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## Examining Barriers and Facilitators of Community Based Vocational Instruction for Students with Significant Disabilities

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EXAMINING BARRIERS AND FACILITATORS OF COMMUNITY BASED  
VOCATIONAL INSTRUCTION FOR STUDENTS WITH  
SIGNIFICANT DISABILITIES

By

Lavinia Gripentrog

A creative project submitted in partial fulfillment of  
the requirements for the degree

of

MASTER OF EDUCATION

in

Special Education

Approved:

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UTAH STATE UNIVERSITY  
Logan, Utah

2015

### **Abstract**

This study examines the barriers and facilitators of community based vocational instruction (CBVI) for students with moderate to significant disabilities as identified by special educators. Community based vocational instruction (CBVI) involves students with disabilities receiving repeated instruction on vocational and other job related skills in community settings (Kim & Dymond, 2010). An electronic survey was sent to high school and transition special education teachers from four states including Utah, Oklahoma, South Carolina, and Colorado. One hundred thirty-five participants completed the survey. Almost two-thirds of the respondents had a master's degree and one-third a bachelor's degree. The majority of respondents were high school and transition special education teachers. There was a wide range of teaching experience among respondents. The survey data were compiled to identify the major barriers and facilitators of CBVI. The results show that major barriers to CBVI were staffing and transportation. Facilitators to CBVI were adequate and knowledgeable staff, transportation, and established community vocational training sites. Significant findings from the survey include increases in CBVI teacher training resulting in greater CBVI engagement among students. Rates of CBVI among transition age students exceed those in high school. Findings will add to the research literature by operationalizing barriers and facilitators to CBVI, providing data from special educators on rankings of both, and offer perspectives of educators on ways to create opportunities for increased community experience for youth with disabilities.

*Keywords:* community based vocational instruction, special education teachers, transition, significant disabilities, barriers, facilitators

## Introduction

The Individuals with Disabilities Education Act (IDEA) 2004 mandates that students with disabilities receive transition services designed to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment); continuing and adult education, adult services, independent living, or community participation (IDEA, 2004,[34 CFR 300.43 (a)] [20 U.S.C. 1401(34)]). The law also dictates that transition services are designed to be within a results-oriented process toward functional achievement of employment in integrated settings, (IDEA, 2004,[34 CFR 300.43 (a)] [20 U.S.C. 1401(34)]). Integrated settings are competitive businesses in the community where students engage in job training with support from school personnel. All transition aged students (ages 16-22) with disabilities should have goals related to vocational education in integrated settings in their Individualized Education Program (IEP).

Best practice compels educators to set up vocational learning opportunities in community settings (McDonnell, 2010). However, community based vocational instruction (CBVI) demands careful planning, effective communication, trained staff and complex logistics to be carried out successfully (Kim & Dymond, 2010). With limited resources in many special education programs today, it is especially important to identify key solutions and barriers to successful CBVI in order to meet the needs of transition students with disabilities. The complexities of providing CBVI with students with significant disabilities is especially challenging due to medical issues, behavior, and physical disabilities (Kim & Dymond, 2010). The importance of providing students with

disabilities CBVI is reflected in studies showing that students with disabilities have lower rates of employment after graduation from school when compared to their non-disabled peers (Newman, Wagner, et al., 2011) (National longitudinal Transition Study-2: NLTS2). An important predictor of successful employment outcomes for students with disabilities is obtaining a paid job prior to graduation from school (Benz, Lindstrom & Yovanoff, 2000).

In addition to lower rates of employment after high school, students with significant disabilities should receive vocational training in integrated settings because many students have difficulty generalizing skills from one setting to another and therefore learn best in a community based setting versus a vocational training center or simulated setting in the classroom (Walker, Uphold, Richter, Test, 2010). Only one previous study examined barriers and components to implementing quality CBVI for students with disabilities (Kim & Dymond, 2010). This study was limited to one state and only surveyed high school special education teachers. Research is needed to survey high school and transition teachers nation-wide to identify key barriers and potential solutions to successfully conducting CBVI. My proposed research will provide a framework for others in the field to apply solutions and overcome barriers in their programs and improve the outcomes of students with disabilities in employment.

### **Literature Review**

To conduct my research I used the EBSCO Host database, Google Scholar, articles recommended by committee members, and reference sections from relevant articles. I included search terms such as; *community based instruction, special education and transition, significant disabilities, employment training and vocational training for*

*special education*. Based on my searches I found 15 articles related to employment and students with disabilities. However, of those 15 only three were related specifically to CBVI and transition students with disabilities. I eliminated the other studies because they were focused on different topics including summer employment programs, students with mild-moderate disabilities only, high school aged students only and, self-determination and vocational outcomes.

In one study, high school special education teachers were surveyed on the barriers and benefits of CBVI in the state of Illinois (Kim & Dymond, 2010). Another study examined the sustainability of quality transition programs in Oregon (Benz, Lindstrom, Unruh, & Waintrup, 2004). Finally I included a literature review on community-based instruction (CBI) by Walker, Uphold, Richter and Test (2010). These studies most closely matched the area of research on which my study is focused.

