylor

Doctor of Philosophy, Graduate Program in Education
University of California, Riverside, September 2019
Dr. Rollanda O'Connor, Chairperson

After high school, the outcomes for youth with disabilities fall behind their typically developing peers. Participation in post-secondary education, hourly earnings, and engagement in either education or employment up to six years after high school are all lower than the general population (Cameto et al., 2011). A researcher-developed online survey investigated the preparation of teachers and the current strategies used with students with Specific Learning Disabilities (SLD). The questions focused on the development of skills necessary to meet post-secondary education, employment, and independent living goals.

A directed content analysis did not reveal evidence that teachers are using the evidence-based practices described by the National Technical Assistance Center on Transition. A wide variety of practices were reported.

A significant relation is shown between the amount of transition instruction a teacher reported and the Education Specialist authorizations held. Another significant

relation exists between the level of involvement in courses or pull out activities and the Education Specialist credentials held or the current special education program teaching assignment.

This research shows there is a significant difference in the practices of teachers when it comes to students with SLD. These differences may contribute to the decreased post-secondary engagement. There is also a lack of research and evidence-based practices for this population leading teachers to pull from unreliable sources or ignore the need for transition skills.

TABLE OF CONTENTS

Chapter 1: Introduction	1
Post-Secondary Transition	2
Problem Statement	5
Purpose of Study	5
Chapter 2: Literature Review	7
Teacher Surveys	7
Evidence-Based Practices	10
Research-Based Practices	13
Predictors of Post-Secondary Participation	13
Research Questions	15
Chapter 3: Methodology	17
Research Design	17
Hypothesis	18
Population and Sample	19
Research Sites	19
School District A	19
School District B	20
School District C	20
School District D	21
Special Education Annual Performance Measures	21
Indicators 1 and 2	21

Indicator 5	22
Indicators 9 and 10	24
Indicator 13	24
Indicator 14	24
Data Collection	26
Survey Questions	26
Data Analysis	27
Theoretical and Analytical Framework	27
Analytical Methods	28
Chapter 4: Findings	31
Sample Descriptive Statistics	31
Question 1	32
Assessment	32
Employment	33
Education	34
Independent Living	34
Question 2	35
Question 3	36
Question 4	38
Question 5	38
Credential	38
Teaching Assignment	39

Chapter 5: Conclusions, Discussion, and Suggestions for Future Research	42
Summary of Findings	42
Conclusions	42
Transition Assessment and Practices	42
Evidence-Based Practices	43
Teacher Preparation	44
Level of Involvement	44
Discussion	45
Limitations	45
Suggestions for Future Research	46
Survey	46
Teacher Preparation	46
Evidence-Based Practices	46
Jingle-Jangle Fallacy	47
References	48
Appendix A: Teacher Survey Questions	54

LIST OF TABLES

1. Four Year Graduation and Dropout Rate in Percent	22
2. Percentage of Students Inside a Regular Classroom	23
3. Post-Secondary Participation	25
4. Means, Standard Deviations, and Range for Years Teaching	32
5. Teacher Reported Transition Assessments and their Frequency	33
6. Activities to Improve Employment Outcomes and their Frequency	34
7. Activities to Improve Education Outcomes and their Frequency	35
8. Activities to Improve Independent Living Outcomes and their Frequency	36
9. Descriptives: Hours of Transition Plan or Transition Teaching Instruction	37
10. Total Variance Explained by Factors	37
11. PCA Matrices: Hours of Transition Plan or Transition Teaching Instruction	38
12. Added Authorizations Predict the Amount of Transition Instruction	38
13. Results of the Regression by Added Authorization	39
14. Credential Predicts Involvement	40
15. Results of the Regression by Credential	40
16. Teaching Assignment Predicts Involvement	41
17. Results of the Regression for Teaching Assignment	41
18. Teaching Assignment Predicts Involvement	42
19. Results of the Regression by Teaching Assignment	42

Chapter 1

Introduction

According to the U.S. Department of Education (DoE) (2016), during the 2013-14 school year, approximately 8.7% of the population ages 6 through 21, or 5,825,505 students, were identified as having a disability, with 3.4% of the population recognized under the category of Specific Learning Disability (SLD). On December 3, 2004, Congress reauthorized the Individuals with Disabilities Education Act (IDEA 2004)(108th Congress Public Law 446, 2004). According to IDEA (2004) section (602)(30)(A), defined SLD as a "disorder in one or more of the basic phonological processes involved in understanding or in using language, spoken or written. The disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations." The learning problems cannot be a result of physical or emotional disabilities nor mental retardation. Students with SLD account for 39.2% of the students served nationally under IDEA part B, which covers students aged 3 to 21, the highest percentage of any category. According to the U.S. DoE's report to Congress (2016), in 2013-14, 42.1% of students served under IDEA part B graduated with a high school diploma; of that 71% were students with SLD. In the same period, 82% of the typically developing population, those students without a disability, completed a regular high school diploma. In California, 50.7% of students served under IDEA part B graduated with a regular diploma in 4 years, while 17.5% dropped out. Students with SLD account for 44.6% of the student's aged 6-21 served under IDEA part B. Compared with national statistics, California has a higher percentage of students graduating with a high school

diploma (50.7% vs. 42.1%) and a higher number of students qualified under SLD (44.6% vs. 39.2%).

After high school, the outcomes for youth with disabilities fall behind their typically developing peers. Participation in post-secondary education (55% vs. 62%), hourly earnings (\$9.40 vs. \$13.20), and engagement in either education or employment (84% vs. 95%) up to 6 years after high school are all lower than the general population (Cameto et al., 2011). Each school district mandates the diploma requirements, consisting of courses in English, Mathematics, Social Science, Science, Art, Foreign Language, and Technology. Students in special education often require remedial or support courses to complete academic coursework. When combined with the district mandates, there is little room for courses explicitly targeting the skills needed for post-secondary education, employment, and independent living. While there are many high school transition programs expressly designed for students ages 18-22 with moderate to severe disabilities, and adult programs that serve this population beyond the age of 22, services end for students once they earn a high school diploma. Nationally over 42% of students with a disability are exiting high school in 4 years with a regular diploma, including over 50% of students in California, with 71% of this population being students with SLD, a step which permanently ends the support provided by special education personnel (U.S. DoE, 2016).

Post-Secondary Transition

IDEA (2004) seeks to improve educational results for students with disabilities to ensure equity of opportunity, participation, independent living, and economic self-

sufficiency. Section 601(c)(14) of the law states “As graduation rates for children with disabilities continue to climb, providing effective transition services to promote successful post-school employment or education is an important measure of accountability for children with disabilities.” This document highlights the importance of providing transition services that assist students beyond a high school diploma. Section 601(d)(1)(A) asserts "the purposes of this title are to ensure that all children with disabilities have available to them a free appropriate public education ... to meet their unique needs and prepare them for further education, employment, and independent living.” As stated within the law, the primary purpose of the IDEA reauthorization of 2004 was to focus the efforts of special education on skills that promote post-secondary engagement for students with disabilities.

One way to promote post-secondary engagement is through transition services. Section 602(34) defines transition services "as a coordinated set of activities that ... is focused on improving the academic and functional achievements of a child with a disability to facilitate the child's movement from school to post-school activities." The explanation of funding, in section 610(e)(2)(C)(vi), names transition programs and services as authorized activities. The guidelines for an individual transition plan (ITP) are presented in Section 614(d)(1)(A)(i)(VIII). Special education teachers are required before a student turns 16 to develop a plan that includes "appropriate measurable postsecondary goals based on age-appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills." IDEA (2004) defines

transition services, allocates funding, and requires post-secondary assessment and goals occur for students by the age of 16.

The IEP team, which includes the student, parent, general education teacher, special education teacher, and service providers such as a speech-language pathologist, develop post-secondary goals. The goals take in to account the student's interests and preferences. The ITP identifies the services and course of study needed to attain the goals and develops a plan to build the skills and supports necessary to meet the goals (Flannery, Kato, & Lombardi, 2015). IDEA 2004 requires transition services be in effect before the student is 16 years old; this results in a transition plan typically being written during the junior year of high school, leaving less than two years to build the skills necessary to meet transition goals. Correlational studies show transition-related skills improve through interventions within the classroom (Alwell & Cobb, 2009; Benz, Doren, & Yovanoff, 1997; Cameto, 2005; Carter, Glaeser, Lane, & Pierson, 2008; Doren & Murray, 2013). However, in a survey of special education teachers, the teachers of students with SLD reported the lowest levels of transition skills preparation and implementation (Benitez & Morningstar, 2013). Many educators do not feel sufficiently knowledgeable about transition planning to write and implement effective transition plans (Bassett, Hutchinson, & Li, 2009; Benitez, Frey, & Morningstar, 2009; Blanchett, Boone, & Wolfe, 1998; Landmark, Roberts, & Zhang, 2013). Although IDEA requires special education teachers develop activities to support post-secondary goals as a part of the IEP, and research supports instruction related to transition skills during school, survey results indicate teachers are not confident in the practices necessary to build these skills.

Problem Statement

Students with SLD demonstrate average to above-average intelligence quotients (IQ) with a deficit shown in academic achievement. Given their average ability to learn, the post-secondary outcomes for students with SLD should be similar to those of their typically developing peers; yet, research shows this is not the case. Students with SLD often require classes to support academic content or remediate skills leaving little room in the schedule for elective courses beyond the diploma requirements. Specialized programs do currently exist within special education to teach the skills necessary for post-secondary education, employment, and independent living; unfortunately, these programs often take place after the first four years of high school, when the majority of students with SLD have graduated.

