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Embedding Interventions to Promote Self-Determination within Multitiered Systems of Supports

Karrie A. Shogren, Michael L. Wehmeyer, and Kathleen L. Lane

University of Kansas

ABSTRACT

Schools are increasingly exploring the implementation of multitiered systems of support. This article reviews the literature pertaining to efforts to promote self-determination to provide initial direction as to how interventions and supports to promote self-determination could be implemented within a tiered framework. The intent is to provide direction to the field on how such an approach can engage *all* students—including students with and without disabilities—in their learning across the lifespan to promote positive school and postschool outcomes. Specifically, we review interventions and supports that have been described in the literature pertaining to self-determination, organizing our review and analysis around the traditional three-tier approach. Implications for future research and development to promote the universal applicability of self-determination are discussed.

Within the disability field, increased attention has been directed to the supports model (Thompson et al., 2009) and the importance of creating systems of supports to promote the achievement of valued outcomes across the lifespan. Systems of supports have been defined as the “planned and integrated use of individualized support strategies and resources that encompass the multiple aspects of human performance in multiple settings” (Schalock et al., 2010, p. 106). The supports model (Thompson et al., 2009) shifts the focus from remediating deficits to understanding disability (and more generally human functioning) as an interaction between environmental demands and personal competencies. When there is a mismatch between demands and competencies, the person experiences a need for support. In the systems of supports framework, supports are defined as any “resources and strategies that aim to promote the development, education, interests, and personal well-being of a person and enhance individual functioning” (Schalock et al., 2010, p. 175). Individualized supports for the person are critically important, but effective systems of supports must be aligned across ecological contexts (Bronfenbrenner, 1979, 2005), including home, school, neighborhood, and community and the broader societal environment that shapes norms, expectations, and public policies that directly and indirectly impact human functioning.

Within the education context, supports can encompass a wide array of resources and strategies that promote learning and participation (Schalock et al., 2012). For example, students with disabilities in inclusive classrooms may experience a mismatch when a general education classroom is not structured to be physically or cognitively accessible, or when administrators or district policies impede the adoption of inclusive models. In this case, supports for participation (e.g., reorganization of the physical space and district policies that enable students with disabilities to be educated in general education classrooms) and learning (e.g., adoption of differentiated instruction, universally designed materials, and schoolwide instruction) may be needed. However, even if the classroom and school are designed to be cognitively and physically accessible for all students, students with and

without disabilities will have different support needs. Some students may still need individualized supports (e.g., an AAC device or program, learning strategy for math), but when environments are designed to be accessible to all, there is less of a mismatch. To promote universal accessibility, supports for learning and participation must be aligned across ecological systems (i.e., individual student supports, classroom supports, school/district supports, policy supports), and the complex factors related to developing and implementing integrated systems of supports and reforms must be addressed (Cook & Odom, 2013), although more research is needed to develop models for building integrated systems of supports that address the complexities of implementation.

Universal supports that proactively support *all* people, including people with disabilities, have received attention in the education field and beyond. Universal design (Connell et al., 1997) and Universal Design for Learning (Hall, Meyer, & Rose, 2012) emphasize how physical and learning environments, products, and materials can be structured to ensure access for all members of society, including people with disabilities. Increasingly, educators and researchers interested in school reform are designing and implementing tiered models of supports that are premised on providing high-quality supports for all students, with increasingly specialized supports for students who continue to experience a mismatch between the demands of the environment and their personal competencies (Greenwood, Kratochwill, & Clements, 2008; Lane, Menzies, Kalberg, & Oakes, 2012). Such models recognize that the reference environment for all students is the general education classroom, but that students will need diverse supports for learning and participation to access the general education curriculum and opportunities for social and emotional learning. The ultimate goal of these supports is to promote positive academic, social, and behavioral outcomes in school, preparing students to meet the demands of society, including the need to be self-regulated, goal-directed learners ... skills and attitudes directly linked to self-determination (Shogren, Wehmeyer, et al., in press).