In 2010, Walker, Uphold, Richter and Test conducted a literature review on CBI across grade levels. The researchers examined 23 transition intervention studies to identify vocational, community, daily living, and recreation skills taught using community based instruction. They reviewed studies beginning in 1990 when IDEA first introduced transition services for students aged 16 and above, through 2007. The researchers included published and peer reviewed studies of students in elementary school through age 21 receiving CBI in the areas of vocational, daily living, community, and recreation skills. Of the 23 studies, 60.1% examined high school students and only 17.4% of studies were related to vocational skills. The 23 studies included 161 participants with varying disabilities including intellectual disability (87%), autism (17.4%), multiple disabilities (8.7%), and other disability categories. The majority of the

studies (65.2%) taught skills in the community only. A few studies taught simulation in the classroom as well as CBI. Most of the studies were based on single subject designs which collect continuous and ongoing data on students across experimentally controlled phases.

The results of the literature review showed positive results for all participants but two studies where students only reached criterion in the community setting not in the simulation setting (Domaracki & Lyon, 1992) and where two students out of eight did not reach criterion (Morse & Schuster, 2000). All students increased target skills in CBI and ten of 12 studies showed positive results measuring generalization of skills in the areas of grocery shopping, banking, street crossing, and purchasing according to the Walker et al. review. The study did not examine results within various disability categories.

The Walker et al. study emphasizes the importance of teaching skills in a community based setting for students with disabilities. They concluded that generalization of skills are vitally important to the success of students with disabilities in the real world and therefore students should receive CBI as part of their transition services. Walker et al. argued that more research is needed to address the vocational training needs of students since the majority of studies were conducted on daily living skills and community skills. They also recognize the challenges teachers face when implementing CBI and the need to research evidence-based strategies to effectively conduct CBI.

Another study that examined effective CBI was conducted by Benz, Lindstrom, Unruh and Waintrup (2004), who examined key factors that sustain successful transition innovations in local schools. The researchers conducted a survey and a case study to

investigate the sustainability of school-to-community transition programs in Oregon called Youth Transition Program (YTP). The survey included 29 YTP sites in the state involving 64 high school districts in rural and non-rural communities. Surveys and phone calls were made to knowledgeable personnel including special education teachers, transition specialists, and special education directors about the five essential features of the program. Following the survey, five sites were selected to participate in an intensive case study to explore the factors involved in developing and sustaining quality programs.

The researchers found three themes that sustained quality transition programs including (a) stable staff and administrator support, (b) school and community perceptions of positive students outcomes, and (c) a clear role and presence in the district. While these findings are important and may be relevant to this particular transition program model, there are several limitations to this study. The sites studied were purposely selected and not randomly selected, they were limited to YTP sites only in Oregon and they lacked a focus on community based vocational instruction. Furthermore, YTP did not serve students with more significant disabilities based on the student descriptions in the study.

The most relevant study I found was by Kym and Dymond (2010). This study surveyed 68 high school teachers from randomly selected schools in Illinois. Letters were sent to principals with instructions to select a special educator in the school with the most experience delivering vocational instruction to special education students. Participants were asked questions regarding demographics as well as their beliefs about the importance of various components of CBVI using a six-point Likert scale. They were also asked about their beliefs about the benefits and perceptions of barriers to CBVI. The



majority of teachers who completed the survey had 11-20 years of teaching experience, taught students with varying disabilities, and had experience with CBVI. Data collection was completed over a 9-week period and included both paper-based and web-based surveys.

The findings of this study indicated the benefits of implementing CBVI as very high (Mean=5.27; 6=highest) among the teachers surveyed. According to teacher respondents, benefits of CBVI to be more important for students with severe disabilities. The overall mean score for teachers' beliefs about barriers to CBVI was 4.16. Teachers with more years of teaching experience tended to perceive more barriers. Teachers of students with significant disabilities reported more barriers to CBVI than did the teachers of students with mild-moderate disabilities. The two components that were ranked the most important were, providing students with CBVI more than two times a week, and providing students with opportunities to interact with employees without disabilities.

This study suggests that CBVI is very important for students with disabilities and especially those with severe disabilities. The findings identify several significant barriers to implementation of CBVI including lack of adequate personnel, funding, access to transportation, and safety issues; as well as high stakes testing of general education curriculum and greater preparation time. Where this study falls short is the small sample size ( $n=68$ ) and limited geographic location (Illinois). Another limitation of this study is the number of teachers surveyed that served only students with severe disabilities was limited at 11.8%. The definition of CBVI in this study was quite broad which may have led to more participants reporting that they had experience in CBVI. The researchers suggest the importance of replicating and expanding the findings of their study to include

other variables such as amount of training time on CBVI, type of disability, and its affect on student employment outcomes.

These important studies laid the groundwork for my research in the area of CBVI of students with severe disabilities. Further research is needed to identify effective solutions to implementing CBVI for students in high school and transition programs. The need for examining innovative solutions to CBVI implementation across states is apparent after reviewing the few existing studies. My research has addressed the limitations of the other studies including data across states, a focus on CBVI instead of CBI, transition aged students, and include students with severe disabilities.

### **Purpose Statement and Research Question**

The purpose of my study was to gather data on barriers to CBVI as well as identify innovative solutions to implementing consistent CBVI for students with severe disabilities in high school and transition programs. By surveying teachers across states I expanded the scope of the existing research and focused on the gaps left by other studies.

My research questions include:

To what extent are:

Are students with moderate and severe disabilities receiving CBVI in high school and transition programs (ages 18 and above)?

What are the characteristics of CBVI programs for students with moderate to severe disabilities?

What are the major barriers and solutions to implementing CBVI for students with moderate to severe disabilities?

