



Instructional specialist

Aligns instruction with curriculum
to meet the needs of all students.

Coaches spend a large portion of their time in the role of instructional specialist when they are affecting the planning and implementation of classroom instruction to increase student learning. The instructional strategies that make up the focus of the coach's work should be clearly aligned with school and district improvement goals, the district's instructional framework, and student learning needs. Examining the levels of student achievement and knowing how the instructional practices align with them give the coach direction to make critical decisions about where to spend time and energy. To guide their work, coaches may turn to several excellent sources that provide research-based guidance on high-impact instruction related to content- and non-content-specific instructional strategies. Once they align their instructional focus with state, district, and school instructional goals and define their scope of instructional work, coaches can support teachers in providing high-quality

teaching to meet student learning needs.

As instructional specialists, coaches' goals are to ensure that all students experience high-quality, effective instruction equitably across classrooms. To this end, coaches advocate the use of an instructional framework to apply effective, research-based instructional strategies. An instructional framework or set of learning principles fosters consistency in the quality of instruction for all students in every classroom.

If the district does not have an instructional framework or established learning principles, coaches may also assist a school's or district's leadership team in developing their own. These documents typically establish the fundamental beliefs about effective instruction. In some cases, instructional frameworks are used as the basis for measuring the effectiveness of teaching and are used as the basis for the professional growth systems within states or schools. For example, Georgia Department of Education includes Standards-based

Classroom Instructional Framework (2016) as a part of its overall effectiveness expectations for teachers. Another example is the American School of Dubai, which organizes student learning around a set of 12 learning principles that serve as a model for how a school establishes consistency and high-quality in its instructional framework.

- Learning has inherent value.
- Learners experience the power of an idea for themselves.
- Learning is enhanced when goals are clear and personalized.
- Learners engage when they see the importance of the work and experience a sense of accomplishment.
- Learners need clear expectations regarding the quality of product, performance, and outcome.
- Learners thrive in a safe environment.
- Effective feedback, reflection and self-assessment are essential to deepen and extend learning.
- Independent thinking and creativity flourish with a stimulating environment. (American School of Dubai, 2013)

“When I think of learning outcomes, one of the critical elements for me is to ensure that students have gained proficiency in the objectives that they were expected to learn. Also, that the teacher has valid and reliable assessments to gauge students’ growth in that area.”

Santosh Chawla
Instructional Coach
Walter Moses Burton Elementary School
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These examples show that *instruction* can mean different things to different people. Reaching agreement on the most essential areas of focus for a coach’s work as an instructional specialist helps the coach contribute more intentionally to the school’s goals, builds consistency in the quality of instruction across classrooms, and allows the coach to narrow her attention to a few practices that have high effect sizes. With a clear understanding about their instructional focus, coaches also may maintain some sanity in their daily work. If they flit from focus area to focus area, they rarely have an opportunity to dive deeply with teachers into the practices. That means that coaches may be unable to help teachers develop an understanding about how to implement a practice, as well as to know why it works and how to adjust it when necessary. This form of deep learning is necessary because it builds teachers’ capacities to make sound instructional decisions without the coach.

Instructional specialists support teachers in several ways

As instructional specialists, coaches help teachers select and implement the most appropriate instructional strategies to meet the learning needs of all students. In addition, they support teachers in developing Tier 1 instruction for all students to address most of the needs of students within their classroom. They may employ frameworks such as Universal Design for Learning (UDL) to differentiate or modify instruction and learning tasks or processes to meet the needs of all learners. Coaches may use a set of guiding questions to help teachers with the most essential questions to consider in making instructional decisions (see Tool 5.1).

This role is frequently combined with the roles of curriculum specialist and classroom supporter; coaches often plan lessons or units with teachers individually or in teams and then demonstrate, co-teach, or observe and reflect with teachers. When there is training for teachers on various instructional strategies, coaches in their role as instructional specialists provide the much-needed support that increases the likelihood of implementation of newly learned practices. Without that support and opportunities for continued study, as the research of Bruce Joyce and Beverly Showers (2002) indicates, the application of new practices has a minimal chance of occurring.