Purpose of Study

I investigated the current strategies used during the first four years of high school by special education teachers of students with SLD, specifically, those designed to facilitate the development of skills necessary to meet post-secondary education, employment, and independent living goals. Surveys of special education teachers indicate teachers of students with SLD potentially lack some knowledge regarding the instruction of post-secondary transition skills (Benitez & Morningstar, 2013; Mazzotti & Plotner, 2014), yet IDEA requires the development of annually updated ITP's, which include activities to support post-secondary goals. If this population of teachers feels underprepared, in what ways are they assisting the development of post-secondary education, employment, and independent living skills? This study sought to address this

gap in the literature. To fill this gap, a survey of current special education teachers gathered demographic data and information on the location, frequency, intensity, and duration of instruction and activities designed to promote post-secondary employment, education, and independent living skills. Open-ended question responses allowed for the identification of research-based practices. The benefit of this study is that findings will be shared with participating districts to identify potential areas for professional development or program improvements.

Chapter 2

Literature Review

IDEA 2004 mandated special education teachers use “scientifically-based” instruction to improve secondary and post-secondary outcomes for students; however, transition service providers lack the knowledge and skills to adequately implement evidence-based practices for post-secondary success (Benitez, Frey, & Morningstar, 2009). Poor post-secondary outcomes have created a need for enhanced transition skills development that fully implements evidence-based practices (Mazzotti & Morningstar 2014; Mazzotti, Mustian, & Test, 2014). The transition perspective (Kohler & Rusch, 1995) argues that all educational programs and activities be based upon the individuals' post-secondary goals and interests. The perspective supports integrating the development of post-secondary skills across grades and for all ability levels. Correlational studies suggest that transition-related skills improve through interventions within the school setting (Alwell & Cobb, 2009; Benz, Doren, Halpern, & Yovanoff, 1997; Cameto, 2005; Doren & Murray, 2013).

Teacher Surveys

Pham (2013) surveyed 248 special education teachers across 20 states using the Promoting Transition Skills Inventory (PTSI), developed by the author from the Transition Assessment Goal Generator (TAGG) (Hennessey, Kazimi, Martin, & McConnell, 2011). The PTSI measured the extent to which teachers were promoting the constructs from the TAGG. The constructs include knowledge of strengths and limitations, disability awareness, employment, goal setting and attainment, persistence,

proactive involvement, self-advocacy, and utilization of supports through responses on a 7-point Likert scale from 1 (almost never true) to 7 (almost always true). Teachers rated statements about promoting transition skills as “usually true” ($M = 5.67$, $SD = 0.85$) with similar means in each construct. The author also gathered information about where special education teachers learn about transition practices. Roughly 20% of respondents learned about transition practices through either professional development or colleagues. Other sources include college courses (14%), previous experiences (14%), through trial and error (13%), conferences (11%), online sources (6%), and research journals (4%). This study found teachers self-reported promoting high levels of nonacademic transition skills while learning about transition practices from a wide variety of resources. The survey utilized research-based constructs to focus statements that the respondent rated on a Likert scale. Unfortunately, the wording appears to lead educators to the desired response, as indicated by the high mean and low standard deviation throughout the constructs. The current survey utilized open-ended responses to gather more specific data about the ways in which teachers promote and develop transition skills.

Benitez and Morningstar (2013) conducted a multistate survey of secondary special education teachers. Approximately 51% of respondents were teachers of students with SLD. On a four-point Likert scale, with one being very unprepared and four being very prepared, the respondents indicated the level of preparation to perform the transition competencies as somewhat unprepared to somewhat prepared ($M = 2.69$, $SD = .65$). A one-way ANOVA showed significant differences between educators working with specific disability groups, $F(5, 543) = 5.21$, $p < .001$, with an effect size of $\eta^2 = .046$. A

Tukey Honestly Significant Difference (HSD) test indicated the transition (specialists that teach students beyond grade 12) teachers' level of preparation was significantly higher ($M = 3.08$, $SD = .08$) than teachers of students with SLD ($M = 2.61$, $SD = .62$, $p < .00$), low incidence ($M = 2.53$, $SD = .64$, $p < .03$), and those that indicated a combination of disabilities ($M = 2.66$, $SD = .66$, $p < .002$). The survey also asked the frequency of implementation of transition activities on a 5-point Likert scale of 1 being never to 5 being frequently. The average overall was rarely to occasionally ($M = 2.70$, $SD = .56$). A one way ANOVA showed significant differences by student disability, $F(5, 545)=6.04$, $p < .001$. Again a Tukey HSD highlighted differences between the transition specialist group ($M = 3.03$, $SD = .51$) and teachers of students with SLD ($M = 2.62$, $SD = .53$, $p < .01$), low-incidence ($M = 2.54$, $SD = .66$, $p < .01$), and combination ($M = 2.71$, $SD = .56$, $p < .01$). A significant correlation existed between the perceived level of preparation and the frequency with which educators reported completing transition activities ($r = .72$, $p < .01$). Staff development hours ($r^2 = .08$, $p < .001$) and the number of courses ($r^2 = .07$, $p < .001$) in transition all significantly contributed to the variation in the frequency of implementation. The detailed quantitative analysis shows significant correlations between preparation and frequency of implementation, but there is no information on the ways in which teachers implement transition practices. The current survey addressed this through both categorical and open-end responses.

Mazzotti and Plotner (2014) conducted a multistate online survey of transition service providers, focusing on the implementation of evidence-based secondary transition practices. Researchers asked the frequency with which the respondent received

professional development opportunities specific to evidence-based practices, with 51.8% reporting they were never or seldom provided opportunities by the district. Over half (56.3%) strongly disagreed or disagreed that professional development prepared them to implement evidence-based practices. University preparation programs fared worse than professional development provided by school districts, with 67.4% either disagreeing or strongly disagreeing that their university teacher preparation program taught them about evidence-based practices. The survey asked how frequently (always, often, sometimes, never) the provider used evidence-based practices in seven transition-related skill areas. The majority of responses indicated they used the identified evidence-based practices always, often, or sometimes. Very few stated they never used them. This survey used evidence-based practices as the framework for data but compiled all transition service providers together. The participants included teachers of students with all types of disabilities, administrators, program coordinators, rehabilitation counselors, and other professionals. The current survey specifically targeted high school teachers of students with SLD due to the high percentage of these students exiting high school after four years when compared to students with low incidence disabilities. As they exit high school, they also lose the support of special education. Moreover, previous survey results have indicated that teachers of students with SLD feel unprepared to perform transition activities.

Evidence-Based Practices

In 2009, Catherine Fowler and colleagues published a paper to identify evidence-based practices for the post-secondary transition. The researchers used the five areas of

the Taxonomy for Transition Programming as study inclusion criteria and a way to organize the evidence-based practices (Kohler, 1996). Kohler defined the five areas as student-focused planning, student development, interagency collaboration, family involvement, and program structures such as program philosophy, policies, resource allocation, and human resource development. The studies analyzed came from the National Secondary Transition Technical Assistance Center (which became NTACT in 2015), the *What Works in Transition Research Synthesis Project* (Allwell & Cobb, 2006), which performed a thorough literature review through 2005, and an additional search to identify studies published from 2005-2008. Studies needed to be either a systematic literature review or group- or single-subject experiment meeting specific quality criteria. The evidence base evaluated included 240 reviews and studies. The researchers used input from Carr et al. (2005) and Compton et al. (2005) to create a series of checklists to evaluate individual studies. Overall, 63 articles met the criteria for high or acceptable quality and were used to develop the 32 evidence-based practices.

According to the National Technical Assistance Center on Transition (NTACT), an evidence-based practice is one based on group experimental, single-case, and correlational designs, which adhere to strict standards. The research must use stringent research design, display a robust record of success for improving outcomes, undergo a systematic review process, and follow quality indicators for the specific research design. All evidence-based practices were reviewed and published on the NTACT website, along with lesson plans and guides. Given the focus of this research, the evidence-based

practices have been condensed to include the two which address students with learning disabilities.

Using published curricula to teach student involvement in the IEP meeting is an evidence-based practice in the areas of education, employment, and independent living developed with evidence from two high-quality group studies, three acceptable group studies, and five quality single-subject studies. Seven of the studies focused on students with SLD, with 107 total participating students. The curricula included "The Self-Directed IEP" (Jerman, Marshall, Martin, & Maxson, 1996), "Self-Advocacy Strategy," (Bos, Schumaker, & Van Reusen, 1994), "Whose Future is it Anyway?" (Garner, Lawrence, Palmer, Soukup, and Wehmeyer, 2004), and an adapted version of "Personal Futures Planning Model" (Bates & Miner, 1997). Students were provided instruction on participation in IEP meetings and transition planning, leading IEP meetings, self-determination skills, and transition awareness. The teaching took place in general education, high school, self-contained, or resource classrooms.