## **Method**

### **Participants**

The survey was sent to transition practitioners in four states including Utah, Colorado, Oklahoma, and South Carolina. Specifically, an email that included information about the study and an active online survey hyperlink was sent to special education directors in South Carolina and Utah; the directors forwarded the survey link to transition practitioners in their districts. For Colorado and Oklahoma, the survey link was distributed via a transition practitioner listserv provided by teacher preparation programs in each state. Because snowball sampling was used, an accurate survey sample response rate could not be determined. A total of 135 practitioners from the four states completed the online survey.

### **Dependent Variables and Response Measurement**

The dependent variable was responses to the survey questions regarding whether students with disabilities under the supervision of the participant are receiving CBVI in high school and transition programs (age 18 and above). I collected demographic information, program characteristics, barriers and solutions to CBVI. Demographic information included, state, special education license, education level, position, and years experience. Characteristics of CBVI in high school and post high transition programs included primary disability category, caseload, number of paraprofessionals, district size, urban or rural settings, type of preservice or inservice training, percentage of IEP goals written for CBVI, student engagement in CBVI, age students are accessing CBVI, who develops CBVI, and types of transportation used. I also examined specific barriers to implementing CBVI including (a) staffing limitations, (b) transportation problems, (c)

scheduling, (b) challenging behaviors, (d) parent reluctance, (e) cooperating job sites, (f) administrative supports, (g) liability, and (h) curriculum constraints. Solutions to implementing CBVI included, (a) flexible scheduling, (b) adequate staffing, and (c) transportation,

### **Survey Instrument**

The survey was developed using Qualtrics online survey software. The survey was divided in to several sections. Section I provided a definition of CBVI as outlined by (Kim & Dymond, 2010). Section I also collected demographic information such as the position of participants responding to the survey, types of students taught, endorsements held and years of teaching experience, and other characteristics. The survey also collected information about the characteristics of CBVI on high school transition programs (see Appendix A). Section II assessed participants' perceptions of barriers to CBVI as well as solutions to those barriers.

### **Pilot Survey**

Prior to launching the survey, a pilot was conducted with three to four urban high school or transition special education teachers, and four experts in the field to evaluate the clarity and relevance of the survey questions. The pilot was also tested on the ease of completing the survey and length of time needed to complete the survey. Revisions were made based on feedback from pilot test.

### **Procedures**

The survey was sent out via an email and link to special education directors and listserves in South Carolina, Utah and Oklahoma, and Colorado. The email included a short explanation of the purpose of the study and instructions on how to complete the

survey, including an informed consent statement. An email was sent 1 week after the initial survey reminding participants to complete the survey.

Participants were asked to provide demographic and program characteristic information. Participants were also provided with a list of potential barriers to CBVI and ask to rate each item on a 4-point Likert scale by order of least to most barrier (1=no barrier 2=minor 3=notable 4=major barrier). Similarly, participants rated each solution on a 4-point Likert scale by order of major to minor solution (1=major solution 2=notable 3=minor 4=no solution). Participants were provided the opportunity to write in answers. Open-ended survey answers were examined to determine themes and then ranked by most to least common answers.

### **Data Analysis**

Data were collected over an eight-week period. Data were analyzed using descriptive statistics for the demographic and program characteristics sections. For the barriers and solutions section, I calculated the percentage response for each Likert scale response. Percentages were used to represent numbers of participants engaged in CBVI as well as CBVI characteristics and demographic information. Percentages of Major/Notable Barriers and Major/Notable Facilitators were summed and ordered according to rank. Open-ended answers were compiled and ranked according to theme and frequency.

### **Results**

Table 1 displays the demographic information for survey respondents. A total of 135 transition practitioners completed the survey across four states. The most common respondent endorsements were severe/profound disabilities (35.5%), mild/moderate

disabilities (55.5%), general special education (29.5%), specific learning disabilities (29.4%), and autism (18.5%). Almost two thirds of the respondents had a master's degree and one third a bachelor's degree. The majority of respondents were high school and transition special education teachers. Fourteen percent of respondents indicated they worked in an "other" setting such as middle school and junior high special education teachers, adult education, work adjustment instructor, learning specialist in a Career Technical Education (CTE), and transition counselor. There was a wide range of teaching experience among respondents.

Table 2 displays program characteristics. In some cases percentages will exceed 100% because multiple responses were available. The most common disabilities served were intellectual disabilities (74.0%), autism (69.0%), multiple disabilities (53.3%), and other health impaired (53.3). The average size of the respondents' caseload was 20 students. A small percentage of respondents indicated they had no paraeducator support while nearly 73.1% indicated some level of paraeducator support. Respondents reported that most paraeducators worked between 21 to 40 hours a week in their classroom. Over half (63.6%) of the respondents worked in districts with less than 5 high schools. Only 12.5% of respondents indicated they had 10 or more hours of preservice training in CBVI. Overall, 25.1 % percent of the respondents reported writing IEP goals for CBVI in all IEPs, while 35.5 % reported writing CBVI goals 25% or more. It is noteworthy that 39.2% reported never or rarely writing CBVI goals. About one-third of teachers (30.3%) indicated that all of their students were engaged in CBVI while 24.4% indicated that none of their students were engaged. The remaining 45.1% indicated some level of student engagement in CBVI. The number of hours per week that students were engaged in

CBVI varied with 38.5% reporting more than 2 hours per week and 34.7% ranging from < 1 hour to 1-2 hours per week. About one quarter (26.6%) reported that students did not engage in CBVI. The majority of students (41.4%) were gaining access to CBVI in 11th and 12<sup>th</sup> grade, 30.3% were not engaged until post-high school, and 28.1 % were gaining access in 9th and 10th grade. The majority of respondents indicated that special educators not only developed CBVI sites, they also provided most of the direct instruction. The primary method of transportation to access CBVI sites was school buses, public transportation, and district or school vehicles. A small number of respondents indicated they walked to sites, and other means of transportation included parents, students' own vehicles or tribal transportation.

