

Factors Influencing Teacher Decisions About Their Use of Community-Based Instruction

Shari L. Hopkins, M.A.
slhopki2@illinois.edu
University of Illinois at Urbana-Champaign
Department of Special Education
1310 S. 6th Street
Champaign, IL 61820, USA

Stacy K. Dymond, Ph.D.
University of Illinois at Urbana-Champaign
Champaign, IL 61820, USA

Abstract

Teachers of high school students with severe disabilities are charged with making decisions about educational programming that prepares students for life post-school. This includes decisions about using community-based instruction (CBI) to teach skills that students will need to participate in the community. This qualitative study investigated the factors 13 high school special education teachers considered when making decisions about whether to use CBI with 26 students with severe disabilities and the factors they considered when selecting skills to teach these students during CBI. Data were collected using in-depth interviews and analyzed using a constant comparative method. Findings indicate that program organization and individual student needs influenced teachers' decisions to use CBI. When selecting skills to teach during CBI, teachers considered the student's current and future needs, the classroom curriculum, skills needed in the community, and the student's ability to learn.

Keywords: community-based instruction, severe disabilities, high school, teacher beliefs

Factors Influencing Teacher Decisions About Their Use of Community-Based Instruction

Educating students with disabilities at the high school level is a highly complex undertaking that requires individualized decisions about curriculum and instruction. In order to prepare students for adulthood, schools must provide transition services that include “instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation” (Individuals with Disabilities Education Act [IDEA], 2004, section 1401[34]). These services must be based on the student’s individualized needs, and focus on improving academic and functional achievement (IDEA, 2004).

Community-based instruction (CBI) is recognized as an integral component of educational programming for high school students with severe disabilities who are preparing to transition to adulthood (Bambara, Koger, Burns, & Singley, 2016; Dymond, in press; McDonnell, 2017; Test, Spooner, Holzberg, Robertson, & Ley Davis, 2017). Students with severe disabilities have extensive support needs associated with intellectual disability, autism, or multiple disabilities. These students often experience difficulty generalizing skills learned in structured, classroom settings to environments where unknown variables are present (Avellone & Taylor, 2017; Bambara et al., 2016). With CBI, students receive instruction in the community, at regularly scheduled intervals across the week, to learn specific skills that enhance their participation and independence in community activities (e.g., grocery shopping, eating at restaurants, going to a movie; Bambara et al., 2016; Dymond, in press; McDonnell, 2017). CBI is often employed with high school students with severe disabilities because it promotes learning in the natural setting, thus limiting potential issues associated with generalization (Dymond, in press; McDonnell, 2010).

A variety of community skills have been taught effectively using CBI including grocery store skills (Alberto, Cihak, & Gama, 2005; Cihak, Alberto, Kessler, & Taber, 2004; Cihak, Alberto, Taber-Doughty, & Gama, 2006), restaurant skills (Berg, Wacker, & Ebberts, 1995; McDonnell, 1987), banking (Cihak et al., 2004; McDonnell & Ferguson, 1989), transportation (Davies, Stock, Holloway, & Wehmeyer, 2010), and safely navigating the community (Branham, Collins, & Schuster, 1999; Collins, Stinson, & Land, 1993). In addition, several studies have shown CBI combined with classroom instruction is more effective and requires less time for students to acquire skills than classroom instruction alone (Bates, Cuvo, Miner, & Korabek, 2001; Branham et al., 1999; Cihak et al., 2004). Research investigating effective methods for teaching community skills has substantially declined since 2005 (Dymond, Butler, Hopkins, & Patton, 2018); however, sufficient evidence exists to suggest CBI continues to be an important strategy for preparing high school students with severe disabilities for adulthood (Avellone & Taylor, 2017; Bambara et al., 2016; Dymond, in press; Test et al., 2017).

Although research supports the effectiveness of CBI, only three studies have examined teachers' beliefs about its effectiveness and benefits (see Agran, Snow, & Swaner, 1999; Langone, Langone, & McLaughlin, 2000; Westling & Fleck, 1991). Teachers across these studies generally believed that CBI was effective in teaching community and work skills, and that CBI facilitated generalization of skills learned in the classroom to community settings. Additionally, teachers reported other benefits to using CBI, including preparing students for their lives post-school (Agran, et al., 1999; Westling & Fleck, 1991), providing opportunities for interactions with community members and peers without disabilities (Agran, et al., 1999; Westling & Fleck, 1991), and positively impacting students' self-worth (Langone et al., 2000).

To date, research has neglected to investigate the factors teachers believe influence their

decision to use CBI with a particular student or the factors they consider when selecting skills to teach each student during CBI. The existing literature suggests a variety of factors should be considered when deciding whether to use CBI including age of the student (i.e., older students need increased instruction in the community), instructional priorities of the family/student, ability of the student to easily generalize skills learned at school to the community, resources available for CBI (e.g., transportation, funding, staffing, administrator support), and extent to which participation in CBI detracts from time spent in the general education classroom (Bambara et al., 2016; Dymond, in press; McDonnell, 2010; Test et al., 2017). The literature also describes various factors teachers should consider when identifying, prioritizing, and selecting the types of community skills to target during CBI. These strategies include conducting an ecological inventory of the community to determine activities that occur, performing a discrepancy analysis to examine how a student participates in community activities compared to individuals without disabilities, using a student or family preference assessment, and gathering information about the types of community settings used by the student and his/her family (Dymond, in press; Spooner, Browder, & Richter, 2011; Test et al., 2017).

Understanding teachers' beliefs and the role they play in their decision-making is important. Teachers' beliefs are the best predictor of individual behavior (Brown, 2004) and impact how they approach individualizing educational programming for their students (Cook, Tankersley, & Harjusola-Webb, 2008; Ruppert, Gaffney, & Dymond 2015). Teachers' beliefs about what is meaningful and relevant for their students to learn (Timberlake, 2016) influences their decision-making, including the instructional methods they use and the contexts in which they teach (Wehman & Thoma, 2006). Beliefs are also frequently influenced by teachers' previous experiences rather than recommended research and evidence-based practices (Cook et

al., 2008; Greenway, McCollow, Hudson, Peck, & Davis, 2013). Because teachers must use educational strategies that are supported by evidence and research (Every Student Succeeds Act [ESSA], 2015), it is important to understand the factors they consider when making individualized decisions about the use of CBI with each student.

