Functional Curriculum = Evidence-Based Education?: Considering Secondary Students With Mild Intellectual Disabilities

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Abstract: Education is currently in an evidence-based era, demanding as well as assuming all educational practices are evidence-based. In the case of a functional curriculum for secondary students with mild intellectual disabilities, despite existing professional wisdom, the state of empirical evidence is unclear. This study represents a systematic review of the literature regarding the evidence-base of a functional curriculum to educate secondary students with mild intellectual disabilities. Seven research-based articles were found in the literature exploring use of a functional curriculum for this population of students, suggesting a lack of research on functional curriculum for secondary students with mild intellectual disabilities in recent years, especially when considering postschool outcomes and adult experiences. The authors concluded a functional curriculum for secondary students with mild intellectual disabilities is not an evidence-based practice at the current time.

Education is currently in an evidence-based practice era (i.e., No Child Left Behind [NCLB], 2002), meaning the instructional practices used to educate students should be evidence-based. According to the United States Department of Education (US DOE, 2002), evidence-based education is “the integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver instruction.” Empirical evidence is then defined as practices that are scientifically-based or have empirical data as to their effectiveness. Professional wisdom is considered information ascertained through one’s own experiences or through a consensus (US DOE).

Given the focus on evidence-based education, it seems intuitive that instructional practices and curriculum for all students should adhere to the definition of evidence-based education, meaning empirical evidence and professional wisdom exist to support their use. While the dual focus appears to be the standard for core academic areas, is it also true for curriculum and instructional practices for non-core content areas as defined by NCLB? This paper will explore the research base on functional curriculum for secondary students with mild intellectual disabilities and discuss if the use of a functional curriculum adheres to the definition of an evidence-based educational practice. The review focuses specifically on students with mild intellectual disabilities as recent consideration of the education of students with mild intellectual disabilities has been largely ignored (see Bouck, 2004b, 2007, 2009a; Polloway, 2006; Wehmeyer, 2006 for exceptions). Implications for use of a functional curriculum and evidence-based education, when considering the population of students who may benefit from a functional curriculum, will also be discussed.

Functional Curriculum

Slightly different conceptualizations of a functional curriculum exist in the field, including “a curriculum that focuses upon independent living skills and vocational skills, emphasizing communication and social skills” (Evans & Fredericks, 1991, p. 409), and a curriculum focused on skills needed for daily life, such as domestic, vocational, community, and recreation (Browder et al., 2004; Brown et al.,...
1979). However, a key feature of functional curriculum involves a curriculum focused on skills needed to function in adult life (Bouck, 2009b; Browder et al., Brown et al.). Thus, a functional curriculum is multifaceted and typically considered to be composed of the following components (Patton, Cronin, & Jairrels, 1997):

- Functional academics (i.e., modified academic curriculum) (Browder & Snell, 1993).
- Vocational education (i.e., educational programs to prepare students for employment—paid or unpaid) (Vocational Education Act, 1963).
- Community access (i.e., skills to navigate the community and use community resources and services) (Snell & Browder, 1987).
- Daily living (i.e., domestic of life skills experienced as adults) (Bigge, Stump, Spagna, & Silberman, 1999; Edgar & Polloway, 1994).
- Financial (i.e., personal finances and applying money concepts to everyday life) (Wehmeyer, Sands, Knowlton, & Kozleski, 2002).
- Independent living (i.e., living independently and the skills needed to do so, such as home management and food preparation) (Kregel, Wehman, Seyfarth, & Marshall, 1986; Vogelsberg, Williams, & Bellamy, 1982).
- Transportation (i.e., moving about independently, including walking, taking a bus, driving) (Westling & Fox, 2000).
- Social/relationships (i.e., skills to make and maintain friendship and other relationships as well as social competence) (Gumpel, 1994).
- Self-determination (i.e., skills to be autonomous, make decisions, advocate, and control one’s self) (Patton et al., 1997; Wehmeyer, 1992).

