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Tiered Teacher Coaching to Promote Self-Determination in the Classroom --Manuscript Draft--

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Abstract:	Promoting self-determination has been shown to enhance outcomes for students with and without disabilities. The Self-Determined Learning Model of Instruction (SDLMI), an evidence-based model of instruction, is designed to promote self-determination in diverse contexts, including inclusive general education classrooms. SDLMI delivery requires training and ongoing support to enhance fidelity, teacher implementation skills, and positive student outcomes. Coaching is an effective way to support effective implementation and fidelity of an evidence-based intervention, like the SDLMI. However, coaching supports must be tailored to implementers' needs and requested support level. This article describes a three-tiered coaching model for the SDLMI that can be used to inform teacher supports for effective SDLMI implementation. This three- tiered model builds on and expands the research-based SDLMI Coaching Model, providing a framework for further individualizing and intensifying SDLMI coaching support to enhance teacher implementation and associated student outcomes.	

COACHING TO PROMOTE SELF-DETERMINATION

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Abstract

Promoting self-determination has been shown to enhance outcomes for students with and without disabilities. The Self-Determined Learning Model of Instruction (SDLMI), an evidence-based instructional model, is designed to promote self-determination in diverse contexts, including inclusive general education classrooms. SDLMI delivery requires training and ongoing support to enhance fidelity, teacher implementation skills, and positive student outcomes. Coaching is an effective way to support the effective implementation and fidelity of an evidence-based instructional model, like the SDLMI. However, coaching supports must be tailored to implementers' needs and requested support level. This article describes a three-tiered coaching model for the SDLMI that can be used to inform teacher supports for effective SDLMI implementation. This three-tiered model builds on and expands the research-based SDLMI Coaching Model, providing a framework for further individualizing and intensifying SDLMI coaching support to enhance teacher implementation and associated student outcomes.

Keywords: self-determination, coaching, evidence-based practices, fidelity of implementation, students with disabilities, self-determined learning model of instruction

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Tiered Teacher Coaching to Promote Self-Determination in the Classroom

Causal Agency Theory describes how people become self-determined; that is, how people develop the abilities, skills, and attitudes that enable them to act and cause things to happen in their lives while working toward goals (Shogren, Wehmeyer, et al., 2015). Throughout students' educational journey, self-determination emerges as a result of experiences, opportunities, and supports that empower them to set and work towards goals reflecting their interests, values, and beliefs. Self-determination is an inherent right for all people. However, researchers continually highlight disparities in opportunities for young people with and without disabilities to develop abilities, skills, and attitudes associated with self-determination (Shogren et al., 2012; Stancliffe et al., 2011; Wehmeyer & Abery, 2013).

Disability researchers and self-advocacy leaders have focused on creating opportunities in schools for young people with disabilities to develop and use abilities, skills, and attitudes associated with self-determination since the 1990s (Chapman, 2019; Lopez et al., 2020; Power et al., 2002; Shogren et al., 2021; Shogren et al., 2016; Shogren, Abery et al., 2015; Ward & Meyer, 1999). Research has shown that promoting self-determination within special education services and supports contributes to enhancing in-school (e.g., access to the general education curriculum, academic goal attainment) and post-school outcomes (e.g., competitive employment, community living; Burke et al., 2020). More recent research has suggested positive impacts of promoting self-determination by using evidence-based practices in inclusive settings for students with and without disabilities (Raley et al., 2020; Shogren et al., 2021). When teachers are equipped with evidence-based practices to promote self-determination in the classroom, they can positively impact student achievement of academic, social, and transition outcomes (Burke et al., 2019; 2020; Shogren et al., 2020). Further, when trained coaches support teachers during implementation, practices can be sustained and scaled up over time, leading to a notable improvement in student outcomes (Artman-Meeker et al., 2014; Flynn et al., 2017).

The Self-Determined Learning Model of Instruction

The Self-Determined Learning Model of Instruction (SDLMI: Shogren et al., 2019) is an evidence-based model of instruction (National Technical Assistance Center on Transition, 2017). It was designed to be adaptable fpr different contexts and has been used in diverse contexts to promote self-determination for secondary students and young adults with and without disabilities (e.g., transition planning, academic instruction, employment supports, community-based settings; Dean et al., 2022; Shogren & Raley, 2022). The SDLMI aligns with Causal Agency Theory and was designed to be overlayed on any content area (e.g., academic, social-emotional learning, transition planning), enabling teachers to integrate self-determination instruction within any curriculum (Hagiwara et al., 2020). When delivering the SDLMI, teachers support students in a self-directed goal-setting process, including identifying a goal, planning action strategies, and evaluating progress. The SDLMI supports growth in multiple abilities, skills, and attitudes associated with self-determination, including choice making, decision making, problem solving, planning, self-management, self-advocacy, and self-knowledge (Raley et al., 2020).

The SDLMI is implemented in three phases: Phase 1 - Set a Goal, Phase 2 - Take Action, and Phase 3 - Adjust Goal or Plan. Each SDLMI phase includes three core components: Student Questions, Teacher Objectives, and Educational Supports. Students answer four Student Questions per phase (12 total) to learn to self-regulate the goal setting and action-planning process (Shogren et al., 2019). Teacher Objectives are linked to the Student Questions and serve as a "roadmap" for what teachers must achieve in supporting students to answer the Student Questions. Further, each phase includes Educational Supports (e.g., choice-making instruction, self-scheduling instruction) that teachers can utilize to meet Teacher Objectives and provide individualized support to students (Shogren et al., 2019). The intended outcome of the SDLMI is not achieving a targeted goal, per se, but instead, students learning the process of self-regulating goal setting, adjustment, and attainment. The SDLMI is designed to be a cyclical, structured process that students can use repeatedly across academic semesters and years, identifying and taking steps toward new and different goals and leveraging more opportunities to engage in selfdetermined actions (Shogren et al., 2019). Working through the three phases of the SDLMI takes approximately 10-12 weeks or an academic semester and is repeated in subsequent semesters. For more detailed information about the SDLMI, visit self-determination.org.