The Self-Determined Learning Model of Instruction (SDLMI; Palmer & Wehmeyer, 2002) to teach goal attainment is an evidence-based practice in the areas of education, employment, and independent living based on one high-quality group study. The study included 14 students with learning disabilities. SDLMI is a curriculum focused on self-directed and self-regulated learning. The three units are: set a goal, take action, and adjust goal or plan based on results of action. Students are taught a series of steps to solve problems: identify the problem, identify potential solutions to the problem, identify barriers to solving the problem, and identify consequences of each solution. Lee, Little,

Palmer, Soukup, and Wehmeyer (2008) conducted a study with a randomized trial control group design. The special education teachers of the students in the experimental condition received instruction in the SDLMI intervention. The average implementation time was ten weeks. Students set a goal that required action in the general education environment. Students were assessed using the Goal Attainment Scale (GAS), a 5-point rubric that compares progress across multiple targets. In the experimental condition, a higher than expected score on the GAS was shown ($M = 52.80$, $SD = 11.28$) with 65% of students at or above expected levels (raw GAS scores were converted to T scores with a mean of 50, indicating an acceptable outcome, and standard deviation of 10).

Research-Based Practices

According to the National Technical Assistance Center on Transition (NTACT), a research-based practice is one based on group experimental, single-case, and correlational research, which adheres to rigorous research designs, and has demonstrated repeated evidence of improving outcomes. Unlike evidence-based practices, research-based practices may or may not have undergone a systematic review process or adhere to all quality indicators of the specific research design.

Given the evidence for improving student outcomes, research-based practices provide valuable tools for educators. Throughout this section, effect sizes reported are obtained from Fowler et al. (2009) to allow for comparison with Pearson's r effect sizes.

Predictors of Post-Secondary Participation. According to NTACT, occupational and vocational courses are correlated, at the research-based practice level, with improved post-secondary education and employment outcomes. These courses

support career awareness and exploration of career pathways, develop job skills, and focus students on an employment goal. The course should include career awareness, planning, and assessment activities; 21st century skills, technology, and specific career content; and hands-on and community-based learning opportunities. It should also incorporate Universal Design for Learning principles, take place during the school day, and offer a wide variety of occupational clusters (Alverson et al., 2014).

Two studies found potential evidence to support the use of occupational courses. Benz, Doren, Halpern, & Yovanoff (1995) found that students who passed more than half of all courses covering topics such as remedial academics, finance, community access, and vocational education were more likely to be engaged in postsecondary education with a medium to large effect size ($r = 0.47-0.53$). Similarly, Heal and Rusch (1995) found that a student who took more hours of academic and occupational courses was more likely to obtain post-secondary employment ($r = 0.09$). The proposed survey will solicit data on the availability and student use of these courses.

The skills necessary to manage one's self-care and independent living needs include personal management skills to interact with others, daily living skills, financial management skills, and the self-management of health and wellness needs. This practice covers a wide variety of skills; assessments are needed to determine in which areas a student requires instruction. Potential topics for instruction include financial planning, self-help, cooking, housekeeping, home maintenance, using transportation, clothing care, accessing community services, time/organizational management, self-determination, social roles/citizenship, community/peer relationships, and critical thinking and problem-

solving. Research promotes embedding self-care/independent living skills instruction into academic coursework in general education, special education, and the community with individual, small group, and whole-class instruction, as appropriate, with opportunities to practice skills during the school day (Alverson et al., 2014).

Self-care was found to have a small to large effect size on independent living across three studies. Heal and Rusch (1994) saw that high scores on adaptive and self-care skills led to an increase in the likelihood of living independently ($r = 0.06$). Students with high self-care skills are more likely to be engaged in living independently, employment, and education ($r = 0.27$) (Blackorby, Hancock, & Siegel, 1993). Similarly, students with high daily living skills as assessed by the teachers have an increased quality of life and higher levels of engagement in post-secondary employment ($r = 0.53$) (Brolin, Johnson, & Roessler, 1990). The current survey asked about instruction in independent living goals on the ITP, as many students with SLD are deemed, by the IEP team, not to need support in this area.

Research Questions

In California, over half of all students with a disability graduate with a diploma after four years, and a high percentage of those are students with SLD. Survey results indicate that teachers self-report high levels of engagement in promoting transition skills (Pham, 2013). Yet among all special education teachers, Benitez and Morningstar (2013) found teachers of students with SLD reported the lowest levels of transition training and implementation. IDEA (2004) mandates that teachers use evidence-based practices in special education. Mazzotti and Plotner (2014) found, in a survey of transition service

providers, the majority of respondents sometimes, often, or always reported utilizing evidence-based practices in seven transition-related skill areas. While NTACT reviews research on transition practices and recommends evidence-based practices, little is known about the ways in which teachers are utilizing these methods. The current survey extended the results of Pham (2013), Benitez and Morningstar (2013), and Mazzotti and Plotner (2014) by utilizing qualitative and quantitative methods to discover how students with learning disabilities received instruction in the skills necessary for post-secondary engagement with the following research questions:

1. In what ways are students with learning disabilities provided instruction and assessed for post-secondary transition goals during high school?
2. What evidence-based practices are teachers utilizing with students with learning disabilities to develop post-secondary skills?
3. Do teacher characteristics (i.e., types of credential, years of services, date of the last credential) affect the amount of transition instruction or professional development the teacher received?
4. Does the amount of transition instruction teachers receive affect the use of evidence-based practices for transition?
5. Does the amount of transition instruction received or teacher characteristics affect the teachers' level of involvement in the development of post-secondary skills?

Chapter 3

Methodology

The research questions required both qualitative and quantitative methods. Mixed methods research combines "elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breadth and depth of understanding and corroboration" (Johnson, Onwuebuze, & Turner, 2007, p. 123). Qualitative research allowed the researcher to ask open-ended questions and is the ideal method for research questions one and two. The topic is not easy to measure and is too complicated for the presentation of a detailed understanding through purely quantitative measures. Quantitative research allowed the evaluation of numerical data to test for statistically significant effects. Questions three, four, and five examined the impact of an independent variable (i.e., teacher characteristics or education) on a dependent variable (i.e., involvement in the development of post-secondary skills). Some variables are used as independent in one question and dependent on another (i.e., amount of transition instruction received.)

Research Design

The researcher conducted a self-administered Internet survey. An Internet survey allowed the respondent control of the pace and recording of their response to ensure accuracy (Manfreda & Vehovar, 2008). It allowed for the accumulation of a large number of surveys at a lower cost than using an interviewer. An email invitation required only a single click by the respondent to move into survey completion with a reminder email sent

out one week later. Upon completion of the survey, respondents had the option to complete a Google Form with their contact information to be entered into an incentive drawing. In an experimental study, Goeritz, Sattler, and Van Veen (2011) found offering incentives increased response rate with no effect on perceptions of anonymity. A meta-analysis completed by Goeritz (2006) found that material incentives increased web survey completion by 27%.

The survey expanded upon research that utilized teacher surveys on transition (Benitez & Morningstar, 2013; Mazzotti & Plotner 2014; Pham, 2013). The purpose of the study is to identify and describe teachers of students in grades nine - 12 who are developing the transition skills of diploma-bound students with Specific Learning Disability (SLD). The study sought to discover the ways in which teachers are providing instruction and assessment for post-secondary education, employment, and independent living. Open-ended questions compiled detailed accounts by participants as to the methods that they are using to develop transition skills.

Hypothesis

The study examined teachers of students with SLD due to a gap in the literature regarding current practices of teachers and survey results that indicated teachers of this population lack instruction for developing post-secondary skills of their students. I suspected the open-ended results would vary across the region and districts. Based on the survey by Mazzotti and Plotner (2014), the hypothesis is that teachers will report a low frequency of use of evidence-based practices. Based on the survey conducted by Benitez and Morningstar (2013), the assumption is that the teacher characteristics will affect the

amount of instruction received and the level of involvement in the improvement of post-secondary skills of their students.

Population and Sample

The survey went to all high school special education teachers in three out of four Southern California school districts. District B has not yet participated in the study. The student population of the four school districts is diverse and reflective of the Southern California population. California is an ideal research location because it has a higher graduation rate for students on an IEP and a higher percentage of students served under the category of SLD than the national average (U.S. DoE, 2016).

The survey sample consisted of all special education teachers at the high school level that report students with SLD on their caseload in these districts. School district A has nine high schools, district B has 96 high schools, district C has 24 high schools, and district D has 13 high schools. A request for teacher participation occurred via e-mail.

Research Sites. The research sites were all located in urban and suburban areas in Southern California. The sites provided a diverse student and teacher population. The locations vary in size, but all offered traditional high school sites to study.

School district A. This district consists of nine comprehensive high schools, two charter high schools, one continuation high school, two alternative education sites, four special education facilities, a middle college high school program, a Regional Occupational Program (ROP), and an adult education program. Over 22,000 students attend the district schools with approximately 53 percent of high school students

identifying as white and 47 percent come from diverse backgrounds such as Latino, African-American, Asian, Filipino, Pacific Islander, and Native American.

School district B. This district covers over 720 square miles and consists of over 900 schools serving over 734,000 students in 187 public charter schools, with kindergarten through 12th grade. There are 19 primary school centers, 451 elementary schools, 83 middle schools, 96 senior high schools, 54 option schools, 44 magnet schools, 24 multi-level schools, 12 special education schools, 169 k-12 magnet centers (on regular campuses), 228 charter schools, and 120 other schools and centers. As of the 2016-2017 school year, the student characteristics include 94 languages other than English with 141,490 students learning to speak English proficiently. Latino students account for 74% of the district population, in addition to 8.4% African-American, 9.8% White, 6% Asian, 0.04% Pacific Islander, and 0.02% American Indian/Alaskan Native. Approximately 75.7% of the students qualify for free or reduced meals.