There are two main examples of universal supports that have significantly impacted school reform movements over the past two decades. Positive behavior support initially emerged as a framework to eliminate the need for problem behavior by students with disabilities by redesigning environments and providing learning supports for positive behavior (Carr et al., 2002). Researchers quickly recognized, however, that redesigning environments and providing supports for positive behavior had relevance for all students. Tiered systems of positive behavior interventions and supports (PBIS) (Sugai & Horner, 2010) involves the application of PBIS to *all* students in a school to proactively prevent inappropriate and reinforce appropriate behavior. Students who do not respond to universal supports then receive specialized and differentiated supports for learning and participation. PBIS is often organized into a three-tier model, with Tier 1 representing universal supports, Tier 2, group or low-intensity supports (e.g., behavior contracts, social skills groups), and Tier 3, individualized or high-intensity supports (e.g., functional assessment-based interventions) (Lane, Oakes, & Cox, 2011).

With regard to academic interventions, response to intervention (RtI) has emerged as a model to provide high quality and individualized academic supports for students. While some RtI models focus on addressing instructional needs primarily as an alternative to the IQ-discrepancy model of identifying students with learning disabilities (Hale et al., 2010), increasingly, a problem-solving approach to RtI (Sailor, 2009) is being adopted. The problem-solving RtI model focuses on instructional needs, data-based decision making, and tiered systems to support all students' academic progress. Batsche and colleagues (2005) defined RtI as "the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying child response data to make important education decisions" (p. 3). Like, PBIS, under problem-solving RtI frameworks, interventions and supports are organized within a "tiered" framework. The starting point, however, is always Tier 1, or universal supports, with more intensive supports only provided after effective Tier 1 strategies are attempted with fidelity (Lane et al., 2007). Three tier models are common, although some researchers are beginning to suggest the need to view supports along a continuum, rather than as distinct tiers. However, in the traditional and still widely accepted classification system, Tier 1 supports are

proactive, preventative, and designed to benefit all students. The goal is to prevent problems in learning or behavior and to provide opportunities for desired school and postschool outcomes by using research-based interventions and reinforcement of appropriate behavior. Researchers suggest that approximately 80% of students respond positively to Tier 1 supports. Tier 2 supports tend to be targeted, short-term, focused group interventions provided in addition to core instruction/supports for students who do not respond to Tier 1 interventions despite Tier 1 efforts being implemented with fidelity. Tier 2 interventions may include instruction in specific academic skills, social skills, self-regulatory skills, or conflict resolution skills. It is estimated that approximately 10%–15% of students will need Tier 2 supports. Finally, Tier 3 supports involve the most intensive interventions. They tend to be individualized, more time-intensive, of longer duration to support students' with multiple risk factors who are most resistant to Tier 1 and 2 efforts. It is estimated between 1% and 5% of students will need Tier 3 supports (Greenwood et al., 2008; Lane et al., 2007, 2012; Sugai & Horner, 2010). To be clear, Tier 3 is not applicable only for students receiving special education services, as students with and without disabilities could be supported across this continuum. A key element of tiered models is that students with disabilities should be supported to be a part of Tier 1 instruction, and provided more intensive instruction (e.g., Tier 2 and Tier 3) only as needed. Specialized instruction and supplementary aids and services can be delivered within Tier 1 as well as any other instructional configuration. There is a growing research base documenting the impact of school and statewide implementation of PBIS (Bohanon et al., 2006; Muscott, Mann, & LeBrun, 2008; Sugai & Horner, 2010) and RtI (Koutsoftas, Harmon, & Gray, 2009; Pyle & Vaughn, 2012).