In addition, teachers want support in aligning instruction with curricula and standards, especially when new standards and curricula call for deeper, more personalized, and student-centered instruction. With advances in and access to technology, for example, teachers can move instruction out of school to create time within the classroom for guiding students through more authentic applications of their learning. As a result, teachers are experiencing steep learning curves in instruction. Coupling teacher learning and the learning needs of individual learners within their classrooms with expanded attention to Tier 1 instruction, teachers must constantly seek the most appropriate instructional strategies they can use to achieve student learning outcomes.

Instructional specialists help teachers become connoisseurs of instruction. Teacher preparation programs and professional development that purport to develop teaching capabilities may develop procedural understanding of the steps for implementing an instructional model, yet they often fall short of building teacher capacity to select instructional methodologies that align with specific curricular outcomes or cultivate the capacity

“By changing the focus from fixing teachers to improving student learning, the coaching paradigm can take on new meaning for us all.”

Diane Sweeney,
Student-Centered Coaching: A Guide for
K–8 Coaches and Principals, 2010, p. 23

of adjusting or adapting them to address the needs of diverse learners. A major responsibility of instructional specialists is to assist teachers in differentiating instruction and selecting the best strategies for the intended learning outcome. To accomplish this, a coach may spend time with individuals and small groups in planning lessons and thoughtfully selecting appropriate instructional strategies to reach the desired student learning outcomes (see Tool 5.2).

Planning conversations are useful ways for coaches in the role of instructional specialist to engage with teachers. Planning is a logical time during which teachers make multiple decisions related to instruction, such as choosing instructional methodology and assessment strategies; adapting or personalizing instruction to meet needs of diverse students by using different learning approaches or tapping student interests; integrating technology; anticipating potential problems in advance; and choosing engagement strategies. When coaches support effective, thoughtful, and deliberate decision making on the front end of instruction, instruction is more effective. Planning-conversation guides help coaches as they facilitate planning. An important consideration for coaches and teachers as they engage in collaborative planning is the school’s or district’s instructional framework and the

performance expectations for teachers (see Tool 5.3). With focused planning conversations coaches can expand teachers' capacity to become more deliberate in their decision making and help teachers become more aware of how their planned actions affect instruction.

Coaches may serve as instructional specialists in planning conversations with teachers individually or in teams. In fact, coaches may find that they spend more time with teams than with individuals because team planning has a couple of important benefits. First, it minimizes variance in the quality of instruction across classrooms and thus gives students equitable opportunities to learn. A second benefit of team planning is that the entire team develops interdependence and capacity to sustain thoughtful planning on their own when the coach is working with other teams. A third benefit is that it cultivates collaboration among teachers.

Instructional specialists need certain knowledge, skills, and practices

To be successful in this role, coaches must have a deep understanding of the research on effective instruction and know how to align instruction with content. Beyond having the procedural knowledge about how to implement instructional practices such as using thinking maps or graphic organizers, coaches need to know why they work, for which students they work best, and how to adapt them for students with varied learning preferences or needs. And, they will share this information to build collective capacity among all teachers. By going beyond describing the steps of an instructional practice to providing sufficient background about the practice (e.g. theoretical, research, or evidence base),

coaches build teachers' understanding about the routine so that they can make informed decisions about its use in the future. When coaches have used a wide variety of various instructional strategies and know when each is the most effective from their own successful classroom experience, they can tap into their personal experiences to help teachers develop a depth of understanding. This experience allows coaches to be comfortable modeling practices for teachers or guiding teachers to anticipate potential challenges with the use of specific instructional practices.

Coaches employ the complementary skills of acting, first, as curriculum specialists to help teachers look at the big picture of learning outcomes and then shifting to the role of instructional specialist to help them focus on planning instruction and assessment. Coaches must also understand standards-based and backwards planning, including how to plan instruction to ensure that all students achieve content standards. Because new content standards emphasize the authentic application of learning across disciplines, coaches also help teachers design authentic learning tasks that help students engage productively in constructing their own understanding of enduring concepts within each discipline and then apply those concepts to real-life situations.

Knowing and offering a variety of formats for unit and lesson planning help coaches simultaneously guide teacher decision making and build their understanding of the process so they can be successful with the planning process without the coach's support. Coaches might use tools such as the effect size of different instructional strategies (see www.visiblelearning.org) as useful guides for helping teachers understand and select appropriate instructional processes (see Tool 5.4).