School district C. This district serves over 130,000 students and consists of over 226 educational facilities, serving kindergarten through 12th grade. There are 117 traditional elementary schools, 9 K-8 schools, 25 traditional middle schools, 24 high schools, 49 charter schools, and 14 atypical/alternative schools. The student population is very diverse, with more than 15 ethnic groups and more than 60 languages and dialects. The racial diversity includes 46.5% Hispanic, 23.4% White, 10.2% African American, 5.4% Filipino, 4.9% Indo-Chinese, 3.3% Asian, 0.3% Native American, 0.6% Pacific Islander, and 5.4% identifying as multiracial. Approximately 59.4% of students are

eligible for free or reduced meals, and 26.5% are classified as English Language Learners.

School district D. This district serves over 42,000 students in grades seven through 12. There are 32 campuses with 13 traditional high schools and 11 middle schools. The student population comprises a diverse group of ethnicities, including Hispanic, Filipino, African-American, and Asian. Approximately half of the students speak a language other than English at home. Over 24,000 students receive free or reduced meals.

Special Education Annual Performance Measures (CDE, 2018)

The Individuals with Disabilities Education Improvement Act of 2004 requires the state to collect detailed data on the performance of students receiving special education programs. The information from each Local Education Agency (LEA) is sent to the California Department of Education (CDE) annually. The current reports reflect data from the 2017-2018 school years. There are 14 State Performance Plan indicators; only those indicators directly relating to the research focus are discussed in the following sections.

Indicators 1 and 2. For Indicator 1, the LEA reports the percent of all students in grade 12 and exiting ungraded students eighteen and over, who graduate with a regular high school diploma. The data sources are the Adequate Yearly Progress (AYP) Graduation Rate, and the target for all LEA's is 90%. For Indicator 2 the LEA reports the percent of all students in grades nine and higher, and ungraded students thirteen and over,

who exit special education by dropping out of school. Each LEA has the same target of less than 11.72%. Below are the Indicator 1 and 2 data for all four school districts:

Table 1

Four Year Rate in Percent

School District	Graduation	Dropout
A	61.21	2.59
B	58.3	17.42
C	61.22	11.73
D	67.87	3.22

(CDE, 2018)

All districts failed to meet the 90% target graduation rate for Indicator 1. The indicator only looks at the graduation rate after the first four years of high school. Many students in special education require one or more additional years of schooling to meet the graduation requirements. The State Performance Plan does not account for students that graduate with a diploma beyond the four-year mark.

Districts B and C failed to meet the dropout rate target of less than 11.72%. Of the four research sites, districts B and C are the largest geographically and in student population, while also serving kindergarten through grade 12. Several factors contribute to student drop out rates that are beyond the scope of this research.

Indicator 5. In December 2015, the LEA reported IEP compliance-related information to the California Special Education Management Information System (CASEMIS); these data are used to calculate Indicator 5. This indicator evaluates the average amount of time students ages six through twenty-two receive their special

education or services in settings separate from their typically developing peers. The data are in three categories: A) inside of the regular class more than 80% of the day; B) inside the regular class less than 40% of the day; and C) in separate schools, residential facilities, or homebound/hospital placements that do not include students in correctional facilities or parentally placed in private school. The targets are: category A more than 51.2%; category B less than 22.6%; and category C less than 4.0%. The Indicator 5 data for all four schools are:

Table 2

*Least Restrictive Environment:
Percentage of Students Inside a Regular Classroom*

School District	> 80% of the day	< 40% of the day	In restrictive placements
A	39.04	19.08	8.65
B	50.26	17.35	8.32
C	66.58	4.26	15.11
D	48.53	20.77	4.18

(CDE, 2018)

According to NTACTION, inclusion in general education is an evidence-based practice that positively impacts post-secondary education, employment, and independent living. District C met the target of greater than 51.2% of students included in general education more than 80% of the school day. It is important to note that the indicator data covers ages six-22, but districts A and D have only secondary grades. As academic rigor increases in middle and high school, inclusion becomes a more significant challenge for students with disabilities. All districts met the target of having less than 22.6% of

students included less than 40% of the school day. No districts reached the goal of lower than 4% placement in a restrictive setting. Students are placed into restrictive settings for a wide variety of reasons from health to behavior, and these schools offer little to no interaction with their typically developing peers.

Indicators 9 and 10. Through evaluation of data from the California Longitudinal Pupil Achievement Data System (CALPADS) and the December 2014 CASEMIS submission items, LEAs look for disproportionality. Indicator 9 is overall disproportionality by racial and ethnic groups, and Indicator 10 evaluates for disproportionality within each disability category by racial and ethnic groups. All four districts were found to be not disproportionate in Indicator 9 and Indicator 10. Since the proposed study seeks to target the SLD population, it was essential to evaluate the research sites for disproportionality that could bias results.

Indicator 13. IDEA requires all students 16 years of age or above to have measurable annual goals and services that will reasonably enable students to meet their post-secondary goals. Indicator 13 used data from the June 2018 CASEMIS submission to determine the percentage of students with post-secondary goals and transition services. For all LEA's, the target is 100%. School district B did not meet this target with 99.96% and school district C with 94.12% of reviewed students meeting Indicator 13.

Indicator 14. The LEA is required to contact students who had an IEP in place when they exited school, one year after graduation. Responses fall into one of three categories: A) enrolled in higher education, B) enrolled in higher education or competitively employed, or C) enrolled in higher education or some post-secondary

education or training program; or competitively employed or in some other employment. According to the National Technical Assistance Center on Transition (NTACT), higher education includes enrollment full or part-time at a community college or four-year college for at least one complete term at any time in the year since leaving high school. Competitive employment incorporates working for pay at or above minimum wage in a setting with typically developing peers for 20 hours a week for at least 90 days at any time in the year since leaving high school, which includes military employment. Enrollment in other post-secondary education or training includes Job Corps, adult education, workforce development program, or vocational-technical school that lasts less than two years. Some other employment includes self-employed, family business, or positions below minimum wage. The targets are 53.3% in category A, 73.4% in category B, and 82% in category C. As seen below, the four school districts varied in the number of responders sampled as well as the percent in each category:

Table 3

Percentage of Post-Secondary Participation

School District	Higher Ed	Higher Ed or Competitive Employment	Any Training Program or Employment
A	32.2	65.82	99.15
B	55.45	73.73	99.43
C	42.16	66.2	98.26
D	51.26	78.64	100
Target	53.3	73.4	82

(CDE, 2018)

The process of collecting data for Indicator 14 is arduous and requires staff to call to interview students. Although staff make multiple attempts, students may have moved, or phone numbers are disconnected, which accounts for a low number of responses.

Only district B met all three targets with district D meeting targets B & C. It is possible the students from districts B and D are excelling in post-secondary engagement due to some intervention during high school; the proposed survey seeks to investigate the methods used to promote higher education and employment within all four districts during grades nine through 12.

Data Collection

With IRB approval, an online survey was sent out to the sample teachers via email. The site "Qualtrics" hosted the survey. It allows for unlimited questions, surveys, responses, and pages with the ability to export responses. Answers are confidential and untraceable to the email address and protected with multifactor authentication.

Respondents were allowed to complete the survey one time but had the option to save and continue later. An optional Google Form enabled them to submit their email address to enter the incentive drawing, but it was not tied directly to the responses.

Survey Questions. The survey consisted of a combination of multiple-choice, short answer, and paragraph responses. The questions are in Appendix A. Section 1 covered demographic information. Section 2 asked how many hours of instruction or professional development the teacher received in writing transition plans or providing transition instruction. Section 3 asked open-ended questions regarding how students were assessed for their transition plans, the ways in which the teacher-built transition skills

with students with SLD, and use of published curricula, if any. Section 4 asked a series of questions regarding whether students participated in a course specific to the development of skills in education, employment, or independent living. Next were questions targeting who taught the transition course, if indicated as available. Another series of questions asked if students participated in pull-out activities specific to the development of skills in education, employment, or independent living, followed by questions targeting who conducted the pull-out activities, if indicated as available: the respondent, a general education colleague, or special education colleague. Altogether, the questions elicited a variety of qualitative and quantitative data to address the research questions.

Data Analysis

Theoretical and Analytical Framework. As described by David Silverman (2011), theories are like a kaleidoscope where the images change as the lens is rotated. The same is true for theoretical perspective, which alters the focus of a researchers' data collection and analysis. The application of a valuable theory helps to organize the data, especially when elements seem disconnected from one another (Maxwell, 2008). A theoretical framework allows the researcher to focus his/her kaleidoscope on a specific area of interest that requires further explanation.

The transition perspective, as defined by Kohler (1996), provided the interpretive lens for all data. It encouraged the development of programs and activities that are focused on the students' post-secondary goals and took into account their unique needs, interests, and preferences. Transition planning provided the cornerstone for all educational programs and activities. Kohler and Rusch (1996) assert transition planning

consists of three steps: identification of post-secondary goals, the creation of instructional activities and experiences to develop the skills necessary to meet post-secondary goals, and collaboration with the student and a variety of individuals for continued progress towards post-secondary outcomes.

Analytical Methods. The responses from Section 3, the open-ended questions on the survey, and question 46 were analyzed using directed content analysis, which allowed for the identification of evidence-based practices for post-secondary education, employment, and independent living within the responses. These data answered research questions one and two to address how students receive instruction, are assessed, and teacher use of evidence-based practices for post-secondary skills. The directed content analysis provided for the interpretation of a text through coding, uncovering themes, and uncovering patterns with a specific focus (Hsieh & Shannon, 2005). Upon completion of the content analysis, the quantitative and qualitative data were evaluated holistically to look for patterns and themes across data types.