Educating students with disabilities with a functional curriculum dates back several decades. In 1938 the National Education Association produced a document regarding use of a functional curriculum for students with disabilities (Kolstoe, 1970). However, the peak use of a functional curriculum occurred during the late 1970s-early 1980s, and researchers suggested a general decline in its use from then through the 1990s (Kolstoe). Further, supporting the decline of a focus on functional skills, and thus use of a functional curriculum, Nietupski, Hamre-Nietupski, Curtin, and Shrikanth (1997) found 32% fewer articles published in six major journals in the field of special education (i.e., Education and Training in Mental Retardation and Developmental Disabilities, Mental Retardation, Teaching Exceptional Children, The Journal of Applied Behavior Analysis, Journal of the Association for Persons with Severe Handicaps, The Journal of Special Education). In addition, Billingsley (1997) calculated that between the mid-1980s and mid-1990s, 53% fewer articles relative to functional skills were cited by ERIC. Billingsley and Albertson (1999) suggested the decreased emphasis on functional skills and functional curriculum was related to the increased emphasis on inclusion.

Although use of a functional curriculum for students with disabilities had advocates over the years (Bouck, 2004b; Cronin, 1988; Edgar, 1987; Kaiser & Abell, 1994; Patton, Cronin, Polloway, Hutchinson, & Robinson, 1989), it also had critics. For example, a functional curriculum has been viewed as an alternate curriculum and a deviant from the “normal” or acceptable curriculum (Nolet & McLaughlin, 2000). Others suggested a functional curriculum provided students with disabilities a limited set of skills and contributed to tracking in schools (Edgar & Polloway, 1994; Weaver, Landers, & Adams, 1991). Finally, criticism arose over functional curriculum because it was typically taught in a pull-out setting rather than a general education setting (Field, Leroi, & Rivera, 1994).

Despite the critics, previous research—although not disaggregated for students with mild intellectual disabilities—suggested positive outcomes for students receiving a functional curriculum. For example, Miller (1994) reported positive results after implementing a functional approach when teaching adolescents with high incidence disabilities. After using On Your Own curriculum—a functional curriculum for adolescents with “mild disabilities” geared towards skills in selecting a career, finding living arrangements, and budgeting, Miller found skipping class reduced by 80% and referrals to the principal for reasons of non-compliance behavior reduced by 72%. On a larger scale, Benz and colleagues (Benz, Lindstrom, & Latta, 1999; Benz, Lindstrom, & Yovanoff, 2000) studied the Youth Transition
Program (YTP), which provided services for special education students in their last two years of high school that were aligned with components of a functional curriculum (i.e., self-determination; instruction in functional academics, vocational, independent living, and personal-social content areas; paid work experiences). Students in the YTP improved their rates of graduation, with those completing multiple years in the program having even higher rates of graduation. Additionally, 68% of students who participated in the program were engaged in some sort of postsecondary education after graduation or productive work (Benz et al., 2000). For those in productive work, students from YTP reported higher average hourly wages, higher average weekly wages, and higher maintenance of employment. The YTP students were also less likely to have lost their job because they quit, got fired, or were laid off (Benz et al., 1999). These results support the potential of functional skills to positively impact postschool outcomes.

**Postschool Outcomes**

A functional curriculum is important to consider as its premise is to prepare students with disabilities for adult life or, in other words, life after high school (Bouck, 2009b; Browder et al., 2004; Brown et al., 1979). Preparing students for life after high school is critical seeing as students with disabilities have experienced poor postschool outcomes (e.g., low rates of employment, independent living). From the National Longitudinal Transition Study (NLTS), Blackorby and Wagner (1996) found a 57% employment rate for all students with disabilities three to five years after high school, and specifically a 35% rate for individuals with intellectual disabilities. More recently, from the NLTS2 study, Cameto (2005) found a 46% employment rate one-to-two years out of school for students with disabilities who graduated. Finally, in a survey completed by 1,888 one-year post-high school students who formerly received special education services, Curtis, Rabren, and Reilly (2009) found 67% of participants reported working, but of those only 60% were working full time.