The Need for Teacher Coaching to Enhance SDLMI Implementation

Teachers' varied backgrounds, instructional skill sets, and lived experiences impact their need or preference for distinct intensities of support while implementing evidence-based practices. Addressing teachers' needs for individualized support can empower and equip them to implement an evidence-based practice with fidelity (e.g., the practice being implemented as intended; National Implementation Research Network, n.d.). In the context of implementing the SDLMI, while researchers have found positive teacher and student benefits, they have also identified a range of challenges teachers face as they implement the SDLMI including a lack of administrative support, opportunities for professional development and coaching, other IEPrelated demands and stressors, and navigating paraprofessional interactions (Burke et al., 2020; Raley et al., 2023). Teachers also report needing more intensive support, at times, as they are implementing the SDLMI throughout the semester and year (Raley et al., 2023). Assessing teacher needs and the variability in teacher needs is crucial to support them in implementing the SDLMI and adapting it to fit their students' needs, particularly their students with more extensive support needs (Burke et al., 2019).

Additionally, integrating culturally responsive resources and encouraging culturally sustaining instruction in universal instruction, as suggested by Shogren et al. (2021), can promote equity and inclusion by leveraging the strengths of marginalized students during SDLMI instruction. The cultural nuances of self-determination may vary across different cultural backgrounds (Trainor et al., 2017; Zheng et al., 2015) and influence the way in which students prioritize and engage in the SDLMI. Therefore, coaches should encourage teachers to center diversity and adopt a flexible and culturally responsive approach in self-determination instruction to ensure social justice is advanced in the work they are doing (Brusnahan et al., 2023; Shogren, 2018). However, supporting teachers to adopt a broad, inclusive definition of culture and address systemic barriers that limit opportunities will require different levels of support (Gay et al., 2018). Previous research highlights that implementing evidence-based practices like the SDLMI requires varying levels of support for teachers (Shogren et al., 2018) and that teachers require adequate infrastructure and varied coaching methods to feel confident when implementing new practices in their teaching (Mello & Matthee, 2019). Coaches aware of these needs and challenges can provide tailored support, addressing implementation barriers (Raley et al., 2023).

When teachers begin implementing newly learned strategies, a collaborative partnership with a trained coach who provides effective prompts and explicit feedback can guide teachers' implementation. In the existing literature, a wide range of supports has been provided to teachers implementing, the SDLMI, and earlier research did not consistently and explicitly report coaching support protocols (Kiblen et al., 2022). To address this need, a systematic coaching model for the SDLMI was developed (Hagiwara et al., 2020) and has been evaluated in studies suggesting impacts on student outcomes (Raley et al., 2021; Shogren et al., 2019). However, the current SDLMI Coaching Model does not include a formalized means to intensify supports provided to teachers, particularly when teachers experience implementation challenges or needs. Because classroom coaching models in schools typically necessitate individualized coaching (Peltier et al., 2020), a tiered coaching approach is ensuring to ensure teachers receive the supports they need to deliver SDLMI with fidelity, accommodating their diverse contexts and backgrounds (Raley et al., 2023). Tiered approaches to coaching provide structure to enable teachers to implement research-based practices with varying intensities of support based on teacher needs (Owen et al., 2021).

Additionally, statewide research on SDLMI implementation highlights the importance of materials, training, and coaching to cater to teacher's support needs (Burke et al., 2020). Thus, there is a need to expand the current SDLMI Coaching Model to delineate tiers of support that coaches can use to enable teachers to achieve high fidelity in implementing the SDLMI. This is important given research suggests more positive student outcomes (e.g., self-determination, goal attainment) when teachers implement the SDLMI with high fidelity (Shogren et al., 2021). This paper aims to introduce the development of the SDLMI Tiered Coaching Model, a framework for intensifying supports for teachers to implement the SDLMI. We describe the SDLMI Coaching Model and existing multi-tiered coaching frameworks and then introduce the SDLMI Tiered Coaching Model.

SDLMI Coaching Model

The SDLMI Coaching Model was introduced in 2020 to guide high-quality, consistent coaching for implementing the SDLMI (Hagiwara et al., 2020). The SDLMI Coaching Model is

used by trained coaches and was informed by an extensive review of self-determination and coaching literature. The review focused on identifying effective supports for educators using complex, evidence-based practices like the SDLMI (Hagiwara et al., 2020; Snyder et al., 2015). The SDLMI Coaching Model is grounded in Causal Agency Theory, which describes how a person becomes self-determined. The SDLMI Coaching Model guides coaches to support teachers in implementing the SDLMI with fidelity, systematizing coaching procedures, and ensuring that every student receives highly effective self-determination instruction through the SDLMI (Hagiwara et al., 2020). The SDLMI Coaching Model highlights that teachers or other school personnel (e.g., transition coordinators) can become coaches as they develop expertise in SDLMI implementation through standardized training sessions and materials and that external researchers and other internal faculty at schools, in districts, and at state departments can also serve in this role.

There are six components of the SDLMI Coaching Model (highlighted in Table 1), including (a) the SDLMI Coaching Framework, (b) SDLMI Coaching Stages, (c) SDLMI Coaching Procedural Checklist, (d) SDLMI Fidelity Measure, (e) SDLMI Coaching Conversation Notes, and (f) SDLMI Coaching Feedback Survey. Each component is essential to implementing the SDLMI Coaching Model and remains the backbone of the proposed SDLMI Tiered Coaching Model.

