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Perspectives of General and Special Educators on Fostering Self-Determination in Elementary and Middle Schools

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Recognizing that many youth with disabilities lack critical self-determination skills and that such deficits may be a contributing factor to disappointing postschool outcomes, educators and researchers have called for increased attention to promoting student self-determination in the early grades. The authors queried 891 elementary and middle school teachers regarding the extent to which they valued and provided instruction in seven self-determination skill domains. Educators generally perceived self-determination to be an important curricular priority, and the majority reported teaching self-determination skills at least sometimes in their classrooms. Special educators' ratings of overall importance were significantly higher than those of general educators. Middle school teachers reported providing self-determination instruction more frequently than elementary school teachers. These findings lend additional support to calls for promoting self-determination within the general curriculum in the earlier grades.

Keywords: *self-determination; elementary curriculum; access to general education curriculum*

Self-determination has assumed an increasingly prominent role in discussions of educational policies, services, and supports for children and youth with disabilities (Agran & Hughes, 2005; Field & Hoffman, 2002). Although defined variously across theoretical orientations (e.g., Deci & Ryan, 2002; Wehmeyer, Abery, Mithaug, & Stancliffe, 2003), *self-determination* typically refers to possessing the skills, knowledge, and attitudes that enable a person to live a quality life and assume primary control and responsibility for myriad life activities (Field, Martin, Miller, Ward, & Wehmeyer, 1998; Wehmeyer, 2005). Over the past decade, a plethora of empirical studies, theoretical papers, systematic reviews, and meta-analyses have explored the self-determination construct and the component skills that may contribute to self-determined behavior among students receiving special education services (e.g., Algozzine, Browder, Karvonen, Test, & Wood, 2001; Carter, Lane, Pierson, & Glaeser, 2006; Chambers et al., 2007; Lee, Simpson, & Shogren, 2007; Mooney, Ryan, Uhing, Reid, & Epstein, 2005; Test, Fowler, Brewer, & Wood, 2005; Test et al., 2004; Wood, Fowler, Uphold, & Test, 2005). These efforts are coalescing into a rapidly developing corpus of research on enhancing student self-determination. Although this area of research is still relatively young, there is emerging consensus around several issues.

First, enhanced self-determination is associated with improved in- and postschool outcomes. Although definitive causal evidence is still pending, research

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suggests that the acquisition of self-determination skills may play a vital role in improving outcomes for youth and young adults with disabilities, including enhanced academic performance (Martin et al., 2003), greater class participation (Gilberts, Agran, Hughes, & Wehmeyer, 2001), improved employment status (Wehmeyer & Palmer, 2003), increased postsecondary involvement (Field, Sarver, & Shaw, 2003), expanded independence (Sowers & Powers, 1995), and enhanced quality of life (Lachapelle et al., 2005). Recent postschool follow-up studies underscore the critical need for further developing the capacity of students with disabilities to engage in self-determined behavior (Wagner, Newman, Cameto, Garza, & Levine, 2005; Zigmond, 2006).

Second, self-determination should comprise an important aspect of educational programming for students with disabilities. Surveys of special educators indicate that self-determination is valued highly as both an instructional emphasis and an educational outcome (Agran, Snow, & Swaner, 1999; Carter, Lane, Pierson, & Stang, in press; Mason, Field, & Sawilowsky, 2004; Thoma, Nathanson, Baker, & Tamura, 2002). For example, Wehmeyer, Agran, and Hughes (2000) reported that a national sample of high school special educators considered each of seven skills related to self-determination (e.g., decision making, goal setting, self-management) to constitute moderately to very important instructional domains. Similarly, parents report taking steps to foster self-determination among their children with disabilities outside of the school day and broadly support teaching self-determination skills within the school curriculum (Carter et al., 2006; Grigal, Neubert, Moon, & Graham, 2003; Zhang, Wehmeyer, & Chen, 2005). Unfortunately, students' individualized educational program goals still fall short of reflecting fully this emerging curricular emphasis (Powers et al., 2005; Wehmeyer et al., 2000).

Third, when provided with systematic instruction and frequent practice opportunities, students with disabilities can acquire the knowledge, skills, and attitudes that contribute to enhanced self-determination. Recent meta-analytic work attests to the efficacy of an array of self-determination intervention strategies, as evidenced by large effect sizes (ESs) across diverse outcomes (e.g., Algozzine et al., 2001; Reid, Trout, & Schartz, 2005; Test et al., 2004; Wood et al., 2005). Although most research has been directed toward students with cognitive or learning disabilities, evidence for the effectiveness of some self-determination strategies for youth with emotional disturbance (Mooney et al., 2005) and autism (Lee et al., 2007) is accumulating gradually.

Fourth, self-determination instruction should be infused within the general curriculum. Recent legislative initiatives such as the Individuals With Disabilities Education Improvement Act (2004) and the No Child Left Behind Act (2002) challenge educators to consider the general education classroom as the primary context for delivering instruction to students with disabilities (Browder & Spooner, 2006; Browder, Wakeman, & Flowers, 2006). This instructional setting is presumed to offer several substantive benefits, such as more rigorous and relevant curriculum, higher expectations for performance, access to age-appropriate peer models, and increased accountability for student outcomes. Thus, it is critical that the general education curriculum include instruction designed to promote self-determination skills.

Fifth, efforts to promote self-determination must begin much earlier than high school (Chambers et al., 2007; Eisenman & Chamberlin, 2001). Although self-determination is most frequently discussed within the context of youth transition planning, educators and researchers alike affirm the importance of laying an early foundation on which self-determination can incrementally be fostered. This call recognizes that self-determination is a developmental task, in which the behaviors and dispositions that contribute to self-determination develop throughout childhood and emerge over one's lifetime (Sands & Doll, 1996; Wehmeyer & Field, 2007). To adequately equip students with disabilities with these capacities, instruction should begin early in the elementary grades and be characterized as focused, sequenced, and sustained. Waiting until adolescence simply means waiting too long. Because substantial numbers of students with disabilities fail to complete school or become disengaged at an early age, Eisenman (2007) suggested that an early emphasis on teaching self-determination skills may constitute an important dropout prevention strategy by providing an avenue to promote school completion.