Several questions in the survey addressed similar ideas with small variations. For example, questions 19-22 all asked about the hours of preparation in transition. Before conducting a regression to answer a particular research question, a principal component analysis was performed to see if the variables combine into a latent variable. According to Field and Miles (2010), a principal component analysis reduces the data set size while maintaining as much original information as possible.

Throughout Section 1, responses provided demographic data and teacher characteristics. These data were analyzed using SPSS to gather descriptive statistics

regarding the sample. The teacher characteristics were examined, in combination with Section 2, to address research question three (Do teacher characteristics affect the amount of transition instruction or professional development the teacher received?). This analysis was conducted using linear regression in SPSS. Simple linear regression allowed for the examination of the effects of one variable on another (Field & Miles, 2010). Given that several questions resulted in categorical data, effects coding was used to allow for the interpretation of main and interaction effects (UCLA: Statistical Consulting Group, 2017). Survey questions 3 through 8 and 11 through 16 served as independent variables with questions 19 through 22 as dependent variables to answer research question three.

Research Question 4 (Does this amount of transition instruction received affect the use of evidence-based practices?) required data from the content analysis and questions 19 through 22. The absence of reported evidence-based practices did not allow for analysis related to Question 4.

To address research Question 5 (Does the amount of transition instruction received or teacher characteristics affect the teachers' level of involvement in the development of post-secondary skills?) data from Sections 1, 2, and 4 were required. Variables from Sections 1 and 2 acted as the independent variables with data from Section 4 as the dependent. When a respondent indicated students on their caseload participated in a course or pullout activities to develop transition skills, a follow-up question asked who taught the material (i.e., the respondent, a special education colleague, or a general education colleague). Those data included information broken down by transition area (employment, education, and independent living) and indicated

the method of delivery (course or pullout) with who provided the instruction as the dependent variable for Question 5.

Chapter 4

Findings

The survey received 78 responses during the Spring of 2019 which included respondents who did not meet sample criteria. The survey sample (n = 55) is all teachers who indicated one or more students with SLD on their caseload. School district B declined to participate in the survey before the end of the school year.

Sample Descriptive Statistics

The survey sample consisted of teachers from school district A (n = 22), district C (n = 13), and district D (n = 13). The majority of teachers reported working at a traditional high school (n = 54). Most respondents were female (n = 44) and Caucasian (n = 37). There were a variety of Education Specialist credentials held: Mild/Moderate (n = 50), Moderate/Severe (n = 12), Deaf and Hard of Hearing (n = 1), and Language and Academic Development (n = 3). The state of California issues a wide variety of added authorizations. All are represented in this sample: Autism (n = 41), Deaf-blind (n = 1), Emotional Disturbance (n = 11), Other Health Impairment (n = 5), Orthopedic Impairment (n = 1), and Traumatic Brain Injury (n = 3). The highest level of education received was commonly a Master's Degree (n = 45) with no reported doctoral degrees. The majority of teachers had several years since their last credential (M = 8.623, SD = 7.670).

The sample included teachers from programs serving students with Mild/Moderate (n = 45), Moderate (n = 4), and Moderate/Severe (n = 6) disabilities. Each

participant had numerous students with SLD on their caseload ($M = 15.04$, $SD = 10.632$) with a high percentage being diploma-bound ($M = 52.33$, $SD = 45.127$).

Table 4

Means, Standard Deviations, and Range (Minimum/Maximum) for Years Teaching

Variable	<i>M</i>	<i>SD</i>	Min	Max
Total	13.29	8.583	1	39
High School	8.81	8.266	0	34
Transition	4.18	7.245	0	31
Special Education (SE)	11	7.242	1	33
SE High School	8.48	7.412	0	31
SE Transition	3.53	6.610	0	31

Question 1

Assessment. IDEA 2004 requires the development of an Individual Transition Plan (ITP) before the student is 16 years old; assessment is a critical piece in the development process. As shown in Table 5, teachers reported using a variety of teacher/district created, online, and published assessments and a directed content analysis was conducted to look for similarities among respondents. The most common means of assessment was student interview ($n = 23$). The BRIGANCE ($n = 5$), which measures transition skill areas, was the most common published assessment.

Table 5

Teacher Reported Transition Assessments and their Frequency

Teacher/Online Assessments		Published Assessments	
Career Cluster Survey	8	<i>BRIGANCE</i>	5
District/Teacher Created	11	<i>Career Cruising</i>	1
Grades/Work Sample	1	<i>California Career Zone Quick Assessment</i>	1
Interest Inventory	4	<i>COPS Interest Inventory</i>	1
Interview	23	<i>My Next Move Survey</i>	1
Learning style inventory	1		
Observation	2		
Practical life skills	3		
Skill inventory	1		
Vocation specific	1		

Employment. The ITP requires a goal, activities, and services to support the development of employment skills. Table 6 shows teachers reported students are taught to build resume skills (n = 9), interview skills including mock interviews (n = 8), and how to obtain and complete job applications (n= 5). Teachers also connected students to district (n = 6) or outside agency recourses (n = 4), on the job training (n = 4), paid internships (n = 2), and business/industry tours (n = 4).

Table 6

Activities to Improve Employment Outcomes and their Frequency

On-Campus Skill Building		Off-Campus Activities	
Classroom enterprise	1	Business tours	4
Executive function	1	Connect to district resources	6
Guest speakers	2	Connect to outside agencies	4
Interview	8	Career Technical Education	1
Job application	5	Job fair	1
Networking	2	Job shadow	1
Research careers	3	On the job training	4
Resume	9	Paid Internships	2
Transition class	3	Volunteer work	2

Education. In addition to ITP requirements, high school academics are to designed to prepare students for post-secondary education. Teachers reported, as illustrated in Table 7, teaching students to research college options and requirements (n = 16), taking students on 2-year and 4-year college tours (n = 8), and assisting students with college, financial aid, and scholarship applications (n = 7). Teachers also coordinated meetings with academic counselors (n = 6), Disabled Student Programs and Services (n = 5), and Department of Rehabilitation (n = 1).

Table 7

Activities to Improve Education Outcomes and their Frequency

On-Campus Activities		Off-Campus Activities	
Assist with College/FAFSA/Scholarship Applications	7	College Tour	8
Attend College Visit on Campus	1	Community College Classes	1
AVID	1	Connect with DOR	1
College Ready Goals	1	Connect with DSPS	5
Executive Function Training	1	ROP Class	1
Guest Speakers	1		
Meet with Academic Counselor	6		
Research requirements/options	16		
Transition Class	1		
Write Letters of Recommendation	1		

Independent Living. The skills needed for an adult to successfully live independently are vast. Potential topics for instruction include financial planning, self-help, cooking, housekeeping, home maintenance, using transportation, clothing care, accessing community services, time/organizational management, self-determination, social roles/citizenship, community/peer relationships, and critical thinking and problem-solving. Nearly 35% of the survey sample said the development of independent living skills with students with Specific Learning Disabilities was unnecessary. Table 8 displays teachers reported instructing students on budgeting/finance (n = 10), options for living arrangements (n = 4), and food preparation skills (n = 3). Several teachers reported off-campus community-based instruction focusing on accessing public transportation (n = 4), visiting local stores and points of interest (n = 2), and obtaining a driver’s license or identification card at the Department of Motor Vehicles (n=2). Respondents also

indicated connecting students to adult agencies or resources for support after high school (n = 2).

Table 8

Activities to Improve Independent Living Outcomes and their Frequency

On-Campus Activities		Off-Campus Activities	
Budgeting/Finances	10	Connect to adult agencies	2
Cleaning	1	Obtain Driver's License	1
Discuss Living Arrangements	4	Obtain ID Card	2
Food Preparation	3	Open Bank Account	1
Gardening	1	Public Transportation	4
Self-advocacy class	3	Register to Vote	1
		Visit Community Locations	2

Question 2

According to NTACTION, five published curricula incorporate evidence-based practices for students with SLD. A directed content analysis revealed none of the published curricula in the survey responses. NTACTION also identified vocational and occupational courses as a research-based practice for students with SLD. Only one teacher reported using occupational courses with students on her caseload. Nearly 35% of responses stated that independent living was not an area addressed in their classrooms. High levels of self-care skills have a positive correlation with post-secondary independent living (NTACTION). As discussed in Question 1, a variety of on-campus and off-campus activities were reported with the intent to improve independent living skills.

Question 3

The survey asked teachers to self-report the number of hours of transition planning and transition teaching instruction received during the credential program or as professional development. As indicated in Table 9, the responses varied with higher

means for the development of transition plans and high standard deviations in all categories. A Pearson test of correlations indicated that the four variables were highly correlated.

Table 9

*Means, Standard Deviations, and Correlations:
Hours of Transition Plan or Transition Teaching Instruction*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Credential/Plan	7.89	17.453	1			
2. PD/Plan	8.11	15.940	.897**	1		
3. Credential/Teaching	6.59	15.939	.981**	.894**	1	
4. PD/Teaching	4.80	14.517	.835**	.927**	.877**	1

**p < 0.01 *PD = Professional Development*

High correlations led to the use of principal component analysis for dimension reduction. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy measure of 0.646 indicated the sample was adequate. In addition, Bartlett's Test of Sphericity Chi-Squared (293.660, 6) was significant at the p < .001 level. The principal component analysis utilized an Oblimin rotation with Kaiser Normalization. Table 10 shows the initial Eigenvalues.