Giving the growing emphasis on systems of support that promote academic and behavioral outcomes, education researchers and leaders are increasingly exploring the integration of these diverse initiatives under the larger framework of multitiered system of supports (MTSS). MTSS combines elements of other frameworks for supporting students, to focus on student success across multiple domains (Chard et al., 2008; Lane et al., 2012). In an MTSS model, the goal is that (a) all students receive high quality, evidence-based, and universally designed instruction, taking into consideration their linguistic and cultural backgrounds, disabilities, and other learning needs (Tier 1); (b) some students, who are not successful behaviorally or academically with only Tier 1 supports receive additional targeted instruction in addition to Tier 1 instruction (Tier 2); and (c) a few students who need the most intensive supports to succeed receive not only Tier 1 and 2 interventions, but more intensive, sometimes individualized, instruction and supports (Tier 3). As students move to more intensive levels (tiers) of support, they do not need to be removed from general education classes (Sailor, 2008, 2009). Interventions can be embedded within general education instruction and activities, maintaining opportunities for the benefits of inclusion. MTSS promotes systemwide practices to support a rapid response to instructional needs, with frequent databased monitoring for instructional decision-making (Greenwood et al., 2008) and collaboration among professionals across disciplines (e.g., special and general education, speech, language, content areas), and strong parent, professional, and community partnerships (Sailor, 2009).

Although the stated goal of MTSS is to implement evidence-based practices, it must be acknowledged that few interventions in the education and special education fields meet accepted criteria (Cook, Tankersley, & Landrum, 2009) for determining that an intervention is evidence-based (Chard, Ketterlin-Geller, Baker, Doabler, & Apichatabutra, 2009; Lane, Kalberg, & Shepcaro, 2009; Test et al., 2009). Further, even when there is research to support specific practices, rarely has this work been taken to scale or applied across populations. And, MTSS itself, while based in other concepts and initiatives that have theoretical and empirical support, has limited research examining its key implementation features and impacts. However, despite the need for more research, MTSS provides a means to potentially advance the systems of supports framework, by promoting alignment of initiatives (e.g., academic and behavioral supports) as well as the integration of supports across ecological systems (e.g., individual supports, classroom supports, school supports, policy supports). And, some researchers and educators interested in MTSS have begun to move beyond the academic and behavioral domains, also recognizing the need to align high-quality instruction related to social and emotional learning in the

general MTSS model. For example, Lane, Oakes, and Menzies (2014) introduced the comprehensive, integrated, three-tiered (CI3T) model of prevention that brings together RtI for academics, PBIS for meeting students' behavioral needs, and a validated curricula to teach core social skill (e.g., conflict resolution skills, character, or bullying prevention skills).

Although descriptions of MTSS often include an emphasis on multiple outcome domains, the predominant focus has been on academic outcomes, generally through RtI frameworks, and behavioral outcomes, generally through PBIS frameworks. The CI3T model advances MTSS by integrating academic, behavior, and social skill instruction and supports. However, across all models, limited attention has been directed to other key outcome areas, such as transition outcomes. To fully address the complexity of educational reform, in addition to academic, behavior, and social domains, initiatives to promote positive transition outcomes must also be integrated into MTSS models. Integrating efforts to enhance transition outcomes by promoting self-determination, in particular, appears to be a natural fit given the emphasis in MTSS on enabling youth to become self-regulated, goal-directed learners, skills and attitudes directly linked to self-determination. Researchers have consistently argued that valued outcomes of transition services and supports, such as self-determination, must be considered across the lifespan for all students, including students with and without disabilities (Shogren, 2013). Although never formally conceptualized as a tiered system, researchers focused on issues pertaining to self-determination have asserted that people with and without disabilities need opportunities to develop and express self-determination (universal supports), but that some students will need more intense supports to develop specific skills (e.g., increasingly explicit instruction in problem-solving, goal setting, self-advocacy, or transition planning). Further, promoting self-determination has proven benefits beyond just transition-related outcomes, with several studies linking efforts to promote self-determination with more positive academic and school-related outcomes, including enhanced access to the general education curriculum (Lee, Wehmeyer, Soukup, & Palmer, 2010; Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012), as well as raising teachers' expectations for students with disabilities (Shogren, Plotner, Palmer, Wehmeyer, & Paek, in press). Given the growing emphasis in MTSS—and now CI3T models—on integrating the multiple domains that impact outcomes and the argument in self-determination literature that students need differing intensities of supports to develop self-determination, it is logical to explore the integration of self-determination into such models. In the following sections, we further elaborate on how existing research on self-determination can inform the development of MTSS and CI3T models for self-determination intervention.