SDLMI Coaching Components

The first component of the SDLMI Coaching Model is the framework that defines principles (application, empowerment, equality, reflective dialogue, shared vision, trust) that guide all supports coaches provide for educators (Hagiwara et al., 2020). The second component of the SDLMI Coaching Model is the SDLMI Coaching Stages (Plan, Observe, Reflect, and Share). These describe how coaching principles are actualized in practice through the four stages (Plan - sending introductory emails to teachers and explaining the coaching process; Observe – conduct fidelity observations; Reflect - bringing coaching-related documents to visits to reflect with teachers on instruction; Share - follow-up communication; Hagiwara et al., 2020). The third component of the SDLMI Coaching Model is the SDLMI Coaching Procedural Checklist, which coaches use to ensure the completion of all tasks associated with the SDLMI Coaching Model and track fidelity of coaching.

The fourth component of the SDLMI Coaching Model describes using key standardized coaching supports such as the SDLMI Fidelity Measure (see Table 1; Shogren, Raley, et al., 2018), which guides coaches in strategically observing how the SDLMI is implemented during a coaching visit. The SDLMI Coaching Model integrates the SDLMI Fidelity Measure in order to collect data on the degree to which teachers are delivering the core components of the SDLMI during a coaching visit (Hagiwara et al., 2020; Shogren, Raley, et al., 2018). Unlike other fidelity measures, the SDLMI Fidelity Measure incorporates coach and teacher fidelity reporting. During a fidelity observation, the coach collects data on teachers' self-reported fidelity, observes SDLMI implementation, and provides data on their perceived levels of SDLMI implementation fidelity. The congruence of perceptions of implementation by the coach and teacher reinforces a collaborative approach to enhancing SDLMI instruction (Shogren et al., 2021). See Figure 1 for an example of the SDLMI Fidelity Measure.

The fifth component of the SDLMI Coaching Model, or Coaching Conversation Notes (See Figure 2), guides coach-teacher relationship building and the development of shared goals for implementation and future coaching sessions. Coaches pair the SDLMI Fidelity Measure with Coaching Conversation Notes to inform specific supports teachers need to enhance implementation fidelity. For example, the SDLMI Fidelity Measure assesses the degree to which teachers ensure they have met the specific Teacher Objectives for an SDLMI lesson, and this rating can inform strengths and areas of growth related to the SDLMI core components that coaches highlight in their coaching conversations with teachers. The Coaching Conversation Notes also promote opportunities for the coach and teacher to develop a shared vision for additional supports needed in the future. It is important to note that coaching conversations should not include sharing the completed SDLMI Fidelity Measure with the teacher, as it is not designed to be evaluative. Rather, coaches are trained to use the data collected on the SDLMI Fidelity Measure to structure their coaching conversations and identify areas needing additional support. The Coaching Feedback Survey is the sixth element of the SDLMI Coaching Model and allows teachers to provide anonymous feedback to improve future coaching practices. SDLMI coaching the survey to ensure their decisions about how to support the implementation of SDLMI take into account teacher perspectives and experiences.

Tiered Coaching Frameworks

Engaging teachers in the SDLMI through tailored supports is crucial (Raley et al., 2023). Tiered frameworks have been applied to SDLMI implementation with students in recent studies (Shogren et al., 2016), but work is needed to understand how tiered frameworks can be applied to coaching to enhance teacher implementation. To develop the SDLMI Tiered Coaching Model, we sought to integrate key elements of the most widely researched tiered coaching frameworks (Eagle et al., 2015; Hemmeter, 2022) with the SDLMI Coaching Model. Because research suggests the positive impact of self-determination instruction on valued student outcomes (e.g., academic and transition goal attainment; Burke et al., 2020), tiered coaching frameworks for evidence-based practices designed to promote self-determination, like the SDLMI, have gained increasing support. With the support of tiered coaching, teachers can enhance student outcomes to overcome barriers to self-determination skill development, foster academic achievement, and empower students to take control of their learning and future. Further, tiered coaching can provide a means to address additional supports needed to modify or intensify implementation of the SDLMI with students, particularly those with complex support needs (Raley et al., 2023). For this reason, we reviewed literature on multi-tiered systems of supports (MTSS) and the Pyramid Model to determine how more intensive coaching supports within a tiered framework can be effective.

Multi-Tiered Systems of Supports

MTSS frameworks have been applied to teacher professional development and the implementation of evidence-based practices in the classroom (e.g., Freeman, 2017; Myers et al., 2011). Three critical components of MTSS in coaching are data-based decision-making, monitoring of implementation fidelity of evidence-based practice, and using additive supports (Lewis & Newcomber, 2002). Each additive support, or tier, adjusts the intensity of model implementation by changing aspects of model coaching (National Center on Intensive Intervention, 2019). When MTSS is applied to teacher coaching, teachers receive support across three tiers: (a) Tier 1 - universal coaching for all teachers, (b) Tier 2 - targeted coaching for teachers who need more support, and (c) Tier 3 - intensive support tailored to the unique needs of each teacher (IRIS Center, 2019). True to the additive nature of MTSS, teachers receiving Tier 3 supports are also provided Tier 1 and 2 supports, which highlights that more intensive support does not replace initial supports provided to all teachers. While tiers of support may vary based on key model components (e.g., student questions, teacher objectives, education supports), they

all address a common issue of providing support to increase teacher implementation fidelity and success in response to individualized teacher needs.

The Pyramid Model

The Pyramid Model is a multi-tiered framework of evidence-based teaching practices that provide practical support, leading to meaningful outcomes for students and enabling practitioners to implement practices with fidelity (Hemmeter, 2018; 2021). Designed to implement universal evidence-based practices and individualized additive approaches to an instructional model, the Pyramid Model has often been used to support teachers in early childhood settings (Snyder et al., 2018). However, recent literature supports the need to expand professional development, specifically targeting tiered approaches across all grade levels, including secondary educators (Gaines & Barnes, 2017). The Pyramid Model incorporates four strategies to support teachers' learning, including (a) building positive relationships, (b) classroom engagement practice, (c) using social and emotional teaching strategies, and (d) planning individualized instructional practices (Fox, 2003). These support elements impact teachers' abilities to implement strategies effectively and as intended. They also directly impact student outcomes related to selfdetermination, such as the development of self-awareness (Fox, 2003).