Although these areas of consensus are promising, additional research is needed to address several gaps in this literature. Despite calls to broaden self-determination instruction across the grade span, the extent to which educators working with younger students value and promote component elements of self-determination in their classrooms remains uncertain. Studies suggest that special educators working

with younger students may attach less importance to promoting self-determination. Mason et al. (2004) reported that relative to middle and high school teachers, elementary teachers placed less value on student involvement in individualized educational program meetings, reported feeling less prepared to teach self-determination skills, and stated that they were less likely to provide formal or informal self-determination instruction. Similarly, Zhang et al. (2005) suggested that educators' efforts to promote self-determination appeared to be somewhat more prominent at the secondary level. However, definitive data on the perspectives of early grade educators remains absent. Research addressing the extent to which educators working in the early grades (i.e., first through eighth grade) prioritize self-determination as an instructional goal and devote instructional time to this domain would elucidate the opportunities available for students to acquire and refine skills that promote self-determined behavior. Such data could lend additional support for advocates emphasizing an earlier focus on this curricular area.

The perspectives of general educators on this issue also remain largely unexplored, particularly at the elementary and middle school levels. Persistent calls to embed self-determination instruction within the general curriculum, coupled with placement patterns indicating that younger students with disabilities spend a greater percentage of their school day in general education classes than high school students (U.S. Department of Education, 2006), illustrate the necessity of understanding general educators' view on promoting self-determination. Although Carter et al. (in press) found that general and special educators at the high school level shared fairly similar perspectives on the importance of teaching self-determination, previous research has not disaggregated the perceptions of general and special educators at the elementary and middle school levels (Mason et al., 2004; Thoma et al., 2002). Because general educators typically assume primary responsibility for designing and delivering instruction within inclusive classrooms, understanding their perspectives is essential when advocating for intervention efforts in the area of self-determination.

In this study, we sought to examine the extent to which opportunities to acquire self-determination skills exist in the earlier grades across general and special education classrooms. Specifically, we sought to answer the following questions: To what extent do elementary and middle school educators value teaching each of seven self-determination skills relative to other instructional priorities in their classrooms? How much instructional time do these educators devote to teaching various self-determination skills? Do educators share similar perspectives on promoting self-determination across grade levels (i.e., elementary vs. middle school) and program areas (i.e., general vs. special education)?

Method

Participants

Participants were 563 elementary and 328 middle school teachers who provided their views on promoting students' self-determination skills in their classrooms. These educators were predominantly female (83.8%), held graduate degrees (56.3%), and averaged 12.51 years ($SD = 9.43$ years) of teaching experience. The majority of participants (87.9%) taught within general education classrooms. Additional participant characteristics by school level are provided in Table 1. A χ^2 analysis contrasting program type by gender was not significant, $\chi^2(1, N = 871) = 1.93$, $p = .164$; nor were differences found in teacher experience by school level, $\chi^2(1, N = 891) = 0.07$, $p = .795$. Consistent with the workforce demographics in the state, a χ^2 analysis contrasting school type by gender yielded a significant difference, $\chi^2(1, N = 885) = 62.34$, $p < .001$, with a smaller proportion of women teaching at the middle school level. Because of small cell sizes, χ^2 analyses contrasting program type by credential status and school type by credential status were not conducted.

Schools

Participants in this study were employed at 29 elementary schools and 12 middle schools within six districts located in a western state. The districts served between 3,314 and 30,901 students, representing economically and ethnically diverse suburban and urban communities. Student enrollment in the elementary schools ranged from 314 to 976, with an average student population of 583 ($SD = 167$). Student ethnicity across the elementary schools was 42.1% Caucasian ($SD = 23.5\%$, range = 2.9% to 84.0%), 37.3% Hispanic ($SD = 27.1\%$, range = 7.9% to 92.9%), 13.6% Asian American ($SD = 15.6$, range = 1.3%

Table 1
Participant Characteristics

	Elementary (n = 563)		Middle (n = 328)		Combined (N = 891)	
	%	n	%	n	%	n
Gender						
Female	91.27	512	70.99	230	83.84	885
Male	8.73	49	29.01	94	16.16	143
Ethnicity						
Asian American	6.39	35	6.67	21	6.49	56
African American	1.82	10	3.17	10	2.32	20
Caucasian	81.20	445	74.92	236	78.91	681
Hispanic	7.30	40	11.11	35	8.69	75
Native American	0.18	1	0.63	2	0.35	3
Other ethnicities	3.10	17	3.49	11	3.24	28
Type of program						
General education	89.53	496	85.00	272	87.87	768
Special education	10.47	58	15.00	48	12.13	106
Credential status						
Certified	98.92	556	99.69	321	99.20	877
Emergency credential	1.08	6	0.31	1	0.80	7
Highest degree						
Bachelor's	45.37	255	40.74	132	43.68	387
Master's	54.63	307	59.26	192	56.32	495
Teaching experience						
Novice (<5 years)	28.60	161	27.74	91	28.28	252
Experienced (≥5 years)	71.40	402	72.26	237	71.72	639

Note: Percentages are based on the number of participants who completed the given item.

to 68.8%), 3.3% African American (SD = 3.6%, range = 0.9% to 16.9%), and 3.7% other ethnicities (SD = 3.0%, range = 0% to 11.8%). The percentage of elementary school students receiving free or reduced-price lunch across schools averaged 30.5% (SD = 27.8%, range = 1.8% to 100%). The percentage of middle school students receiving free or reduced-price lunch was slightly lower, averaging 21.6% (SD = 15.8%, range = 2.9% to 56.4%). Student enrollment in the middle schools ranged from 772 to 1,682, with an average student population of 1,022 (SD = 246). Student ethnicity across the middle schools was similarly diverse, with 43.7% Caucasian (SD = 23.7%, range = 14.1% to 81.2%), 34.2% Hispanic (SD = 24.3%, range = 6.3% to 73.9%), 16.1% Asian American (SD = 21.2%, range = 1.1% to 68.8%), 2.8% African American (SD = 3.6, range = 1.0% to 13.9%), and 4.8% other ethnicities (SD = 4.2%, range = 2.0% to 17.6%). Although participating schools were similar in size and poverty status to elementary schools nationally (Snyder, Dillow, & Hoffman, 2007), a greater proportion of students attending these schools were Hispanic, and a smaller proportion of students were Caucasian or African American.

