

Maximize Efficiency: Unlocking Effective High School Schedules through Smart Staffing

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PART 1: Introduction

The Scheduling and Staffing Guidance Document is designed to help schools and systems improve student outcomes through strategically aligned scheduling and staffing practices.

The guidance acknowledges that:

- As students' needs continue to evolve, a return to past practices will not address the needs of students.
- Many students struggle academically and have not yet mastered previous grade-level content.
- Practical best practices exist, and all children should benefit from this well-established research.

This guidance was developed in partnership with New Solutions K12. A full list of research and evidence-based practices that inform the guidance can be found at the end of this document.

This document is also aligned with LDOE's education priorities:

- Early childhood leading to kindergarten readiness
- Literacy instruction aligned with the Science of Reading
- Math instruction from foundational to advanced skills
- Opportunities ensuring a meaningful high school experience
- An effective teacher for every student
- Expand educational choice for students and families

1.1 Why focus on staffing and scheduling?

The experience of schools and school systems that have accelerated learning and closed achievement gaps has taught us that best-practice staffing and scheduling are needed to implement many transformational teaching and learning practices. Essentially, if staffing and scheduling don't directly support teaching and learning best practices, these otherwise successful strategies will not bear fruit.

In creating the Staffing and Scheduling Guidance Document, we are addressing the unfortunate reality that many school systems have embraced proven best practices, trained their staff, planned and worked hard to implement, but still did not see outcomes improve. It is not that they selected the wrong materials or strategies or did not try hard enough, but often that their schedule or staffing practices undermine effective implementation.

In short, the practices in the Staffing and Scheduling Guidance Documents **are the supports and structures needed to bring other teaching and learning best practices to life.**

1.2 What is the Staffing and Scheduling Guidance?

This document provides guidance for how to most strategically organize schedules and staffing to positively impact and drive student learning. It covers three interrelated topics:

1. What are the best practices for helping students with unfinished learning?
2. How should staffing change in order to effectively implement these best practices?
3. How should schedules change in order to effectively implement these best practices?

1.3 Who is this document for?

This guidance will assist school and system leaders as they work to meet the needs of all students. Roles that this document is relevant for include:

- Superintendents
- Chief academic officers
- Special education directors
- English learner (EL) directors
- Directors of teaching and learning
- School principals and assistant principals
- Department heads
- School counselors and others involved in scheduling
- School business officers

1.4 Which students will this guidance help?

This document is designed for the majority of students in a school system, regardless of their abilities or disabilities. An asset-based mindset, which values all learners, best supports students and their diverse needs. This requires viewing student supports, including the best practices outlined in this document, as opportunities to build upon and leverage the unique strengths or assets that learners bring to the classroom. The best practices apply to a wide range of students and are designed to meet the needs of:

- **Students With Unfinished Learning:** Students who have grade-level skills and knowledge that they have not yet mastered.
- **Students with Disabilities and English Learners:** Students with disabilities as identified with an Individualized Education Plan (IEP) and English learners. *Note: Students with significant disabilities will likely need more specialized services than those discussed in this guidance.*

Legal Disclaimer

The information provided in this document does not, and is not intended to, constitute legal or regulatory requirements; instead, all information, content, and materials available in this



document are for general informational purposes only and to assist LEAs in their planning efforts.

PART 2: What are the scheduling and staffing best practices?

Building student learning and closing the achievement gap is not easy, but well-established best practices provide a roadmap. At the highest level, this guidance includes four interconnected recommendations:

1. **High-quality core instruction is the foundation.**
2. **Effective literacy and numeracy instruction is central to student success.**
3. **Students with unfinished learning need extra learning time to catch up and build proficiency.**
4. **Both core instruction and extra time learning must be provided by content-strong staff.**

2.1 High-quality core instruction is the foundation.

Ensuring high-quality core instruction is fundamental to addressing the needs of all students. Throughout this document, when core instruction is referenced, this is referring to on grade level ELA, math, science, and social studies instruction. While extra time learning, special education, and English language services are also important, they are not a replacement for high-quality core instruction, which requires the following elements:

2.1a. Core instruction must be on grade level and provided in the least restrictive environment. While the challenges and disruptions that lead to student needs academically can be significant, it is essential that core instruction remains on grade level, or students will fall further behind.