The purpose of this study was to investigate the factors special education teachers believe influence their decisions to use CBI with individual high school students with severe disabilities and the factors they report considering when selecting skills to teach each student during CBI. All students require an educational program that prepares them for adulthood. Although the focus of instruction should be on access to grade-level academic curriculum, students with severe disabilities also need to learn skills that promote their movement from school to post-school activities, including community participation (IDEA, 2004). A strong body of research demonstrates that CBI is effective in teaching students with severe disabilities skills needed to participate more fully in their communities. Special education teachers are often the primary person responsible for making curricular decisions for their students; therefore, it is important to understand factors that affect their decisions, particularly in light of the research to practice gap that exists in education today (Cook, Lloyd, Mellor, Nosek, & Therrien, 2018; Cook & Odom, 2013). Two questions guided the study:

1. What factors do special education teachers believe influence their decision to use CBI with a particular student?
2. What factors do special education teachers report they consider when selecting skills to teach each student during CBI?

Method

Qualitative methods were used to allow for an in-depth exploration of the research

questions (Creswell & Poth, 2018).

Participants

Teachers were selected from public high schools located in five counties surrounding a major city in the Midwest. Counties were purposefully selected to ensure participants had proximity to a variety of community settings for CBI. Inclusion criteria for participation in the study included: (a) a valid special education teaching license, (b) employment at a public high school that serves students with and without disabilities, (c) experience during two of the last three years teaching students with severe disabilities, and (d) use of CBI to teach at least one student with severe disabilities between the ages of 14 and 21. For purposes of this study, CBI was defined as the teaching of everyday tasks to students through direct, systematic instruction within community contexts a minimum of once per week (Spooner et al., 2011). Students with severe disabilities were defined as students who have a primary disability of moderate to severe intellectual disability, multiple disabilities, or autism spectrum disorder and take (or have taken) the state's Alternate Assessment. During the screening interview, definitions for both CBI and severe disabilities were provided to ensure potential participants met inclusion criteria.

An initial email was sent to each school district superintendent ($n = 75$) requesting permission to recruit teachers. For districts that granted permission ($n = 38$), a recruitment email was sent to teachers in the district who held a special education teaching license. Teachers who responded to the email ($n = 33$) were screened by telephone to determine if they met eligibility criteria. No more than one teacher was selected to participate from each high school in order to eliminate potential duplication of information across teachers due to administrative policies within a particular school. When more than one teacher from the same school responded to the recruitment email, the teacher who responded first was screened. If the teacher met inclusion

criteria, he or she was invited to participate in the study. If the teacher did not meet criteria, the second teacher from the school was invited to participate in the screening interview.

Of the 33 teachers who were screened, 13 met eligibility criteria and were selected to participate in the study (see Table 1). Participants included 12 females and one male. The majority of teachers had 10 or fewer years of teaching experience ($n = 10$), between 6 to 10 students on their caseload ($n = 9$), and more than 5 students with a severe disability ($n = 11$). Teachers used CBI one to three times per week and each CBI session lasted 30 to 90 minutes. Schools in which teachers worked were spread evenly across four counties, with only one participant from the fifth county of Alder. The majority of participants ($n = 8$) taught in schools located in communities categorized by the U. S. Census Bureau as an urban cluster (i.e., population between 2,500 and 50,000), with the remaining schools categorized as urbanized areas (i.e., population greater than 50,000, $n = 5$). Socioeconomic status varied across locations, with per capita income ranging from \$30,638 to \$81,492 ($M = \$48,396$). The racial and ethnic make-up of all communities was primarily White. Minorities constituted 30% or more of the population in six communities.

Nearly all teachers ($n = 12$) described teaching in a program focused on functional life skills. Although some teachers described teaching functional academics, the primary skills taught were related to preparing students for work, independent living, and the community (i.e., functional life skills). Teachers were either the sole teacher in the program or worked with 1 to 2 other teachers who also taught functional life skills. Students spent the majority of their time in the functional life skills program. The one teacher who did not describe her program as focused on functional life skills reported that students spent more than 40% of their time in general education settings.

Interview Protocol

An interview protocol was developed based on the CBI literature. During development, two graduate students who were prior teachers of students with severe disabilities and previously used CBI, and three researchers with expertise in secondary curriculum and severe disabilities, reviewed the protocol for content and clarity of questions. The protocol was revised and piloted with two teachers of students with severe disabilities who use CBI and were not affiliated with the study. The teachers responded to questions without difficulty and did not suggest changes to the questions. The final protocol consisted of eight questions (see Table 2).

The first two questions were designed to develop rapport with the teacher and were not included in data analysis. Questions 3 and 4 asked teachers to identify two students with severe disabilities who received CBI during the previous school year and for each student, answer a series of questions about their decision to use CBI with the student and their process for determining what skills to teach the student during CBI. Questions 5 to 7 were designed to help teachers elaborate on their decision-making process.

Data Collection

An email was sent to participants requesting completion of an online questionnaire. The questionnaire was designed to elicit information about demographics, available dates and times for the interview, and preferred method of interview (i.e., online teleconference, telephone). One researcher (first author) scheduled and conducted all interviews by telephone. Semi-structured interviews were audio recorded and lasted an average of 45 min (range = 25 – 85 min).

Although the interview was structured to address the research questions, probes were included that allowed the researcher and participant to explore certain subjects in greater depth or to address unforeseen topics that arose from the interview. Handwritten notes were taken during

the interview to assist with formulating additional probes that addressed earlier responses and helped to focus the interview at later stages (Patton, 2015).

Immediately following the interview, audio files were checked to ensure that the interview was properly recorded. Files were uploaded to a secure server. The researcher also scheduled time on the same day of the interview to record details about the interview process (i.e., post-interview reflection) and to review interview notes. All participants received a \$20 gift card at the conclusion of the study.

Data Analysis

Within one week of each interview, the researcher listened to the audio recording, reviewed interview notes and post-interview reflections, and developed a summary of key points and emerging themes. Participants were sent the transcript summary and asked to review and provide feedback and/or corrections, if needed, in order to confirm that the data collected reflected the participants' intended meaning (Maxwell, 2013). All 13 teachers reviewed the transcript summaries and responded that they were accurate.