Upon closer examination of the program characteristics, results showed teachers with 1 to 10 hours of CBVI training were more likely to have 100% of their students engaged in CBVI (51.0%) versus those teachers that reported no prior CBVI training (32.0%). When comparing CBVI engagement among high school teachers and transition teachers serving students age 18 and above, 24.3% of high school teachers had 100% of their students engaged in CBVI compared to 73.6% for transition teachers (ages 18 and above). Teachers with 1-10 hours of pre-service training on CBVI were more likely to write CBVI IEP goals for their students (47.3%) than those with no pre-service training (27.8%). Teachers with post-service CBVI training were slightly more likely to write IEP goals for CBVI (38.5%) than those that received no post service training (35.8%).

Teachers with a mild/moderate license had average caseloads of 20.7 students with 41.3% having two paraeducators and 38.6 % having no paraeducators. These teachers reported 29.3% of students were not engaged in CBVI. They also reported that CBVI

instruction was delivered by special education teachers 64.0% of the time and 26.6% of the time by paraeducators. In contrast, teachers with a severe/profound license reported an average caseload of 18.2 with 37.5% having one to two paraeducators and 31.2% having five or more paraeducators. They reported 33.3% of students as 100% engaged in CBVI with 12.5% not engaged. Teachers with severe/profound licenses reported delivering CBVI instruction 83.3% of the time, and paraeducators 64.0% of the time.

Table 3 displays potential barriers to implementing CBVI and the percentage of agreement for each rating scale statement. When combining notable and major barriers, respondents reported four important barriers to implementing CBVI. The most noted barriers were walking distances to jobsites too far (59.2%), lack of staff (56.2%), lack of available public transportation (54.0%), and lack of experienced staff (51.8%), and Other barriers not listed in the survey, in the order of frequency of response, included lack of time, lack of funding for more staff, lack of community resources such as VR, and lack of wheelchair accessible transportation.

Table 4 displays potential facilitators to CBVI including flexible scheduling, administrator supports, established job sites, adequate staffing, and access to transportation. When combining major and notable facilitators, the most significant facilitators in order of importance were adequate staff to develop CBVI jobsites (79.9%), staff knowledge (78.5%), staffing to support students (78.4%), established jobsites (74.7%), and supportive employers at community jobsites (73.3%). Other responses included more funding for staff and uniforms, having a transition coordinator in the district, more training on customized employment, reliable wheelchair transportation, and establishing separate programs for high school and transition students with significant



disabilities.

When comparing responses by type of teaching license/endorsement, teachers with mild/moderate licenses reported that the most significant barriers to CBVI were walking distances too far (53.3%), lack of adequate staff (34.6%), lack of public and/or district transportation, (29.3%) and difficult student behaviors (26.6%). Among teachers of students with mild/moderate disabilities in Utah, curriculum constraints, transportation, and adequate staffing were of noted concern. Administrative support was a significant barrier for teachers with the same license in Oklahoma. Teachers in South Carolina reported transportation and lack of established jobsites as major concerns. In Colorado, lack of staff, school scheduling and student behaviors were considerable barriers to implementing CBVI. Teachers of students with severe/profound disabilities reported major barriers to CBVI as being lack of public/district transportation (62.5%), and walking distances to community jobsites too far (33.3%). Utah teachers of students with severe disabilities noted lack of staff as the most significant barrier to CVBI. Colorado respondents noted transportation as the largest barrier. Oklahoma respondents reported lack of administrative supports as the major barrier, and South Carolina respondents noted lack of transportation, and lack of established jobsites as the major barriers to implementing CBVI.

### **Discussion**

This study examined the characteristics of CBVI programs and the barriers and facilitators to implementation among high school and transition settings for students with disabilities across four states. The findings revealed that 75.4 % of students with disabilities are engaged in CBVI at some level, and that 54.7% of students were accessing

CBVI more than 1 hour per week. This finding suggests that teachers, specialists, and districts are prioritizing CBVI for students with disabilities to a certain extent. This finding is consistent with other research that suggested teachers believed that students with disabilities benefited from CBVI (Kim & Dymond 2010). Moreover, the results of this study indicated that students with more significant disabilities were engaged in CBVI at higher rates (33.3%) than students with mild/moderate disabilities (24.0%), and for longer duration (> 2 hours/week).

In addition, findings indicated transition programs serving students over 18 years of age were utilizing CBVI at higher rates (73.6%) compared to high school programs (24.3%). This finding was consistent with Kim and Dymond's (2010) findings that teachers believed that students with significant disabilities benefited more from CBVI than students with mild/moderate disabilities. Clearly, more research is needed to survey transition teachers on the characteristics of CBVI. Another issue leading to the low rates of CBVI among high school students could be that 45.1% of all teachers reported receiving no pre-service training on CBVI. This finding would indicate a need for teacher training in CBVI especially among high school special education teachers.