Self-determination

Within the disability field, self-determination has been defined within the context of Causal Agency Theory (Shogren, Wehmeyer, et al., in press) as a “dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined people (i.e., causal agents) act in service to freely chosen goals. Self-determined actions function to enable a person to be the causal agent in his or her life” (Shogren, Wehmeyer, et al., in press). Self-determination develops across the lifespan as adolescents acquire multiple, interrelated skills, referred to as component elements of self-determined action, that enable the expression of self-determination and causal agency, including learning to make choices and express preferences, solve problems, make decisions, set and attain goals, self-manage and self-regulate action, self-advocate, and acquire self-awareness and self-knowledge. To develop these skills, multiple opportunities to engage in volitional and agentic action are needed to build action control beliefs, which we posit are the essential characteristics of self-determined action. The promotion of the skills and attitudes leading to enhanced self-determination has been linked with positive outcomes for youth with and without disabilities, including higher life satisfaction (Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006).

In the field of motivational psychology, Self-Determination Theory (Deci & Ryan, 2002) emphasizes the importance of environmental supports for the development of autonomy, relatedness, and competence, which is assumed to enhance motivation and self-determination. Although the research

has been limited in the education context, a small number of studies have suggested that when general education teachers are “autonomy-supportive” (i.e., structure the environment to provide choice, encourage self-initiation, and promote intrinsic motivation) that students without disabilities show greater intrinsic motivation and perceive themselves as more self-determined and competent (Reeve, 2002). Thus, in both the general and special education field, promoting self-determination has been identified as a vehicle to motivate students and raise expectations, creating opportunities for students to learn skills and begin to perceive themselves as self-regulated, goal-oriented learners. These are skills that as mentioned previously, have been identified as highly valuable for learners in the MTSS framework.

Supports for learning and participation that facilitate self-determination have emerged in the general education field under the auspices of SDT and in the special education field under the auspices of Causal Agency Theory. Across both approaches there is a strong emphasis on the need to create opportunities for students to become self-regulated, goal-directed learners. Self-Determination Theory emphasis environmental modifications, namely how teachers can support autonomy in the classroom by promoting choice-making, self-initiation, and the development of intrinsic motivation. This has primarily been studied in general education classrooms (Reeve, 2002; Vansteenkiste et al., 2012), although applications to students with disabilities have also been highlighted (Deci & Chandler, 1986). For example, Vansteenkiste and colleagues (2012) found that when teachers build in choice-making opportunities, clearly explain expectations, and solicit student opinions, students feel more volitional in their learning. The majority of research in this area is descriptive and correlational, and more work is needed to examine the impacts of creating “autonomy-supportive” (Vansteenkiste et al., 2012, p. 431) environments for youth with and without disabilities, and the fit of such environmental supports at a Tier 1 intervention.

Causal Agency Theory also highlights the critical role of environmental supports and modifications that create opportunities for self-determination, but has focused more explicitly on the development of interventions that teach the skills associated with self-determined behavior. A number of interventions to promote self-determination have been developed, evaluated, and linked to positive outcomes across multiple domains—academic, behavioral, social, and transition—for students with disabilities (Shogren et al., 2012; Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2013; Wehmeyer et al., 2012). However, such interventions have typically been implemented as “Tier 3” interventions, or as individualized instruction provided to a few students with extensive support needs without concomitant universal supports. Universal supports to promote self-determination are needed, and should be infused across instructional activities and time, based on the premise of MTSS and CI3T that all students need access to high-quality instruction as Tier 1 interventions prior to more intensive Tier 2 or 3 interventions.