Beyond employment, Blackorby and Wagner (1996) reported 14.6% of all students with disabilities took courses from post-secondary institutions; although Kaye (1997) reported only 2.5% of students with intellectual disabilities attend college. In analyzing data from the NLTS2 study, Newman (2005) reported 30.6% of students with disabilities took some type of class at a post-secondary institution after high school, with participation at a two-year institution or community college the most frequently reported (19.7% and 9.7%, respectively). In their study of predominantly students with high incidence disabilities, Curtis et al. (2009) found 13% of students enrolled in a two-year college, 5% in a four-year college, and 9% in a technical school. Finally, Blackorby and Wagner (1996) reported about 13% of former special education students were living independently two years out of school, as compared to one-third of general education students. In the NLTS2, similar rates of independent living were found, suggesting about 15% of students with disabilities were living independently after two years out of school (Wagner, 2003).

Given the current postschool data regarding students with disabilities and the underlying premise of a functional curriculum is to prepare students to function in adult life, it seems reasonable to expect that receiving such a curriculum should result in better postschool outcomes for students with mild intellectual disabilities. However, currently little research examines if this is true. Clearly, professional wisdom exists regarding use of a functional curriculum; not only does one find articles advocating for its use (Bouck, 2004b; Cronin, 1988; Edgar, 1987; Kaiser & Abell, 1994; Patton et al., 1989) but Bouck (2004a) found 19% of secondary teachers reported using a functional curriculum to teach students with mild intellectual disabilities. Hence, a functional curriculum remains a curricular option for these students, despite the presence or lack thereof of research regarding its evidence-base.

This project represents a systematic review of the literature regarding a functional curriculum and secondary students with mild intellectual disabilities. It seeks to explore the potential for empirical evidence to support the professional wisdom regarding educating secondary students with mild intellectual disabilities with a functional curriculum (US DOE, 2002). Given the current era of evidence-
based education, students with mild intellectual disabilities deserve no less consideration to their education.

Method

We used multiple means to locate articles published between 1994 and present (i.e., last fifteen years) which addressed research on functional curriculum for secondary students with mild intellectual disabilities. First, we searched electronic databases: Proquest, Education Full Text, and PsychInfo. The following key terms were used in the search: functional curriculum, functional curricula, life skills curricula, life skills curriculum, life management curriculum, and life management curricula. No other restrictions were initially placed on the search of the electronic databases. Second, we performed an electronic search, using the same search terms, of journals in the field: Education and Training in Developmental Disabilities, Exceptional Children, Journal of Special Education, and Remedial and Special Education. The authors also searched the four journals using the word ‘functional.’

Next, we eliminated any of the obtained articles from the database or journal searches whose abstracts indicated the focus of the article was not research on secondary students with mild or moderate intellectual disabilities and functional curriculum or any components of a functional curriculum (e.g., daily living, self-determination, functional academics). We included a focus on moderate intellectual disabilities at this point to check that articles were not being eliminated that may have had one student with a mild intellectual disability (i.e., IQ over 55). Next, we read through all articles obtained and determined the inclusion of articles. Articles were included if they met the following criteria: (a) articles were published between 1994 and 2009 in English language referred journals, (b) the articles involved research of any methodology, (c) the articles focused on functional curriculum, including any components of a functional curriculum (i.e., functional academics, vocational education, community access, daily living, financial, independent living, transportation, social/relationship, and self-determination) (Patton et al., 1997), (d) data collection occurred in the United States, and (e) participants in the study included secondary (i.e., middle or high school) students with mild intellectual disabilities, as defined in the article, or IQ provided was between 55 and 75. Note, we considered articles in which only one student had mild intellectual disability if data were disaggregated for this individual (i.e., single subject); however, only the results pertinent to students with mild intellectual disabilities are reported.