Interview audio files were transcribed verbatim and analyzed using a constant comparative method (Corbin & Strauss, 2015). In the first level of analysis, the researcher and a graduate student independently read each transcript line by line and assigned codes in order to define actions and events within the data. After every two to three transcripts, the researcher and graduate student met face-to-face to discuss the emerging codes and their application. During these meetings, they reviewed each coded segment and, when there was incongruence, discussed the disagreement until consensus was reached. An initial codebook was developed after the first face-to-face meeting and updated at each subsequent meeting to reflect new understandings of the data. As codes changed, the researcher and graduate student revisited previously coded data

to ensure consistency in the application of codes. The second author reviewed the master codebook twice during the coding process to determine whether codes were clearly defined and distinct from one another. Discussions between the second author and researcher resulted in clarification of several codes and definitions.

In the second level of analysis, the researcher and graduate student met face-to-face to collaboratively group codes pertaining to the same phenomena into categories. Data within and across codes were compared to verify that each coded segment fit within its assigned category (Corbin & Strauss, 2015). When segments of data did not fit with the category, the segment was recoded and grouped into a different category. During the third level of analysis, the researcher and graduate student engaged in discussion about the relationship among categories, which resulted in the establishment of overarching themes specific to the research questions. The second author reviewed the categories and themes, and met with the researcher to engage in a questioning process that ensured the categories and themes reflected the findings.

The design of the study followed the criteria established for qualitative studies in special education to address trustworthiness (Brantlinger, Jimenez, Pugach, & Richardson, 2005). First, during development and planning of the research study, the participants were appropriately selected and screened, and interview protocols were developed to address the research questions. Second, rigorous procedures (e.g., accurate transcription of interviews, systematic coding of data, sound measures to maintain confidentiality) were adhered to as outlined in the data collection and analysis sections. Finally, collaborative work, level 2 member checks, and researcher reflexivity were used to control for potential bias or misunderstanding of the data.

Findings

Each of the 13 special education teachers selected two students who met the study's

criteria for severe disabilities and participation in CBI. Overall findings reflect teachers' decision making about CBI regarding a total of 26 students with severe disabilities.

Factors Teachers Believe Influence Their Decision to Use CBI

Two themes emerged regarding factors special education teachers reported as influencing their decision to use CBI with a particular student: (a) program organization and (b) individual student needs.

Program organization. When asked what influenced their decision to use CBI with a particular student, the majority of teachers ($n = 10$) responded that they used CBI because it was a required component of their life skills program. Decisions to use CBI were not made on a student-by-student basis. Instead, decisions were made at the program level and all students enrolled in the functional life skills program were expected to participate in CBI. As a result, teachers did not consider any factors when determining whether to use CBI with a particular student because all students automatically received CBI.

Teachers had varying degrees of influence related to the decision to require CBI in their program and held differences of opinion regarding whether all students in their program should receive CBI. Nearly half of the teachers shared that they were expected to maintain the status quo of the curriculum that was already in place when they started in their position. The decision to use CBI was either made by the administration or was what other teachers who they worked with expected them to do. These teachers explained that CBI was just "part of our programming here at school" (Jasmine) and "every student has the expectation to go out" (Gabriela). Some teachers ($n = 2$) expressed frustration with this requirement, indicating they "did not have a choice" (Kate) and were "kind of forced" to do it (Gabriela). Others ($n = 3$) were strong proponents of CBI and believed all students in a functional life skills program needed to

participate in CBI. They assumed that if a student was enrolled in their program that the student lacked the skills necessary to participate in the community and therefore would benefit from CBI. Chloe shared the following:

I totally believe that if you're in a self-contained setting, it is going to be a kind of student who will always need assistance in their life, that one of the best decisions that a program can make is being able to let students have those experiences (CBI).

Another teacher believed in the benefits of CBI so strongly that no matter where she was employed, she incorporated CBI into all of her students' educational programs.

Every school district that I've worked for, I've gone to that school district to start their life skills programing. And CBI has always been part of a life skills program wherever I went. It just, it was a given. It is just the common understanding that if you run a life skills program you're going to do CBI (Angela).

Teachers who stated CBI was a required component of their program did not have the option to exclude students; however, four teachers stated that "student readiness" was a factor they would consider if allowed to make individualized decisions about the use of CBI with each student. One teacher's concern about readiness pertained to students having sufficient pre-requisite skills to benefit from CBI. Erin perceived that CBI was not beneficial for students who would never be able to function independently in the community. Given a choice, she would not provide CBI to these students. When asked what advice she would give teachers, she responded:

I guess it depends on their program. Because if you know there is a student that probably will not be in the community on their own, and they have the ability to work on something else instead that could be a benefit to them, then they should stay at school.

Three teachers described challenging behaviors as a reason for students not being ready

to participate in CBI. Heather believed students had to be “behavior ready” in order to participate in the community. She explained, “we plan our community outings far in advance and we feel like if you’re not school appropriate then we really can’t take you out to the community.” This particular teacher believed students needed to learn how to manage their behaviors at school before they could receive CBI. Other teachers believed challenging behaviors impacted a student’s ability to participate in CBI, but made their decision to include the student in CBI on a situational or day-to-day basis. These teachers shared that they held students back at school when they were experiencing behavioral or safety concerns. Gabriela described it as “putting it on hold for a little bit” because her student had a medication change which increased episodes of elopement at school. Once the medication was regulated, the elopement decreased, and the student resumed participation in CBI. Another teacher explained that she might not include students in CBI if they were engaging in challenging behavior on that day because she did not want to negatively stigmatize her students (Kate).

Individual student needs. Three teachers in the study described making decisions to use CBI with their students on an individualized basis. These teachers reported considering a variety of factors when determining the appropriateness of CBI for a student, none of which related to the organization of their classroom, program, or school. Unlike teachers who implemented CBI because it was a required component of their program, teachers who focused on individual student needs identified factors that emphasized the match between the student, the skill to be learned, and the learning environment rather than the student’s readiness for CBI.