In terms of existing research, Wehmeyer, Shogren, and colleagues (2012) conducted a group-randomized, modified equivalent control group design study of 312 high school students with intellectual disability or learning disabilities using the Self-Determined Learning Model of Instruction (SDLMI) over a two-year period. The SDLMI is a teaching model designed to enable teachers to teach students to self-regulate problem solving leading to educational goal attainment. The SDLMI supports students to (a) set educationally relevant and valued goals; (b) create an action plan to achieve those goals, monitor and evaluate their progress toward their goals; and (c) revise the action plan or goal as necessary based on those evaluations that is described in detail subsequently. In the RCT, where the SDLMI was implemented only with students with disabilities in short, targeted instruction, Wehmeyer and colleagues (2012) found significant differences in latent means across measurement occasions and differential effects attributable to the SDLMI in the control and treatment group after two years of intervention. Within the treatment group, students had significant increases in self-determination scores from baseline to the end of Year 2, increases not found for the control group. Of interest, however, was the examination of latent means over time. The intervention group improved from 0.00 to 0.30 units (latent means at the first measurement time were mean-standardized to zero) from Time 1 to Time 3 (end of two years of

intervention), a powerful effect size for an educational intervention. At measurement Time 2 (end of Year 1 of intervention), however, the improvement was only 0.07 units, suggesting most of the growth in self-determination came after a sustained period of time during which students repeatedly used the SDLMI to set and attain goals (i.e., two years of intervention). In other words, time-limited interventions—delivered in self-contained or resource room for a brief period of time—may not be the most effective means to achieve greater student self-determination. Instead, instruction to promote self-determination may be more effective if provided across instructional activities so that all students, including students with disabilities, receive instruction in self-regulated problem solving leading to goal setting and attainment in general education classes. Research is needed that examines the application of these instructional strategies to students without disabilities. Further, a framework is needed that can be evaluated that promotes instruction and opportunities for self-determination that are relevant for all students and matched to instructional needs, given the value of this outcome and the emphasis placed on self-regulation and goal-directed behavior in MTSS and CI3T models. In the following sections, we will review existing research on self-determination interventions to provide a framework for the development of tiered self-determination interventions.

Self-determination interventions and supports and their relevance to tiered models

In the previous section, we described the SDLMI as one example of a research-based intervention that has been implemented at a Tier 3 level for students with disabilities. There are a range of other interventions with varying levels of evidence, ranging from short-term interventions to promote specific skills leading to enhanced self-determination (Algozzine, Browder, Karvonen, Test, & Wood, 2001), to longer-term curricula providing more intensive instruction in multiple skills promoting self-determination (Wehmeyer & Field, 2007). Further, there is research from SDT, applied in general education, that suggests that structuring environments to be autonomy-supportive by providing opportunities for choice and self-imitation is related to enhanced motivation and self-determination. In the following sections, we review interventions and supports that have been described in the literature pertaining to self-determination, organizing our review and analysis around the traditional three-tier approach to multitiered systems of supports. While many of these interventions and supports have been primarily applied to students with disabilities, we analyze their relevance for all students recognizing that future development will be needed to ensure universal applicability.

Tier 1—Universal supports

As described previously, promoting self-determination includes teaching students' skills associated with self-determined action (e.g., volitional and agentic actions and action control beliefs), such as expressing preferences, making choices, solving problems, making decisions, setting and attaining goals, self-managing and self-regulating action, self-advocating, and acquiring self-awareness and self-knowledge, as well as creating opportunities for students to practice and develop competencies in using these skills to achieve desired outcomes and goals by creating autonomy-supportive environments. In many ways, creating these opportunities and the supports for students to understand and apply skills leading to enhanced self-determination can be framed as a critical part of "Tier 1" supports for all students. The skills associated with self-determined action are critical for all students, a finding acknowledged in both the general and special education literature. Researchers frequently suggest the critical nature of problem solving skills to success in core academic subjects, particularly mathematics (Miller, 2013; Wenrick, Behrend, & Mohs, 2013). For example, the National Council of Teachers of Mathematics (2000) states that "contexts that promote problem solving, reasoning, communication, making connections..." are fundamental to learning mathematics.