Instrument

Teachers were asked to rate the extent to which they valued and provided instruction in each of seven self-determination instructional domains: (a) choice making, (b) decision making, (c) goal setting and attainment, (d) problem solving, (e) self-advocacy and leadership skills, (f) self-awareness and self-knowledge, and (g) self-management and self-regulation skills. These domains were drawn from a national survey of high school special educators' promotion of self-determination conducted by Wehmeyer et al. (2000). Each item included a brief example of instructional activities that represent the domain. For example, the phrase "Teaching students to identify interests, express preferences, and make choices; structuring instructional activities to provide students the opportunity to select preference" was listed below the "choice making" item. Item wordings, examples, and scale anchors were identical to those included in Wehmeyer et al.'s survey. First, educators rated the importance of teaching each skill domain relative to other instructional priorities in their classroom. Each item was rated on a 6-point, Likert-type scale ranging

from *low* (1) to *high* (6). Next, educators rated how often they taught each skill in their classroom, rating each item on a 6-point, Likert-type scale ranging from *never* (1) to *often* (6). This second response dimension, which was not included in Wehmeyer et al.'s original survey, asked teachers to estimate the amount of instructional time they devoted to each instructional domain. No specific reference to students' disability status was provided on the questionnaire; rather, respondents were simply asked to rate items in relation to their own classrooms. The instrument had strong internal consistency, with coefficient α reliabilities computed on the current sample of .83 and .81 for the importance and instruction dimensions of the scale, respectively. Both estimates exceeded the recommended value of .70 (Nunnally & Bernstein, 1994). Finally, educators reported basic demographic information (i.e., gender, ethnicity, years of teaching experience, and credentials held) and provided information about their current instructional responsibilities (i.e., program type and current classes).

Procedures

The data analyzed in this study were collected as part of a larger investigation of educators' perceptions of instructional priorities for students in their classrooms (Carter et al., in press; Lane, Pierson, Stang, & Carter, 2008). Eight ethnically and economically diverse school districts were randomly selected from among all districts located in the southern region of the state. Two districts declined participation, citing competing commitments and time constraints that would make study participation unfeasible during the proposed time frame. Of the six participating districts, three were composed exclusively of elementary and middle schools (i.e., *K-6* or *K-8*), and three were unified school districts (i.e., *K-12*). Principals in each of the 13 middle schools and 58 elementary schools constituting these six districts were invited to participate. Of the 13 middle school and 39 elementary school principals who responded, 92.3% ($n = 12$) and 74.4% ($n = 29$), respectively, agreed to participate. Those who declined cited time constraints that precluded their involvement during the semester in which the study took place.

Two of the researchers attended schoolwide faculty meetings at participating schools throughout the spring semester to provide educators with a verbal and written overview of the research study, obtain consent to participate, and distribute questionnaires. Educators filled out the anonymous questionnaires individually (completion time ranged from 15 to 20 minutes) and placed them in a secure, slotted box upon completion. Six principals requested that their staff members individually complete the questionnaires outside of the designated faculty meetings, returning them to sealed boxes located in the schools' offices at their convenience. Participation rates for elementary and middle schools were comparable, averaging 77.0% ($SD = 18.7\%$, range = 29.0% to 100%) and 76.5% ($SD = 22.2\%$, range = 11.1% to 93.3%), respectively. Data were entered by four graduate students pursuing degrees in special education. The fidelity of data entry was assessed for 25% of the questionnaires; any data entry errors were noted and corrected.

Questionnaires were excluded if respondents omitted more than 2 of the 14 self-determination questionnaire items. Furthermore, questionnaires completed by persons with positions other than general or special educators (e.g., reading specialists, related service providers) were not analyzed. Thus, of the original 606 elementary and 365 middle school teachers who completed questionnaires, we analyzed data for 563 elementary and 328 middle school teachers.

Experimental Design and Statistical Analysis

Descriptive statistics were used to summarize ratings of importance and actual instruction across all respondents. The experimental design was a 2×2 factorial design. Two 2×2 analyses of variance (ANOVAs) were computed, with grade level (elementary vs. middle school educators) and program type (general vs. special educators) as between-groups factors. For the purposes of this analysis, two composite scores were created: one for the importance of teaching self-determination skills (importance) and a second for the actual instructional time devoted to teaching self-determination skills (actual instructional time). Composite score values ranged from 7 to 42, with higher scores indicating either greater importance or more actual instructional time. These composite scores were created because item-level analyses would necessitate in excess of 28 comparisons. Interaction terms (Grade Level $\times$ Program Type) were examined first. Statistically significant interactions were followed by tests of simple effects. If the interaction was not statistically significant, main effects were examined. Because each factor contained only two levels, multiple comparisons were not required. Values were not imputed for the relatively