A major factor considered by all three teachers related to whether a priority skill for a student was one that could be adequately taught in the classroom setting. Teachers believed that many skills needed in the community can be simulated in a classroom environment (e.g., using

worksheets or fake money to learn purchasing skills; selecting items on a menu in the classroom to practicing ordering at a restaurant); however, they expressed concern that students could not realistically learn the nuances involved with a skill taught in the classroom because it involved use of a "faux" (Bethany) environment and materials. One example of a priority skill area teachers uniformly found impossible to teach in the classroom related to socialization and communication skills. Although students could be taught skills in the classroom specific to socializing and communicating in the community, the school setting did not provide opportunities for students to interact with unknown people, such as those one might encounter in the community, or to interact with unknown people in unfamiliar settings. Teachers thus explained that for some students "simulation isn't enough" (Isabella) because it is not possible to teach the skill across the range of situations that might occur in the community.

Intertwined within teachers' discussions about their ability to teach skills in a realistic manner was the issue of generalization. Teachers explained that they chose to use CBI when a student had difficulty generalizing skills learned in the classroom to the "real world" (Faith). The importance of skill mastery and generalization was underscored by teachers' beliefs about the importance of students achieving "independence" (Bethany, Isabella, and Faith) or being "as independent as they can be" (Faith). This belief was evidenced by Isabella and Bethany, who stated that they did not consider students to have learned a skill unless they were able to generalize it in the community. These teachers made the decision to use CBI when they felt it was essential for a student to demonstrate mastery across multiple natural settings.

Student motivation was also considered when determining whether to use CBI. Teachers felt that CBI was useful for students who experienced difficulty seeing that what they were learning in the classroom had both a meaningful and functional application to their life.

Participation in CBI was thought to make it more likely that students would understand how to use the skills they learned during CBI in both their current and future environments. Faith described the benefits in this manner:

It's really when we're out in the community that they start to apply those skills that they've learned. To see that what they've been doing really connects and that it is things that they can use. And not just when we are at school or when we are out in the community but also when they're at home and they're going out on the weekend with their parents or friends or things like that.

For some students, teachers explained that a factor influencing their decision to use CBI was that the student had limited opportunities to be in the community outside of school hours. Parents might not be able to take their child with significant support needs into the community, so participating in CBI was viewed as an opportunity for students to learn about the larger world around them, "giving them opportunities that they never would have" (Bethany). Participating in CBI provided exposure to different settings and experiences that might help students identify what activities they might want to do in the future.

Factors Teachers Report Considering When Selecting Skills to Teach During CBI

Teachers shared that they collaborated with parents, related service providers, and students when determining the skills to teach during CBI. Information elicited from these individuals helped to guide teachers in better understanding students' overall goals and needs. Four themes emerged regarding factors teachers consider when selecting skills to teach during CBI: (a) students' current and future needs, (b) classroom curriculum, (c) skills needed in the community, and (d) students' ability to learn.

Student's current and future needs. Nearly all teachers ($n = 12$) reported

contemplating students' current and future needs for participation in the "real world" (Chloe, Erin, and Faith) when selecting skills for CBI. Students' current and future needs were often identified in conjunction with the parent, either formally at an IEP meeting or through informal communications (e.g., telephone calls, emails). In some instances, parents shared the general long-term goals for their child's future and teachers then used this information to identify specific skills they believed the student needed in order to meet those goals. Kate shared how she used parent input obtained during IEP meetings when selecting skills for CBI:

Really what I try to do with the families, we try to work backwards from their post 22 goals. Every year I hear from their parents where they want their students to go [after graduation]. And then we talk about what are the barriers that are going to keep them from getting to your dream for your child or their dream for themselves. So, we work our way backwards.

In other instances, parents identified the specific skills they wanted teachers to focus on during CBI. These communications generally occurred during informal conversations during the school year. Teachers explained that parents would talk about how they "can't go out" (Danielle) to community locations (e.g., a sit-down restaurant, a play) because their young adult did not know how to participate in the environment. Teachers then provided instruction on these skills in the community to "make it easier on the families" (Gabriela).

Although parents served as the primary source of information regarding students' current and future needs, many teachers also contemplated the skills they personally needed to learn when they transitioned to adulthood. For example, one teacher reported thinking about his own life outside of school and "what I am doing as an adult in my normal life" (Neil). He then selected skills for instruction during CBI that mirrored those he used frequently. Some teachers

also thought about the skills students needed to acquire prior to entering the school district's transition program (i.e., ages 18 - 22). These teachers focused on selecting skills that would "prepare them...to have as much independence as possible in their daily living and life skills" (Chloe) so students could participate more fully in the transition program.

Classroom curriculum. In addition to considering current and future needs, many teachers ($n = 8$) considered the classroom curriculum when identifying skills for CBI. Teachers reported using either a commercial curriculum (e.g., Unique Learning, edMARK) or a teacher-developed curriculum to select skills for instruction in the classroom. They then identified skills from the curriculum that might benefit from additional instruction in the community to promote generalization across settings. Angela shared how she used a commercial curriculum to select skills taught in the community:

I usually teach using edMark sight word reading program and the edMark program teaches some basic vocabulary. It also has one for grocery stores...so when I've used the grocery store program, then we would go and generalize that skill to the grocery store.

Several teachers also described how they used CBI to augment the classroom curriculum. Rather than selecting skills that mirrored the classroom curriculum, teachers extended the curriculum by selecting skills for CBI that were related to specific school-based projects or activities. For example, one teacher had students work on locating and purchasing grocery store items based on a recipe that would be used in her cooking class (Faith). Another teacher explained, "We have been discussing Earth Day. So, we went to our local home improvement store today to purchase potting soil and shovels using a visual shopping list" (Monica). By linking the classroom to the community, teachers believed that it demonstrated to students that what they were learning in the classroom was functional and had application to their lives.

Teachers' beliefs about the importance of helping students understand the connection between school and everyday life, thus influenced their decisions about skills to teach through CBI.

Skills needed in the community. Decisions about skills to teach during CBI were often influenced by what teachers ($n = 9$) learned from observing their students or interacting with other people in the community. A few teachers used a task-analysis while observing their students in the community in order to identify “those steps that are going to have to be taught” (Danielle). Neil explained how he used this method to determine priority skills:

A student might be very capable of purchasing items, being able to pay with money, and those kind of things. But they may have a very difficult time locating an item.