Further, the Common Core State Standards (Council of Chief State School Officers & National Governors Association, 2011) as well as virtually every state or local education agency content standards include objectives related to the component elements of self-determined action, including goal-setting,

problem-solving, and decision-making skills (Wehmeyer, Field, Doren, Jones, & Mason, 2004). However, while these skills may be taught incidentally in the context of academic instruction, such as mathematics instruction, rarely is explicit attention given to those skills themselves. Further, general educational environments are infrequently structured in ways that allow for the expression of preferences and self-regulated learning (Soenens, Sierens, Vansteenkiste, Dochy, & Goossens, 2012). In studies with students with disabilities, researchers have found that the use of curriculum augmentations (i.e., teaching students additional content focused on learning-to-learn strategies, such as problem solving, goal-setting, decision-making, etc.) is very low (Soukup, Wehmeyer, Bashinski, & Bovaird, 2007). Much like PBIS, where a key issue is explicitly teaching expectations to all students (Sailor, Dunlop, Sugai, & Horner, 2009), the same can be argued for supporting the development of self-determination. There is a need for explicit instruction that creates opportunities for students to apply and generalize skills leading to enhanced self-determination across multiple curriculum content areas. There will likely be differences in the intensity of supports that diverse students need to learn and generalize these skills, but as a Tier 1 intervention, providing opportunities by highlighting how to make effective choices and decisions, set meaningful and attainable goals, advocate for and understand yourself, would lead to clearer expectations and greater skill development for all students.

The Self-Determined Learning Model of Instruction (SDLMI)

The SDLMI has potential as a universal support/Tier 1 intervention, although further research is needed as its impacts have only been documented for students with disabilities on access to and progress in the general education curriculum. For example Shogren and colleagues (2012) found that students with disabilities taught using the SDLMI have greater access to the general education curriculum than a control group, even when instruction did not take place in the general education classroom. Essentially, the SDLMI can be implemented to support instruction in both general education curriculum content areas (i.e., enhancing academic skills) as well as student's unique behavioral and functional learning needs (i.e., self-determination and goal attainment skills) for more positive transition outcomes. By implementing the SDLMI as a Tier 1 intervention, in the context of the general education curriculum and classroom, its impact could be broadened and the goal of MTSS and—to provide high-quality instruction for all students—could be realized.

The SDLMI is particularly relevant as a Tier 1 intervention as it is a teaching model rather than a curriculum. Joyce and Weil (1980) defined a model of teaching as “a plan or pattern that can be used to shape curriculums (long term courses of study), to design instructional materials, and to guide instruction in the classroom and other settings” (p. 1). The SDLMI is an instructional model derived from theory in self-determination, described previously (Shogren, Wehmeyer, et al., in press) and the process of self-regulated problem solving, and research on student-directed learning (Agran, King-Sears, Wehmeyer, & Copeland, 2003). It is appropriate for students with and without disabilities across multiple content areas and enables teachers to engage students in their educational programs by increasing opportunities to self-direct learning. It is important to emphasize that while the SDLMI is based on theory in self-determination, it is intended as a teaching model to enable teachers to teach students to set and attain goals in multiple content areas, from academic to transition. It is not a model to teach self-determination, although one outcome of the model's implementation is that students acquire goal setting, problem solving, and other skills that enhance self-determination. And, by shaping the model of instruction used by teachers, the SDLMI creates a context that is more autonomy-supportive.