SDLMI Tiered Coaching Model

The SDLMI Tiered Coaching Model was iteratively developed based on what has been learned from implementing the SDLMI Coaching Model in research and practice, the tiered coaching literature reviewed previously, and the implementation of the authors' tiered supports have been needed and delivered in the classroom with teachers implementing the SDLMI during ongoing research and implementation projects. The SDLMI Tiered Coaching Model begins with the SDLMI Coaching Model described previously and integrates elements of MTSS and the Pyramid Model. A specific focus of the model is defining tiers of support to intensify teacher supports based on implementation data. The SDLMI Tiered Coaching Model layers individualized coaching strategies on top of universal supports (i.e., Tier 1) provided to teachers in the SDLMI Coaching Model. The newly defined Tier 2 and Tier 3 supports in the SDLMI Tiered Coaching Model are additive layers of support applied to teachers individually through data-based decision-making (e.g., SDLMI Fidelity Measure, SDLMI Coaching Conversation Notes). Relationship building undergirds all tiers and coach-teacher interactions. Each SDLMI Tiered Coaching Model tier will be explicitly described later in this section.

However, it is first necessary to describe how the SDLMI Coaching Framework principles are infused throughout the SDLMI Tiered Coaching Model. The SDLMI Coaching Framework Principles include application, empowerment, equality, reflective dialogue, shared vision, and trust. These principles are infused in all activities, including across the SDLMI Coaching Stages (Plan, Observe, Reflect, and Share). In the SDLMI Tiered Coaching Model, these principles can also be infused across tiers of support within each SDLMI Coaching Stage. Table 2 demonstrates, for the Plan stage, how the SDLMI Coaching Model principles can be infused across tiers of support. For example, coaches support all teachers at Tier 1 during the Plan stage through a Preliminary Meeting; this enables coaches to promote Equality, an SDLMI Coaching Model principle, by valuing communication and equal partnership in developing an implementation plan. Coaches seek information from the teacher to accommodate their preferences for types and intensities of coaching support, which professional experiences and cultural backgrounds can influence (Hagiwara et al., 2020). Coach activities highlighted in Table 2 align with the SDLMI Coaching Framework principle that most effectively impacts teachercoach collaboration in SDLMI implementation.

The SDLMI Coaching Model Stages provide a framework in the Tiered SDLMI Coaching Model for coaches and teachers to identify the level of coaching support needed across the stages for teachers to implement the SDLMI with fidelity. For example, Observe is actualized in practice by coaches observing teacher implementation of the SDLMI and using the SDLMI Fidelity Measure and Coaching Conversation Notes to document fidelity, implementation strengths, and implementation areas for growth at Tier 1. More frequent observations will occur at Tiers 2 and 3 to determine progress and implementation challenges if issues are identified at Tier 1. These measurement tools allow for data-based decision-making to inform which tier of support best meets teachers' support needs, recognizing this can change over time. Three SDLMI Coaching Stages (Observe, Reflect, and Share) ensure the SDLMI Tiered Coaching Model reflects evidence-based instructional strategies intensified through more frequent coaching visits or additional training and resources when teachers struggle to implement with fidelity.

Data-based decision-making using the SDLMI Fidelity Measure and Coaching Conversation Notes is essential to support coaches in identifying the need for intensified supports and cultivating positive relationships with teachers by supporting their effective implementation. Specifically, the SDLMI Procedural Checklist, used in all support tiers, utilizes the SDLMI Fidelity Measure to inform coaching focused on the model's components implemented with low fidelity and movement between support tiers in the SDLMI Tiered Coaching Model. Consistent with MTSS models, Tier 1 or universal instruction is intended for *all* teachers receiving SDLMI coaching supports. Tier 2 includes additional targeted SDLMI implementation support that should be individualized based on a teacher's support needs. Tier 3 is the most intensive SDLMI implementation support, which should also be further intensified based on a teacher's support needs that are not being met with Tier 1 or 2 supports (IRIS Center, 2019; Raley et al., 2022). Specific to the SDLMI Tiered Support Model, MTSS principles are integrated to guide coaches using fidelity and conversation notes to identify needs for more intensive coaching. Teacher feedback and communications, fostered through the SDLMI Coaching Model principles, also inform this decision-making. Tables 3-5 illustrate how Tier 1, 2, and 3 supports are operationalized across tiers of SDLMI coaching support with integrated principles of MTSS and across the SDLMI Coaching Stages.

In addition to integrating tiered supports and data-based decision-making, we also integrated teacher support practices from the Pyramid Model, namely the focus on relationshipbuilding, into our SDLMI Tiered Coaching Model. This aligns with and expands the SDLMI Coaching Framework Principles. To support the fidelity of the instruction and enhanced student outcomes, coaches must build collaborative relationships with teachers and provide individualized coaching support based on data and teacher-identified needs (Artman-Meeker et al., 2021). Figure 3 demonstrates alignment between the Pyramid Model's framework and the SDLMI Coaching Model Stages to further enhance elements of effective evidence-based supports across tiers.

SDLMI Tiered Coaching Model in Practice

As coaches prepare to support teachers' diverse strengths and instructional needs by applying tiers of support during SDLMI coaching, it is essential to consider how to initially approach teachers and gather information about individual needs and preferences. As a first step, coaches put into practice the SDLMI Coaching Stage Plan to collaborate with a teacher for observations and coaching support and to discuss the purpose of SDLMI observations and the SDLMI Tiered Coaching Model. As mentioned, Table 2 shows the planning components that coaches engage in, including (a) preliminary meetings, (b) preliminary training delivered to small or large groups using standardized training materials, (c) implementation scheduling, (d) fidelity observations, and (e) coaching support. During this process, decisions can be made about needing more intensive support. Specific actions are taken during each activity to promote effective communication between the coach and teacher; this supports relationship building. All stages integrate the SDLMI Coaching Model principles (application, empowerment, equality, reflective dialogue, shared vision, and trust; Hagiwara et al., 2020). The first four planning activities in the Tiered SDLMI Coaching Model are provided to all teachers (Tier 1). The fifth planning component of the Tiered SDLMI Coaching Model aligns with our three-tiered protocol and will vary based on teacher needs and preferences and data gathered about implementation.