A caution: Some educators will, from a place of “kindness,” think that core instruction for students should be below grade level to “meet them where they are.” Sometimes, core instruction is diluted in an attempt to address prerequisite or unfinished learning for these students as well. While well-intentioned, this lowering of expectations locks students into staying below grade level. Extra time learning is the time and place to address prerequisite or unfinished learning instead of diluting the rigor of core instruction.

2.1b. More time on a subject increases learning. Research shows that there is a positive relationship between annual time spent on teaching and learning a subject and student mastery, assuming high-quality teaching and high-quality instructional materials.

2.1c. Students should not be pulled from core subjects for extra time learning or other services. As part of safeguarding core instruction, students should not be pulled from core subjects for services or extra time learning. Core instructional time is paramount for all students, especially so for those who struggle. Ideally, schedules will include designated extra time learning blocks and related services outside of core instruction. **If there are conflicts, core instruction in literacy, math, social studies, and science should be protected.**

At the secondary level, students should be assigned to content-specific extra time learning courses as part of their overall schedule.

A note about IEPs: Nearly all of the best practices listed here are appropriate for many students with disabilities. By law, IEPs must be individualized to meet the individual needs of students. The best practices should be considered by IEP teams and incorporated if the IEP team determines them to be appropriate.

Conversely, best practices should not be dismissed for students with disabilities if they are not currently in the IEP. IEPs are intended to be living documents and can be amended at any time by the IEP team, which of course, includes the parent or guardian. For additional information on IEP language and how these practices apply to students with disabilities, see section 2.5.

2.1d. Coaching impacts teacher content retention. *Coaching increases the percentage of content that teachers retain by sixteen times the amount that teachers tend to retain from a presentation or lecture alone. Source: Joyce & Showers, 2002.*

School systems can reference the [LDOE Professional Learning Roadmap](#) for additional guidance on professional learning best practices. The document provides a clear pathway for school systems and schools to align their priorities to improve instructional practice through three essential professional learning structures:

1. Instructional leadership teams (ILTs)
2. Teacher collaboration
3. A Career pipeline that follows the High-Quality Professional Learning Cycle and is based on cycles of continuous improvement.

2.1e. High-quality instructional materials and curriculum are important. High-quality core instruction requires that all classrooms utilize high-quality instructional materials. LDOE is committed to ensuring that every classroom has access to high-quality instructional materials. It assists local school systems in selecting high-quality curriculum and aligning that curriculum with assessments and professional learning by reviewing curriculum for quality and supporting school systems in accessing the best materials, building high-quality tools to fill in the gaps where needed, and providing ongoing training and instructional resources around high-quality curricula.

An Important Note: School systems should use LDOE-designated and approved high-quality instructional materials and curriculum and avoid using school-created, teacher-created, or teacher-purchased materials. This is to ensure students across the state have the same access to high-quality materials.

2.1f. Regular progress monitoring from assessments embedded in high-quality instructional materials should guide core instruction. In conjunction with a high-quality curriculum, a robust system of assessments, both formative and summative, should be integrated into core instruction. Such assessments provide students and teachers regular feedback to determine how students are progressing, what they do or do not understand, and what adjustments may be needed to better support students' varied learning needs.

All HQIM contain multiple embedded assessments to ensure teachers can monitor student progress. Curriculum-embedded assignments such as section assessments, exit

tickets, end-of-unit assessments, and in-class “do now” assignments are effective progress monitoring resources. All assessment activities must be aligned to lesson and unit goals. Teachers should avoid creating their own assessments and instead rely on assessments provided as part of HQIM.

A caution: Given individual student needs, there may be a tendency to assess less than other students. This is not in line with best practices. It is critical for students and teachers to have a clear picture of what students can and cannot do, and where students are struggling. Easily administered formative assessments (including examples of student work, listening to student discussion, etc.) can give teachers and school leaders a clear picture of how students are performing so that lessons and extra time learning supports can be adapted accordingly in real time.

2.2 Effective literacy instruction is central to student success.

Within core instruction, literacy is of paramount importance. Building word recognition, along with language comprehension, is essential to student success.