This survey identified barriers and facilitators to implementing CBVI from a teacher's perspective. Findings indicated the major barriers to implementing CBVI were lack of staff and transportation. These barriers were consistent with some of Kym and Diamond's (2010) findings. However, where they differed was in teachers' reports of safety issues and high stakes testing as barriers in the Kym and Diamond (2010) study. In the current research, teachers in Oklahoma indicated lack of administrative support was the greatest barrier. In Colorado, school schedules and student behaviors were noted

barriers. In South Carolina, lack of established jobsites stood out as a barrier for teachers with severe/profound licenses. Utah teachers of students with mild/moderate disabilities reported curriculum constraints as a notable barrier. These findings suggest that some barriers to CBVI for students differ from state to state.

Facilitators to implementing CBVI were also examined and most common notable-to- major facilitators included adequate staff (78.4%), knowledgeable staff (78.5%), staff to develop jobsites (79.9%), supportive employers (73.3%), and established sites (74.7%). The facilitators identified by respondents are important because often teachers have to multitask to ensure each student's individual needs are being met. In this survey, 45.9% of the respondents indicated that community-based jobs were developed by the special educator and the average caseload was 20 students. This reality may make it difficult for teachers to develop and monitor meaningful community based vocational instruction sites. Other teachers reported needing a transition coordinator at the district level as a facilitator to providing more CBVI to students as well as more training on individualized and customized employment.

### **Limitations**

Several limitations to this study should be considered. First, the small sample size ( $n=135$ ) limited the generalizations of the results. Second, there was not an even distribution across teacher license and type of transition setting. That is, the majority of survey respondents held mild/moderate special education licenses ( $n=75$ ) versus those with severe/profound licenses ( $n=48$ ). The number of high school teachers responding to this survey was 82 and the number of transition teachers was 19. This unequal distribution may limit the generalizability of findings.

## **Implications**

Given that this study identified key barriers and facilitators to the implementation of CBVI, the results were beneficial for special education teachers, administrators, and transition specialists in implementing or improving CBVI in their own districts. Results may assist in the planning and prioritizing CBVI for stakeholders by offering solutions to common barriers. The findings reflect the need to provide more training on CBVI, increase staff supports, create transportation solutions, and develop more community jobsites. Future research should examine CBVI barriers and facilitators in other states and use a larger sample size of participants. Additionally, given that inadequate numbers and insufficient training of staff are major barriers to CBVI, research should examine how schools can invest in additional human resource and training of instructional teams. For example, schools may want to consider appealing to volunteers, retired individuals, community service groups, or business persons who are high school alumni to assist with CBVI. Additionally, schools may consider focusing on teachers and students who have been successful in CBVI to rally efforts for expansion. Teachers experienced in CBVI may be good candidates for delivering CBVI training to others. Further, research should explore the extent to which teachers are being trained on CBVI and future research should explore how to effectively provide preservice and inservice training on the provision of CBVI. Finally, future research should examine how CBVI is correlated to improved employment outcomes for students with significant disabilities.

Table 1

*Demographics of Respondents (N=135)*

Variables	<i>n</i>	%
State		
Colorado	28	20.7
Oklahoma	28	20.7
South Carolina	24	17.7
Utah	55	40.7
Type of special education teacher license(s)/endorsements*		
Severe/profound disabilities	48	35.5
Mild/moderate disabilities	75	55.5
General special education	40	29.6
Autism	25	18.5
Hearing impaired	6	4.4
Visually impaired	3	2.2
Emotionally disabled	21	15.5
Learning disabilities	33	24.4
Intellectual disabilities	25	18.5
Orthopedic/ Other health impaired	13	9.6
Multiple disabilities	21	15.5
Brain injury	13	9.6
Other (specify)	15	11
Education level		
Bachelor's degree	46	34.0
Master's degree	82	60.7
PhD	1	0.7
Other	6	4.4
Position		
Special education high school teacher	82	60.7
Special education transition teacher (ages 18 and above)	19	14.0
Transition coordinator	8	5.9
Teacher specialist	2	1.4
Administrator	4	2.9
Elementary special education	1	0.7
Other (please specify)	19	14.0
Years experience teaching special education in high school and or transition (18 years and above).		
0-4 years	41	30.3
5-10 years	33	24.4
11-15 years	19	14.0
16 and above	37	27.4
Not currently teaching	5	3.7

*Notes.* \* = Multiple responses allowed

Table 2

*Program Characteristics*

Characteristics	<i>n</i>	%
Primary disabilities served *		
Autism	93	69.0
Intellectual disabilities	100	74.0
Multiple disabilities	72	53.3
Emotional disturbance	50	37.0
Orthopedic disabilities	21	15.5
Deafness	20	14.8
Deaf-blindness	5	3.7
Visually impaired (including blindness)	19	14.0
Traumatic brain injury	37	27.4
Communication disorders	30	22.2
Other health impaired	72	53.3
Size of caseload	135	**20
Number of paraeducators		
0	36	26.6
1-2	58	42.9
3-4	22	16.2
5 or more	19	14.0
Total paraeducator hours per week		
Less than 20 hours/week	40	29.6
21-40 hours/week	58	42.9
More than 40 hours/week	37	27.4
District size (number of high schools in district).		
1 high school	33	24.4
2-5 high schools	53	39.2
6-10 high schools	39	28.8
11 or more high schools	10	7.4
Rural or Urban setting.		
Rural	38	28.1
Urban	46	34.0
Mixed	51	37.7
Pre service CBVI training received in teacher training.		
No training	61	45.1
Some training (1-10 hours)	57	42.2
Substantial training (more than 10 hours)	17	12.5
Percentage of IEP Goals (overall) written for CBVI.		
None	21	15.5
Rarely (<10%)	32	23.7
Sometimes (25-50%)	27	20.0
Often (>50%)	21	15.5