Because both feedback and assessment are strongly associated with student achievement, attending to these critical factors along with the classroom environment and student engagement give the teacher the core practices necessary for developing successful learning experiences for their students. Coaches as curriculum specialists support teachers' in designing a variety of formative and summative assessments, and as instructional specialists in using the assessments and data to make informed instructional decisions to address gaps in student learning. Nancy Love, Robin Whitacre, and Nina Smith (2016) explain, "You won't find any argument among researchers that formative assessments — teacher and students using evidence of learning as part of daily instruction — has a potent impact on student learning" (p. 24).

Instructional specialists also support teachers in applying the feedback process (Killion, 2015) to engage students in self-generated feedback that enhances students' accountability for their own learning. Classroom assessment that guides teachers in adjusting their daily instruction is the responsibility of teachers and an essential component of any lesson or unit of study. A component of assessment is the feedback that teachers engage students in during instruction. Teachers help students know where they are relative to the expected learning outcomes and how to move closer to those outcomes. This means providing students with learning tools such as rubrics, anchor charts, and exemplars to guide their learning and assessment of their learning.

Coaches can use a planning meeting agenda when they meet with teams of teachers to plan instruction. To work effectively with teachers, coaches determine if teachers hold any assumptions about students' ability or right to learn that may serve as barriers to student success. Coaches model their own

beliefs about students as capable learners when they address negative presuppositions or blaming behaviors. Coaches are most effective when they believe all teachers can learn, just as they ask teachers to believe that all students can learn when given the right opportunities.

Coaches in this role are more successful when they understand how students learn and how teachers make decisions. When coaches know about, can exhibit, and can articulate their own thinking about selecting and using various instructional strategies, they are better able to support teachers. When coaches understand how to differentiate instruction for all students, including those who are non- or limited English speaking, have exceptionalities, differ in gender, ethnicity, race, and background, they will be better able to assist their colleagues improve their instruction. Sometimes coaches reach out to other district or in-school specialists who have expertise in these areas for ideas or to connect teachers with these experts for direct support.

Coaches as instructional specialists face challenges

Coaches as instructional specialists face multiple challenges, primarily because of the scope and significance of this role. The instructional specialist role requires a large body of knowledge, skill, and practices. It is often hard for coaches to be well versed in all areas so knowing where to seek assistance or ideas when needed is essential. Tapping into resource specialists within the district and school and other teachers who have special expertise in these areas might not only help coaches connect teachers with other resource people but also build teacher leadership capacity and model that collaboration among professionals improves learning for students.

Many instructional decisions are based on understanding the learning needs of students. Coaches must be committed to modeling how important it is to consider the learner when making instructional decisions by asking teachers for enough information about individual students in the classroom before designing or selecting appropriate instruction. Gathering this information may be time consuming early on until the coach begins to know a teacher's students. Coaches are aware of how they are gradually releasing responsibility for instructional decisions and encourage teachers to gain greater independence in working collaboratively with their peers to make instructional decisions (see Tool 5.5).

Coaches who have not taught widely diverse students may be challenged to support teachers who have students with many differences. Sometimes coaches may learn new instructional strategies or how to adapt instruction along with teachers in their school, but will not have had opportunities to practice those strategies. Because their understanding of what it takes to implement them successfully is limited in such cases, coaches take advantage of opportunities to apply the strategies in demonstrations or co-teaching.

Coaches often must be risk takers, stepping out to model or experiment with a new instructional strategy or classroom routine in another teacher's classroom. Modeling willingness to be a risk taker reinforces that all professionals engage in continuous learning to refine and expand their practice. Coaches must be continuous learners and be willing to step back and critique their own practices as a model for all teachers in the building. Reading research, practicing new strategies, and introducing new strategies to teachers are continuous challenges facing coaches in the role of instructional specialist.

Perhaps the most complex challenge a coach faces as an instructional specialist is dealing with teachers' expectations of students. Coaches may hear comments such as "Students were not prepared for my class," "Parents do not support education," "Students can't learn at this level," or "Students are not motivated to learn." When these comments slip into conversations, coaches listen to understand teacher concerns. They ask teachers about their overall goals and reasons for becoming a teacher and probe for positive examples of successful students whom teachers have taught; they invite teachers to problem solve and listen to understand with sound decision making. Coaches may choose to address motivation as a focus because it is the teacher's concern. Doing so may build trust and rapport between the teacher and coach. Making the most of such situations, coaches may assume the catalyst-for-change role to influence change across the school.