Reading is the gateway to all other learning. Without literacy proficiency, students will struggle in many subjects. Moreover, third-grade reading proficiency is a strong predictor of lifetime achievement. Difficulty with reading is the most common reason for students to be referred to special education. School schedules should dedicate sufficient time to reading instruction.

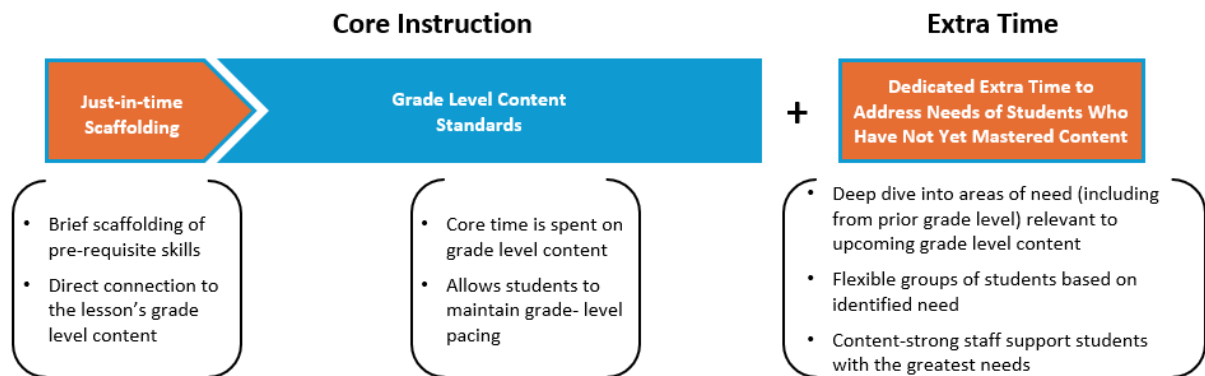
2.3 Students with unfinished learning need extra learning time to catch up and build proficiency.

Effective tier I core instruction is every school’s most important lever to drive student learning. High-quality tier I instruction prevents most students from needing extra time learning, should always be prioritized, and should never be sacrificed in service of providing extra time learning. Said another way, schools cannot expect to intervene students to grade-level proficiency.

While core instruction is the foundation, some students who struggle will require more than just core instruction. This dedicated extra time for learning should be used to connect unfinished learning to new learning within grade-level content, utilizing high-quality materials to provide just-in-time support.

2.3a. Core instruction should focus on grade-level material while extra time learning should focus on prerequisite knowledge and skills required for success with grade-level content. Core instruction is grade-level content with moments of scaffolding. Such just-in-time scaffolding should provide students with the necessary skills or knowledge to engage with grade-level material.

Extra time learning, by comparison, is meant to address students’ unfinished learning, which may include teaching prerequisite content knowledge or standards. The end goal of doing so is to prepare students for mastering current year grade-level content. Below is a visualized summary.



Common Elements of Approaches to Extra Time to Learn

Extra time to learn has common elements that align to best practices. These include:

Scheduling

For extra time learning to be successful, time must be carved out of the schedule. Elements of doing this well include:

- **Provide extra time learning during the school day.** Extra time learning should happen within the school day to reduce the barriers to student attendance. This also increases the perceived importance of extra time learning for both students and teachers.
- **Make extra time learning in addition to – not instead of – core instruction.** Tier 1, grade-level, time for core instruction should not decrease as a result of extra time learning.
- **Schedule as content-specific courses.** Extra time learning should be scheduled like all other classes in student and teacher schedules to emphasize the importance of extra time support.
- **Group students by area of need.** A data-driven system and process should be used to assess student area(s) of need to inform extra time learning placements. All students should be grouped with others who have similar academic needs, so that the instruction can always be targeted. Groups should be flexible, meaning students should be able to move throughout groups based on need and progress as indicated in current data.

Staffing

It is equally as important to have the right person in the room to deliver and manage extra time learning. Key staffing requirements include:

- **Teachers, tutors, and interventionists should be content-strong.** All staff providing extra time learning should have deep, demonstrated content expertise for the

subject(s) they support. Staff must be able to connect and teach content and skills from the current year and past years. They must be able to scaffold upcoming HQIM core lessons and most importantly, they must be able to teach a concept two or three different ways. To do all this, they must have aptitude and training in the subject they are teaching, as well as the high-quality instructional materials implemented in core instruction.