Somewhere in that chain, something is broken, right? So it's our job to figure out what's that missing link in the chain, to help them link all these different skills together. I wish it was really like, if you do step one, then you can do two, and then three, etc...It doesn't work like that. Sometimes the third one gets broken, but one, two, four, five, six, seven, eight, nine, ten, are all good. So we have to identify where's that hiccup happening out in the community.

Skills identified as needing further instruction while out in the community would then be retaught in the classroom and generalized in the community during future CBI trips.

Teachers acknowledged that many skills often presented themselves *in the moment* while they were out in the community. Angela explained that “you could have the best curriculum in the world but you're still going to have those teachable moments.” Bethany, Danielle, Gabriela, and Neil described these teachable moments as “incidental learning” or “learning opportunities.” These unexpected opportunities were often related to appropriate behavior, especially in the context of social interactions. One teacher felt these skills might even “outweigh the functional

math or any other subjects that we're teaching. Because if we can't get them to have the correct social skills in public then the other stuff kind of loses its meaning" (Faith).

Student's ability to learn. Four teachers reported they did not identify specific skills to teach students with the most severe disabilities because they were either not able to learn or could not learn the skills that the other "higher functioning" (Kate) students were learning. The skills these students were learning were viewed as "pure exposure of being out [in the community]" (Angela). Kate described the relevance of CBI for one of her students with a severe disability:

Of course, you hope he's taking in some of the socialization and interaction and caring that he is receiving. But that was my most significant student and that's the reason why he ended up continuing going out into the community, even though he didn't have a goal for that [specific skills to learn during CBI].

A couple of teachers explained that they reflected on what skills a student had already mastered and then selected those as the target skills for CBI. These teachers shared that the majority of students in their class were working on higher-level skills (e.g., paying to the next whole dollar) but those skills were too difficult for the students with the most significant disabilities. Therefore, when the larger group of students was learning higher-level skills, the teachers "fit in skills" (Erin) for their students with the most severe disabilities where they could. Erin elaborated on targeting skills that her students already could perform by explaining:

I don't necessarily want to say they need them [the skills], but because they are in the program, and they will participate in the community because we do that as a group, just to make it meaningful, as meaningful as I can for them.

Discussion

The purpose of this study was to understand the factors special education teachers believe influence their decision to use CBI with a particular student and the factors they consider when selecting skills to teach each student during CBI. Factors that influenced teachers' decisions to use CBI included program organization and individual student needs. Although most teachers did not make decisions about the use of CBI on a student-by-student basis, those who reflected on individual student needs reported considering several factors previously cited in the literature. These factors include the student's ability to acquire priority skills in a classroom or school setting, the student's ability to generalize skills learned in the classroom to the community, the student's motivation for learning, and opportunities available for the student to access the community outside of the school day. Factors cited in the literature but not identified by teachers include student age, available resources, and extent to which CBI detracts from time spent in the general education classroom (see Bambara et al., 2016; Dymond, in press; McDonnell, 2010; Test et al., 2017).

When selecting skills to teach each student during CBI, teachers reported contemplating a variety of factors including the student's current and future needs, the classroom curriculum, skills needed in the community, and the student's ability to learn. Strategies for determining skills to teach aligned with recommended practices in the literature and encompassed gathering information from families about their priorities, inventorying the community to identify skills needed in various settings, and conducting a discrepancy analysis to determine gaps between a student's skills and those needed in the community (Bambara et al., 2016; Dymond, in press; Test et al., 2017). Teachers also identified other creative ideas for selecting skills for instruction that were not cited in the literature, such as thinking about the skills they personally needed in their own life as an adult, selecting skills related to specific school-based projects, and being

open to teachable moments that arose in the community.

It is important to note that across interviews, it was evident that teachers believe CBI is an important component of the educational programming they provide high school students with severe disabilities. In fact, all of the teachers talked about the effectiveness of CBI in helping their students acquire and generalize community skills. Variation existed in teachers' beliefs about the appropriateness of CBI for certain students, yet their commitment to offering this form of instruction was uniformly strong, not unlike findings from research conducted 20 to 30 years ago (see Agran et al., 1999; Langone et al., 2000; Westling & Fleck, 1991). Although teachers strongly supported the use of CBI, there were two areas where their responses diverged substantially from recommended practice. These areas related to making decisions based on the needs of the whole group instead of individual students and a lack of meaningful participation in CBI for students with the most severe disabilities.

Decisions for the Whole Group vs. Individual Students

One major finding from the study was that many teachers did not consider individual student needs when making decisions about whether to use CBI with a particular student or when selecting skills for instruction. Instead, teachers made their decisions based on the perceived needs of the whole group. For these teachers, there was an expectation that all students in the program participate in CBI because it was either what all students with severe disabilities needed or what all students enrolled in their functional life skills program were expected to do. Additionally, when some teachers selected skills to teach in the community, they often selected the same skills for all students. This approach to curricular decision-making runs contrary to what is advocated in the literature and mandated by federal law (IDEA, 2004). Although many students with severe disabilities do benefit from instruction on functional skills in natural

environments (Bambara et al., 2016; Test et al., 2017), it is important that decisions regarding the location of instruction and the skills to be taught are based on a student's individual needs and not their disability label or the "program" in which they are enrolled.

Teachers' beliefs impact how they approach individualizing educational programming for their students (Cook et al., 2008; Ruppert et al., 2015). When teachers view the needs of students with severe disabilities as being the same, they risk not adequately addressing each individual student's unique needs. This in turn may affect the student's ability to participate in current and future activities in a meaningful way, thus promoting increased dependence on others and diminished quality of life. Thus, when teachers focus on making decisions for the whole group, students who do not "fit in" with the needs of the majority suffer. Post-school outcomes for students with severe disabilities continue to be at levels far below that of their peers (Bouck, 2012; Mazzotti et al., 2016). By focusing on the individual needs of students, we can better prepare each student for successful outcomes and an improved quality of life (Mazzotti et al., 2016).