Conclusion

Teaching is a complex action that cannot be ruled by a set of definitive procedures, and as a result teachers make multiple instructional decisions before, during, and after instruction. Because many factors related to instruction, including feedback, assessment, classroom environment, learning tools, and student engagement, are strongly associated with student academic success, attending to these critical factors influences students' opportunities to learn. To meet the needs of all students within their classrooms, teachers with the support of their coaches and with the collaborative support of their peers build the capability, efficacy, and confidence of a professional.

SNAPSHOT

A coach as an instructional specialist

Lilly Pham is the new instructional coach at Preston Elementary School,* a Title I school whose student achievement scores declined three years in a row. Pham is a veteran teacher from a similar Title I school in the district. She has a track record as a highly effective teacher with students in her own classroom, particularly English language learners. She has a reputation as being committed to meeting the needs of each student.

From her work with Preston teachers in the first few weeks, Pham discovers that they could benefit from more detailed unit planning. Teachers, she finds, are planning each day's instruction without a big picture of overall student learning outcomes; she wonders whether students are making connections among their many disparate lessons. She also finds that teachers in the primary grades are spending 90% of the day on literacy and math, and wants to help them integrate science and social studies standards into the literacy block. Because neither the school nor district has a required planning template, and teachers infrequently complete formal lesson plans, Pham anticipates that teachers might not have a consistent approach or even language they use for planning instruction. They also seem overwhelmed by a list of new initiatives the district is implementing and are not yet making connections among them.

Pham discusses her plans with the principal and asks whether she might focus grade-

level, early-release-day meetings for the next four weeks on working collaboratively to develop consistency in planning and to create at least two multiweek units. Pham wants to help teachers become more conscious about their many instructional decisions. Pham asks her central office professional learning coordinator, Darrell Stevens, to assist her in designing the day-long meeting and to co-facilitate the first team meeting. Pham and Stevens decide that sharing a model unit with teachers is a good way to start the day, so they create a unit map for literacy that integrates social studies and science and that identifies differentiation strategies for their large population of English language learners and special education students.

After two weeks, Pham checks back in with one 1st-grade teacher who was frustrated at their first meeting. She wanted to learn if the teacher had given their discussion some thought and what questions she had now. "I understand the need for the big picture now," said the teacher, "yet I am really worried that it means I need to redo everything I have done in my 30 years of teaching." Pham assures her that she has the capability to build on and refine what she has done to understand more fully how learning from one day connects with the next. Following that frame of thinking, the teacher can think about how first grade connects with kindergarten and the grades that follow it. Several days later, this same teacher asks Pham to review parts of a unit she redesigned over the weekend. Pham makes an appointment to meet with her after school to review the units.

**Fictitious name and school*

Tools index for Chapter 5		
Tool	Title	Purpose
5.1	Instructional planning protocol	Use this protocol as a guide for assisting teachers in planning effective instruction.
5.2	Summary of differentiation strategies	Use this tool to give teachers ideas for differentiating lessons to meet the needs of all learners in a classroom.
5.3	Questions to consider when selecting an instructional strategy	Use this tool to provide coaches with various questions that can be used in coaching conversations about instructional strategies.
5.4	Lesson planning protocol and sample agenda	Use this tool to provide a process and structure for planning a lesson.
5.5	Questions to consider when designing instruction	Use these questions to guide instructional planning and design to meet the needs of all students in the classroom.

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Chapter 6



As a curriculum specialist, a coach's responsibilities are substantial. While all coaches typically have some responsibility to assist teachers with implementing the adopted curriculum, this role is particularly important for coaches serving in content-specific roles such as science, math, or literacy coaches.

The roles of curriculum specialist and instructional specialist are two sides of the same coin. Curriculum is what students learn and its sequence, including the learning outcomes that are aligned with a set of curriculum-specific or interdisciplinary standards and forms of assessments that determine the level or scope of student learning. Instruction, on the other hand, is about how learning occurs. Both are intimately related and influence each other. While it is difficult to consider support in the arena of curriculum without simultaneously addressing instruction, each requires different expertise and focus. For this reason, these roles are separated.