Always (100%)	34	25.1
Percentage of students engaged in CBVI		
None	33	24.4
Some (<24%)	27	20.0
Many (25-50%)	19	14.0
Most (>50%)	15	11.1
All (100%)	41	30.3
Number of hours per student engaged in CBVI per week		
None	36	26.6
< 1 hour per week	25	18.5
1-2 hours/week	22	16.2
> 2hours/week	52	38.5
Age students are gaining access to CBVI		
Early high school 9-10 <sup>th</sup> grade	38	28.1
Late high school 11-12 <sup>th</sup> grade	56	41.4
Post high school (18 yrs. and above)	41	30.3
Who develops CBVI sites (i.e., who talks to employers or agencies to set up the CBVI training opportunities)? *		
Special educators	62	45.9
Transition coordinator	43	31.8
Employment specialist/job coach	23	17.0
Other (please describe)	30	22.2
I do not know	22	16.2
Who delivers CBVI instruction (i.e., who sets up the community teaching opportunities)? *		
Special educator	92	68.1
Paraeducator	54	40.0
Transition coordinator	27	20.0
Employment specialist/job coach	31	22.9
Other (please describe)	26	19.2
Primary means of transportation to access CBVI?		
School bus	39	28.8
Walking	8	5.9
Public transportation	29	21.4
District or school vehicles	29	21.4
Personal vehicles	13	9.6
Other (please describe)	17	12.5

*Notes.* \* = Multiple responses allowed, \*\* = Mean

Table 3

*Barriers to CBVI reported as a percentage of respondents indicating agreement for each barrier statement (N=135).*

Barriers	No Barrier %	Minor Barrier %	Notable Barrier %	Major Barrier %
1. Walking distance too far to community jobsites	14.8	25.9	28.1	31.1
2. Lack of staff to implement CBVI	16.2	27.4	34.0	22.2
3. Lack of availability of public transportation	20.0	25.9	22.9	31.1
4. Lack of staff experience in implementing CBVI	16.2	31.8	31.1	20.7
5. Lack of established cooperating community jobsites	17.7	32.5	28.1	21.4
6. Lack of availability of district transportation	22.9	28.1	22.9	25.9
7. Lack of staff knowledge of CBVI	17.0	37.0	27.4	18.5
8. Challenging student behaviors	12.5	42.2	30.3	14.8
9. Other barriers (please specify)	52.5	5.1	7.4	34.8
10. Lack of administrative priority for CBVI	33.3	25.9	24.4	16.2
11. Curriculum constraints such as core curriculum and/or testing	29.6	30.3	18.5	21.4
12. Lack of cooperating job sites due to employer discomfort with disabilities	20.7	39.2	28.8	11.1
13. Lack of administrative support for CBVI	34.0	28.1	22.9	14.8
14. Lack of flexible school schedules	31.1	31.1	15.5	22.2
15. Lack of flexible student schedules	28.8	34.0	15.5	21.4
16. Lack of liability coverage for students at jobsites	34.8	30.3	22.2	12.5
17. Parent request not to have students engage in CBVI	50.3	35.5	8.8	5.1



Table 4

*Potential facilitators to CBVI reported as a percentage of respondents indicating agreement for each solution statement.*

Facilitator	Major Facilitator %	Notable Facilitator %	Minor Facilitator %	No Facilitator %
1. Adequate staffing to develop CBVI jobsites	45.9	34.0	13.3	6.6
2. Adequate staff knowledge of CBVI	40.0	38.5	14.8	6.6
3. Adequate staffing to support students in CBVI	41.4	37.0	14.8	6.6
4. Established community jobsites	48.8	25.9	17.0	8.1
5. Accepting/supportive employers at cooperating jobsites	47.4	25.9	20.0	6.6
6. Administrators make CBVI a priority	42.2	29.6	18.5	9.6
7. Special education director supports CBVI	46.6	25.1	14.8	13.3
8. Flexible curriculum for students	42.9	28.8	18.5	9.6
9. School principal supports CBVI	38.5	29.6	19.2	12.5
10. Flexible school schedules	34.8	31.1	25.9	8.1
11. Access to district transportation	34.0	31.8	23.7	10.3
12. Flexible student schedules	34.8	30.3	26.6	8.1
13. Liability insurance coverage for students at jobsites	35.5	28.1	25.1	11.1
14. Parent cooperation and support of CBVI	38.5	22.9	26.6	12.5
15. Easy walking distance to jobsites	22.2	38.5	25.1	14.8
16. Access to public transportation	31.1	29.6	22.9	16.2
17. Other solutions (please specify)	34.0	8.1	5.1	52.5