Instruction

How the extra time learning is utilized is central to its success. Key features of effective extra time instruction include:

- **Extra time learning should be in the form of direct instruction.** Students learn from teachers. While software platforms can play an important role in tutoring, they cannot replace a teacher. Content-strong teachers can explain a concept in multiple ways, determine and address a student’s misunderstanding, build relationships, and motivate a student.
- **Extra time learning content should be standards-aligned.** All extra time learning sessions should have a clear connection to specific, prerequisite standards connected to the core curriculum. All support should be strategic and aimed at preparing for readiness in core.
- **Pace instruction to front load soon to be taught core instruction.** Extra time for learning should provide instruction in prerequisite content knowledge and skills needed for upcoming core HQIM lessons. In literacy, the order of lessons and skills should align with screener and diagnostic data regarding where students are, and should be consistently progress monitored in grades K-12.
- **Students should receive support in only one subject per cycle.** It is important to go deep, not wide when it comes to extra time learning support. For every support cycle, students should receive extra time learning in only one subject and their progress should be monitored consistently.
- **Student progress should be monitored and acted upon weekly.** Data on student academic progress should be assessed and acted upon at least weekly by teachers, tutors, and school leadership.

Students with Disabilities

For many students with mild-to-moderate disabilities, extra time learning may be the most appropriate and effective form of academic support. Two elements necessary for this to happen include:

- **Students with mild-to-moderate disabilities should receive extra time learning based on similar criteria as their non-disabled peers.** There is no requirement or benefit to excluding students with disabilities if general education extra time learning is an appropriate support. The fact that tutoring is a general education initiative should not exclude students with disabilities.
- **Adjust IEPs to reflect extra time.** Student IEPs can include extra time learning as an

IEP service, even if the teacher, tutor, or interventionist is not special education certified and if students without a disability will be in the same group. Generally, extra time learning will replace some portion of existing academic support, not simply added atop existing services.

Unique Elements of Approaches to Extra Time Learning

Extra time to learn has a common goal of providing targeted supports to students, but may differ in specific ways regarding implementation. Foundational expectations for extra time learning should include:

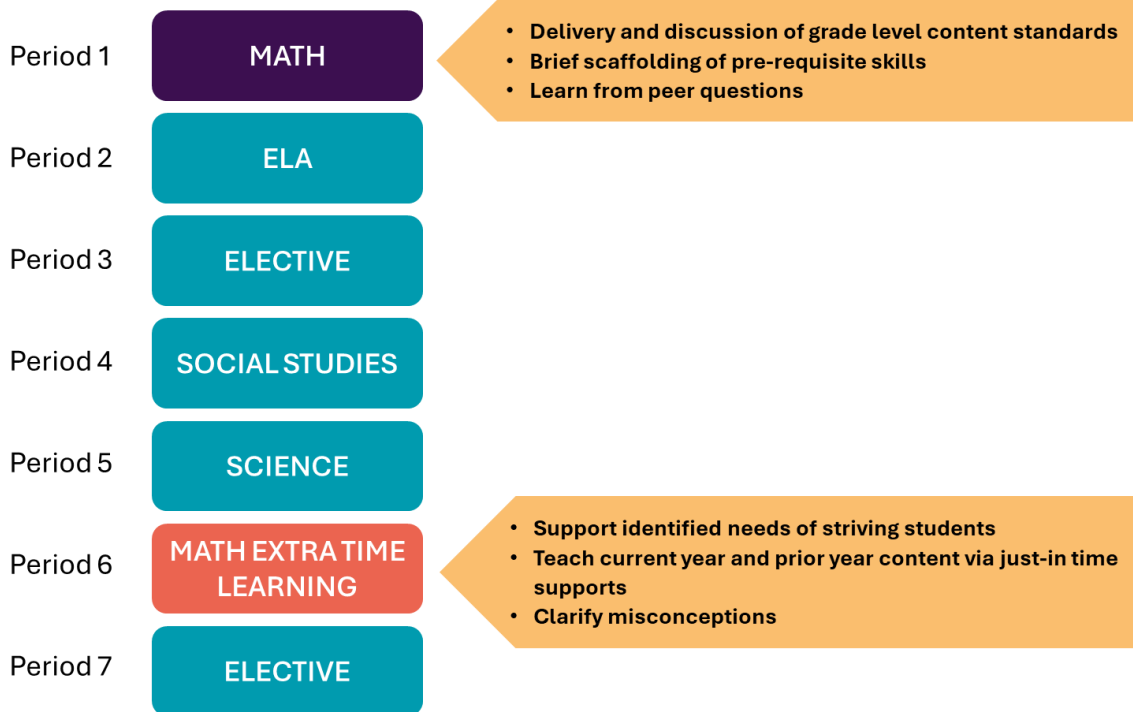
- **Frequency/duration:** Extra time intervention assumes daily targeted support for 30-45 minutes for a minimum of 3x per week.
- **Group size:** Extra time intervention allows for student group sizes of up to 10-15 students at the secondary level, while tutoring is more focused on providing individual, 1:1 support to students. LDOE Accelerate: High Dosage Tutoring may have group sizes of up to 4 students. Groups should be flexible and adjusted as students demonstrate understanding of content and new student needs are identified.
- **Instructor:** Extra time intervention should be provided by a teacher or interventionist. Tutoring should be provided by a content-strong tutor, which may be a teacher, paraprofessional, or designated tutor (e.g. a college student, a tutor from an approved tutoring vendor).

