The Every Student Succeeds Act (2015) requires teachers to address students’ diverse learning needs to master increasingly rigorous state standards within a Multi-Tier System of Supports (MTSS). To actualize equitable learning opportunities, it is critical teachers be equipped with the knowledge and skills to provide individualized, specially designed, and responsive instruction within a decision-making framework. In response, teacher preparation programs must include professional competencies that ensure teacher candidates are prepared with the knowledge, skills, and resources necessary to effectively teach students with diverse learning needs. To accomplish this goal, teacher preparation programs can be enhanced to include resources, tools, and protocols from nationally vetted and federally funded centers (e.g., IRIS, CEEDAR, NCII) to address teachers’ knowledge and skills for differentiation through universal design for learning (UDL), individualization, and data-driven decision-making.

In 2015, the Every Student Succeeds Act (ESSA) was passed, reauthorizing the Elementary and Secondary Education Act and replacing No Child Left Behind (2002). ESSA renewed the emphasis on strengthening standards and rigor for all students, the use of evidence-based practices to support student learning, and the use of data-based instructional decision-making. This legislation provided greater flexibility in the adoption of rigorous standards aligned with college and career goals and in the application and implementation of instruction and intervention using a multi-tier system of supports (MTSS). The increased emphasis on rigorous standards has implications for all students, including students with disabilities, who must work towards mastering the same general education curriculum standards as their peers. Students, regardless of diverse learning needs, must be prepared for a dynamic workforce with different skills and knowledge than previously required (Weiss & McGuinn, 2016).

Although the alignment of standards with career and college goals is designed to benefit all students, such initiatives have placed some students at a disadvantage as they continue to struggle to close the ever-widening gap between them and their peers (Elish-Piper, 2016). Setting high standards is important, however, providing appropriate supports to assist students to reach those new standards is critical (Elish-Piper, 2016) especially given that reading and math proficiency are directly correlated with academic success, high school graduation, and college attainment (Hough et al., 2013). Even though educational reforms of rigorous standards have been touted to address inequities, the most recent data from the National Assessment of Educational Progress (NAEP, 2019) reported 65 percent of both fourth- and eighth-grade students performed below proficiency on grade level assessments in reading. In mathematics, 59 percent of fourth grade and 66 percent of eighth-grade students were below proficiency (NAEP, 2019). These results indicate a significant
number of students continue to struggle to meet grade level standards, a struggle that will likely continue if not addressed.

The emphasis on standards-based reforms to improve student knowledge has implications for teachers and teacher preparation programs. Teachers will need knowledge and expertise in universal design for learning (UDL) and data-driven decision-making to provide targeted instruction and interventions to assist students reach increasingly rigorous standards (Elish-Piper, 2016). Therefore, teacher preparation programs need to enhance content, performance tasks, and resources to prepare teachers with enhanced pedagogical knowledge on differentiation of instruction through UDL, data-driven decision-making, and varied instructional practices to meet diverse learning needs of students.

Meeting the Needs of All Students

Federal legislation has emphasized the need for schools and districts to utilize a Multi-Tier System of Supports (MTSS) to address gaps in student achievement. ESSA (2015) describes MTSS as a comprehensive continuum of evidence-based, systemic practices to support an immediate response to student needs through regular observation and data-driven instructional decision-making. Specifically, ESSA recognized in order for students to meet challenging academic standards, the use of a multi-tier system of supports was necessary as it would “increase the ability of teachers to effectively teach children with disabilities, including children with significant cognitive disabilities, and English learners” (Section 2103(b)(3)(F), ESSA).

Typically, MTSS is a three-tiered, instruction, intervention, and problem-solving framework that begins with evidence-based instruction within the grade level classroom (Braun et al., 2018). Defining characteristics of MTSS include: (a) evidence-based instructional practices at all three tiers; (b) differentiated methods and immediate supports for struggling students; (c) data-driven instruction; (d) sustained progress monitoring; and (e) individualized and targeted intervention (Barrio et al., 2015). Throughout the MTSS process, teams of educators collaboratively identify students who are at-risk or not meeting grade level standards or expectations, determine specific instructional goals based upon the data, provide early intervention, and guide service delivery for students with persistent needs using assessment data (Hoover, 2019; Lane et al., 2019).