Each author independently completed each step of the search process. A 92% inter-rater agreement was found for the first level of article identification (i.e., from the electronic searches of databases and journals). All discrepancies were discussed and a decision was reached about the inclusion or exclusion of any articles. A 95% inter-rater agreement was found for the second level of article selection (i.e., selecting targeted articles for possible inclusion). Again, discrepancies were discussed and a decision made about the inclusion or exclusion of any discrepant articles. From this, 22 articles were read in-depth by both authors to determine the appropriateness of their inclusion per the criteria previously described (100% inter-rater agreement).

Of the 22 articles, three were included in the final analysis. Eight of the 22 were omitted because the population did not match the criteria (i.e., focused on elementary or only focused on moderate intellectual disabilities). We omitted two others because they did not isolate the disability categories stated in the criteria (i.e., disability not disaggregated), and one because it failed to explicitly reference functional curriculum or components of functional curriculum. Finally, eight articles were omitted because they were systematic reviews of the literature or meta-analyses.

The last step to locating relevant articles included performing an ancestral search of the three articles for inclusion and the eight systematic reviews or meta-analyses. From the ancestral search, we obtained 23 additional articles; 91.5% inter-rater reliability. Again, we discussed any discrepancies and articles for further review were agreed upon by both authors. From the 23 additional articles we included four in the final analysis (100% inter-rater reliability). Twelve were omitted because they did not fit the population, four because
the disability category could not be disaggregated, one because it did not present research, and two because the research was conducted outside of the United States.

Results

Seven articles focusing on components of a functional curriculum and secondary students with mild intellectual disabilities were found for inclusion in this analysis (Agran, Blanchard, Wehmeyer, & Hughes, 2002; Arnold-Reid, Schloss, & Alper, 1997; Collins, Branson, & Hall, 1995; Collins & Stinson, 1995; Denny & Test, 1995; Kennedy, Itkonen, & Lindquist, 1994; Schloss et al., 1995) (see Table 1). The overall results suggest little research on issues of a functional curriculum for secondary students with mild intellectual disabilities in the last 15 years. The existing research focused on students acquiring specific components of a functional curriculum (e.g., daily living skills), rather than evaluating the outcomes of receiving a functional curriculum.

Five articles focused, at least in part, on students acquiring functional academic skills (i.e., reading, mathematics) (Collins et al., 1995; Collins & Stinson, 1995; Denny & Test, 1995; Kennedy et al., 1994; Schloss et al., 1995). The study by Collins et al. also focusing on daily living and/or independent living skills, included one student with an IQ in the mild intellectual disability range (i.e., 57); the study included four students total. Throughout the paper only the results related to the student with mild intellectual disabilities will be discussed when participants included students with a variety of disabilities (mild, moderate, severe intellectual disabilities, autism, etc.). The multiple probe design across word sets replicated across participants involved peer tutors using a constant time delay to teach words related to cooking. The results indicated the student increased in his/her ability to read and define the target words as well as to generalize both the reading and defining to other novel words. Similarly, in another study, Collins and Stinson focused on issues of safety (i.e., daily living skills and/or independent living) by exploring four students reading product warning labels. Through a multiple probe design across word pairs replicated across participants, Collins and Stinson trained their participants using a progressive time-delay on product warning label words both isolated and within context. The one student with an IQ in the mild intellectual disability range experienced minimal errors during instruction and mastered the target words. S/he was able to provide a definition for some words, but 100% generalization of the definitions in an actual context (i.e., grocery store) was not achieved.

Also focusing on functional academics related to reading and daily living/independent living skills, Kennedy et al. (1994) used time delay procedures to teach stimulus classes of the four food groups (i.e., meat, dairy products, grains/cereals, and vegetables/fruit). Using a multiple baseline across participants design, two students with mild intellectual disabilities participated in the intervention pertaining to food group sight words (total of three participants). The results indicated one student quickly acquired the sight word labeling, while the other was more moderate in the acquisition. Schloss et al. (1995) also focused on sight words (i.e., functional academics), but within a leisure context. Using a parallel treatment design with multiple baseline replications, Schloss and colleagues provided direct instruction to two students with mild intellectual disabilities and behavior disorders (a total of three participants). Both students acquired the sight words while engaging in leisure activities within community settings.