Table 2
Overall Ratings of Skill Importance and Reported Instruction

	Importance (% ranking)				Instruction (% ranking)			
Domain	1 or 2 (low)	3 or 4 (moderate)	5 or 6 (high)	*M* (*SD*)	1 or 2 (never)	3 or 4 (sometimes)	5 or 6 (often)	*M* (*SD*)
Problem solving								
Elementary	0.9	16.4	82.7	5.23 (0.87)	2.7	32.0	65.4	4.80 (1.05)
Middle	2.8	19.7	77.5	5.07 (1.04)	4.9	34.8	60.3	4.67 (1.17)
Combined	1.6	17.6	80.8	5.17 (0.94)	3.5	33.0	66.5	4.76 (1.09)
Self-management								
Elementary	5.3	29.5	65.1	4.77 (1.23)	10.1	41.5	48.4	4.33 (1.33)
Middle	3.1	27.1	69.8	4.91 (1.08)	8.9	34.5	56.6	4.51 (1.29)
Combined	4.5	28.6	66.9	4.82 (1.18)	9.7	38.9	51.4	4.40 (1.32)
Decision making								
Elementary	5.7	37.3	57.0	4.55 (1.19)	9.6	52.5	37.9	4.09 (1.20)
Middle	5.8	35.9	58.3	4.64 (1.20)	8.9	43.4	47.7	4.31 (1.28)
Combined	5.7	36.8	57.5	4.59 (1.19)	9.4	49.2	41.5	4.17 (1.24)
Goal setting								
Elementary	8.0	42.1	49.9	4.40 (1.24)	18.2	53.0	28.8	3.76 (1.30)
Middle	4.3	28.2	67.5	4.79 (1.15)	10.2	45.2	44.6	4.27 (1.29)
Combined	6.6	37.0	56.4	4.54 (1.22)	15.2	50.2	34.6	3.95 (1.32)
Self-awareness								
Elementary	5.5	45.5	40.0	4.37 (1.16)	13.7	54.5	31.8	3.85 (1.25)
Middle	5.3	39.3	55.5	4.53 (1.14)	13.9	47.1	39.1	4.06 (1.26)
Combined	5.4	43.2	51.4	4.43 (1.16)	13.7	51.8	35.5	3.93 (1.26)
Choice making								
Elementary	6.2	42.6	51.2	4.42 (1.15)	11.1	49.0	39.9	4.12 (1.24)
Middle	8.5	44.5	47.0	4.30 (1.28)	13.2	46.2	40.7	4.09 (1.35)
Combined	7.1	43.4	49.6	4.38 (1.20)	11.8	48.2	40.2	4.11 (1.28)
Self-advocacy								
Elementary	6.4	44.7	48.9	4.37 (1.15)	13.1	55.2	31.6	3.89 (1.19)
Middle	8.6	47.9	43.6	4.28 (1.25)	15.4	51.9	32.7	3.88 (1.33)
Combined	7.2	45.8	47.0	4.34 (1.19)	14.0	54.0	32.0	3.89 (1.24)

small percentage (i.e., 3%) of surveys on which respondents failed to rate one of the questionnaire items.

Results

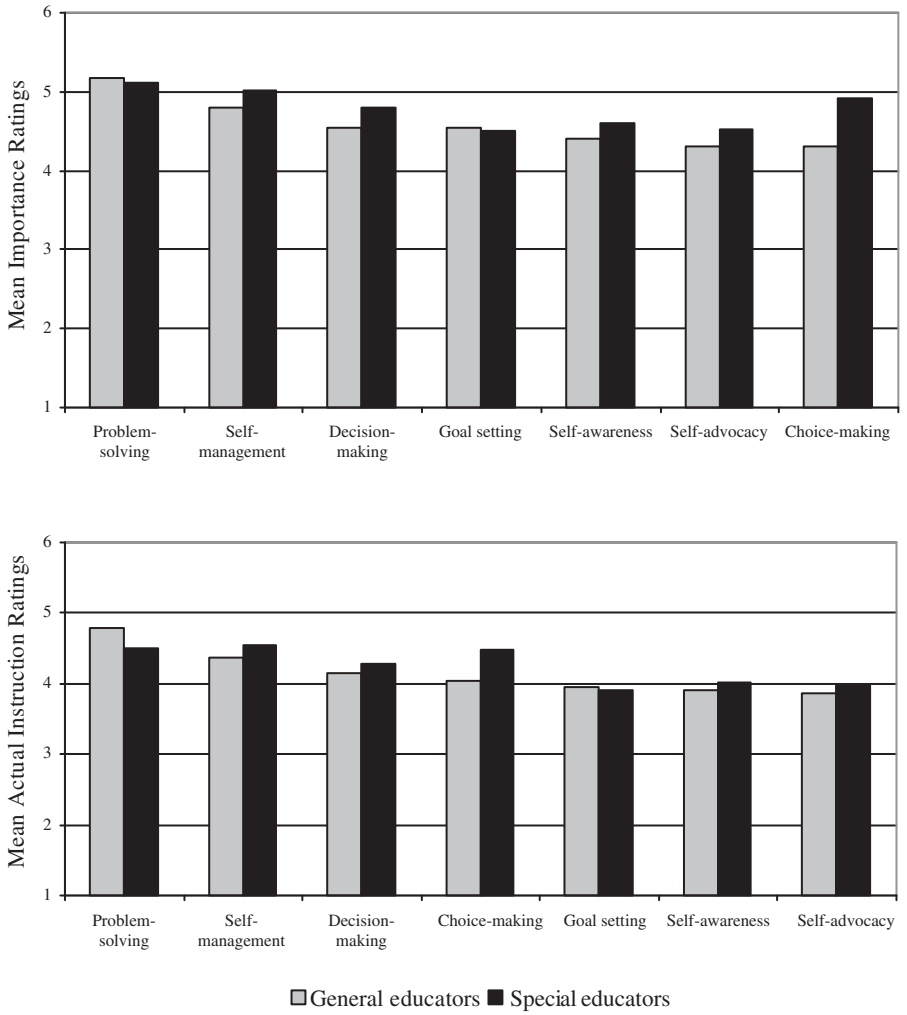
Overall Ratings of Importance and Actual Instruction

Collectively, elementary and middle school teachers generally attributed moderate to high levels of importance to each of the seven self-determination domains (see Table 2), with average ratings exceeding the midpoint of the scale for all items. More than half of educators rated problem solving, self-management and self-regulation, decision making, goal setting and attainment, and self-awareness and self-knowledge as very important (i.e., ratings of 5 or 6) relative to other instructional priorities in their classrooms. The majority of educators reported that they at least sometimes taught each of the seven self-determination skills in their classrooms. Problem solving and self-management and self-regulation were the only domains that more than half of the educators reported often teaching (i.e., ratings of 5 or 6) in their classrooms. Self-advocacy and leadership and self-awareness and self-knowledge were the least frequently taught self-determination skills. Figure 1 displays average ratings of item importance and actual instruction separately for general and special educators.

Importance of Self-Determination Skills

The findings of the first two-way ANOVA with two between-groups factors (grade level taught and program type) revealed that the Grade Level × Program Type interaction was not significant, $F(1, 862) = 2.91$, $p = .088$ (see Table 3). The main effect of grade level taught was not significant, $F(1, 862) = 0.82$, $p = .366$, ES = 0.07, indicating that elementary

Figure 1
General Versus Special Educators' Ratings of Importance and Actual Instruction



and middle school educators held similar views regarding the relative importance of teaching self-determination skills, with respective mean scores of 32.07 (SD = 5.78) and 32.50 (SD = 5.75). The main effect of program type was significant, $F(1, 862) = 5.83$, $p = .016$, ES = 0.25, indicating that general educators (M = 32.05, SD = 5.71) viewed self-determination skills as less important than did special educators (M = 33.50, SD = 6.04).