2.3b. Students who struggle need dedicated extra time for learning, typically in reading, math, or writing. Reading, math, and writing are fundamental knowledge that spiral throughout grades K-12. Science, social studies, and world languages are more accessible with strong skills in reading, writing, and math.

Addressing student needs should occur during grade-level core instruction and during dedicated extra time for learning. Teachers should use the scaffolding and support within their HQIM to improve student understanding of grade-level content during core. Even when using this practice; the vast majority of core instruction time should be spent on grade-level content. Time must also be set aside to address the needs of students who are struggling.

Students are not receiving extra time for learning at the expense of grade-level core instruction but rather during a dedicated extra learning block. Note that the below schedule is an example.

**BEST PRACTICE SCHEDULE FOR
STUDENT WHO STRUGGLES**



2.3c. Students with similar areas of need may be placed in small groups for extra time learning. Since extra time learning must target the specific needs of the students, narrowing the range of needs can be beneficial for students and teachers alike.

For example, at the secondary level, a math intervention or tutoring group might have students who mostly need support with functions while the other serves students who may need support with ratio and rate reasoning.

- **Math:** Student needs should be determined by prerequisite skills needed for topics upcoming in core instruction.
- **Literacy:** Students should progress to a new skill set by looking at progress monitoring data to determine mastery of that skill.
- **English learners:** English language learners should be grouped according to skills dictated in a diagnostic, similar to regular education students.

Groupings must not be static and should be modified or updated on a regular basis as students progress through content or additional needs are identified.

This intentional grouping by similar areas of need allows content experts to target specific skill sets in an efficient manner allowing for personalization that would be more difficult in a mixed group.

Across Four Classrooms,
Five Students Are **Struggling With Phonics**



Sample grouping of students by need. Students with similar needs and who are struggling in phonics, for example, should be grouped together. Doing so allows a reading teacher to target instruction to the specific needs of the students.

A tip: If creating small groups for extra time learning poses complexities, consider two questions. 1) Will smaller group sizes mean some students who need support will not receive it? 2) Will smaller group sizes mean that some students in need of support receive instruction from teachers who may not be considered content experts in the given subject area? If the answer is yes to either question, consider increasing group size by two to three students to meet the school's needs. Although not ideal, increases in group size may be necessary to prevent students missing out on extra time learning entirely, not receiving extra time learning as frequently as they need it, or receiving extra time learning from less qualified staff.

Consider the two groups below. Each student has been identified as needing additional support in reading, though individual needs vary between fluency, comprehension, and vocabulary. Group A is smaller and consists of only three students with varying needs. Group B, alternatively, is slightly larger, consists of five students, and has been grouped according to one common need (fluency). Because Group B has been grouped according to a similar area of need, these students are more likely to demonstrate accelerated progress compared to their peers in Group A.

Needs of Group A	Needs of Group B
Multisyllabic words	Fluency
R-controlled vowels	Fluency
Consonant-vowel-consonant words	Fluency
	Fluency
	Fluency

2.4 Both core instruction and extra time learning must be provided by content-strong staff.

Who provides the extra time learning matters as much as the amount of time dedicated to extra time learning.