Second, coaches engage in the remaining SDLMI Coaching Stages Observe, Reflect, and Share, as shown in Tables 3-5. Each of these stages can be intensified across tiers of support. Observe occurs in all coaching tiers through standardized observation tools like the SDLMI Fidelity Measure and Coaching Conversation Notes. This enables coaches to observe SDLMI implementation and inform needs for more intensive supports at Tiers 2 and 3. Reflect combines coach observation tools and equal partnership between teacher and coach to tailor support tier to teacher needs. Share promotes reflective dialogue by actively engaging the teacher in their own professional growth as they collaborate with their coach to identify the level of tiered support tailored to a shared vision to achieve sufficient fidelity to impact student outcomes. The SDLMI Coaching Stages are consistent across the SDLMI Tiered Coaching Model tiers. However, the support provided within each stage and tier can be intensified based on teacher needs, particularly Observe, Reflect, and Share. The six elements of the SDLMI Tiered Coaching Model that are intensified include (a) SDLMI Phase Coaching, (b) additional bi-monthly support, (c) in-person implementation support, (d) pre-lesson overview, (e) in-person implementation support for complex lessons, and (f) in-person implementation support for technology-related lessons. Teachers are provided with increased supports aligned with these elements if they move from Tier 1 to Tier 2 and 3. The following sections describe Tier 1, 2, and 3 supports and how these elements are operationalized.

Tier 1 Coaching

SDLMI Phase Coaching is essential to the Tier 1 universal support provided through the SDLMI Tiered Coaching Model. It includes virtual or in-person coaching during Phases 1, 2, and 3 for every implementing teacher (e.g., three coaching visits during an academic semester aligned with the three phases of the SDLMI). Coaching once during each phase of the SDLMI allows feedback and fidelity observations during these critical and distinct phases of instruction. SDLMI Phase Coaching is the lowest intensity of support that has been demonstrated to lead to fidelity of implementation for teachers (Shogren et al., 2020). Coaching sessions during each align with fidelity observations conducted using the SDLMI Fidelity Measure (e.g., component four of the SDLMI Coaching Model). This informs coaching conversations (e.g., component five of the SDLMI Coaching Model) that focus supports and goal setting around items rated with low fidelity. Fidelity observations are used universally in every tier of support.

At the Tier 1 level, SDLMI coaches schedule an SDLMI Phase 1, 2, and 3 fidelity observation with each implementing teacher (Observe stage of the SDLMI Coaching Model). The coach completes the SDLMI Fidelity Measure during the lesson and then, prior to the coaching session, organizes the data collected to inform the coaching conversation. For example, suppose an item is rated low or absent on the SDLMI Fidelity Measure. In that case, the coach will explore implementation support for this component to increase teacher fidelity of implementation for future lessons with a play to intensity supports and move to Tier 2 and Tier 3, as necessary. Each coaching meeting will be 15-20 minutes. The Reflect stage of the SDLMI Coaching Model Coaching Stages provides a structure for this meeting, where the coach and teacher collaboratively identify the teacher's strengths and support needs related to SDLMI implementation (Hagiwara et al., 2020). In practice, and if time permits, this can occur directly after the SDLMI Fidelity Measure observation or a coach may schedule a meeting on another day. It is crucial to be mindful of the teacher's schedule and assume they may not have time to chat directly after the Observe stage. Table 3 provides specific steps in planning and preparing for Tier 1 support aligned with the SDLMI Coaching Model stages and principles.

Tier 2 Coaching

Tier 2 supports include additional bi-monthly coaching and in-person implementation support, which are provided in addition to Tier 1 supports based on identified needs. Additional bi-monthly coaching can occur virtually, in person, or via email. In-person implementation support can occur for the first lesson of the SDLMI cycle and be initiated when teachers are experiencing unexpected delays in implementation or report struggling with implementing the first SDLMI lesson. Coaching still occurs three times during each SDLMI phase (Tier 1 support); however, Tier 2 support provides two additional monthly meetings between the teacher and coach and in-person focused implementation and technology support during the first lesson of the SDLMI. During these additional, bi-monthly check-ins, coaches begin with rapport building, asking the teacher how their lessons are going and if they would like to discuss anything specific. Coaches should support the needs teachers identify, review the implementation schedule to determine if any adjustments are needed, and specifically review areas where needs have been identified on the SDLMI Fidelity Measure.

Some early lessons (e.g., SDLMI Lesson 1) include data collection elements (Self-Determination Inventory: Student Report [SDI: SR; Shogren & Wehmeyer, 2017]; see selfdetermination.org) that are often identified as challenging for teachers because they require teachers to support students in accessing technology. Data can be collected through the Self-Determination Inventory System (SDIS; see self-determination.org). The SDIS Data Dashboard allows teachers to create and manage student accounts, assign the SDI: SR to students, and view SDI: SR results. SDLMI Lesson 1 often requires focused coaching attention to support teachers, and this may be the in-person implementation support for many teachers receiving Tier 2 support. For example, prior to SDLMI Lesson 1, coaches can include a hyperlink in their support email for the SDIS and student login information for easy access, then attend this lesson inperson for implementation support and technical assistance. While this information is covered in training, teachers who report this is a struggle or who struggled with fidelity in previous semesters can benefit from this additional support. This support can also be provided for other lessons or aligned with core components that need support based on fidelity observations. Table 4 provides specific steps in planning and preparing for Tier 2 support.

Tier 3 Coaching

Tier 3 coaching support includes Tier 1 and 2 supports and adds: (a) pre-lesson overview (e.g., lesson overview with links to resources and overview of teacher objectives), (b) in-person implementation support for complex lessons that require more individualized focus, and (c) in-person implementation support for technology-related lessons (SDI: SR; see self-determination.org). Tier 3 provides the most intensive supports above and beyond those provided in Tier 1 and Tier 2 and is individualized to align with teachers' identified needs based on fidelity data and coaching conversations.