Implementation of the SDLMI consists of a three-phase instructional process. Each instructional phase presents a problem to be solved by the student. The student solves this problem by posing and answering a series of four *Student Questions* per phase that students learn, modify to make their own, and apply to reach self-selected goals. Each question is linked to a set of *Teacher Objectives*. Each phase includes a list of *Educational Supports* that teachers use to enable students to self-direct learning. In each phase, the student is the primary causal agent for choices, decisions, and actions, even when eventual actions are teacher-directed. The Student Questions in the model are constructed to direct the student through a problem-solving sequence. The solution to the problem

in each phase leads to the problem-solving sequence in the next phase. The questions are based on theory in the problem-solving and self-regulation literature that suggests there is a sequence of thoughts and actions, a means-ends problem-solving sequence, which must be followed for any person's actions to produce results that satisfy their needs and interests. Teachers teach students to solve a sequence of problems to construct a means-ends chain—a causal sequence—that moves them from where they are (an actual state of not having their needs and interests satisfied) to where they want to be (a goal state of having those needs and interests satisfied). We construct this means-ends sequence by having students answer the questions that connect their needs and interests to their actions and results via goals and plans (for more information on implementation, see Wehmeyer, Agran, Palmer, & Mithaug, 1999; Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000). Thus, the design and implementation of the SDLMI is consistent with Tier 1 efforts, although further research is needed on the implementation of the SDLMI in general education classrooms with all students, and examination of the impact on academic and transition-related outcomes for all students.

Tier 2—Targeted supports

In the MTSS framework, a critical element is that *all* students have access to high-quality, universally designed instruction. We have proposed that at the universal supports/Tier 1 level, the SDLMI provides an existing self-determination intervention that has preliminary evidence with students with disabilities that suggests its potential impact for all students. However, some students with and without disabilities will likely need additional supports for learning and participation related to self-determination. Several instructional strategies and curricula have been developed and validated that could potentially be applied or modified and delivered as targeted instruction for students in the general education classroom who need more support to understand and apply effective self-determination-related skills and act as a causal agent. For example, some students may need more explicit instruction in one or more key skills promoting self-determination: making effective choices, solving problems, setting goals, making decisions, self-advocating, or developing self-awareness and self-knowledge, for example. Although a full review of the strategies for each of these skills is beyond the scope of this article, multiple sources document the evidence-base and effective strategies (Algozzine et al., 2001; Wehmeyer & Shogren, in press). For each of the aforementioned skill areas, explicit steps have been documented from the theoretical and empirical literature that youth and adults follow to execute these skills. While much of this literature is from the disability field, there are examples in general education of teaching problem solving and goal-setting skills (Durnin, Perrone, & MacKay, 1997). Explicitly teaching steps in skill areas that students are struggling with in Tier 1 instruction, could provide a meaningful Tier 2 intervention for targeted groups of students based on assessment of self-determination and progress monitoring information. For example, a decision-making process involves coming to a judgment about which solution is best at a given time. Making effective decisions typically involves (a) identifying alternative courses of action, (b) identifying the possible consequences of each action, (c) assessing the probability of each consequence occurring, (d) choosing the best alternative, and (e) implementing the decision (Beyth-Marom, Fischhoff, Quadrel, & Furby, 1991; Hickson & Khemka, 2013). Explicit instructional activities can be organized around these steps, and delivered in a group instruction format with students whose data have suggested are not making adequate progress in decision-making when working to set and attain educationally relevant goals.

Specific curricula have also been developed to teach these skills. While primarily tested in youth with disabilities, they have potential relevance for all students as a targeted support. For example, the *Self-Advocacy Strategy* (Van Reusen, Bos, Schumaker, & Deshler, 1994) provides a manualized strategy to teach students strategies to apply self-advocacy behaviors during educational planning conferences, and could potentially be used with students to enable them to engage in self-advocacy related to making decisions about their future. All students have to make decisions about planning for classes and other experiences linked to their postschool goals. Further research is needed to explore the application of procedures developed for students with disabilities in a Tier 2 context, and

their expansion to students without disabilities in need of Tier 2 supports. Further research is also needed to develop best practices related to self-determination assessment and progress monitoring. A limitation has been that assessment tools have typically been developed and validated for students with disabilities only; however, a new measure is being developed, the *Self-Determination Inventory—Self-Report* (Shogren et al., 2014) that is being validated and normed with all students, including students with disabilities. The measure is based on causal agency theory (Shogren et al., in press) and includes items measuring the three essential characteristics of self-determination: volitional and agentic action, and action-control beliefs.