Instruction in Self-Determination Skills

The findings of the second two-way ANOVA with two between-groups factors (grade level taught and program type) revealed that the Grade Level Taught × Program Type interaction was not significant, $F(1, 862) = 1.15$, $p = .284$ (see Table 3). The main effect of grade level taught was significant, $F(1, 862) = 4.72$, $p = .030$, ES = 0.16, indicating that middle school educators (M = 29.83, SD = 6.17) reported providing self-determination instruction with greater frequency than elementary school educators (M = 28.88, SD = 5.97). The main effect of program type was not significant, $F(1, 62) = 0.08$, $p = .770$, ES = 0.09. General and special educators reported providing similar levels of instruction in self-determination, with respective mean scores of 29.16 (SD = 6.01) and 29.71 (SD = 6.42).

Discussion

Recent glimpses into the postschool experiences of young adults with disabilities continue to challenge schools to better equip students for life after high

Table 3
Respondent Ratings: Mean (*SD*) Score Comparisons

	Elementary School		Middle School	
	General Educators (n = 492)	Special Educators (n = 57)	General Educators (n = 269)	Special Educators (n = 48)
Dimension				
Importance	32.02 (5.67)	32.51 (6.63)	32.16 (5.78)	34.67 (5.06)
Instruction	28.89 (5.89)	28.75 (6.69)	29.64 (6.21)	30.87 (5.94)

Note: Means and standard deviations were computed for the number of respondents who completed each item.

school. Recognizing that many youth with disabilities lack critical self-determination skills (Cameto, Levine, Wagner, & Marder, 2003; Carter et al., 2006) and that such deficits may be a contributing factor to disappointing postschool outcomes, educators and researchers alike have called for an earlier start to efforts to promote self-determination (Eisenman, 2007; Sands & Doll, 1996). Such calls, however, are predicated on the assumption that educators at the elementary and middle school levels recognize the value of promoting these skills and regularly address these skills in their classrooms. This study is the first to provide empirical evidence in support of this presumption.

This study extends the field's understanding of self-determination in several ways. First, little is known about the importance educators place on promoting self-determination among children prior to their entry into high school. Empirical research in this area has been directed largely toward transition-age youth (Carter et al., in press; Wehmeyer et al., 2000), with limited exploration of self-determination as a curricular priority earlier in the grade span. We found that elementary and middle school educators placed fairly high value on teaching an array of skills that are presumed to promote self-determination. Indeed, fewer than 8% of educators rated any of the seven self-determination domains as having limited importance. This broad affirmation of the importance of these skills is promising and serves as an endorsement of the relevance of self-determination as a priority focus within the elementary and middle school curricula. For educators advocating an earlier emphasis on cultivating self-determination skills among students with disabilities, these findings may strengthen their calls for directing more focused efforts toward promoting self-determination at an early age.

Among elementary and middle school educators, we found that the most important instructional domain was judged to be problem solving, followed by self-management and self-regulation, decision making, and goal setting. Such findings are not surprising, as each of these skills appears to have broad applicability across diverse curricular areas (e.g., language arts, math, science; Wehmeyer & Agran, 2006; Wehmeyer & Field, 2007), as well as relevance for use within an array of school, home, and community settings. Self-advocacy and self-awareness, although still judged to be somewhat important, may have greater relevance within a narrower range of school contexts, such as during educational planning meetings or within the context of peer interactions. It should be noted, however, that the range in average scores across all seven instructional domains was somewhat narrow (approximately .85), suggesting that these domains were viewed fairly similarly by educators.

Second, high ratings of self-determination domain importance do not necessarily translate seamlessly into increased opportunities to acquire and practice self-determination skills within the classroom. Although more than half of educators reported frequently providing instruction to students in the areas of problem solving and self-management and self-regulation, the remaining domains were generally described as being less often addressed in their classroom. Such findings are still promising, however, because very few (less than 3%) elementary and middle school educators reported that they never provided instruction in each of the areas, and the large majority reported at least sometimes providing instruction. The variability in the extent to which educators reported providing instruction suggests that students with and without disabilities may have greater opportunities to acquire and refine some self-determination skills relative to others (e.g., self-awareness, self-advocacy). This variability should serve as a catalyst for researchers to explore further the following questions: What factors account for why teachers direct more instructional time to certain

self-determination domains relative to others? Conversely, why do some self-determination domains receive more instructional attention from some teachers, but not others?

Discrepancies between evaluations of importance and actual instruction are not surprising in light of previous research conducted at the secondary level (e.g., Agran et al., 1999; Grigal et al., 2003; Wehmeyer et al., 2000). Certainly, the extent to which educators value a particular instructional domain influences the extent to which they allocate instructional time to that area within their own classrooms. Although typically a necessary prerequisite, perceived importance clearly is not the only factor that influences actual instructional practices. Several other factors may influence whether instructional time mirrors the high evaluations of importance attributed by teachers. For example, teachers have cited limited professional development and training opportunities, competing instructional demands, insufficient resources (e.g., curricular or assessment materials), student resistance, and limited administrator support as salient barriers to providing instruction related to self-determination (e.g., Karvonen, Test, Wood, Browder, & Algozzine, 2004; Thoma et al., 2002; Wehmeyer et al., 2000). Furthermore, the relative infancy of this area of research means that there still exists somewhat limited evidence of instructional strategy effectiveness at the elementary and middle school level.

Third, changing expectations for where students with disabilities should receive educational services and supports highlight the importance of understanding both general and special educators' views on promoting self-determination. Although recent mandates for access to the general curriculum (e.g., Individuals With Disabilities Education Improvement Act, 2004; No Child Left Behind Act, 2002) emphasize the general education classroom as the instructional context of choice, most students with disabilities spend at least a portion of their day in both general and special education classrooms (U.S. Department of Education, 2006). Although most teachers' ratings of self-determination importance were fairly high, we found that special educators' composite ratings were significantly higher relative to general educators' ratings. This finding likely reflects differences in the student populations that constitute each group of educators' classrooms. Research suggests that many students with disabilities show substantial deficits in the area of self-determination (e.g., Cameto et al., 2003; Carter et al., 2006) and that these students' capacities to engage in self-determined behavior may be substantially lower than those of their peers without disabilities (Mithaug, Campeau, & Wolman, 2003). Thus, special educators' ratings of greater instructional priority may reflect their recognition of the presence of greater self-determination skill deficits among the students with whom they spend the most time.