Table 5

*Other Barriers*


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Colorado	<ul style="list-style-type: none"> <li>• Absenteeism</li> <li>• Not enough 1:1 staff for students with significant disabilities at jobsites</li> </ul>
Oklahoma	<ul style="list-style-type: none"> <li>• No program for CBVI</li> <li>• Support</li> <li>• Funding</li> <li>• Time to teach personnel to develop jobsites</li> <li>• Large companies</li> <li>• Administrative understanding of benefits of CBVI for students</li> </ul>
South Carolina	<ul style="list-style-type: none"> <li>• Lack of parent support</li> <li>• Loss of jobsites due to corporate changes</li> <li>• Lack of opportunity due to rural areas</li> </ul>
Utah	<ul style="list-style-type: none"> <li>• Lack of time</li> <li>• Lack of Vocational Rehabilitation support</li> <li>• Students' schedules</li> <li>• Lack of community resources</li> <li>• Lack of knowledge about liability insurance on the business side</li> <li>• Lack of money to pay students for jobs</li> <li>• Use of personal vehicles no longer allowed for CBVI</li> <li>• Lack of wheelchair accessible public transportation</li> </ul>

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Table 6

*Other Facilitators*


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Colorado	<ul style="list-style-type: none"> <li>• Reliable wheelchair accessible public transportation</li> <li>• District support</li> </ul>
Oklahoma	<ul style="list-style-type: none"> <li>• Having a transition coordinator at the district level</li> <li>• Transportation for rural schools</li> <li>• Revise the program</li> <li>• Funding for support staff</li> <li>• Funding for uniforms and materials for jobsites</li> <li>• Funding for programs</li> </ul>
South Carolina	<ul style="list-style-type: none"> <li>• Continued support from existing jobsites</li> </ul>
Utah	<ul style="list-style-type: none"> <li>• Funding for all facilitators listed in survey</li> <li>• More time</li> <li>• Need for a separate program for transition and high school students with significant disabilities</li> <li>• Business awareness about liability insurance coverage</li> <li>• More training on individualized and customized employment placements</li> <li>• More agencies to pay students for work</li> </ul>

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## References

- Benz, M. R., Lindstrom, L., Unruh, D., & Waintrup, M. (2004) Sustaining secondary transition programs in local schools. *Remedial and Special Education, 25*, 39–50.
- Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509–529.
- Individuals With Disabilities Education Improvement Act, P.L. 108-446, H.R.1350, 108th Congress (2004).
- Domaracki, J. W., & Lyon, S. R. (1992). A comparative analysis of general case simulation instruction and naturalistic instruction. *Research in Developmental Disabilities, 13*, 363-379.
- Individuals With Disabilities Education Improvement Act, P.L. 108-446, H.R.1350, 108th Congress (2004).
- Kim, R. & Dymond, S. (2010). Special education teachers' perceptions of benefits, barriers, and components of community-based vocational instruction. *Intellectual and Developmental Disabilities, 48*, 313-321.
- McDonnell, J. (2010). Employment training. In J. McDonnell (Ed.), *Instruction in community settings* (pp. 173-199). Los Angeles, CA: Sage.
- \*Morse, T. E., & Schuster, J. W. (2000). Teaching elementary students with moderate intellectual disabilities how to shop for groceries. *Exceptional Children, 66*, 273-288.
- Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P., (2005). After high school: A first look at the post highschool experiences of youth with

disabilities: *Findings from the National Longitudinal Transition Study 2*. Menlo Park, CA: SRI International.

Walker, A. R., Uphold, N. M., Richter, S. & Test, D. W. (2010). Review of the literature on community-based instruction across grade levels. *Education and Training in Autism and Developmental Disabilities, 45*, 242-267.

## Appendix A

### Survey (Outline)

#### Part I

##### Demographic Information

1. Indicate the number of years you have taught special education transition services in high school or post-high school
  - a. 0-4 years
  - b. 5-10 years
  - c. 11-15 years
  - d. 16 and above
  - e. I DON'T TEACH HIGH SCHOOL TRANSITION SERVICES  
(DISCONTINUE SURVEY NOW)
2. What best describes your position
  - a. Special Education High school teacher
  - b. Special Education Transition teacher (ages 18 and above)
  - c. Transition Coordinator
  - d. Specialist
  - e. Administrator
  - f. Other (specify)
3. Indicate your special education teacher license(s) (check all that apply)
  - a. Severe/profound disabilities
  - b. Mild/moderate disabilities
  - c. Autism
  - d. General special education
  - e. Hearing impaired
  - f. Visually impaired
  - g. Emotionally disturbed
  - h. Specific learning disabilities
  - i. Intellectual disability
  - j. Orthopedic/ Other health impaired
  - k. Multiple disabilities
  - l. Traumatic brain injury
  - m. Other (specify)
4. Indicate your degree level
  - a. Bachelor's degree
  - b. Master's degree
  - c. PhD
  - d. Other (specify)
5. Primary disabilities you serve (check all that apply)
  - a. Autism