Tier 3—Intensive supports

Tier 3 supports are conceptualized as the most intensive interventions and can include individualized instruction and supports for students that continue to need more intensive interventions than those provided under Tiers 1 and 2. For secondary students with disabilities, for example, Tier 3 supports might involve specific instruction designed to meet unique learning needs experienced by students related to transition instruction. IDEA requires that educational programs for students with disabilities address both access to the general education curriculum and interventions linked to their unique learning needs, including transition instruction. A number of curricula have been developed, specific to self-determination and transition for students with disabilities including *ChoiceMaker* (Martin, Marshall, Maxson, & Jerman, 1996), *NEXT S.T.E.P.* (Halpern et al., 1995), *Steps to Self-Determination* (Hoffman & Field, 2005), and *Whose Future is it Anyway?* (2nd ed., Wehmeyer, Lawrence, et al., 2004). Each of these curricula are most appropriate for transition-age students with disabilities and are described more fully in other sources (Wehmeyer & Field, 2007). Work is needed to develop strategies to provide such intensive individualized supports in the general education classroom, and to expand relevant self-determination instruction for all students, with and without disabilities, with regard to transition. All students move from school to adult life, experiencing differing environmental demands, and learning to use specific skills related to transition may benefit all students, not just students with disabilities. Further research is needed, however, to develop and test such models and, work on Tier 1 supports seems a natural starting place, as high-quality universally designed instruction is a necessary prerequisite to more fully explicated needed Tier 2 and 3 supports.

Discussion

Despite the fact that enhanced self-determination is acknowledged as a valued outcome of education, promoting self-determination has yet to be systematically considered within comprehensive school reform (Wehman, 2012) and emerging MTSS and CI3T models. The purpose of the present article was to explore the relationship between existing interventions to promote self-determination and three-tiered frameworks. Flexible models of instruction, such as the Self-Determined Learning Model of Instruction (Wehmeyer et al., 2000) exist that can be overlaid on instruction in any content domain and have been shown to impact student academic and goal attainment outcomes (Shogren et al., 2012). The SDLMI provides direct instruction and impacts environment supports by changing the model of teaching to a more autonomy supportive model. Further research is needed to explore the possibilities of such an approach to engage students, with and without disabilities, in their learning across the lifespan based on their support needs related to acting as a causal agent to promote positive school and postschool outcomes. We believe that implementing the SDLMI within the general education curriculum will increase the impact of the intervention, and allow for the examination of its feasibility with different populations. However, implementation issues, particularly with specific groups of students who have unequal access to high-quality instruction or supports because of location, resources, disproportionality, policies, attitudes, and teacher/school/district factors need to be further considered and researched within MTSS and CI3T models, as the implementation of self-determination as a tiered intervention, will be shaped by multiple ecological factors.

In summary, there are multiple reasons to explore the use of effective interventions to promote self-determination as a part of the Tier 1 instruction offered within the core curriculum as part of data-informed, tiered system of support. First, promoting self-determination is relevant for all students, not just students with disabilities. By providing instruction for all students, students with disabilities have more opportunities for learning and expressing self-determination, as instruction to promote this outcome is infused throughout the instructional day—consistent with the least restrictive environment and access to the general education curriculum mandates of Individuals with Disabilities Education Act. Second, self-determined behaviors (e.g., goal setting, problem solving, decision making) are infused throughout content standards, including the common core for which all students are responsible, including students with disabilities. Third, the SDLMI is directly linked to increased academic and transition goal attainment as well as access to the general education curriculum for secondary students with disabilities. These links support the value of starting with an efficacious model, the SDLMI, and testing its feasibility with all students as a Tier 1 intervention, rather than only a subset of students. The skills are relevant for all and are better supported for students with disabilities when opportunities to learn and practice these skills are provided in the general education classroom. Further research and development is needed to further examine the possibilities of the SDLMI, the application of Tier 2 and 3 self-determination supports, and the assessment of self-determination and use of curriculum-based decision-making.

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