The final article involving aspects of functional academics focused on financial skills (i.e., money) (Denny & Test, 1995). Using a multiple baseline design across participants, Denny and Test taught one student with mild intellectual disabilities and two with moderate intellectual disabilities the one-more-than concept for purchasing items (i.e., putting one dollar aside for the cents pile). Results indicated the student with mild intellectual disabilities mastered the one-more-than technique in only 10 training sessions and maintained the skill for up to 10 weeks post-intervention. The student performed the skills in the school setting where training occurred as well as generalized it to the community.

Of the final two articles, one focused on daily living and independent living skills (i.e., meal preparation) and the other on social skills and self-determination. Arnold-Reid et
<table>
<thead>
<tr>
<th>Study</th>
<th>Participants</th>
<th>FC focus</th>
<th>Methods</th>
<th>Intervention</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agran, Blanchard, Wehmeyer, &amp; Hughes (2002)</td>
<td>n = 4 (1 MID, 1 ASD, 2 MoID)</td>
<td>Self-determination; social skills</td>
<td>Multiple baseline design across participants</td>
<td>Problems-solving skills through a sequence of steps for improvement</td>
<td>Student increased in targeted behavior (i.e., following directions) for improvement</td>
</tr>
<tr>
<td>Arnold-Reid, Schloss, &amp; Alper (1997)</td>
<td>n = 3 (MID and mental illness)</td>
<td>Daily living skills; independent living skills (meal planning)</td>
<td>Multiple-probe design across participants</td>
<td>Trained about making nutritional choices, planning meals with charts, and making selections at store</td>
<td>Students increased in meeting their nutritional needs and maintained these skills for at least 2 months.</td>
</tr>
<tr>
<td>Collins, Branson, &amp; Hall (1995)</td>
<td>n = 4 (1 MID, 2 MoID, 1 SID)</td>
<td>Functional academics; daily living skills; independent living skills (reading and defining words related to cooking)</td>
<td>Multiple probe design across word sets replicated across participants</td>
<td>Peer tutors using constant time delay to present target and exemplar words</td>
<td>Student increased in the ability to read and define target words and increased in the ability to generalize both reading and defining words</td>
</tr>
<tr>
<td>Collins &amp; Stinson (1995)</td>
<td>n = 4 (1 MID, 2 MoID, 1 SID)</td>
<td>Functional academics; daily living skills; independent living skills (reading product warning labels)</td>
<td>Multiple probe design across word pairs replicated across participants</td>
<td>Trained using a progressive time-delay on words and words used within context (i.e., product warning label)</td>
<td>Student made minimal errors during instruction. Student mastered target words and defined some words correctly. Student did generalize definitions to actual labels 100% in grocery store.</td>
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<tr>
<td>Study</td>
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<td>Results</td>
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<tr>
<td>Denny &amp; Test (1995)</td>
<td>n = 3 (1 MID, 2 MoID)</td>
<td>Financial; functional academics; (money)</td>
<td>Multiple baseline design across participants</td>
<td>One-more-than concept for purchasing items (i.e., putting one dollar aside for the cents pile)</td>
<td>Student mastered the technique in only 10 training sessions and maintained the skill up to 10 weeks post intervention. Student performed the skill in school and community settings</td>
</tr>
<tr>
<td>Age: 17, 17, 17</td>
<td>Location: School and community</td>
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<tr>
<td>IQ: 72, 43, 39+/4</td>
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<tr>
<td>Kennedy, Itkonen, &amp; Lindquist (1994)</td>
<td>n = 3 (2 MID, 1 MoID)</td>
<td>Functional academics; daily living skills; independent living skills (food group sight words)</td>
<td>Multiple baseline design across participants</td>
<td>Time delay procedure to teach stimulus classes of the four-food groups</td>
<td>One student quickly acquired the sight word labeling, while another was more moderate</td>
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<tr>
<td>Age: 19, 17, 21</td>
<td>Location: School</td>
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<tr>
<td>IQ: 59, 58, 47</td>
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<tr>
<td>Schloss, Alper, Young, Arnold-Reid, Aylward, &amp; Dudenhoeffer (1995)</td>
<td>n = 3 (2 MID and BD, 1 Elem MID)</td>
<td>Functional academics; leisure (sight words in leisure activities)</td>
<td>Parallel treatment design with multiple baseline replications</td>
<td>Direct instruction with sight words used in leisure activities</td>
<td>Students acquired sight words in leisure activities in community settings</td>
</tr>
<tr>
<td>Age: 14, 14, 12</td>
<td>Location: Group home</td>
<td></td>
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<tr>
<td>IQ: 64, 79, 56</td>
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</table>
al. (1997) trained three students with mild intellectual disabilities and mental illness to make nutritional choices through meal planning and making selections at grocery stores. Using a multiple probe design across participants, all three students increased in meeting their nutritional needs and maintained this skill for at least two months following the intervention. Agran et al. (2002) focused on teaching students how to problem-solve using a multiple baseline design across participants. One of the four students in the study was identified as a student with mild intellectual disabilities. Following the intervention, the student increased in his/her target behavior (i.e., following directions).