Table 10

Total Variance Explained

Component	Total	Initial Eigenvalues	
		% of Variance	Cumulative %
1.	3.706	92.647	92.647
2.	.209	5.228	97.875
3.	.074	1.851	99.726
4.	.011	.274	100

Two components were extracted using an Eigenvalue threshold of 0.1. Table 11 includes the pattern, structure, and coefficient matrix for each component and variable.

Table 11

*Principal Component Analysis Matrices:
Hours of Transition Plan or Transition Teaching Instruction*

Variable	Pattern		Structure		Coefficient	
	1	2	1	2	1	2
1. Credential/Plan	.992	-.231	.970	-.137	.288	-1.165
2. PD/Plan	.945	.178	.962	.267	.244	.766
3. Credential/Teaching	.995	-.167	.979	-.073	.284	-.865
4. PD/Teaching	.908	.317	.938	.402	.223	1.424

**p < 0.01

PD = Professional Development

The two components were used individually as the dependent variable in subsequent analyses for research question three. A simple linear regression was calculated to predict the amount of transition instruction received based on the Education Specialist authorizations held. As shown in tables 12 and 13, a significant regression equation was found with one component ($F(7,35) = 2.634, p < 0.027$), with an R^2 of 0.345.

Table 12

Added Authorizations Predict the Amount of Transition Instruction

	SS	df	MS	F
Regression	16.128	7	2.304	2.634*
Residual	30.611	35	0.875	
Total	46.740	42		

*p < 0.05

Table 13

Results of the Regression by Added Authorization

	<i>B</i>	<i>SE B</i>	β	<i>t</i>
(Constant)	0.024	0.935		0.025
Autism	0.295	0.957	0.123	0.308
Deaf-Blind	-0.952	0.957	-0.138	-0.995
Emotional Disturbance	-0.430	0.411	-0.168	0.303
Other Health Impairment	-0.653	0.695	-0.182	-0.939
Orthopedic Impairment	-4.432	1.323	-0.641	-3.351**
Traumatic Brain Injury	2.099	1.164	0.424	1.804
None	-0.410	0.981	-0.166	-0.418

**p < 0.01

These results indicate the added authorization of Orthopedic Impairment is significantly different than other groups.

Question 4

Within the survey sample, there was only one reported use of an Evidence Based practice; this did not allow for an analysis of the research question.

Question 5

Teacher characteristics and self-reported hours of preparation were evaluated in relation to their level of involvement in courses or pull out activities.

Credential. A simple linear regression was calculated to predict the level of involvement in education, employment, and independent living courses or pull out activities based on the Education Specialist credentials held. A significant regression equation, as revealed in tables 14 and 15, was found ($F(4,50) = 3.048, p < 0.025$), with an R^2 of 0.196.

Table 14

Credential Predicts Involvement

	SS	df	MS	F
Regression	8.076	4	2.019	3.048*
Residual	33.124	50	.662	
Total	41.200	54		

*p < 0.05

Table 15

Results of the Regression by Credential

	B	SE B	β	t
(Constant)	-.508	.495		-1.027
Mild/Moderate	.777	.482	.258	1.613
Moderate/Severe	1.108	.336	.529	3.303**
Deaf and Hard of Hearing	-.268	.824	-.041	-.326
Language and Academic Development	-.638	.490	-.167	-1.303

**p < 0.01

The results indicate a higher level of involvement in post-secondary skill preparation by teachers holding an Education Specialist Moderate/Severe credential.

Teaching Assignment. A simple linear regression calculated the predicted level of involvement in education, employment, and independent living courses or pull out activities based on the current special education program teaching assignment. Tables 16 and 17 illustrate a significant regression equation was found ($F(1,53) = 6.833, p < 0.012$), with an R^2 of 0.114.

Table 16

Teaching Assignment Predicts Involvement

	SS	df	MS	F
Regression	4.705	1	4.705	6.833*
Residual	36.495	53	.689	
Total	41.200	54		

*p < 0.05

Table 17

Results of the Regression for Teaching Assignment

	<i>B</i>	<i>SE B</i>	β	<i>t</i>
(Constant)	-.249	.272		-.913
Teaching Assignment	.253	.097	.338	2.614*

*p < 0.05

To further investigate which teaching assignments were significantly different, an additional simple linear regression was calculated. It predicted the level of involvement in education, employment, and independent living courses or pull out activities based on the current special education program teaching assignment with effects coding to allow for the interpretation by individual teaching assignments. A significant linear regression equation was found ($F(5,49) = 9.177, p < 0.001$), with an R^2 of 0.484.

Table 18

Teaching Assignment Predicts Involvement

	SS	df	MS	F
Regression	19.924	5	3.985	9.177***
Residual	21.276	49	.434	
Total	41.200	54		

***p < 0.001

Table 19

Results of the Regression by Teaching Assignment

	B	SE B	β	t
(Constant)	-1.429 E-14	.659		.000
Mild/Moderate	.190	.667	.093	.286
Moderate	1.383 E-14	.761	.000	.000
Moderate/Severe	2.2	.722	.731	3.048***
Transition Mild/Moderate	1.000	.761	.262	1.314
Transition Moderate	1.382 E-14	.932	.000	.000

*** p < .001

The results indicate a higher level of involvement in post-secondary preparation by teachers with a Moderate/Severe teaching assignment.

Chapter 5

Conclusions, Discussion, and Suggestions for Future Research

The 46-question survey focused on the preparation of teachers in transition skills, transition assessment of students with learning disabilities, instruction in post-secondary skills, and demographics. The survey results created a detailed picture of the current practices in three southern California school districts.

Summary of Findings

The qualitative analysis reveals that teachers utilize a wide variety of assessments and on/off-campus activities to develop post-secondary education, employment, and independent living skills. There are no consistencies between or across districts with a low frequency reported in most areas. There was an increased level of involvement for teachers with a Moderate/Severe credential and those assigned to teach in a Moderate/Severe program. The teachers were involved in teaching students with SLD the skills necessary for post-secondary education, employment, and/or independent living, but there is no evidence for the use of evidence-based practices.

Conclusions

Transition Assessment and Practices. There appears to be little consensus among practitioners in the sample on assessments or practices related to transition. Student and family interviews were the most commonly reported assessment. The challenge with developing an evidence-base for the use of an interview is the inherent lack of structure and inconsistencies in implementation. Teachers most frequently

reported assisting with resumes and job interview skills. While these help a student obtain a job, it does little to help them maintain engagement in post-secondary employment. Respondents focused their efforts in the area of post-secondary education on 2-year colleges and 4-year universities. The most regularly reported activity was the research of the requirements for colleges of interest to the student. Focusing on college does not show students all the options or teach them strategies to help maintain enrollment.

The expanse of independent living skills is the most overlooked transition skill area for students with SLD. Almost 35% of the sample reported: “Most of my students do not need assistance with independent living” or a similar sentiment. The lack of development of independent living skills is not unexpected but alarming, nonetheless, considering the complexity of independent living. The most common topics of instruction were budgeting or public transportation, but there were low frequencies throughout the responses. Overall, there was a wide range of activities described with low frequencies, including food preparation, self-advocacy, and support to obtain a driver’s license or identification card.

Evidence-Based Practices. NTACTION identified a small number of evidence-based practices for students with SLD, supporting their absence from responses. Only one response indicated using occupational courses with students. Even when the research base was expanded to include research-based practices, they did not appear in the responses. One participant stated, "In your survey, I learned that there is curriculum I can utilize when working with my students. I would love to use that in the future because the training on post-secondary transition planning in my schooling and the district training

always seem abstract/vague.". The survey questions did not include the phrases evidence-based or research-based, but by asking about the published curriculum used, this teacher was enlightened to their existence.

Teacher Preparation. The results for question three require replication, with larger sample sizes, before drawing conclusions. Questions 19 through 22 asked teachers to report the number of hours of instruction or professional development they had in transition instruction and planning. During a preliminary review, many colleagues reported they had a difficult time remembering how many hours they received, leading to a wide range of responses. The simple linear regression indicated completion of the added authorization of orthopedic impairment led to a higher number of hours of transition preparation. This category had only one respondent, who reported high hours, which skews the results. It is possible that added authorizations affect the teacher preparation, but the survey sample was too small to conclude at this time. A regression was completed with the total number of added authorizations but the results for both factors were insignificant.

Level of Involvement. Both the teaching assignment and Education Specialist credential had a significant effect on the level of involvement in post-secondary skill preparation. Having a Moderate/Severe credential yielded significantly different results than all other credentials. Special education program teaching assignment indicated teaching in a Moderate/Severe program was associated with a higher level of involvement. Moderate/Severe programs often focus on life skills, supporting a higher level of involvement. This research indicates the students with SLD, who are on the

caseload of a teacher with a Moderate/Severe credential or assigned to a Moderate/Severe program, are more likely to have a teacher that is actively involved in transition skill development.

Discussion

The qualitative results provide practices for further evaluation to develop an evidence-base. Published assessments such as the BRIGANCE and COPS Interest Inventory need additional research with students with SLD to develop an evidence-base. In order to use interview as an assessment, a standard protocol must be developed and tested. Practices such as on the job training, internships, and volunteer work show promise but also lack operational definitions or evidence-bases to demonstrate their effect on post-secondary engagement in employment. Executive function activities were reported. These activities may support engagement in education as it is studied in a variety of age groups with research-based curriculum available, yet additional research is needed to show whether such an emphasis is helpful for students with SLD. Self-advocacy is well researched with several published curricula to teach student involvement in the IEP meeting as an evidence-based practice supporting all areas of post-secondary engagement. The survey responses did not include these curricula so it is unclear how or whether respondents developed self-advocacy skills.