2.4a. Knowing the content deeply improves instruction and learning. Research shows that the content expertise of an instructor has significant bearing on the student’s likelihood of mastering the material. Content-strong experts can teach a concept multiple ways, identify missing skills, correct misconceptions, and break down complex ideas in a way that is more accessible for students who struggle.

If schools are using HQIM, any staff providing intervention or tutoring, analyzing student data, and preparing lessons should be trained in that program. This should include ongoing professional learning to develop proficiency and track success.

A caution: Providing extra time learning led by staff without deep content knowledge and expertise is seldom effective. See part 7 in this document for how to find sufficient staff with the needed skills.

2.4b. General education staff should play a major role in extra time learning, including intervention or tutoring for students with mild-to-moderate disabilities. Increasing the role of content expert general education staff can improve results for students with mild-to-moderate disabilities and students who struggle. This increases the likelihood of addressing student needs. Students who struggle benefit from extra time learning taught by teachers with content expertise, which includes general education staff. While some special educators have content expertise, some do not.

2.5 How do these practices apply to students with disabilities?

Many of the practices noted in this guide are intentionally very similar to those detailed in the [LDOE Special Education Playbook for System Leaders](#). The practices outlined in this playbook are applicable to all students, including those with mild-to-moderate disabilities.

While every student’s needs are unique and should be evaluated by the IEP team, sometimes, unintentionally, IEP language undermines a student’s access to the best

practices outlined above. Small changes to IEP language can help ensure students with mild-to-moderate disabilities benefit from best practice supports.

Recommended IEP language should address:

- When services are provided
- Who provides the services
- Inclusion in general education extra time learning

The typical IEP often assumes all services are provided by special education certified staff or special education paraprofessionals. The best practices encourage some needs being met by classroom teachers and other content-strong staff. The typical IEP also assumes that each provider will schedule services at their best discretion. However, best practices require clarity about when services are provided.

Sample language that may be added to the comment section of the IEP to ensure services do not reduce access to core reading and math:

- Student shall receive 100% of core reading and math instruction each day. Services will be scheduled at other times during the school day.
- Student shall receive services during regularly scheduled extra time learning period.
- Student shall receive services during regularly scheduled reading extra time learning/RTI/MTSS period.
- Student shall receive services during _____ (state what will be missed).

Sample language to ensure services are provided by content-strong teachers:

- Services to be provided by certified reading teacher or classroom teacher.
- Services to be provided by certified math teacher.
- Services to be provided by reading specialist, interventionist, or individual strong in the content area.
- Phonemic awareness skills will be taught by the speech language pathologist and a reading specialist in addition to 100% of core reading and math.
- Given (student's) learning disability in the reading areas of phonemic awareness, fluency, and comprehension, the reading specialist will provide extra reading support (30 minutes/daily) outside core instruction in reading and math. The special education teacher will serve in an indirect consultative role with (student's) general education teacher and reading specialist for 15 minutes/week to review progress and adjust practices, if necessary.

Sample language to ensure students participate in high-quality general education extra time learning at the secondary level:

Many schools have created graded and/or credit bearing extra time learning classes taught by general education content-strong staff. These are often called math lab, English intervention or other similar descriptions. These courses can and should serve students with and without disabilities. IEPs can support high school students with disabilities using the following sample language in the "Regular Classes" section noted in the "Electives" box: Student to be enrolled in math lab (or another appropriate course).

Additional guidance regarding IEP language and supporting students with disabilities can be found in the [LDOE Special Education Playbook for System Leaders](#).

2.6 How do these practices apply to students who are English learners?

The practices outlined in this resource are applicable to all students, including those who are learning English. For additional strategies and guidance specific to implementing strong EL programming, please refer to the [English Learners Guidebook: Changing Educational Outcomes for English Learners](#).