Discussion

Results of the systematic review of the literature on use of a functional curriculum to educate secondary students with mild intellectual disabilities over the last 15 years indicated little attention has been paid to the issue. While the lack of attention should perhaps not be surprising, given the analyses in the 1990s suggesting less research on use of a functional curriculum in general (Billingsley & Albertson, 1999; Nietupski et al., 1997) as well as the recent assertions by Polloway (2004, 2005, 2006) that the field of mild intellectual disabilities is dying, the limited interest should be disconcerting. Further, a closer look at the results (i.e., the seven articles regarding a functional curriculum and secondary students with mild intellectual disabilities) shows the limited research focused on students acquiring components of a functional curriculum (e.g., daily living skills, functional academics) rather than exploring outcomes related to students using a functional curriculum.

Despite the limited quantity, it is worth noting the seven existing studies reported positive results. Across all seven studies the students with mild intellectual disabilities improved in the targeted skills. For examples, in both studies by Collins and colleagues (Collins et al., 1995; Collins & Stinson, 1995) the students with mild intellectual disabilities improve in their reading and defining of targeted words (i.e., cooking or product warning labels). Similarly, in the Kennedy et al. (1994) and Schloss et al. (1995) studies, the students with mild intellectual disabilities learned the intended sight words. Thus, the students in these four studies acquired the functional academics skills and other related functional curriculum components (i.e., daily living skills, independent living skills). While none of these four studies focused on student outcomes from acquiring these skills, it is hypothesized that knowing cooking and food terms, product warning labels, and vocabulary related to leisure activities in the community would result in positive postschool outcomes and adult experiences.

The same is true for the other three research studies, which all addressed skills and abilities utilized in adult life (i.e., purchasing, making nutritional decisions, and problem solving). The student with mild intellectual disabilities in the Denny and Test (1995) study learned the targeted technique for purchasing items and generalized this skill to community settings. Similarly, the students with mild intellectual disabilities in the Arnold-Reid et al. (1997) study improved in their skill regarding nutrition through meal planning and maintained this skill after the intervention was completed. Finally, the one student with mild intellectual disabilities in the Agran et al. (2002) study improved in following directions through learning to problem-solve to meet this goal. Despite the premise that learning these skills will translate into successful life outcomes, research connecting students’ acquisition of these functional curriculum components and resulting postschool outcomes and adult experiences needs to be conducted.