In contrast, similar opportunities to receive self-determination skill instruction were found to be available across both general and special education classrooms. The potential availability for consistent opportunities to receive instruction in the area of self-determination across the school day is particularly promising, because students with disabilities often require both frequent and sustained opportunities to acquire, refine, and maintain new skills. Initially, our findings may seem to diverge somewhat from Zhang (2001), who found that high school students with mild intellectual disabilities showed higher levels of self-determination in self-contained classrooms. Yet unexplored in our study was the extent to which students with disabilities were able to fully access and benefit from these reported learning opportunities. As with other aspects of the general curriculum, simple exposure to common instruction is necessary, but not sufficient, to promote meaningful engagement during learning opportunities.

Fourth, we found that elementary and middle school teachers both affirmed the overall importance of self-determination as a curricular priority. These similarities were somewhat unexpected, because we anticipated that educators at the elementary and middle school levels might diverge substantially in their ratings of importance (cf. Mason et al., 2004; Zhang et al., 2005). Such consistency across the grade span affirms self-determination as a developmental task and suggests that efforts to promote self-determination at earlier ages might be well received.

Educators at the middle school level, however, reported devoting significantly more instructional time to this curricular area. This finding corresponds with the greater emphasis on self-determination evident in the secondary literature. Although instruction in component self-determination skills clearly was evident across both elementary and middle school levels, the nature of actual instruction provided to children quite likely differs across the grade span. We did not attempt, however, to capture differences in the specific strategies used to teach various self-determination skills. Children of different ages vary in their capacities

to acquire specific skills. Future research should explore how instructional goals, materials, activities, and procedures can be adapted effectively for younger children to reflect their capacities, needs, interests, and instructional contexts. Several authors have suggested potential age-referenced instructional activities (Erwin & Brown, 2003; Sands & Wehmeyer, 1996; Wehmeyer & Field, 2007) to illustrate how self-determination skills might be fostered across the grade span.

Limitations

Future research should address several limitations of this study. First, we asked educators to evaluate their promotion of self-determination skills while broadly referencing their classrooms. Within heterogeneous classrooms, however, general educators may hold divergent expectations for students experiencing different disabilities or support needs (e.g., Carter & Hughes, 2006). We did not query educators about whether and how their curricular priorities might be influenced by the diverse needs and characteristics of students in their classroom, nor did we explore whether and how they allocated instructional time for different students. Wehmeyer et al. (2000) found that high school special educators serving students with severe disabilities held significantly different self-determination priorities than those educators who worked with students with mild disabilities. Future research should investigate the extent to which elementary and middle school educators perceive specific self-determination skills to have greater relevance for students with different disabilities (e.g., self-management for students with emotional disturbance, choice making for students with significant intellectual disabilities). In addition, the specific instructional or curricular strategies that educators use to teach these self-determination skills to students in their classrooms should be documented.

Second, the extent to which educators value and promote self-determination in their classrooms may be influenced by additional factors beyond school level, program area, and teacher demographic variables (e.g., gender, teaching experience). For example, research indicates that educators report varied degrees of exposure to preservice training and professional development opportunities in the area of self-determination (Thoma et al., 2002; Wehmeyer et al., 2000) and that these experiences are likely to influence the value that educators place on fostering student self-determination. Similarly, schoolwide efforts to promote social competence, behavioral success, and academic learning (e.g., positive behavior supports) often incorporate self-determination strategies such as decision making, problem solving, and self-management into their programs (Sugai, Horner, & Gresham, 2002; Turnbull et al., 2002). Future research should examine the role that educators' prior training plays in determining instructional priorities in this area, as well as the extent to which programmatic efforts to promote self-determined behavior are being implemented in schools.

Third, although the perspectives of both general and special educators were captured in this study, the views of paraprofessionals were not sought. Paraprofessionals serve as direct support providers for increasing numbers of students with disabilities, particularly students with intellectual disabilities, autism, and other developmental disabilities (Giangreco & Broer, 2005). The prominent role paraprofessionals play in educating students with disabilities, coupled with concerns about the extent to which such individually assigned support might inadvertently hinder self-determination (Giangreco, Halvorsen, Doyle, & Broer, 2004), highlights the need for additional research aimed at understanding the efforts of paraprofessionals to foster self-determined behavior.

Fourth, we found that educators across the grade span reported providing self-determination instruction sometimes too often in their classrooms. Yet we did not seek to document the specific instructional approaches they used, nor can we characterize the effectiveness of the strategies these educators used. Indeed, relatively few self-determination intervention studies have been conducted at the elementary level (e.g., Hoff & DuPaul, 1998; Palmer & Wehmyer, 2003). For example, less than one fifth of the interventions reviewed by Algozzine et al. (2001) focused on elementary and middle school students with disabilities. Affirmation of the importance of self-determination is essential, but educators will require evidence-based instructional strategies to promote and support improvements in student self-determination skills. Future research should systematically replicate and extend downward those strategies found to be effective with transition-age youth with disabilities. Because the need for additional training is a recurring theme of research involving special educators (Mason et al., 2004; Thoma et al., 2004; Wehmeyer et al., 2000), similar training efforts may need to be directed toward general educators to equip them to effectively

differentiate self-determination instruction for all students within their classrooms.

Finally, consistent with investigations of teachers' expectations of student behavior (Kerr & Zigmond, 1986; Lane, Pierson, & Givner, 2004), data were collected using teacher-report techniques and were not substantiated with direct observations. Although teachers indicated that self-determination skills were both important and addressed with some regularity, this information was not verified with direct observations. It is possible that teacher ratings may have been somewhat inflated because of social desirability factors (Lane et al., 2004). In this study, we did not ask teachers to provide ratings that were anchored against other instructional priorities. Therefore, to more closely analyze how teachers prioritize their instructional decisions, future researchers should use forced-choice response formats in which teachers are asked to rank-order specific instructional priorities that they have for their classroom.