Because many teachers have been consumers of curriculum guides rather than developers of them, their understanding of curriculum may be limited. Content standards are evolving and becoming more rigorous. They scaffold content from grade to grade and integrate across multiple disciplines the knowledge and skills that were once considered discipline specific. And, as standards shift student expectations from knowing about the content to applying the content in authentic ways, teachers may have increased need for deeper understanding of the content and curricula. Even if they understand the content and are familiar with the curricula, the ongoing changes in standards often require them to use the curriculum to validate the expected outcomes for students before they design lessons and units or use those created for them. "Teachers and curriculum materials are not interchangeable," says Janine Remillard (2016). "They actually do different, yet complementary work"

“The role of curriculum specialist was especially intriguing to me, as I have been called on to spend a great deal of my time this year in this capacity. Our district has not filled a key curriculum coordinator position, and in doing so, much of that responsibility has fallen on me. The primary function of this role is to ensure implementation of adopted curriculum, but I am struggling with the earlier stage of getting our district to adopt curriculum, at least in a manner that communicates more clearly to teachers. Understanding the scope and sequence and having access to district curriculum that is housed in many different locations has been particularly difficult.”

Aaron Knodel
NBCT Instructional Coach
Sheyenne High School
West Fargo Public Schools
West Fargo, North Dakota

(p. 36). She notes that when teachers “plan with curriculum materials, teachers draw on their own experiences, expertise, and pedagogical skills, along with resources from their schools and districts, to make appropriate adaptations” (p. 37). As a curriculum specialist, a coach helps teachers become sophisticated users of available curriculum and developers of their own classroom curriculum. Coaches are instrumental in supporting teachers in this decision-making process. These tasks require

some basic understanding of curriculum theory and various curriculum philosophies and how curriculum design leads to learning.

Curriculum specialists support teachers in several ways

Curriculum specialists support teachers in meeting their responsibilities to use the adopted local- or state-adopted curriculum so that students achieve the expected outcomes. These responsibilities may include:

- Deepening teachers’ content knowledge;
- Developing teachers’ understanding of the structure or organization of the curriculum (e.g. hierarchical, thematic, conceptual);
- Aligning the written, taught, and tested curriculum;
- Understanding the distinction between standards and curriculum;
- Dissecting a standard to identify the essential knowledge and skills students need to achieve the standard;
- Using the standards to identify learning outcomes for units and lessons;
- Developing units and lessons to achieve learning outcomes;
- Writing benchmarks to measure progress toward the standard;
- Identifying what to assess;
- Writing formative assessments;
- Analyzing curricular materials to determine which parts of those materials support achievement of the standards;
- Integrating the content-specific knowledge and skills within multiple disciplines to provide additional opportunities for students to practice and apply their learning.

Coaches sometimes begin their work with teachers with a fundamental lesson: understanding what a curriculum is and what it isn’t.

Often, the term *curriculum* is used to describe all aspects of a curriculum from its standards to its sequence, pacing guides, or learning outcomes. Curriculum describes the concepts and skills, the sequence in which they are taught, the key benchmarks for demonstrating achievement of the content — essentially what students are expected to learn and when they are expected to learn it. In their book *Understanding by Design* and its subsequent newer editions, Grant Wiggins and Jay McTighe (2005) outlined the backwards-design process that is widely applied in curriculum writing today. Beginning with standards that provide clarity about what students are expected to know and be able to do, the process of curriculum design requires unpacking standards to identify what Wiggins and McTighe call “enduring understandings,” and use these concepts to develop a sequence of units of study that guides students toward deep understanding of these big ideas and facilitates students’ ability to apply their learning in authentic and novel situations.

Some districts and states specify broad curricula for students by determining what concepts and processes students are expected to know by specified times in their education and then design assessments to measure student progress on and achievement of the standards. Districts, too, may provide teachers pacing guides that define the specific point during a school year at which certain skills are taught and how they align vertically and horizontally within and across curricula. Even when districts provide curricular tools such as these, teachers are still responsible for accessing, understanding, and using these curricular tools in the design of units of instruction and associated lesson plans. To do this, coaches as curriculum specialists support teachers in making decisions about the content of their lessons (see Tool 6.1).

Curriculum materials often include more that can be useful to a teacher and more that can be taught so teachers are continuously determining what the essential learnings so they can focus instruction on these (see Chapter 15 Team Coaching for a process to determine essential learnings). They guide teachers in sequencing learning so that individual lessons complement and contribute to deeper learning of the key concepts. They encourage teachers to think about the developmental nature of curriculum, what came before and what comes after specific units and lessons, and to determine the level of understanding required. Coaches also help teachers use curriculum as they analyze assessment data and, when needed, determine how to fill gaps in student learning and to enrich or accelerate student learning.