- b. Intellectual disabilities
  - c. Multiple disabilities
  - d. Emotional disturbance
  - e. Orthopedic disabilities
  - f. Deafness
  - g. Deaf-blindness
  - h. Visually impaired (including blindness)
  - i. Traumatic brain injury
  - j. Communication disorders
  - k. Other health impaired
6. Size of your caseload (# of students)  
(write in answer)
7. Number of paraeducators working with you
- a. 0
  - b. 1-2
  - c. 3-4
  - d. 5 or more
8. Total paraeducator hours per week (add across all paras)
- a. Less than 20 hours/week
  - b. 21-40 hours/week
  - c. More than 40 hours
9. District size (number of high schools in your district)
- a. 1 high school
  - b. 2-5 high schools
  - c. 6-10 high schools
  - d. 11 or more high schools
10. Primarily rural or urban setting
- a. Rural
  - b. Urban
  - c. Mixed
11. Pre service CBVI training you received in teacher training
- a. No training
  - b. Some training (1-10 class hours)
  - c. Substantial training (more than 10 hours)
12. District or state training on CBVI
- a. No training
  - b. Some training (1-5 hours)
  - c. Substantial training (more than 5 hours)
13. Percentage of IEP Goals (overall) written for CBVI

- a. None
- b. Rarely (<10%)
- c. Sometimes (25-50%)
- d. Often (>50%)
- e. Always (100%)

14. Percentage of students engaged in CBVI on your caseload

- a. None
- b. Some (<24%)
- c. Many (25-50%)
- d. Most (>50%)
- e. All (100%)

15. Number of hours per student engaged in CBVI per week

- a. None
- b. < 1 hour per week
- c. 1-2 hours/week
- d. > 2hours/week

15. Who develops CBVI sites (i.e., who talks to employers or agencies to set up the CBVI training opportunities)?

- a. Special educators
- b. Transition coordinator
- c. Employment specialist/job coach.
- d. Other (please describe)
- e. I do not know

16. Who delivers CBVI instruction (i.e., who sets up the community teaching opportunities)?

- a. Special educator
- b. Paraeducator
- c. Transition coordinator
- d. Employment specialist/job coach
- e. Community Rehabilitation Provider
- f. Other (please describe)

17. What is the primary means of transportation used to access CBVI?

- a. School bus
- b. Walking
- c. Public transportation
- d. District or school vehicles
- e. Personal vehicles
- f. Other (please describe)

## **Part II**

### **Potential Barriers to CBVI**



**Examine each of the following potential barriers to community based vocational instruction. Based on your experience, indicate the level of barrier for each item.**

- 1=No barrier- Never presents as a problem in your CBVI program**  
**2=Minor barrier- Occasionally presents as a problem in your program**  
**3=Notable barrier-Most often presents as a problem in your program,**  
**4=Major barrier- Always presents as a problem in your program**

***Rating example: If answering a question about staffing and Inclusion, no barrier would mean that you feel there is adequate staffing provided for inclusion. A minor barrier would mean that lack of staffing occasionally is a barrier for inclusion. A notable barrier would mean that lack of staffing most often is as barrier to inclusion. A major barrier would mean that lack of staffing always is a barrier to inclusion.***

1. Lack of staff to implement CBVI
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
2. Lack of staff experience in implementing CBVI
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
3. Lack of staff knowledge of CBVI
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
4. Lack of availability of district transportation
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
5. Lack of availability of public transportation
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
6. Walking distances are too far to community jobsites
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier

7. Lack of flexible student schedules
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
8. Lack of flexible school schedules
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
9. Challenging student behaviors
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
10. Parent requests not to have students engage in CBVI
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
11. Lack of established cooperating community jobsites
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
12. Lack of cooperating jobsites due to employer discomfort with disabilities
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
13. Lack of administrative priority for CBVI
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
14. Lack of administrative support for CBVI
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
15. Lack of liability insurance coverage for students at jobsites
  - a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
16. Curriculum constraints such as core curriculum and/or testing

- a. 1=no barrier
  - b. 2=minor barrier
  - c. 3=notable barrier
  - d. 4=major barrier
17. Other barriers to CBVI  
(write in answer)

### **Part III**

#### **Potential Solutions to CBVI**

**Examine each of the following potential solutions to improving community based vocational instruction. Based on your experience, indicate the level of solution for each item.**

**1= Major solution= Substantial facilitator in your CBVI program**

**2= Notable solution = Significant facilitator in your CBVI program**

**3= Minor solution= Moderate facilitator in your CBVI program**

**4= No solution= Not a facilitator in your CBVI program**

***Rating example: If answering a question about staffing and Inclusion, a major solution would mean that you feel adequate staffing is a substantial facilitator for successful inclusion. A notable solution would mean that staffing is a significant facilitator for inclusion. A minor solution would mean that staffing is a moderate facilitator to inclusion. No solution would mean that staffing is not a facilitator to inclusion.***

1. Adequate staffing to support students in CBVI
  - a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
2. Adequate staff knowledge of CBVI
  - a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
3. Adequate staffing to develop CBVI jobsites
  - a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
4. Access to public transportation
  - a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
5. Access to district transportation
  - a. 1= major solution

- b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
6. Easy walking distance to jobsites
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
7. Flexible student schedules
- a. 1= major solution
  - a. b. 2= notable solution
  - b. c. 3= minor solution
  - c. d. 4= no solution
8. Flexible school schedules
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
9. Parent cooperation and support with CBVI
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
10. Established community jobsites
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
11. Accepting/supportive employers at cooperating jobsites
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
12. Administrators make CBVI a priority
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
13. Principal supports of CBVI
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
14. Special education director supports of CBVI
- a. 1= major solution

- b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
15. Liability insurance coverage for students at jobsites
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
16. Flexible curriculum for students
- a. 1= major solution
  - b. 2= notable solution
  - c. 3= minor solution
  - d. 4= no solution
17. Other solutions to CBVI  
(write in answer)