Indicator Explanation

DOMAIN	EFFECTIVE PRACTICE	INDICATOR
Instruction	Provide rigorous evidence-based instruction	3B.1 Instructional teams develop standards-based curriculum for each subject and grade level.

Explanation: Instructional teams must collaborate to develop standards-aligned instructional units. These standards-aligned units of instruction should include learning objectives and their criteria for mastery, pre- and post-tests to assess student mastery, well-designed learning activities aligned to learning objectives, and corresponding materials that are easily accessible to be shared with colleagues. Special education and ELL teachers should be included on instructional teams to ensure that the standards-aligned instructional units address the needs of all learners.

Questions: Do instructional teams develop and refine instructional units that are standards-aligned? Do standards-aligned units of instruction include objectives and criteria for mastery? Do unit plans include both pre- and post-tests to gauge student mastery, and are results used to adjust instruction as necessary? Do units of instruction include a variety of differentiated learning activities for each unit objective? Are materials developed, well organized, and readily shared among teachers? Are special education and ELL teachers included on instructional teams as teams work to create standards-aligned instructional units?

Instructional teams that consist of groups of teachers organized into grade-levels, grade-level clusters, or subject-areas provide an opportunity for teachers to work collectively to improve instruction and student achievement (Hamilton, et al., 2009). Instructional teams work to "build the curriculum from learning standards, curriculum guides, and a variety of resources [and] organize the curriculum into unit plans that guide instruction for all students and for each student" (Redding, 2007, p. 95). With the adoption, in many states, of the Common Core Standards, this task becomes once again one of prime importance. Instructional teams often operate as Professional Learning Communities (PLCs) (DuFour, 2011; DuFour & Mattos, 2013), but have also been referred to as professional learning networks and communities of practice (Hirsh, 2018). Research has consistently demonstrated that a collaborative school culture, with educators working together in teams, is linked to stronger instruction and higher student achievement (DuFour, 2011; Goddard, Goddard, & Tschannen-Moran, 2007; Hitt & Tucker, 2016; Ronfeldt, Farmer, McQueen, & Grissom, 2015). Collaborative structures enhance the chances of providing the excellent teaching and learning opportunities for all students that are required for school improvement (Hirsh, 2018). Plans for each standards-aligned unit of instruction, which typically involve three to six weeks of academic work within a given subject area or grade level, are developed by instructional teams and shared with all teachers that teach the corresponding unit. Aligning unit plans with standards serves as a check on guide/text/test congruence, and also provides teachers with an organizational structure for their own planning (Glatthorn, 1995). These standards-aligned units of instruction must include standards-based objectives and criteria for mastery, pre-post tests to assess student mastery, learning activities aligned to objectives, and corresponding materials for these activities

that are well-organized and easily accessible by teachers. Relevant research that addresses ways that instructional teams can effectively develop standards-aligned instructional units is summarized below.

How can instructional teams effectively collaborate to develop standards-aligned units of instruction? Include standards-based objectives and their criteria for mastery. Instructional teams should develop unit plans that assure that students master standards-based objectives and also provide opportunities for enhanced learning. The instructional team must first review the standards to which they will align objectives, assessment items, and curriculum (Crawford, 2012). They should then engage in a process of:

- Prioritizing: Identify the most critical learning standards for the grade level or course from among the full set of relevant standards;
- Unpacking: Identify the explicit and implicit domain skills for those learning standards at the grade and course level; and,
- Powering: Identify the essential skills from among the domain skills (Marzano, Yanoski, Hoegh, & Simms, 2013).

Once instructional teams have worked through the standards and defined performances and skills that correspond with the standards, they can define instructional objectives for each instructional unit. This process consists of

1. Writing end-of-year learning targets (or objectives) that describe the performances students should be able to demonstrate by the end of the year; these are the performances that every teacher will focus on for the year;
2. Vertically articulating the learning targets with the grade level and course level above and below the assigned grade level to ensure continuity between the grades and courses and sufficient coverage of the domains;
3. Finalize the end-of-year learning targets and make any necessary adjustments based on the vertical articulation;
4. Attach a mastery criterion to each learning objective that describes the level of performance a student must achieve in order to meet the objective; and,
5. Divide the end-of-year targets into quarterly learning expectations and scaffold them so that they are sequenced appropriately. The sequencing should reflect skill hierarchies from simplest to most complex, in a manner that ensures learners will meat the end-of-year learning objectives (Crawford, 2012).