College- and career-ready content standards emphasize the authentic application of learning across disciplines; therefore, coaches help teachers integrate content from multiple disciplines so that student learning experiences are more meaningful and relevant to their daily lives. For example, elementary coaches may model how to integrate fine arts, social studies, and science into literacy and math units or lessons. At the secondary level, coaches may ensure that teachers of all curricular areas understand how to embed literacy within their content areas (see Tool 6.2).

Fortunately, many coaches in the role of curriculum specialist work with district staff with deep expertise in various content areas. Coaches frequently receive training from these staff members in both content and content-specific pedagogy. In some cases, coaches provide turnkey training to their respective staff and serve as key communicators between the district office and school in curriculum matters and occasionally between content-specific professional associations and teachers.

Curriculum specialists need certain knowledge, skills, and practices

To be successful in the role of curriculum specialist, a coach depends on his or her understanding of adopted curriculum to define expectations for students. These expectations may be driven by standards such as those adopted by provincial, state, and local school boards or those recommended by federal or international agencies often specific to a discipline such as American Chemical Society or National Council of Teachers of English. Curriculum specialists understand how a curriculum is structured, the distinction between demonstrative and procedural knowledge, and discrimination and task-analysis skills to break down complex concepts and skills into their component parts. Coaches understand how to interpret broad and finite learning outcomes; they recognize the sequential, hierarchical, and conceptual relationship within the curriculum; they can peel a broad content standard into its essential knowledge and skills and plan the sequence of units of study and lessons to facilitate student acquisition of the outcomes.

Daily curriculum planning depends on understanding the developmental needs of students to whom the curriculum will be taught. Coaches need to know how a concept appears later in the scope and sequence of a curriculum as it is broadened and deepened. For example, in kindergarten through second grades, students learn basic geometric figures such as circle, sphere, triangle, square, cube, and rectangle; they learn to discriminate among them and describe the two-dimensional and three-dimensional attributes of various shapes. In 8th grade, students are expected to measure the angles within a figure and apply principles of geometry to solve problems. A coach must

SNAPSHOT

A coach as a curriculum specialist

At the beginning of the year, Jerry Fenton, the math coach at Tomlin Elementary School,* assesses the level of implementation of the math curriculum in each classroom. The school is in its second year implementing a new math program. The biggest issue for teachers last year was keeping up with the expected pace of the curriculum. Teachers struggled with students not mastering every skill before they moved on to the next unit. The curriculum is based on a completely different approach to mathematics, one that is significantly different from the rote memory of math facts that teachers were so familiar and comfortable with in the past.

In the first few weeks of school, Fenton visits classrooms and has teachers assess their own level of implementation against the Implementation Innovation Configuration map (Hall & Hord, 2015). He also collects samples of student work from each grade level to examine. He discovers that most teachers are not fully implementing the principles of the integrated math program; they slip into the familiar, yet incompatible,

possess, at least, a basic understanding of the scope and sequence of the curriculum so he can support teachers in building on students' previous understandings and adequately preparing them for subsequent ones.

Another significant responsibility of a coach is reinforcing and building teacher content knowledge so that the curriculum

is accurately applied. Fenton meets with each grade-level team to discuss his observations and their self-assessments. Based on these data, he concludes that teachers continue to expect mastery at the end of a unit even though the curriculum spirals through multiple years to promote deep understanding. He presents his findings and discusses them with teachers to understand better how to shift their assumptions about learning mathematics. He asks teachers if they want to know more about how to assess student learning and to know when to move on to the next unit, as well as how to scaffold and integrate mathematical concepts through a series of units without expecting mastery.

In a subsequent meeting, Fenton invites teachers to explore their worries about moving on to a new unit without students' demonstrating mastery. Together, they look at a series of units to study how they weave together math learning targets to deepen understanding over time. This opportunity assuages teachers' anxiety about moving on to subsequent units without requiring mastery.