Universal Design for Learning (UDL) fits within the MTSS framework and has been described (e.g., Basham et al., 2010) as a foundation to differentiate instruction. Developed by Meyer and Rose (1998), UDL is a proactive instructional approach that includes three guiding principles, (a) multiple means of engagement, (b) multiple means for representation, and (c) multiple means of action and expression (Center for Applied Special Technology [CAST.org], 2020). Through its guiding principles, UDL provides a framework for teachers to differentiate instruction to make the curriculum accessible to a wide range of learners (Basham et al., 2010; Pisha & Coyne, 2001). Simply stated, differentiated instruction through UDL principles requires an approach to planning, teaching, and assessing and gives students choices in the materials, content, tools, context, and supports they use (Izzo, 2012).

Preparing Teachers for an Evolving Role

Although many factors contribute to student learning, instructional quality remains a dominant factor in student achievement (Feng & Sass, 2013; Matsumura & Wang, 2014). Teacher preparation programs historically focused on aligning instruction with goals, objectives, and
standards; increasing student engagement; modeling and scaffolding instruction; and highlighting critical information (Fuchs et al., 2014). In addition, student performance and content knowledge are directly influenced by teachers’ knowledge and effective use of evidence-based practices instructional practices (Darling-Hammond & McLaughlin, 2011; Matsumura & Wang, 2014). Therefore, teacher preparation should include access to and experience with the most current research- and evidence-based instructional practices (Sisk, 2019). To actualize the potential for equitable learning opportunities for students with diverse learning needs in this era of rigorous standards and increased accountability, knowledge and skills of teachers to provide individualized, specially designed, and responsive instruction with appropriate supports within a decision-making framework are critical. However, research has indicated that teachers often feel unprepared to meet the diverse and varied learning needs of students in their classroom (Barrio et al., 2015). This is problematic since classroom teachers are the first point of instruction, intervention, and evaluation in the MTSS process (Murawski & Hughes, 2009). In addition, teaching has long been characterized by undifferentiated, whole group instruction that may not meet the needs of all learners (Bucalos & Lingo, 2005). As the classroom becomes more diverse and grade level standards become increasingly rigorous, teachers need to be able to enhance and differentiate their teaching and assessment practices using UDL principles to engage students in meaningful activities (Slanda & Little, 2018). Meeting grade level standards of an increasingly diverse body of students, including students with disabilities, means that teachers need to know how to provide instruction and intervention consistent with students’ assessment results within the MTSS framework (Sisk, 2019).

**Resources to Enhance Teacher Knowledge**

Through an integrated approach, teacher preparation programs periodically review, revise, and enhance course content. Given the current roles of teachers as diagnosticians and interventionists within the MTSS framework, additional knowledge, and abilities of problem-solving, administration and analyses of assessments, data-driven decision-making and differentiation of instruction utilizing a UDL approach across the tiers are needed. To assist with the enhancement process, the U.S. Department of Education, Office of Special Education Programs, has funded multiple projects and centers dedicated to providing teacher educators with an abundance of resources that are readily available for use in their courses and programs. These high-quality online sites have been created by experts to translate research into resources (e.g., videos, course enhancement modules, classroom materials, case studies, activities) for classroom use and within professional learning opportunities. Designed for faculty at Institutes of Higher Education, the sites

Table 1 provides information from three resources utilized in teacher preparation that
can be used to enhance and advance the preparation of teachers to address the diverse earning needs of students.

Table 1
*Sample Resources for Teacher Educators Addressing Tiered Instruction, Differentiation (UDL), and Data-Driven Decision-Making*

<table>
<thead>
<tr>
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<th>IRIS Center</th>
<th>CEEDAR Center</th>
<th>NCII</th>
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<tbody>
<tr>
<td>Overview</td>
<td>Offers easily accessible course modules, case study units, classroom activities, evidence-based strategies &amp; resources</td>
<td>Provides products and services including course-enhancement modules, webinars, technical assistance, various tools, resources, roadmaps, toolkits</td>
<td>Provides course content resources and course activity resources specifically designed for higher education faculty</td>
</tr>
<tr>
<td>Tier 1</td>
<td>Modules and EBPs related to the three principles of Universal Design for Learning (UDL) and discusses how to apply these principles for core instruction</td>
<td>Tools and practices for multiple levels of interventions including course-enhancement modules on Inclusive Education, MTSS for Mathematics, Evidence-Based Reading Instruction</td>
<td>Course content modules for explicit instruction, content delivery in mathematics, reading, and behavior,</td>
</tr>
<tr>
<td>Tier 2</td>
<td>Modules and EBPs related to data-driven individualization and provides information about intensifying and individualizing instruction</td>
<td>Innovation Configurations for UDL, Tier 2 and Tier 3 for Behavior Interventions, Evidence-Based Practices in Reading and Mathematics</td>
<td>Training modules to support data-driven decision-making. Sample lesson plans to intensify instruction for students with math, reading, behavior difficulties</td>
</tr>
<tr>
<td>Tier 3</td>
<td>Modules and EBPs for Tier 3 interventions (i.e., special education services), components of Tier 3 reading interventions, and students' individualized intervention</td>
<td>Innovation Configurations for Response to Intervention, Linking Assessment to Instruction, Inclusive Services</td>
<td>Virtual simulations, video analysis videos, micro-teaching, and lesson studies</td>
</tr>
</tbody>
</table>
**IRIS Center**