Lack of Research

Regardless of the positive outcomes of the studies found, research on a functional curriculum for secondary students with mild disabilities is lacking. However, it is likely research on using a functional curriculum to educate secondary students in general, or students with more moderate intellectual disabilities, is lacking across the last 15 years (i.e., roughly since the issue of decreasing research was highlighted by Billingsley, 1997 and Nietupski et al., 1997). Given our attempt not to miss any studies for this systematic review, articles
discussing students with moderate intellectual disabilities were initially kept. Using the same search procedures, only eight additional articles were located during the same time period and using the same search criteria as the study except for substituting moderate intellectual disabilities and their IQ ranges (see Table 2). Thus, suggesting a lack of focus on functional curriculum for both populations (mild and moderate intellectual disabilities) in recent years.

Given the lack of research on a functional curriculum for secondary students with mild intellectual disabilities, the question becomes why? One plausible hypothesis is the claim by Billingsley and Alberston (1999) regarding the connection between less emphasis on a functional curriculum and greater emphasis on inclusion. Bouck (2009b) asserted the misalignment between using a functional curriculum and federal policies privileging inclusive education. The content and purpose of a functional curriculum differs from the content and purpose of the general education curriculum taught in inclusive setting (Bouck). Related, the decreased attention to a functional curriculum can be connected to the current policies and their intended and unintended consequences (Bouck). The focus of No Child Left Behind (2002) and the Individuals with Disabilities Education Act (2004) on students participating in general large-scale assessments places greater value on the general education setting and curriculum and likely devaluing a functional curriculum (Bouck). Finally, the lack of research on a functional curriculum, particularly for secondary students with mild intellectual disabilities, may be related to the lack of appropriate models existing for this population (Bouck).

### TABLE 2

**Additional Articles Found in the Review of Research on Functional Curriculum for Secondary Students with Moderate Intellectual Disabilities**

<table>
<thead>
<tr>
<th>Study</th>
<th>Focus</th>
</tr>
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<tbody>
<tr>
<td>Branham, Collins, Schuster, &amp; Kleinert (1999)</td>
<td>Teaching students to perform community skills (i.e., mail a letter, cash a check and cross a street), using a constant time delay procedure</td>
</tr>
<tr>
<td>Browder &amp; Shear (1996)</td>
<td>Teaching students sight works using weather reports from local newspapers through an interspersal drill sequence procedure</td>
</tr>
<tr>
<td>Collins, Hall, &amp; Branson (1997)</td>
<td>Teaching students leisure skills (i.e., to play cards, a sports tape, and a computer game, and select a tv show) through use of the least prompts procedure performed by peers without disabilities</td>
</tr>
<tr>
<td>Gardill &amp; Browder (1995)</td>
<td>Teaching purchasing skills of determining money amounts (i.e. $0.75, $1.00, $5.00) for acquiring a snack for vending machine or convenience store or lunch. Students were instructed with pictures, physical prompts, corrective feedback and praise.</td>
</tr>
<tr>
<td>Graves, Collins, Schuster, &amp; Kleinert (2005)</td>
<td>Teaching food preparation skills on a stove, in a microwave, and on a countertop through video prompting using a constant time delay</td>
</tr>
<tr>
<td>Schloss, Kobza, &amp; Alper (1997)</td>
<td>Teaching functional mathematics skills (i.e., providing an extra dollar to account for change for purchasing items) through use of peer tutors</td>
</tr>
<tr>
<td>Taylor, Collins, Schuster, &amp; Kleinert (2002)</td>
<td>Teaching washing and drying laundry skills using the procedure of least prompts</td>
</tr>
<tr>
<td>Van Laarhoven, &amp; Van Laarhoven-Myers (2006)</td>
<td>Teaching daily living skills (i.e., folding laundry, microwaving pizza, and washing a table) using the least prompts procedure in three different video prompt systems (i.e., video prompt, video prompt plus pictures during task, and video prompt plus video during task)</td>
</tr>
</tbody>
</table>

Note: These eight are in addition to five from Table 1 that included students with moderate intellectual disabilities.
In a recent review, Bouck (2009a) indicated current models of a functional curriculum fail to appropriately address the needs of secondary students with mild intellectual disabilities, most aptly because they are not originally intended for this population as well as other problems (i.e., did not include all the components of a functional curriculum, written like college textbooks, worksheets).