The 2nd-grade teachers decide to examine a unit with Fenton so they can learn how to determine the time needed for all parts of the unit and how to assess progress throughout the unit. Fenton sets an agenda for three

meetings that he would facilitate over 10 days. With curricular materials in hand, teachers identify the concepts and skills within one unit to determine which learning outcomes focus on introductory learnings and which on mastering learnings for 2nd graders. They also discuss how to modify learning tasks within the unit to address needs of various learners so that they can ensure all students succeed. The teacher groups plan methods for daily assessment of student learning to give students different ways to express their learning. After their unit study, many teachers had expanded their understanding of the theoretical underpinnings of the integrated curriculum and of the teacher's role in scaffolding student learning.

Having experienced this type of support, the teachers are more comfortable with the curriculum. They find that many of their implementation challenges are alleviated. They continue to ask Fenton for reassurance that students will understand math facts, and he reminds them that being able to understand and use mathematical reasoning is the most important student outcome for the new math curriculum.

**Fictitious name and school*

gain complete foundational knowledge to succeed in subsequent years. Sometimes, coaches are learning the content alongside teachers, yet they may be asked to be a step ahead to support teachers in both learning and applying the content knowledge.

The curriculum specialist role, pairing nicely with that of resource provider, has

grown into an important means of supporting teachers to become critical, savvy consumers of curricular materials available today. Teachers have opportunities to access and share curriculum from other schools, districts, and nations. They access wide-ranging curricular resources such as web-based lessons, educational games, primary source material in museums and archives, news media, TED Talks and YouTube, and live web feeds from space and zoos. Building teachers' capacity to critique available curricular resources for their alignment with the curriculum, level of complexity, accuracy, bias, and accessibility will ensure that student learning experiences using such resources support student success.

Another core part of a coach's curriculum work is guiding teachers to design assessments that accurately measure the expected student outcome at the appropriate developmental level. Many schools and districts have large-scale and benchmark assessments that measure student progress on and achievement of the defined curriculum. The teacher, however, is responsible for designing classroom assessments they can use to adjust their daily curricula; such assessments are essential components of a unit of study. Coaches help teachers use the curriculum to (a) design assessments of student learning; (b) adapt their daily curriculum to make necessary adjustments to personalize and enrich student learning to ensure all students succeed; and (c) use the curriculum as a basis for formative and summative assessment of and reporting on student learning. Knowing how to help teachers design formative assessments that monitor and measure student learning and guiding them to use the results to inform decisions about subsequent lesson design are essential coaching skills because they have an impact on teaching practices.

Classrooms are filled with students with diverse learning needs and preferences. Coaches assist teachers in adapting existing curricula to design units and lessons that support student learning. Coaches may facilitate teachers' use of tools such as UDL to adapt their units, lessons, assessments, and student learning tasks. Or, they may help teachers apply multitiered systems of support so that every student achieves the expected curricular outcomes.

Even though coaches may have a content specialization area, they are expected to have some basic understanding of multiple content areas. Teachers often ask them to integrate various content areas and support them in embedding multiple areas such as reading, numeracy, critical thinking, or writing across curricula. Several tools will help coaches in the role of curriculum specialist. A coach might use a unit-planning, lesson-planning, or weekly-planning template as she works with individual teachers or teams of teams. Coaches might also help teachers unpack a standard to identify the essential knowledge and skills embedded within the standard and to determine how to sequence instruction on the knowledge and skills to ensure that students meet the standard (see Tools 6.3 and 6.4). Finally, coaches might use assessment frameworks to help teachers plan how they will assess students after instruction (see Tool 6.5).

Coaches as curriculum specialists face challenges

Coaches face several challenges in the role of curriculum specialist. The first two challenges are having an adequate understanding of the curricula in multiple disciplines and adequate content knowledge in the disciplines

within which he or she works. These challenges are particularly difficult for coaches who work across multiple disciplines and grade levels, such as a high-school instructional coach who works with teachers in all disciplines and grade levels. This challenge is exacerbated when a teacher with deep discipline-specific knowledge, such as a literacy teacher at the elementary level, becomes a coach to all teachers across all grade levels. Establishing credibility as a curriculum specialist is especially challenging in these situations and may lead a coach to choose roles other than curriculum specialist to maintain the coach's comfort and credibility with teachers.