Pre-lesson overviews are lesson overviews provided to teachers with links to resources and an overview of teacher objectives prior to implementation to provide planning and resource supports (see Table 5). In-person implementation support for complex lessons occurs during SDLMI lessons that require more individualized focus, such as students setting an observable, measurable, and specific individualized goal and completing Goal Attainment Scaling (GAS; Kiresuk et al., 2014). This provides teachers with more support in lessons often described as difficult to navigate for new implementers and can influence fidelity. The final layer of Tier 3 support is in-person implementation support for technology-related lessons like the SDI: SR. This goes beyond that provided in Tier 2 as the coach will support teachers in interpreting the data collected, sharing it with the class, and reviewing it with individual students. For example, a teacher who received Tier 1 supports but was struggling with fidelity to implementing Educational Supports and already received Tier 2 supports, including an additional visit to initiate implementation but reported still struggling and showed low fidelity, would receive Tier 3 supports. For example, teachers often report struggling with modifying and aligning the SDLMI during their first year of implementation to meet student needs. During the Reflect and Share stage of the SDLMI Coaching Stages, the coach can develop an action plan with a teacher to provide targeted pre-lesson overviews with individualized supports for lesson delivery (e.g., an overview of the lesson with links to resources and a brief overview of teacher objectives).

Further, as noted previously, a plan for additional in-person visits targeting challenging lessons can be developed. Coaches can use various resources from the pre-lesson overview, sent two to three days ahead of the lesson aligned with the implementation schedule, to provide support. This may include references to the SDLMI Teacher's Guide (Shogren, Raley, et al., 2018), page numbers in the lesson plan, an SDLMI Google Drive for links to the lesson plans, the goal booklet for page numbers associated with the lesson plan, and a summary of teacher objectives. The pre-lesson overview is sent via email (see Figure 3) and includes hyperlinks for lesson plans and resources, easy-to-follow and specific steps, and minimal wording. See Table 4 for specific steps in planning and preparing for Tier 3 support.

How to Identify Needed Supports

The decisions to move between tiers of supports must be informed by data from the SDLMI Fidelity Measure and Coaching Conversation Notes., consistent with MTSS principles. Coaches and teachers work collaboratively to discuss and determine other perceived implementation needs that also inform movement between tiers (e.g., teachers lack familiarity with technology interpreting assessment results). The SDLMI Fidelity Measure assesses three fidelity components: (a) adherence, (b) quality of delivery, and (c) participant responsiveness. The SDLMI Fidelity Measure, supported through extensive research in use and effectiveness, can enable coaches to systematically inform coaching conversations around SDLMI fidelity items with low fidelity (e.g., items rated below a three on a five-point rating scale). This can guide coaching conversations and demonstrate a need to move beyond Tier 1 to Tier 2 supports to increase fidelity. Research is still establishing explicit recommendations for a standardized acceptable fidelity level across all three domains. However, individual items, including dichotomous coding (yes, no; is the SDLMI core component present) and a five-point Likert scale (e.g., what is the quality of delivery of the SDLMI core component or to what degree are students responsive to SDLMI instruction as delivered) can identify areas of need along with Coaching Conversation Notes (Shogren et al., 2020).

Additionally, other data sources, including teachers' self-reported needs during training and coaching conversations, can inform movement between tiers. For example, a teacher may identify they will struggle with starting implementation of the SDLMI. In that case, it may be valuable to provide Tier 2 supports after training, particularly support for SDLMI Lesson 1 implementation, and then move back to Tier 1 supports unless fidelity data suggests other supports are needed. Further, when teachers are not adhering to their implementation schedule, this can be another data point to inform a need for more intensive Tier 2 or 3 supports. SDLMI Coaching Conversation Notes can also guide movement between tiers throughout implementation. As part of each coaching session, precise, specific goals will be set, planned, and reflected upon, and if these goals are not being met between coaching sessions, then this can inform more intensive supports being needed. The SDLMI Implementation Schedule, SDLMI Fidelity Measure, and SDLMI Coaching Conversation Notes can inform fidelity and needs to enhance fidelity, supporting decision-making to move between tiers.

Coaching Considerations

A critical goal of school-based coaching is to build rapport and mutual trust, establish shared understandings of professional experiences and backgrounds, and ensure educators meet a high implementation fidelity threshold (Fixsen et al., 2010; Snyder et al., 2015). The fifth principle of the SDLMI Coaching Model shared vision, describes the importance of coaches establishing rapport and a shared understanding with teachers as they provide support (Hagiwara et al., 2020). Coaching is a relationship-based process led by an expert to build a teacher's capacity to improve existing abilities, build new skills, and develop a deeper understanding of practice for use in current and future situations (NAEYC/NACCRRA, 2012). Supporting teachers to implement new strategies can bring many challenges for both coach and teacher. It is essential to respect that the teacher's priorities may differ from those of the coaches. Coaches should be trained and continually reflect on how they can provide space for the teacher to protect their and students' boundaries. Coaches should also understand the importance of working within the teachers' schedule and providing as much room for flexibility as possible while honoring the already burdensome demands under which teachers operate. Rapport building may be essential to developing sustainable, trustworthy coach-teacher relationships and establishing shared expectations for time commitments and outcomes, including a mutual understanding of the purpose and process for evidence-based practice (National Center for Quality Teaching and Learning, 2014). The Pyramid Model is the strongest framework promoting the importance of relationship-building between coaches and teachers. As part of its rich tiered structure, practical support is delivered by including individualized approaches to building strong relationships during implementation support (Hemmeter, 2018; 2021), underpinning the significance between rapport-building and implementation fidelity.