Despite these limitations, this study provides an important initial glimpse into elementary and middle school teachers' perceptions of self-determination skills. Is self-determination valued as an instructional priority in the early grades? Do general educators affirm the importance of equipping all students to be self-determined? Is the general curriculum a promising place to address promoting self-determination? Our findings suggest affirmative answers to these questions. Future research is necessary to assess the generalizability of these findings and to move this line of inquiry forward, with the goal of even better preparing students—all students—for an ever changing world with increasingly diverse demands (Lane, 2007).

References

Agran, M., & Hughes, C. (2005). Introduction to the special issue on self-determination: How far have we come? *Research and Practice for Persons With Severe Disabilities*, *30*, 105–107.

Agran, M., Snow, K., & Swaner, J. (1999). Teacher perceptions of self-determination: Benefits, characteristics, and strategies. *Education and Training in Mental Retardation and Developmental Disabilities*, *34*, 293–301.

Algozzine, B., Browder, D., Karvonen, M., Test, D. W., & Wood, W. M. (2001). Effects of interventions to promote self-determination for individuals with disabilities. *Review of Educational Research*, *71*, 219–277.

Browder, D. M., & Spooner, F. (Eds.). (2006). *Teaching language arts, math, and science to students with significant cognitive disabilities*. Baltimore: Paul H. Brookes.

Browder, D. M., Wakeman, S. Y., & Flowers, C. (2006). Assessment of progress in the general curriculum for students with disabilities. *Theory Into Practice*, *45*, 249–259.

Cameto, R., Levine, P., Wagner, M., & Marder, C. (2003). The emerging independence of youth with disabilities. In M. Wagner, C. Marder, J. Blackorby, R. Cameto, L. Newman, P. Levine, et al. (Eds.), *The achievements of youth with disabilities during secondary school* (pp. 6.1–6.22). Menlo Park, CA: SRI International.

Carter, E. W., & Hughes, C. (2006). Including high school students with severe disabilities in general education classes: Perspectives of general and special educators, paraprofessionals, and administrators. *Research and Practice for Persons With Severe Disabilities*, *31*, 174–185.

Carter, E. W., Lane, K. L., Pierson, M., & Glaeser, B. (2006). Self-determination skills of transition-age youth with emotional disturbances and learning disabilities. *Exceptional Children*, *72*, 333–346.

Carter, E. W., Lane, K. L., Pierson, M. R., & Stang, K. K. (in press). Promoting self-determination for transition-age youth: Views of high school general and special educators. *Exceptional Children*.

Chambers, C. R., Wehmeyer, M. L., Saito, Y., Lida, K. M., Lee, Y., & Singh, V. (2007). Self-determination: What do we know? Where do we go? *Exceptionality*, *15*, 3–15.

Deci, E. L., & Ryan, R. M. (Eds.) (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

Eisenman, L. T. (2007). Self-determination interventions: Building a foundation for school completion. *Remedial and Special Education*, *28*, 2–8.

Eisenman, L. T., & Chamberlin, M. (2001). Implementing self-determination activities: Lessons from schools. *Remedial and Special Education*, *22*, 138–147.

Erwin, E. J., & Brown, F. (2003). From theory to practice: A contextual framework for understanding self-determination in early childhood environments. *Infants & Young Children*, *16*, 77–87.

Field, S., & Hoffman, A. (2002). Preparing youth to exercise self-determination: Quality indicators of school environments that promote the acquisition of knowledge, skills, and beliefs related to self-determination. *Journal of Disability Policy Studies*, *13*, 113–118.

Field, S. S., Martin, J. E., Miller, R. J., Ward, M., & Wehmeyer, M. L. (1998). Self-determination for persons with disabilities: A position statement of the Division on Career Development and Transition. *Career Development for Exceptional Individuals*, *21*, 113–128.

Field, S., Sarver, M. D., & Shaw, S. F. (2003). Self-determination: A key to success in postsecondary education for students with learning disabilities. *Remedial and Special Education*, *24*, 339–349.

Giangreco, M. F., & Broer, S. M. (2005). Questionable utilization of paraprofessionals in inclusive schools: Are we addressing symptoms or causes? *Focus on Autism and Other Developmental Disabilities*, *20*, 10–26.

Giangreco, M. F., Halvorsen, A., Doyle, M. B., & Broer, S. M. (2004). Alternatives to overreliance on paraprofessionals in inclusive schools. *Journal of Special Education Leadership*, *17*(2), 82–90.

Gilberts, G. H., Agran, M., Hughes, C., & Wehmeyer, M. (2001). The effects of peer delivered self-monitoring strategies on the participation of students with severe disabilities in general

education classrooms. *Journal of the Association for Persons With Severe Handicaps*, *26*, 25–36.

Grigal, M., Neubert, D. A., Moon, M. S., & Graham, S. (2003). Self-determination for students with disabilities: Views of parents and teachers. *Exceptional Children*, *70*, 97–112.

Hoff, K. E., & DuPaul, G. J. (1998). Reducing disruptive behavior in general education classrooms: The use of self-management strategies. *School Psychology Review*, *27*, 290–303.

Individuals With Disabilities Education Improvement Act, Pub. L. No. 108-446, 118 Stat. 2647 (2004).

Karvonen, M., Test, D. W., Wood, W. M., Browder, D., & Algozzine, B. (2004). Putting self-determination into practice. *Exceptional Children*, *71*, 23–41.

Kerr, M. M., & Zigmond, N. (1986). What do high school teachers want? A study of expectations and standards. *Education and Treatment of Children*, *9*, 239–249.

Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research*, *49*, 740–744.

Lane, K. L. (2007). Identifying and supporting students at risk for emotional and behavioral disorders within multi-level models: Data driven approaches to conducting secondary interventions with an academic emphasis. *Education and Treatment of Children*, *30*, 1–30.

Lane, K. L., Pierson, M. R., & Givner, C. C. (2004). Secondary teachers' views on social competence: Skills essential for success. *The Journal of Special Education*, *38*, 174–186.