**Functional Curriculum = Evidence-Based Education?**

Returning to the question driving the systematic review of the literature, is a functional curriculum an evidence-based educational practice for teaching secondary students with mild intellectual disabilities? Clearly the current research base fails to provide enough evidence. Regardless of the existing professional wisdom for using a functional curriculum to educate this population of students and the lack of compelling data regarding outcomes from use of non-functional curriculum approaches to prepare secondary students with mild intellectual disabilities (i.e., historical negative postschool outcomes), the current empirical evidence to support a functional curriculum is insufficient to conclude a functional curriculum equals an evidence-based education (Bouck, 2004b; Blackorby & Wagner, 1996; Cronin, 1988; Edgar, 1987; Kaiser & Abell, 1994; Kaye, 1997; Patton et al., 1989).

In the field, there is a need for renewed interest and research regarding a functional curriculum for secondary students with mild intellectual disabilities as well as these two issues separately (i.e., general research on a functional curriculum and other educational aspects of students with mild intellectual disabilities). The lack of attention, especially with regards to curricular and educational decisions that have the potential to impact and improve adult life outcomes for students with disabilities, needs to be rectified. Researchers in the field of special education—a field initially built upon the category of mild intellectual disabilities—need to take renewed interest in this population and follow Polloway’s (2006) call to arms. Furthermore, a vested interest towards use of a functional curriculum is warranted. This curricular approach remains a viable option for educating students with disabilities and research needs to be conducted to provide support. Failure to provide support for a functional curriculum as an evidence-based approach may eventually result in its lack of acceptance and thus a lack of availability to use for these students.

**Limitations and Future Directions**

This systematic review is limited with respect to the criteria imposed. For example, the entire history of using a functional curriculum to teach secondary students with mild intellectual disabilities was not researched; one criterion for inclusion was articles published between 1994 and 2009. Hence, a substantial number of articles involving a functional curricular approach to teaching this population of students might exist prior to 1994. Similarly, we chose to focus on just secondary students with mild intellectual disabilities; more studies exist that involve research on a functional curriculum for students with moderate intellectual disabilities and severe intellectual disabilities. Although it should be noted the authors elected to include studies if the IQ reported for the participants was within the range for mild intellectual disability, per the definition (i.e., 55–70), regardless if the publishing authors coined the student(s) as having a mild intellectual disability.

Results of this study support the need for additional research on using a functional curriculum to educate secondary students with mild intellectual disabilities. In particular, research needs to connect the type of curriculum secondary students with mild intellectual disabilities receive and postschool outcomes (e.g., employment, independent living). Additional research is needed regarding the components of a functional curriculum in terms of in-school and postschool success and experiences of this population. For example, none of the seven studies focused on transportation, vocational education, or social/interpersonal skills instruction in school, which are all part of functioning in the adult world. Finally, a systematic review needs to be conducted of research prior to 1994. Evidence for use of a functional curriculum for secondary students with mild intellectual disabilities may exist,
just in research from one, two, or three decades ago. As we a field, we may have forgotten what we already know (i.e., what past research has shown regarding educating students with mild intellectual disabilities with a functional curriculum) and hence a systematic review of research on a functional curriculum for this population that predates 1994 is warranted.

References
(References marked with an “*” were included in the review)


generalized reading of product warning labels to adolescents with mental disabilities through the use of key words. *Exceptionality, 5, 163–181.


*Schloss, P. J., Alper, S., Young, H., Arnold-Reid, G.,