Engagement in post-secondary education, employment, and independent living are the keys to a successful life. The limited research, evidence-based practices, and research-based practices that involve students with SLD, the most common educational disability, are concerning. This lack of research creates challenges for teachers as they

seek to develop post-secondary education, employment, and independent living skills of their students.

Limitations

The survey was conducted exclusively in southern California with credential and added authorizations specific to the state. The small sample size led to difficulties in conducting quantitative analysis. The reluctance of school district B to participate before the end of the school year hurt the sample size significantly. Several quantitative questions relied on self-report which, can lead to errors. The survey consisted of 46 questions, which took an average of 17.5 minutes to complete and may have discouraged participation.

Suggestions for Future Research

Survey. The researcher developed a survey and conducted it in southern California. The survey contained questions that did not yield the expected information. The survey will be revised to reflect credentials in another state, and distributed to gather additional data. The goal of this future study will be to gather practices to study and adapt to create additional evidence-based practices.

Teacher Preparation. The hours of preparation teachers received in transition planning, and instruction during their credential or professional development were self-reported. Self-report led to a wide range of results with some respondents indicating they did not remember. In order to research variations in teacher preparation, particularly between credentials and added authorizations, future research should gather information from credential programs across states and from recent graduates of credential programs.

Evidence-Based Practices. Of the 32 evidence-based practices to develop transition skills described by NTACTION, only 2 were developed to support students with SLD: using published curriculum to teach IEP participation and the Self-Determined Learning Model of Instruction (SDLMI; Palmer & Wehmeyer, 2002) to teach goal attainment. Given the prevalence of students with SLD in special education and their underperformance in post-secondary engagement, additional research is needed to identify and describe evidence-based practices for this population. Specifically, practices are needed that positively influence engagement in post-secondary education, employment, and independent living for students with SLD.

References

- Alverson, C. Y., Fowler, C. H., Kellems, R., Rowe, D. A., Test, D. W., & Unruh, D. K. (2014). A Delphi study to operationalize evidence-based predictors in secondary transition. *Career Development and Transition for Exceptional Individuals*, 38, 113-126.
- Alwell, M., & Cobb, B. (2009). Social and communication interventions and transition outcomes for youth with disabilities: A systematic review. *Career Development for Exceptional Individuals*, 32, 94–107. doi:10.1177/0885728809336657
- Bassett, D. S., Hutchinson, S. R., & Li, J.Y. (2009). Secondary special educators' transition involvement. *Journal of Intellectual and Developmental Disability*, 34(2), 163–172. <http://doi.org/10.1080/13668250902849113>
- Bates, P. E. & Miner, C. A. (1997). The effect of person centered planning activities on the IEP/transition planning process. *Education and Training in Mental Retardation and Developmental Disabilities*, 105-112.
- Benitez, D. T., Frey, B. B., & Morningstar, M. E. (2009). A multistate survey of special education teachers' perceptions of their transition competencies. *Career Development for Exceptional Individuals*, 32(1), 6-16.
- Benitez, D. T. & Morningstar, M. E. (2013). Teacher training matters: The results of a multistate survey of secondary special educators regarding transition from school to adulthood. *Teacher Education and Special Education*, 36(1), 51-64.
- Benz, M. R., Doren, B., Halpern, A. S., & Yovanoff, P. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children*, 62(2), 151-164.
- Benz, M. R., Doren, B., & Yovanoff, P. (1997). School-to-work components that predict postschool success for students with and without disabilities. *Exceptional Children*, 63, 151–164.
- Blackorby, J., Hancock, G. R., & Siegel, S. (1993). *Human capital and structural explanations of post-school success for youth with disabilities: A latent variable exploration of the National Longitudinal Transition Study*. Menlo Park, CA: SRI International.
- Blanchett, W. J., Boone, R. S., & Wolfe, P. S. (1998). Regular and special educators' perceptions of transition competencies. *Career Development for Exceptional Individuals*, 21(1), 87–106. <http://doi.org/10.1177/088572889802100108>

- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117(2), 187.
- Bos, C., Schumaker, J. B., & Van Reusen, A. K. (1994) *Self-Advocacy Strategy for education and transition planning*. Lawrence, KS: Edge Enterprises.
- Brolin, D. E., Johnson, J. M., & Roessler, R. T. (1990). Factors affecting employment success and quality of life: A one year follow-up of students in special education. *Career Development for Exceptional Individuals*, 13(2), 95-107.
- California Department of Education. (2018). *Special Education Annual Performance Report Measures [Data file]*. Retrieved from <https://www.cde.ca.gov/sp/se/ds/leadatarpts.asp>
- Cameto, R. (2005). Employment of youth with disabilities after high school. In R. Cameto, N. Garza, P. Levine, R. Newman, & L. Wagner (Eds.). *After high school: A first look at the postschool experiences of youth with disabilities*. A report from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International.
- Cameto, R., Knokey, A.M., Newman, L., Sanford, C., Shaver, D., & Wagner, M. (2011). The post-high school outcomes of young adults with disabilities up to 6 years after high school. *Key findings from the National Longitudinal Transition study-2 (NLTS2) (NCSE 2011-3004)*. Menlo Park, CA: SRI International.
- Carr, E.G., Halle, J., Horner, R.H., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children*, 71, 165-179.
- Carter, E. W., Glaeser, B. C., Lane, K. L., & Pierson, M. R. (2008). Factors influencing the self-determination of transition age youth with high-incidence disabilities. *Career Development for Exceptional Individuals*, 31, 115–125. doi:10.1177/0885728808317659
- Compton, D., Coyne, M., Fuchs, L. S., Gersten, R., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children*, 71, 149-164.
- Cunha F, Heckman J, Lochner L, Masterov D (2006) Interpreting the evidence on lifecycle skill formation. *Handbook of the Economics of Education*, eds Hanushek EA, Welch F (Elsevier, New York), pp 697–812.
- Doren, B. & Murray, C. (2013). The effects of working at gaining employment skills on the social and vocational skills of adolescents with disabilities: A school-based

- intervention. *Rehabilitation Counseling Bulletin*, 56(2), 96–107.
<http://doi.org/10.1177/0034355212452614>
- Farrington, C., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T., Johnson, D. et al., (2012). Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review. Chicago: University of Chicago Consortium on Chicago School Research.
- Field, A. & Miles, J. (2010). *Discovering statistics using SAS*. Los Angeles: Sage.
- Flannery, K. B., Kato, M. M., & Lombardi, A. (2015). The impact of professional development on the quality of the transition components of IEPs. *Career Development and Transition for Exceptional Individuals*, 38(1), 14–24.
<http://doi.org/10.1177/2165143413489727>
- Fowler, C. H., Kohler, P., Kortering, L., Mazzotti, V. L., Mustian, A. L., & Test, D. W. (2009). Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development for Exceptional Individuals*. <http://doi.org/10.1177/0885728809346960>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of concept, state of evidence. *Review of Educational Research*, 74, 59–109.
- Garner, N., Lawrence, M., Palmer, S., Soukup, N., & Wehmeyer, M., (2004). *Whose Future is it Anyway? A student-directed transition planning process*. Retrieved from <http://www.ou.edu/content/education/centers-and-partnerships/zarrow/selfdetermination-education-materials/whos-future-is-it-anyway.html>
- Göriz, A. S. (2006). Incentives in web studies: Methodological issues and a review. *International Journal of Internet Science*, 1(1), 58-70.
- Göriz, A., Sattler, S., & Van Veen, F. (Eds.). (2011). Proceedings from the European survey research association conference (ESRA) Lausanne and General Online Research Conference (GOR): *The impact of monetary incentives on completion and data quality in online surveys*. Düsseldorf.
- Heal, L. W., & Rusch, F. R. (1994). Prediction of residential independence of special education high school students. *Research in Developmental Disabilities*, 15, 223–243.
- Heal, L. W., & Rusch, F. R. (1995). Predicting employment for students who leave special education high school programs. *Exceptional Children*, 61, 472–487.

- Heckman, J., & Rubenstein, Y. (2001) The importance of noncognitive skills: Lessons from the GED testing program. *Am Econ Rev* 91(1):145–149.
- Hennessey, M. N., Kazimi, N., Martin, J., & McConnell, A. (Eds.). (2011). Proceedings from the 16th International DCDT Conference: *The transition success assessment development study: Phases I & II*. Kansas City, MO.
- Hsieh, H. & Shannon, S. (2005) Three approaches to qualitative content analysis. *Qualitative Health Research*. 15(9), 1277-1288.
- Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108-446, 20 U.S.C. § 1400 et seq. (2004).
- Jerman, P. Marshall, L., Martin, J., & Maxson, L. (1996). *Choicemaker: Self-directed IEP*. Longmont, CO: Sopris West, Inc.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed-methods research. *Journal of Mixed Methods Research*, 1, 112–133. doi:10.1177/1558689806298224
- Kohler, P. D. (1996). *A taxonomy for transition programming: Linking research and practice*. Champaign, IL: Transition Research Institute, University of Illinois.
- Kohler, P. & Rusch, F. (1996). Secondary educational programs: Preparing youths for tomorrow's challenges. In H. C. Reynolds, H. J. Walberg, & H. C. Wang (Eds.), *Handbook of special and remedial education: Research and practice* (107-130). Tarrytown, NY: Elsevier.
- Landmark, L. J., Roberts, E. L., & Zhang, D. (2013). Educators' beliefs and practices about parent involvement in transition planning. *Career Development and Transition for Exceptional Individuals*, 36(2), 114–123. <http://doi.org/10.1177/2165143412463047>
- Lee, S. H., Little, T. D., Palmer, S. B., Soukup, J. H., & Wehmeyer, M. L. (2008). Self-determination and access to the general education curriculum. *The Journal of Special Education*, 42(2), 91-107.
- Lewin, K. (1946). Behavior and development as a function of the total situation. In L. Carmichael (Ed.), *Manual of Child Psychology* (pp. 918-970). New York: Wiley.
- Manfreda, K. L. & Vehovar, V. (2008). Internet surveys. In E. D. de Leeuw & D. A. Dillman, (Eds.), *International handbook of survey methodology* (264-284). New York: Taylor & Francis.