These instructional objectives should then be shared with all members of the school community, and become the focus of curriculum, instruction and assessment; they also provide all school community members with a common set of learning expectations across grade levels and schools within a district (Crawford, 2014). Include pre-/post-tests to assess student mastery of standards-based objectives. After the learning objectives have been defined, instructional teams should determine how to evaluate whether or not the objectives have been achieved. A unit test is an assessment device, aligned with each standards-based objective coveredin the unit, and administered to all students before and after the unit of instruction (or smaller part of the unit). Unit tests are constructed to give teachers a good idea of a student's level of mastery of the objectives without taking a great deal of time to administer, and may range from pencil and paper tests to oral questioning or other systematic means for assessing mastery (Redding, 2007). Teachers benefit from knowing each student's beginning mastery so that assignments can be differentiated for groups and individual students. After the lesson or unit, a post-test shows what has been gained by each student, and signals the need for reteaching and informing the next lesson or unit.

Include specific learning activities aligned to objectives. Contrary to popular belief, design of the curriculum and learning activities should come after defining the learning objectives and their associated assessments (Wiggins & McTighe, 1998). By understanding from the outset where the learner needs to end up, teachers have a blueprint to help guide their development of the lessons, ensuring that they contain what needs to be taught. Learning activities should be carefully aligned with the objectives included in the unit plan to provide a variety of ways for a student to achieve mastery as evidenced in both the successful completion of the activities and correct responses on the unit post-test. Instructional teams should develop differentiated learning activities for each objective that can be assigned to students based on their pre-test results and their progress during the unit (Redding, 2007). Learning activities (e.g., independent work, small group work, computer-based

instruction, homework assignments) can be differentiated for lagging students, students on track, and early learners who need enhanced assignments. An instructional team's unit plans should include a description of each leveled and differentiated learning activity, the standards-based objectives associated with it, and criteria for mastery.

Develop materials for standards-aligned learning activities and share with colleagues as well as ensure materials are well organized and easily accessible by all teachers. Instructional teams must work together to co-design standards-aligned units of instruction, and collaboratively develop or identify high quality instructional materials for each learning activity to support student attainment of learning objectives. Wenger (2000) argues that instructional teams, or communities of practice, should have a "shared repertoire of communal resources—language, routines, sensibilities, artifacts, tools, etc." (p. 229). In schools these resources are largely derived from the work of an instructional team. Helping to align school-wide instructional practices across the school and to the relevant learning standards not only leads to greater consistency in the quality of instruction that students are receiving, but it can also encourage collective creativity and innovation in teaching (Wenger, 2000). Having a bank of shared resources also reduces duplicative efforts from teachers who would typically have to create their own materials (Crow & Pounder, 2000).

It is important to include special education teachers on instructional teams to allow for the development of standards-aligned individual education programs (IEPs). IEPs that are standards-aligned lead to higher student expectations and increased exposure to subject matter with focused instruction to meet challenging goals, as well as increased collaboration between special and general education teachers (McLaughlin, Nolet, Rhim, & Henderson, 1999). One of the primary purposes for including special educators on instructional teams should be to increase capacity for developing effective structures and conditions to support system-wide continuous improvement of teaching and learning for all students with disabilities. The process of developing standards-aligned units of instruction that considers the needs of students with disabilities also supports building deep understanding of knowledge, standards, and pedagogy, as well as the capacity to apply evidence-based instructional practices demonstrated to be effective in increasing student academic achievement and functional performance for all students with disabilities. Universal Design for Learning (UDL) frameworks offer a way that teachers can proactively develop lessons that address diverse learner needs, allowing them to "integrate flexible options and supports that ensure that standards-based lessons are accessible to a range of learners in their classrooms" (Rao & Meo, 2016, p. 1).

English Language Learner (ELL) personnel should also be included on instructional teams to develop standards- aligned curricula to address students' linguistic needs (Rance-Roney, 2009). Isolated supports for ELLs and reliance primarily on language teachers will likely not promote ELL success, particularly given recent shifts to more rigorous academic standards (Santos, Darling-Hammond, & Cheuk, 2013). Cross-curricular planning and co-teaching models can create a culture of collaboration among school staff and enable interdisciplinary partnerships that can foster rigorous language and content instruction that enhances ELL outcomes. Teachers need robust disciplinary knowledge, understanding of their discipline's linguistic demands, and the pedagogical expertise to design and teach well-scaffolded lessons for ELLs (Walqui, Koelsch, & Hamburger, 2010). Cross-disciplinary teams (language and content specialists) can consider together the unique uses of language within content areas, and design instruction that helps students make sense of different language uses (Santos et al., 2013). Teachers can work together to develop lessons and learning tasks, try them in the classroom, and return with student work to analyze the lesson's impact and refine as necessary (Santos, et al., 2013).

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