Lane, K. L., Pierson, M. R., Stang, K. K., & Carter, E. W. (2008). *Teacher expectations of students' classroom behavior: Do expectations vary as a function of school risk?* Unpublished manuscript.

Lee, S., Simpson, R. L., & Shogren, K. A. (2007). Effects and implications of self-management for students with autism: A meta-analysis. *Focus on Autism and Other Developmental Disabilities*, *22*, 2–13.

Martin, J. E., Mithaug, D. E., Cox, P., Peterson, L. Y., Van Dycke, J. L., & Cash, M. E. (2003). Increasing self-determination: Teaching students to plan, work, evaluate, and adjust. *Exceptional Children*, *69*, 431–447.

Mason, C., Field, S., & Sawilowsky, S. (2004). Implementation of self-determination activities and student participation in IEPs. *Exceptional Children*, *70*, 441–451.

Mithaug, D. E., Campeau, P. L., & Wolman, J. M. (2003). Assessing self-determination prospects among students with and without disabilities. In D. E. Mithaug, D. Mithaug, M. Agran, J. Martin, & M. L. Wehmeyer, (Eds.), *Self-determined learning theory: Construction, verification, and evaluation* (pp. 61–76). Mahwah, NJ: Lawrence Erlbaum.

Mooney, P., Ryan, J. B., Uhing, B. M., Reid, R., & Epstein, M. H. (2005). A review of self-management interventions targeting academic outcomes for students with emotional and behavioral disorders. *Journal of Behavioral Education*, *14*, 203–331.

No Child Left Behind Act, Pub. L. No. 107-110, 115 Stat. 1425 (2002).

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). St. Louis, MO: McGraw-Hill.

Palmer, S. B., & Wehmeyer, M. L. (2003). Promoting self-determination in early elementary school: Teaching self-regulated problem-solving and goal-setting skills. *Remedial and Special Education*, *24*, 115–126.

Powers, K. M., Gil-Kashiwabara, E., Geenen, S. J., Powers, L. E., Balandran, J., & Palmer, C. (2005). Mandates and effective transition planning practices reflected in IEPs. *Career Development for Exceptional Individuals*, *28*, 47–59.

Reid, R., Trout, A. L., & Schartz, M. (2005). Self-regulation interventions for children with attention deficit/hyperactivity disorder. *Exceptional Children*, *71*, 361–377.

Sands, D. J., & Doll, B. (1996). Fostering self-determination is a developmental task. *The Journal of Special Education*, *30*, 58–76.

Sands, D. J., & Wehmeyer, M. L. (Eds.). (1996). *Self-determination across the life span*. Baltimore, MD: Paul H. Brookes.

Sowers, J., & Powers, L. (1995). Enhancing the participation and independence of students with severe physical and multiple disabilities in performing community activities. *Mental Retardation*, *33*, 209–220.

Snyder, T. D., Dillow, S. A., & Hoffman, C. M. (2007). *Digest of education statistics: 2006*. Washington, DC: National Center for Education Statistics.

Sugai, G., Horner, R., & Gresham, F. (2002). Behaviorally effective school environments. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 315–350). Bethesda, MD: National Association of School Psychologists.

Test, D. W., Fowler, C. H., Brewer, D. M., & Wood, W. M. (2005). A content and methodological review of self-advocacy intervention studies. *Exceptional Children*, *72*, 101–125.

Test, D. W., Mason, C., Hughes, C., Konrad, M., Neale, M., & Wood, W. M. (2004). Student involvement in individualized education program meetings. *Exceptional Children*, *70*, 391–412.

Thoma, C. A., Nathanson, R., Baker, S. R., & Tamura, R. (2002). Self-determination: What do special educators know and where do they learn it? *Remedial and Special Education*, *23*, 242–247.

Turnbull, A., Edmonson, H., Griggs, P., Wickham, D., Sailor, W., Freeman, R., et al. (2002). A blueprint for schoolwide positive behavior support: Implementation of three components. *Exceptional Children*, *68*, 377–402.

U.S. Department of Education. (2006). *Twenty-sixth annual report to Congress on the implementation of the Individuals With Disabilities Education Act, 2004*. Washington, DC: Author.

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). *After high school: A first look at the postschool experiences of youth with disabilities*. Menlo Park, CA: SRI International.

Wehmeyer, M. L. (2005). Self-determination and individuals with severe disabilities: Re-examining meanings and misinterpretations. *Research and Practice for Persons With Severe Disabilities*, *30*, 113–120.

Wehmeyer, M. L., Abery, B., Mithaug, D. E., & Stancliffe, R. J. (2003). *Theory in self-determination: Foundations for educational practice*. Springfield, IL: Charles C Thomas.

Wehmeyer, M. L., & Agran, M. (2006). Promoting access to the general curriculum for students with significant cognitive disabilities. In D. M. Browder & F. Spooner (Eds.), *Teaching language arts, math, and science to students with significant cognitive disabilities* (pp. 15–37). Baltimore, MD: Paul H. Brookes.

Wehmeyer, M. L., Agran, M., & Hughes, C. (2000). A national survey of teachers' promotion of self-determination and

student-directed learning. *Journal of Special Education*, *34*, 58–68.

Wehmeyer, M. L., & Field, S. (2007). *Instructional and assessment strategies to promote the self-determination of students with disabilities*. Thousand Oaks, CA: Corwin.

Wehmeyer, M. L., & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities*, *38*, 131–144.

Wood, W. M., Fowler, C. H., Uphold, N., & Test, D. W. (2005). A review of self-determination interventions with individuals with severe disabilities. *Research and Practice for Persons With Severe Disabilities*, *30*, 121–146.

Zhang, D. (2001). Self-determination and inclusion: Are students with mild mental retardation more self-determined in regular classrooms? *Education and Training in Mental Retardation and Developmental Disabilities*, *36*, 357–362.

Zhang, D., Wehmeyer, M. L., & Chen, L. (2005). Parent and teacher engagement in fostering the self-determination of students with disabilities: A comparison between the United States and the Republic of China. *Remedial and Special Education*, *26*, 55–64.

Zigmond, N. (2006). Twenty-four months after high school: Paths taken by youth diagnosed with severe emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, *14*, 99–107.

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