Coaches should also recognize their positionality in educational contexts. A coach's position as an outsider in a classroom may impact teacher relations by influencing the interpretations of what is important for teachers and students (McCorkel & Myers, 2003). Coaches are responsible for creating educational change by implementing evidence-based practices in classrooms, yet they are also obligated to support teachers during difficult experiences. Challenges do not exist exclusively within the classroom, and teachers often balance personal constraints and their profession's complexities.

Further, coaches must consider the broader demands from school administration and policies placed on teachers. Constraints from required responsibilities beyond classroom instruction and the need to meet district and national policy standards may impact teachers' ability to participate in the implementation of a new instructional model. Integrating schoolwide approaches, like MTSS and self-determination, may be one way to address the needs of students and encourage the adoption of self-determination-related practices by all teachers and staff (Hagiwara et al., 2017). This will provide students with opportunities to practice skills associated with self-determination throughout their day (Bohanan et al., 2015). Further alignment with schoolwide initiatives would also increase the likelihood that teachers would be willing to directly teach self-determination skills and encourage the adoption of self-determination practices by all teachers and staff (Bohanan et al., 2015). However, additional research is needed to directly examine impacts on teacher practice and student outcomes.

Teachers should be considered experts in their lives and classroom and knowledgeable about their student's strengths, and co-planning with teachers, coaches, and administrators may be beneficial. Coaches would benefit from learning with and from teachers they support through a collaborative partnership with teachers, including capturing feedback on their experiences through documentation in SDLMI Coaching Conversation Notes, offering the opportunity to refine future research and strategies to improve the SDLMI and associated coaching and determine broader factors in educational contexts that impact fidelity and needed implementation supports.

Finally, this proposed tiered coaching approach offers an adaptable framework that could extend beyond the SDLMI. Its emphasis on individualized coaching and tailored support to meet teachers' diverse needs can be applied to various models of instruction, interventions, and practices. By recognizing the importance of accommodating teachers' unique contexts and challenges, this tiered coaching model has the potential to enhance instructional practices in a wide range of educational domains, ultimately promoting more inclusive and effective teaching strategies for students across diverse outcome domains.

Conclusion

This paper has described how evidence-based practices can positively impact students' academic, social, and transition outcomes (Burke et al., 2019; 2020; Shogren et al., 2020). The SDLMI has been shown to promote self-determination among secondary students with and without disabilities, leading to positive student outcomes during transition planning and academic content instruction (Shogren et al., 2019; National Technical Assistance Center on Transition, 2017). Teachers who are supported by a coach during evidence-based instructional model implementation are more likely to sustain and scale the practices over time, resulting in substantial improvement in outcomes (Artman-Meeker, Hemmeter, & Snyder, 2014; Flynn et al., 2017). We have developed structured, individualized approaches to coaching through the SDLMI Tiered Coaching Model to address the complexities of SDLMI implementation and the varied intensities of teacher support needs. To determine how more intensive coaching supports within a tiered framework are effectively provided, alignment with MTSS and the Pyramid Model are key integrations with the SDLMI Coaching Model. Movement between tiers is driven by data-based decision-making and an emphasis on teacher-coach relationship building to provide the most effective and individualized support for teachers to implement the SDLMI with fidelity. Identifying needed supports continues to be a collaborative journey. It necessitates further exploration of the SDLMI Tiered Coaching Model, including data on the impact on both cost and student and teacher outcomes of using a tiered coaching model. Future research should examine SDLMI implementation using this tiered coaching model to further develop knowledge of the most effective supports for fidelity and, ultimately, positive student outcomes.

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Components of the SDLMI Coaching Model

Component	Description	
1: SDLMI Coaching Framework	Six coaching principles (application, empowerment, equality, reflective dialogue, shared vision, trust; Hagiwara et al., 2020) guide all implementation supports coaches provide. These principles are operationalized across all components.	
2: SDLMI Coaching Stages	Coaching principles are actualized in practice through four coaching stages. The first stage (Plan) occurs before an observation, the second stage (Observe) is the observation using the SDLMI Fidelity Measure, and the last two stages (Reflect and Share) occur during the coaching session following the observation.	
3: SDLMI Coaching Procedural Checklist	Used by coaches to ensure the completion of all tasks associated with the SDLMI Coaching Model.	
4: SDLMI Fidelity Measure	Completed by coaches during the Observe stage to assess the extent to which the SDLMI is implemented with fidelity. After completing the measure during the observation session, coaches use it to guide the conversation during the coaching session.	
5a: SDLMI Coaching Conversation Guide	Provides an outline of topics to cover, suggested phrasing, and important reminders for coaches to have meaningful conversations with facilitators during coaching sessions. This seeks to operationalize the SDLMI Coaching Framework principles.	
5b: SDLMI Coaching Conversation Notes	Used to take notes based on the coaching conversation in a structured way and to facilitate goal setting and action planning at the end of each session.	
6: SDLMI Coaching Feedback Survey	Provides SDLMI implementers an opportunity to anonymously provide feedback to improve future coaching practices. Implementers receive a prompt to complete the survey in a follow-up email.	

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SDLMI Coaching Framework Principles and SDLMI Coaching Stage: PLAN