Another challenge is failing to use the curriculum in their interactions with teachers. When coaches focus on instruction without aligning a lesson's objective to the curriculum, they lose the opportunity to reinforce the importance of a viable, aligned, and articulated curriculum as a component of student success. The coach and client have choices about the roles that best support teachers' professional learning needs. Choosing to serve as curriculum specialist, however, is most appropriate if teachers need to know about or use an adopted curriculum to plan and assess student achievement; implement new standards, programs, or new curricula; and build consistent, coherent learning experiences for student success.

Yet another challenge coaches face in the role of curriculum specialist is having inadequate available curriculum and resources to use as a guide. Many districts and schools still depend on a textbook as their primary curriculum guide, which may fall short of addressing the curriculum that is tested. When there is a lack of curricula and appropriate resources, teachers grab what is convenient

and interesting related to the content. This approach often increases variance in the quality of and opportunity for student learning within and across classrooms. Some states, for example, provide detailed curricula for school districts to use. Others adopt only the essential standards and expect districts to create their own curriculum. When new standards emerge, such as the Next Generation Science Standards, it is often years before classroom teachers have access to a complete curriculum and necessary resources to teach the standards. In many cases the directive to implement instruction on new standards occurs well before the supporting curriculum is available.

An opposite challenge for those in the role of a curriculum specialist is helping teachers assess, discriminate among, and apply abundant curricular materials appropriate to the learning outcomes, students' developmental learning needs, and the curriculum. The plethora of resources available to teachers today make it increasingly important for coaches to know how to assist teachers in using the adopted curriculum as one criterion by which they assess available resources for their alignment with the curriculum, units of study, learning outcomes, and student needs. Only with that assessment are they likely to ensure that students' learning experiences lead to the achievement of the expected learning outcomes.

Coaches in the role of curriculum specialist face a final challenge, namely, that curricula are dynamic. Standards change; assessments change; units and lessons change. As new standards are adopted, new curricula follow. For example, the recent addition of the Next Generation Science Standards, adopted by several states, calls for new curricula. As those curricula are developed, teachers, and

Tools index for Chapter 6		
Tool	Title	Purpose
6.1	Weekly lesson planning template	Use this template with teachers to scaffold weekly lesson planning in any discipline.
6.2	Grade-level math unit planner	Use this template or an adapted version to guide the planning process for units of study in mathematics.
6.3	Essential standards	Use this tool to provide structure for prioritizing essential content standards.
6.4	Identifying essential standards	Use this tool to create a deeper understanding of the process for identifying essential standards.
6.5	Common assessment	Use this tool to provide a structure for making decisions regarding the design of a common assessment.

sometimes their coaches, will have a steep learning curve in knowing the content needed to teach and using the curriculum associated with the standards. Coaches are often expected to serve as the local, school-based curriculum specialist to support teachers in teaching a new curriculum.

Conclusion

Coaches as curriculum specialists emphasize the content of student learning to ensure that students achieve identified standards and learning outcomes and are prepared for the next grade, post-secondary education, and careers. In their support of teachers, curriculum specialists focus on the intersection of the written, assessed, and taught curriculum. Working at the nexus as they do, coaches ensure that all students receive instruction based on a viable, rigorous, standards-driven curriculum.

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Chapter 7



Coaches spend a great deal of their time working directly with teachers in classrooms. In some coaching programs, coaches spend most of their time serving in this role. The purpose of the role of classroom supporter is to influence teacher practice and the implementation of new strategies so that student learning increases. Sometimes this role occurs with individual teachers or teams of teachers. What distinguishes this role from others is that it occurs within the classroom while students are present rather than meeting outside the classroom. This role has three distinct components that describe different types or levels of classroom support. They include modeling or demonstrating teaching, co-teaching, or observing and reflecting on teaching. Of all the roles, classroom supporter may have the greatest potential to make a dramatic impact on student learning.

Classroom supporters support teachers in several ways

Coaches have three primary ways to help teachers as classroom supporters: demonstration, co-teaching, and reflection conversations. Each option includes three essential components. The first is that the teacher and coach plan together, even if the coach is conducting a demonstration lesson. Since much of the success of any teaching episode depends on the thoroughness of planning, planning together is essential so that the teacher understands all aspects of effective teaching (see Tool 7.1). During planning, the coach serves as both an instructional and curriculum specialist before serving as a classroom supporter. Second, the coach and teacher work together to complete the selected option. Finally, regardless of which option they choose, the teacher is an active participant rather than passive observer. In demonstrations and co-teaching, the teacher