Since 2001, the **IRIS Center** at Vanderbilt University has created and disseminated resources about evidence-based instructional and intervention practices to improve the learning and behavioral outcomes for all students, particularly students with disabilities and diverse learning needs. This open-access website ([https://iris.peabody.vanderbilt.edu](https://iris.peabody.vanderbilt.edu)) offers easily accessible modules, case study units, classroom activities, and multiple online resources and tools at no cost. IRIS resources include a wide variety of topics related to MTSS and inclusive programming including learning strategies, evidence-based practices, accommodations, early interventions, behavior and classroom management, and differentiated instruction. IRIS provides tools and materials specific to post-secondary faculty designed to assist with the infusion and integration of evidence-based practices in courses. Tools include sample syllabi, curriculum matrices, coursework planning forms, and video vignettes. Additionally, IRIS provides opportunities to earn badges through Micro-credentials or earn Professional Development Certificates.

**CEEDAR Center**

The **Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR)** Center ([https://ceedar.education.ufl.edu](https://ceedar.education.ufl.edu)) was funded to provide technical assistance to state education agencies (SEA), Institutions of Higher Education (IHE), and Local Education Agencies (LEA) to increase alignment in professional learning systems (i.e., certification, licensure, preparation, program evaluation) to enhance learning opportunities for teachers and leaders. Each of the following CEEDAR resources are available at no cost. Multiple Content Enhancement Modules (CEMs) provide the most current information about critical topics such as behavior management, universal design for learning, literacy, and technology for the classroom are available to educators. CEEDAR Innovation Configurations are designed to ensure teacher preparation programs are using evidence-based practices related to culturally responsive pedagogy, UDL, leadership and inclusive schools. Other resources include the interactive tools, webinars, technical assistance, and reports and briefs.

**NCII**

The **National Center on Intensive Interventions (NCII)** is focused on the development of resources to enhance implementation of data-based individualization as an integral part of the MTSS framework for teachers. Modules, videos, and classroom resources have been developed by national experts and are available for immediate use by educators. Through their open-access website ([https://intensiveintervention.org](https://intensiveintervention.org)), this center provides resources for higher education faculty. These resources allow faculty to develop, modify, or enhance their coursework or field experiences and by including additional pedagogical content, video examples, and application activities. Practice based opportunities are delivered through video analysis, microteaching, virtual simulations, and lesson studies in a variety of topics.

**Conclusion**

Policy and practices need to not only focus on rigorous standards, but also address mastery by individual students with varying instructional needs. We must consider pedagogical content to address instruction and interventions for each student within a problem-solving model. Therefore, the preparation of teachers to meet the needs of students with diverse needs and disabilities often requires the development and use of evidence-based curricula focused on shared
knowledge and skill advancements (Blanton et al., 2018). As learning outcomes continue to increase with rigorous standards, it is critical that teacher preparation programs include enhanced knowledge and skills to address the diverse learning needs of individual students. Enhancing teacher preparation curriculum using resources, tools, and protocols (e.g., IRIS, CEEDAR, NCII) can address teachers’ knowledge and skills for UDL, individualization, and data-driven decision-making to meet the needs of each student within our classrooms and schools. It is essential that we review our programs and practices to address current mandates for standardized policies and procedures and facilitate the discussions, implementation, and focus on the needs of individual students to provide equity of opportunity for the academic success within a multi-tiered system of supports.
References


National Assessment of Educational Progress. (NAEP) (2019). *The nation’s

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