	mmunicates with the te MI observations	eacher to set up training observ	ations, coaching sessions, and	to discuss the purpose and	
Tier/Principle	Coaches Activity	When to Schedule	Action/s	Time Requirement	
Tier 1:	1a: Preliminary	2-3 weeks prior to	Identify implementation	20-30 min in person or virtual	
Equality	Meeting	implementation start date	details		
	1b: Considerations	The coach will ask when the teacher implements the SDLMI, which students will			
		participate, and what hour/day of the week the teacher will implement.			
Tier 1:	2a: Preliminary	1 week prior to	2a: Complete SDLMI	3-4 hrs of consecutive or	
Application	Training	implementation start date	content training aligned	nonconsecutive SDLMI	
			with school professional	content training using	
			development schedules	standardized materials,	
			using standardized training materials ^a	2-3 min after SDLMI content	
	2b: Considerations:	materials ^a training The coach will ask if the teacher prefers email, text, or video conference for future support			
			-		
Tier 1: Empowerment	3a: Implementation Schedule	During preliminary training	Identify dates for each lesson to be implemented	10-15 min	
1	3b: Considerations:	The coach will ask when the	teacher implements Lesson #1	^a and what day the teacher	
		complete all 22 lessons.	I		
Tier 1:	4a: Fidelity	1 observation each SDLMI	Occurs during an SDLMI	45 min – 1 hr	
Shared Vision	Observations	Phase	lesson		
	4b: Considerations:	The coach will confirm 1 week ahead that the teacher is on track with implementation schedule and send reminders for upcoming observations.			
Tiers 1-3:	*5a: Coaching	During each phase, include	Enact coaching support	10-20 min after fidelity	
Reflective Dialogue/Trust	Support	additional support dates in implementation schedule	during identified coaching visits	observation or separate time virtually	

*Note: Coaches will align 5a and 5b with the support tier associated with teacher needs and preferences. ^aMeasures and associated training information can be accessed at www.self-determination.org.

Tier 1 Support and SDLMI Coaching Stages: Observe, Reflect, and Share

Description of Tier 1 Suppo	ort SDLMI Coaching Stage	SDLMI Coaching Principle	
	<i>Observe</i> The coach watches the teacher implement the SDLMI while completing the <i>SDLMI Fidelity</i> <i>Measure</i> and <i>Coaching Conversation Notes</i>	<i>Equality</i> The coach demonstrates value for communication and equal partnership through data-based observation and conversation	
 SDLMI Phase Coaching- Phase 1, 	Reflect The coach and teacher use the SDLMI Fidelity Measure and Coaching Conversation Notes to collaboratively identify the teacher's strengths and support needs to identify movement between tiers Share The coach provides feedback on teacher's efforts and progress in SDLMI implementation. Coach and teacher identify support tier and set goals for the next coaching session	<i>Application</i> The coach demonstrates flexibility and creativity to build teacher capacity to implement with fidelity	
Phase 2, and Phase 3		<i>Empowerment</i> The coach supports the teacher to engage in their own professional growth as expert decision-makers during implementation	
		<i>Shared Vision</i> The coach establishes rapport and shared understanding with the teacher by establishing shared expectations	

^aMeasures and associated training information can be accessed at www.self-determination.org

Tier 2 Support and SDLMI Coaching Stages: Observe, Reflect, and Share

Description of Tier 2 Support	SDLMI Coaching Stage	SDLMI Coaching Principle
 SDLMI Phase Coaching- Phase 1, Phase 2, and Phase 3 (Tier 1) Additional Bi-monthly Implementation Support Check-ins (in-person, virtual, text, or email) 	Observe The coach completes the SDLMI Fidelity Measure, Coaching Conversation Notes, and attends two informal observations (one additional bi-monthly support check- in, one in-person support observation for the first lesson of the SDLMI cycle). Reflect The coach and teacher use the SDLMI Fidelity Measure, Coaching Conversation Notes, and additional bi- monthly support to increase opportunities to enhance instruction of the SDLMI through collaborative practice.	<i>Trust</i> The coach builds on Tier 1 support by strengthening collaborative relationships that lead to enhanced student outcomes and implementation fidelity through two additional support sessions.
3. In-person Implementation Support for the first lesson of the SDLMI cycle	<i>Share</i> The coach increases opportunities for feedback on teachers' efforts and progress in SDLMI implementation through additional support sessions. The coach and teacher evaluate current support tier and set goals for the next coaching session.	<i>Reflective Dialogue</i> The coach builds on Tier 1 support by promoting increased teacher reflection on SDLMI implementation through additional conversation

^aMeasures and associated training information can be accessed at www.self-determination.org

Tier 3 Support and SDLMI Coaching Stages: Observe, Reflect, and Share

Description of Tier 3 Support	SDLMI Coaching Stage	SDLMI Coaching Principal
1. SDLMI Phase Coaching-	Observe	-
Phase 1, Phase 2, and	The coach completes the SDLMI	
Phase 3 (Tier 1)	Fidelity Measure, Coaching	
	Conversation Notes, attends two	
2. Additional bi-monthly	Tier 2 informal observations (one	Trust
check-ins for	additional bi-monthly support	The coach builds on
implementation support	check-in, one in-person support	Tier 1 and Tier 2
(in-person, virtual, text, o	observation), and attends two	supports by providing
email) (Tier 2)	additional informal observations	three additional
	(in-person implementation support	opportunities to
3. In-person Implementation		strengthen collaborativ
Support for the first lesso		relationships that
of the SDLMI cycle (Tier	technology-related lessons).	enhance student
2)	Reflect	outcomes and
	The coach and teacher use the	implementation fidelity
4. Pre-lesson overview-	SDLMI Fidelity Measure,	1
lesson overview with link		
to resources and overview		
of teacher objective (Tier	and a Tier 3 additional support	Reflective Dialogue
3)	session (pre-lesson overviews) to	The coach builds on
, ,	increase opportunities to enhance	Tier 1 and Tier 2
5. In-person Implementation		supports by promoting
Support for complex	collaborative practice.	teacher reflection on
lessons (e.g., Goal	L	SDLMI implementatio
Attainment Scaling	Share	during the pre-lesson
(GAS) ^a -setting an	The coach increases opportunities	overview and two
observable, measurable,	for feedback on teachers' efforts	additional in-person
and specific goal that is	and progress in SDLMI	implementation suppor
student-led) (Tier 3)	implementation through three	sessions
	additional support sessions. The	
6. In-person Implementation	± ±	
Support for Technology-	support tier and set goals for the	
Related Lessons (SDI:	next coaching session.	
SR) ^a (Tier 3)	0	

SR)^a (Tier 3) ^aMeasures and associated training information can be accessed at www.self-determination.org Figure 1

Click here to access/download Supplemental Material Supplemental File Figure 1.docx Figure 2

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