Lack of Participation in CBI for Students with the Most Severe Disabilities

Many teachers seemed to hold the belief that the majority of their students with severe disabilities had similar needs, both in terms of instruction in the community and the types of skills they needed in adulthood. However, when contemplating the use of CBI for students with the most severe disabilities, a few teachers indicated they did not believe the purpose of CBI was to learn community skills. Rather, these teachers identified socialization and exposure as the "skills" most appropriate for their students to learn. They expected students would not be able to learn community skills, yet they wanted these students to have the opportunity to be around, or interact with, others in the community. Even when teachers did identify a skill for instruction for

students with the most severe disabilities, the skills they selected were ones they knew the student had already mastered. By selecting already mastered skills, teachers were able to teach the “higher-functioning” students community skills while also allowing the students with more severe disabilities to “participate.” In other words, students with the most severe disabilities passively participated in CBI while the rest of the class received instruction on priority skills.

Also concerning was that some teachers seemed to ascribe to the “readiness model”, believing that students should not receive CBI until they demonstrate appropriate behavior at school and/or master certain prerequisite skills (Wilcox & Bellamy, 1987). This line of thinking is problematic because students with severe disabilities have extensive support needs and will always require some level of support throughout their lives. Making access to the community dependent on acquisition of pre-requisite skills means that some students will spend their whole lives getting ready without ever having access to inclusive settings and activities. There are numerous intervention studies that demonstrate students with severe disabilities *can* learn and generalize skills during CBI (see Walker et al., 2010). It may be that some teachers in the current study did not have the knowledge or skills needed to work with students with the most severe disabilities. Alternatively, teachers may have felt they were unable to provide intensive supports for individual students because they were focused on the needs of the whole group. It is incumbent upon school districts to ensure that all students receive appropriate supports to learn and that prerequisite skills do not become an arbitrary barrier to participation in inclusive school and community settings.

Limitations

A number of limitations should be considered when evaluating the findings shared in this study. First, data were obtained through self-report and may not fully represent how teachers

make actual decisions. Although potential response bias was reduced by obtaining multiple examples of teachers' decision-making, teachers may have responded in a manner that portrayed them in a positive light (Patton, 2015). Second, participants taught in school districts in communities that are designated as urban clusters or urbanized areas according to the U.S. Census Bureau descriptions, and these schools were in close proximity to community settings. The beliefs of teachers who work in other urban settings, rural school districts, or districts with limited access to the community may be very different. Third, all teachers described teaching in a functional life skills program, thus the beliefs of teachers who primarily teach grade aligned content may be very different. Finally, because interviews were employed to better understand teachers' experiences, the number of participants is limited. Readers should therefore evaluate the findings in order to determine transferability to their own situation.

Implications for Research

Future research should build on the current study by examining whether the factors reported by teachers reflect how teachers actually make decisions to use CBI and select skills to teach. Additional investigations should also determine the extent to which factors that emerged from the current study are representative of factors considered by other high school special education teachers, including teachers who do not use CBI. Variables such as the curricular focus for a student (e.g., functional life skills, academics, a combination of functional skills and academics), geographic location of the school (i.e., urbanized area, urban cluster, rural), diversity of the community (e.g., racial composition, socioeconomic status), proximity of the school to community settings, and resources available for CBI should be investigated to determine their relation to factors reported by teachers.

Given the prescribed nature of CBI in the present study, another area for future research

pertains to understanding why some schools offer separate functional life skills programs and require CBI for all students enrolled in such programs. Discussions with administrators, teachers, parents, and other school stakeholders might shed light on barriers that exist to individualizing transition services and curriculum for high school students with severe disabilities. Relatedly, parent input was reported to be a major factor teachers considered when identifying current and future goals; however, teachers indicated that students within their programs had the same or very similar goals for CBI. Future research should investigate if there is a match between the goals parents and students identify, and the skills teachers select for instruction.

Finally, in view of the number of teachers who indicated they did not identify specific skills to target with students with the most severe disabilities, additional data should be gathered to determine how these students participate in CBI, and the type and amount of instruction they receive. Comparisons between students with varying support needs might help to illuminate whether differences are present in how CBI is implemented based on extent of support needs.

Implications for Practice

This study identified various factors teachers report considering when making decisions about whether to use CBI with a particular student and when determining skills to teach students during CBI. Teachers who use or are thinking about using CBI with students with severe disabilities may find it helpful to reflect on these factors when making decisions about their own students. Factors identified in the current study should be considered in connection with factors identified previously in the literature on CBI.

The current study also found that most teachers did not make individualized decisions about the use of CBI with their students because CBI was a required component of their program

and all students in the program were expected to participate. Teachers, administrators, and other school stakeholders are encouraged to examine practices within their school to ensure that decisions regarding the use of CBI consider individual student needs. Although CBI is effective in helping students acquire many skills, alternatives to CBI should also be considered (e.g., learning community skills in the general education classroom, via service-learning projects, or within extracurricular activities). The context in which community skills are initially taught can and should vary by student. Regardless of where or how initial instruction is delivered, skills should not be considered mastered until demonstrated in the natural setting (Dymond et al., in press).

Findings from this study also suggest some teachers felt CBI was inappropriate for students with the most severe disabilities. These students were included in CBI for socialization and community exposure, rather than to address specific IEP objectives. It is important for teachers to carefully consider the curricular decisions they make and ensure that instructional time is maximized with each student. Once students exit high school, services are based on eligibility rather than entitlement, thus the last years of schooling are critical for helping students acquire skills that will increase their independence and participation during adulthood. When planning for CBI, teachers must ensure all students, including those with the most severe disabilities, receive instruction on priority skills and are encouraged to participate in activities to the maximum extent possible. Educational achievement of priority goals is important for all students, regardless of the supports required to promote learning.