- Maxwell, J. A. (2008). Designing a qualitative study. In L. Bickman & D. J. Rog (Eds.). *The SAGE handbook of applied social research methods*, (214-253). Thousand Oaks, CA: SAGE Publications
- Mazzotti, V.L. & Morningstar, M.E. (2014). *Teacher preparation and professional development to deliver evidence-based transition planning and services to youth with disabilities*. Gainesville: Collaboration for Educator Development, Accountability, and Reform Center, University of Florida.
- Mazzotti, V.L., Mustian, A.L., & Test D.W. (2014). Evidence-based practices and predictors: Implications for policymakers. *Journal of Disability Policy Studies*, 25, 5-18. doi:10.1177/1044207312460888
- Mazzotti, V. L., & Plotner, A. J. (2014). Implementing secondary transition evidence-based practices: A multi-state survey of transition service providers. *Career Development and Transition for Exceptional Individuals*, 2165143414544360. <http://doi.org/10.1177/2165143414544360>
- Palmer, S. B., & Wehmeyer, M. L. (2002). *A Teacher's Guide to Implementing the Self-Determined Learning Model of Instruction: Early Elementary Version*. Retrieved <http://beachcenter.org/sites/beach.drupal.ku.edu/files/images/general/SelfDetermination/teachers-guide-to-sd.pdf>
- Pham, Y. K. (2013). An exploratory survey of transition teaching practices: Results from a national sample. *Career Development and Transition for Exceptional Individuals*, 36(3), 163–173. <http://doi.org/10.1177/2165143412464516>
- Silverman, D. (2011). *Interpreting qualitative data: A guide to the principles of qualitative research*. Thousand Oaks, CA: SAGE Publications Limited.
- Thorndike, E. L. (1904). *An introduction to the theory of mental and social measurements*. New York: Teachers College, Columbia University.
- UCLA: Statistical Consulting Group (2017). *What is effects coding?* Retrieved from <https://stats.idre.ucla.edu/other/mult-pkg/faq/general/faqwhat-is-effect-coding/>
- U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (2016). *38th Annual report to congress on the implementation of the individuals with disabilities education act*. Washington, D.C., U.S.

Appendix A

Teacher Survey Questions

Section 1

1. Which school district do you work for?
 - a. (District A)
 - b. (District B)
 - c. (District C)
 - d. (District D)
2. At what type of school do you currently teach?
 - a. Traditional
 - b. Charter
 - c. Magnet
 - d. Alternative
3. How many years have you been teaching (combining all grades and classroom types)?
4. How many years have you taught high school?
5. How many years have you taught at the transition level?
6. How many years have you taught Special Education?
7. How many years have you taught Special Education at the high school level?
8. How many years have you taught Special Education at the transition level?
9. Gender:
 - a. Female
 - b. Male
10. With which ethnicity do you most closely identify:
 - a. African American
 - b. Asian
 - c. Caucasian/European/White
 - d. Hispanic/Latino
 - e. Middle Eastern
 - f. Native American
 - g. Pacific Islander
11. Which Education Specialist credentials (or equivalent) do you currently hold?
(Check all that apply)
 - a. Mild/Moderate
 - b. Moderate/Severe
 - c. Deaf and Hard of Hearing
 - d. Visual Impairment
 - e. Physical and Health Impairment
 - f. Early Childhood Special Education
 - g. Language and Academic Development

12. Which Education Specialist added authorizations (or equivalents) do you currently hold? (Check all that apply)
 - a. Autism
 - b. Deaf-blindness
 - c. Emotional disturbance
 - d. Other health impairment
 - e. Orthopedic impairment
 - f. Traumatic brain injury
 - g. None
13. What year did you receive your last credential?
14. What is the highest level of education you have completed?
 - a. Bachelor's Degree
 - b. Credential Program
 - c. Master's Degree
 - d. Ed.D.
 - e. Ph.D.
15. What is your highest graduate degree?
*For example: M.Ed in Special Education
16. Which special education program do you currently teach?
 - a. Deaf/Hard of Hearing
 - b. Mild/Moderate
 - c. Moderate
 - d. Moderate/Severe
 - e. Transition - Mild/Moderate
 - f. Transition – Moderate
 - g. Transition - Moderate/Severe
17. How many students on your caseload are qualified under Specific Learning Disability (SLD), as either their primary or secondary disability?
18. Of those students on your caseload qualified under Specific Learning Disability, what percentage are working toward a high school diploma?

Section 2

19. During your **credential**, how many hours of instruction were you provided in the **development of a transition plan**?
*Exclude hours, which only taught the elements of IEP form compliance
20. During **professional development**, how many hours of instruction were you provided in the **development of a transition plan**?
*Exclude hours, which only taught the elements of IEP form compliance
21. During your **credential**, how many hours of instruction were you provided related to the **teaching of post-secondary transition skills**?
22. During your **professional development**, how many hours of instruction were you provided related to the **teaching of post-secondary transition skills**?

Section 3

Please answer the following questions with as much detail as possible while focusing on those students on your caseload qualified under Specific Learning Disability (SLD):

23. In what ways do you assess your students with SLD for their transition plan?
24. In what ways do you assist students with SLD towards post-secondary employment?
25. In what ways do you assist students with SLD towards post-secondary education?
26. In what ways do you assist students with SLD towards post-secondary independent living?
27. Which published post-secondary transition curriculum, if any, do you use with your students with SLD?

Section 4 Employment

28. Do the students with SLD on your caseload participate in a **course** to develop post-secondary transition skills for employment?
 - a. Yes
 - b. No
29. What is the published course name?
30. Who is the primary instructor for the course to develop post-secondary transition skills for employment?
 - a. I provide post-secondary instruction to students
 - b. A colleague in special education provides post-secondary instruction to students
 - c. A colleague in general education provides post-secondary instruction to students
 - d. Other:
31. Do the students with SLD on your caseload participate in **pull out activities** to develop post-secondary transition skills for employment?
 - a. Yes
 - b. No
32. How many days a year are students pulled out for activities?
33. Who is the primary instructor that provides pull out activities to develop post-secondary transition skills for employment for the students on your caseload?
 - a. I pull students out to develop post-secondary employment skills
 - b. A colleague in special education pulls students out to develop post-secondary employment skills
 - c. A colleague in general education pulls students out to develop post-secondary employment skills
 - d. Other:

Education

34. Do the students with SLD on your caseload participate in a course to develop post-secondary transition skills for education (beyond general education graduation requirements)?
 - a. Yes
 - b. No
35. What is the published course name?
36. Who is the primary instructor for the course to develop post-secondary transition skills for education (beyond general education graduation requirements)?
 - a. I provide post-secondary instruction to students
 - b. A colleague in special education provides post-secondary instruction to students
 - c. A colleague in general education provides post-secondary instruction to students
 - d. Other
37. Do the students with SLD on your caseload participate in pull out activities to develop post-secondary transition skills for education?
 - a. Yes
 - b. No
38. How many days a year are students pulled out for activities?
39. Who is the primary instructor that provides pull out activities to develop post-secondary transition skills for education (beyond graduation requirements) for the students on your caseload?
 - a. I pull students out to develop post-secondary education skills
 - b. A colleague in special education pulls students out to develop post-secondary education skills
 - c. A colleague in general education pulls students out to develop post-secondary education skills
 - d. Other

Independent Living

40. Do the students with SLD on your caseload participate in a course to develop post-secondary transition skills for independent living?
 - a. Yes
 - b. No
41. What is the published course name?
42. Who is the primary instructor for the course to develop post-secondary transition skills for independent living?
 - a. I provide post-secondary instruction to students

- b. A colleague in special education provides post-secondary instruction to students
 - c. A colleague in general education provides post-secondary instruction to students
 - d. Other:
43. Do the students with SLD on your caseload participate in pull out activities to develop post-secondary transition skills for independent living?
- a. Yes
 - b. No
44. How many days a year are students pulled out for activities?
45. Who is the primary instructor that provides pull out activities to develop post-secondary transition skills for independent living for the students on your caseload?
- a. I pull students out to develop post-secondary independent living skills
 - b. A colleague in special education pulls students out to develop post-secondary independent living skills
 - c. A colleague in general education pulls students out to develop post-secondary independent living skills
 - d. Other
46. Please provide any additional information you feel is relevant to the ways in which you prepare your students with SLD for their post-secondary transition to adulthood.