References

- Agran, M., Snow, K., & Swaner, J. (1999). A survey of secondary level teachers' opinions on community-based instruction and inclusive education. *The Journal of the Association for Persons with Severe Handicaps*, *24*, 58-62. doi:10.2511/rpsd.24.1.58
- Alberto, P. A., Cihak, D. F., & Gama, R. I. (2005). Use of static picture prompts versus video modeling during simulation instruction. *Research in Developmental Disabilities*, *26*, 327-339. doi:10.1016/j.ridd.2004.11.002
- Avellone, L. E., & Taylor, J. (2017). Transitioning students with low-incidence disabilities to community living. In J. M. Kauffman, D. P. Hallahan, & P. C. Pullen (Eds.), *Handbook of special education* (2nd ed.) (pp. 758-770). New York, NY: Routledge.
- Bates, P. E., Cuvo, T., Miner, C. A., & Korabek, C. A. (2001). Simulated and community-based instruction involving persons with mild and moderate mental retardation. *Research in Developmental Disabilities*, *22*, 95-115. doi:10.1016/S0891-4222(01)00060-9
- Bambara, L. M., Koger, F., Burns, R., & Singley, D. (2016). Building skills for home and community. In F. Brown, J. McDonnell, and M. Snell (Eds.) *Instruction of students with severe disabilities* (8th ed., pp. 474-507). Upper Saddle River, NJ: Prentice Hall.
- Berg, W. K., Wacker, D. P., & Ebbers, B. (1995). A demonstration of generalization of performance across settings, materials, and motor responses for students with profound mental retardation. *Behavior Modification*, *19*, 119-143.
- Bouck, E. C. (2012). Secondary students with moderate/severe intellectual disability: Considerations of curriculum and post-school outcomes from the National Longitudinal Transition Study-2. *Journal of Intellectual Disability Research*, *56*, 1175-1186. doi:10.1111/j.1365-2788.2011.01517.x

- Branham, R. S., Collins, B. C., Schuster, J. W., & Kleinert, H. (1999). Teaching community skills to students with moderate disabilities: Comparing combined techniques of classroom simulation, videotape modeling, and community-based instruction. *Education and Training in Mental Retardation and Developmental Disabilities, 34*, 170-181.
- Brantlinger, E., Jimenez, R., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71*, 195-207. doi:10.1177/001440290507100205
- Brown, K. M. (2004). Assessing preservice leaders' beliefs, attitudes, and values regarding issues of diversity, social justice, and equity: A review of existing measures. *Equity & Excellence in Education, 37*, 332-342. doi:10.1080/10665680490518948
- Cihak, D. F., Alberto, P. A., Kessler, K. B., & Taber, T. A. (2004). An investigation of instructional scheduling arrangements for community-based instruction. *Research in Developmental Disabilities, 25*, 67-88. doi:10.1016/j.ridd.2003.04.006
- Cihak, D., Alberto, P. A., Taber-Doughty, T., & Gama, R. I. (2006). A comparison of static picture prompting and video prompting simulation strategies using group instructional procedures. *Focus On Autism and Other Developmental Disabilities, 21*, 89-99. doi:10.1177/10883576060210020601
- Collins, B. C., Stinson, D. M., & Land, L. (1993). A comparison of in vivo and simulation prior to in vivo instruction in teaching generalized safety skills. *Education and Training in Mental Retardation, 28*, 128-142.
- Cook, B. G., Lloyd, J. W., Mellor, D., Nosek, B. A., & Therrien, W. J. (2018). Promoting open science to increase trustworthiness of evidence in special education. *Exceptional Children, 85*, 104-118. doi:10.1177/0014402918793138
- Cook, B. G., & Odom, S. L. (2013). Evidence-based practices and implementation science in

- special education. *Exceptional Children*, 79, 135-144. doi:10.1177/001440291307900201
- Cook, B. G., Tankersley, M., & Harjusola-Webb, S. (2008). Evidence-based special education and professional wisdom: Putting it all together. *Intervention in School and Clinic*, 44, 105-111. doi:10.1177/1053451208321566
- Corbin, J. M., & Strauss, A. L. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA. SAGE.
- Creswell, J. W. & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: SAGE.
- Dymond, S. (in press). Community participation. In P. Wehman & J. Kregel, (Eds.), *Functional curriculum for elementary and secondary students with special needs* (4th ed.). Austin, TX: Pro-Ed.
- Dymond, S. K., Butler, A. M., Hopkins, S. L., & Patton, K. A. (2018). Curriculum and context: Trends in interventions with transition-age students with severe disabilities. *The Journal of Special Education*, 53, 152-162. doi:10.1177/0022466918768776
- Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015-2016).
- Greenway, R., McCollow, M., Hudson, R. F., Peck, C., & Davis, C. A. (2013). Autonomy and accountability: Teacher perspectives on evidence-based practice and decision-making for students with intellectual and developmental disabilities. *Education and Training in Autism and Developmental Disabilities*, 48, 456-468.
- Individuals with Disabilities Education Improvement Act of 2004 (2004). Pub. L. No. 108-446.
- Langone, Langone, & McLaughlin (2000). Analyzing special educators' views on community-based instruction for students with mental retardation and developmental disabilities: Implications for teacher education. *Journal of Developmental Physical Disabilities*, 12,

17-34. doi:10.1023/A:1009452009831

Maxwell, J. A. (2013). Methods: What will you actually do? In J. A. Maxwell (Ed.) *Qualitative research design: A qualitative approach* (pp. 87-120). Thousand Oaks, CA: SAGE.

Mazzotti, V. L., Rowe, D. A., Sinclair, J., Poppen, M., Woods, W. E., & Shearer, M. L. (2016). Predictors of post-school success: A systematic review of NLTS2 secondary analyses. *Career Development and Transition for Exceptional Individuals*, 39, 196-215.

doi:10.1177/2165143415588047

McDonnell, J. (1987). The effects of time delay and increasing prompt hierarchy strategies on the acquisition of purchasing skills by students with severe handicaps. *The Journal of Association of Persons with Severe Handicaps*, 12, 227-236.

McDonnell, J. (2010). Instruction in community settings. In J. McDonnell & M. L. Hardman (Eds.) *Successful transition programs: Pathways for students with intellectual and developmental disabilities* (pp. 173-202). Thousand Oaks, CA: SAGE.

McDonnell, J. (2017). Instructional contexts. In J. M. Kauffman, & D. P. Hallahan (Eds.). *Handbook of special education* (2nd ed., pp. 649-661). New York, NY: Routledge.

McDonnell, J., & Ferguson, B. (1989). A comparison of time delay and decreasing prompt hierarchy strategies in teaching banking skills to students with moderate handicaps. *Journal of Applied Behavior Analysis*, 22, 85-91. doi:10.1901/jaba.1989.22-85

Patton, M. P. (2015). Qualitative interviewing. In M. Q. Patton (Ed.) *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed., pp. 421-518). Thousand Oaks, CA: SAGE.

Ruppar, A. L., Gaffney, J. S., & Dymond, S. K. (2015). Influences on teachers' decisions about literacy for secondary students with severe disabilities. *Exceptional Children*, 81, 209-

226. doi:10.1177/0014402914551739

- Spooner, F., Browder, D. M., & Richter, S. (2011). Community and job skills. In D. M. Browder & F. Spooner (Eds.), *Teaching students with moderate and severe disabilities* (pp. 342-363). New York, NY: The Guilford Press.
- Test, D. W., Spooner, F., Holzberg, D., Robertson, C., & Ley Davis, L. (2017). Planning for other educational needs and community-based instruction. In M. L. Wehmeyer and K. A. Shogren (Eds.), *Handbook of research-based practices for educating students with intellectual disability* (pp. 130-150). New York, NY: Routledge.
- Timberlake, M. T. (2016). The path to academic access for students with significant cognitive disabilities. *The Journal of Special Education, 49*(4), 199-208. doi:10.1177/0022466914554296
- 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.
- Wehman, P., & Thoma, C. A. (2006). Teaching for transition. In P. Wehman (Ed.) *Life beyond the classroom: Transition strategies for young people with disabilities* (4th ed. pp. 201-236), Baltimore, MD: Paul H. Brookes.
- Westling, D. L., & Fleck, L. (1991). Teachers' views of community instruction. *Teacher Education and Special Education, 14*, 127-134. doi:10.1177/088840649101400208
- Wilcox, B., & Bellamy, G. T. (1987). *A comprehensive guide to the activities catalog: An alternative curriculum for youth and adults with severe disabilities*. Baltimore, MD: Paul H. Brookes.

Table 1

Description of Teachers, Contexts, and Use of CBI

Teacher ¹	Gender	Yrs teaching	SWSD on caseload	# of days of CBI per week	Duration of CBI (min)	School county ¹	Location ²	SES ³		Race/Ethnicity (%) ³				
								Median Income (\$) ⁴	Poverty Rate (%)	W	H	B	A	O
Angela	F	> 20	3 - 5	1	30 - 60	Oak	Urban Cluster	31,623	11.4	93.2	4.9	.4	.5	1.0
Bethany	F	11 - 20	> 5	2	61 - 90	Oak	Urban Cluster	35,035	4.2	62.7	6.3	27.8	1.1	2.1
Chloe	F	1 - 4	> 5	2	61 - 90	Oak	Urbanized Area	30,638	8.9	40.3	25.5	18.9	12.0	3.3
Danielle	F	5 - 10	> 5	3	30 - 60	Maple	Urbanized Area	49,929	4.9	65.9	6.7	5.3	18.9	3.2
Erin	F	5 - 10	> 5	2	61 - 90	Alder	Urbanized Area	47,338	4.5	83.7	8.8	1.6	3.8	2.1
Faith	F	1 - 4	> 5	1	30 - 60	Maple	Urbanized Area	49,929	4.9	65.9	6.7	5.3	18.9	3.2
Gabriela	F	5 - 10	> 5	1	30 - 60	Cedar	Urban Cluster	81,492	5.8	86.8	7.3	1.7	2.8	1.4
Heather	F	1 - 4	> 5	1	30 - 60	Cedar	Urban Cluster	42,010	5.1	64.1	13.8	7.1	11.0	4.0
Isabella	F	1 - 4	> 5	2	61 - 90	Hickory	Urban Cluster	53,196	4.8	84.9	10.5	1.2	2.1	1.3
Jasmine	F	5 - 10	> 5	1	30 - 60	Maple	Urbanized Area	49,929	4.9	65.9	6.7	5.3	18.9	3.2
Kate	F	> 20	> 5	3	61 - 90	Hickory	Urban Cluster	65,923	2.7	81.0	2.3	.9	13.2	2.6
Monica	F	5 - 10	3 - 5	1	61 - 90	Hickory	Urban Cluster	45,898	2.6	89.5	4.1	2.0	2.0	2.4
Neil	M	5 - 10	> 5	2	61 - 90	Cedar	Urban Cluster	46,202	2.6	82.6	7.7	.8	7.3	1.6

Note. CBI = community-based instruction; SWSD = students with severe disabilities, SES = socioeconomic status, W = White, H = Hispanic, B = Black, A = Asian, O = other (e.g., Native American, two or more races)

¹A pseudonym has been used to preserve anonymity.

²Location identifier is based on U. S. Census Bureau designation where Urban Cluster is a population of at least 2,500 and less than 50,000, and Urbanized Area is >50,000.

³SES and Race/Ethnicity statistics are from the city/town in which the public high-school is located.

⁴Median income is estimated income per capita in U. S. dollars as of 2016.

Table 2

Interview Protocol

1. Please tell me about a positive experience using CBI with your students.
2. Thinking about the previous school year, what skills did you teach in the community?
3. I'd like for you to think about one of your students from last year who has a severe disability.
 - a. What made you initially decide to use CBI with this student?
 - b. What skills did you work on with the student during CBI?
 - c. How did you decide to focus on these particular skills?
4. I'd like for you to think about another student from last year who has a severe disability.
 - a. What made you initially decide to use CBI with this student?
 - b. What skills did you work on with the student during CBI?
 - c. How did you decide to focus on these particular skills?
5. What words of advice would you give to other teachers regarding how they should make decisions about what to teach in the community?
6. What motivates you to use CBI with your students?
7. This next question is going to ask you to think about the extent to which certain factors affect your decisions to use community-based instruction.
 - a. What role do the state standards have on your decision to use CBI?
 - b. What role do other teachers and colleagues have on your decision to use CBI?
 - c. What role does the school or district administration have on your decision to use CBI?
 - d. What role has your prior training in your teacher preparation program or your professional development activities post college had on your decision to use CBI?
 - e. What role do families have on your decision to use CBI?
 - f. Finally, are there any other factors that influence your decision to use CBI with your students?
8. Is there anything else you would like to tell me about your use of CBI?