There are three key strategies central to high-quality, impactful instruction for English learners, all of which can be implemented alongside the staffing and scheduling best practices:

1. **English learners receive standards-based instruction alongside their English speaking peers.** This strategy is where teachers are deeply knowledgeable of students' English proficiency and meet individual student language needs through the four language domains (listening, speaking, reading, and writing).
2. **Progress monitoring is an ongoing practice to support and accelerate instruction.** This strategy is where student data is consistently monitored through their content classes and the use of the English Language Proficiency Test (ELPT) trajectory goals.
3. **Two-way immersion instructional model.** For school systems or schools that enroll large concentrations of ELs with one common language, the first two strategies could be implemented within a Two-way Immersion instructional model - more details on how this model can be structured within the school schedule can be found in the [English Learners Guidebook: Changing Educational Outcomes for English Learners](#).

2.7 Common staffing and scheduling misconceptions and practices to avoid

As schools and systems shift to these best practices, it's equally important that some past practices come to an end to provide time, staff, and energy to the new approaches. A number of practices regularly observed across the state are at odds with the guidance in this document, including the following:

2.7a. The use of paraprofessionals for academic support or reading instruction seldom accelerates learning. Paraprofessionals play an important role in serving many students with disabilities and behavioral challenges. They are a critical component of meeting the needs of students with significant disabilities and supporting inclusion. They are not, typically, highly trained and skilled content-strong teachers who are best able to support students who struggle and accelerate student understanding.

Paraprofessionals with some college, who have a 2- or 4-year degree in a relevant field, or specialized training will also be more impactful than staff who lack content expertise. Should a paraprofessional provide academic support, the paraprofessional must have content expertise and receive the same ongoing professional learning as certified teachers of the subject they are supporting.

2.7b. Co-teaching is hard to scale and often crowds out more impactful alternatives. Co-teaching, pairing a special education teacher with a general education teacher in a

general education classroom, is a popular means of increasing inclusion and access to grade-level instruction. Inclusion and access to grade level material are best practices, but research indicates that co-teaching is a difficult means to a desirable end.

The research is clear. On average, co-teaching does not accelerate learning and in many cases has the opposite effect. It's not that co-teaching is ineffective, but that it's hard to do well at scale. It requires:

1. Both teachers to be content experts.
2. Good chemistry between both teachers.
3. Long-term working relationships between both teachers.
4. Daily common planning time for both teachers.

If even one of these critical ingredients is missing, the results can be disappointing for students and frustrating for staff. The funds for co-teaching can be more impactful if invested in extra time learning with content-strong staff.

2.7c. Push-in support during core instruction is not a substitute for extra time learning from content-strong staff. Push-in support alone does not give students extra time to master content from prior years or teachers the time they need to address student needs.

2.7d. Providing extra help before school or after school should not take the place of providing extra time learning during the school day. While well-intentioned, extra time learning outside of the school day is often out of reach for students who are unable to attend such programming.

2.7f. A focus on building authentic student-teacher relationships is a key element for increasing student engagement which in turn increases attendance and achievement. Many schools are experiencing increased absenteeism, students less engaged, and more children than ever wondering why school even matters. Most school systems are working hard to address these issues and have placed a priority on building authentic student teacher relationships. This is aligned to best practices.

Research regularly points to the importance of strong student-teacher relationships in supporting student achievement. Students care when they know their teachers care.

Effective strategies for building student-teacher relationships prioritize shared interests or small group, personalized interactions. Small group, personalized interactions can increase student engagement. High dosage tutoring, often done 1:1 or in very small groups, for example, can have the added benefit of students feeling an adult knows and cares about them. Taking a few minutes at the start of a few lessons each week to check in and get to know the student can be time well spent.

PART 3: What are high school scheduling best practices?

Schedules matter!

How time is used during the day is central to implementing the best practices effectively. This section provides guidance on how schedules can bring the best practices to life. It is unlikely that the best practice guidance can be implemented well without some changes to school and staff schedules.

How are schedules impacted by the guidance?

Time on learning matters, and schedules impact the amount of time that students learn from teachers. Specifically, the following best practices impact the schedules:

1. **Time for instruction in all core subjects:** Research indicates that there is a large, positive relationship between academic learning time and student achievement.¹ In other words, the more time a student spends in a given subject, the more they will learn (assuming an effective teacher and high-quality curriculum).
2. **Time for literacy:** For students who need it, schools must find time for direct literacy instruction five days a week at the secondary level.
3. **Time for extra time learning:** For students who are struggling academically, time for extra time learning can and needs to be incorporated into school schedules.

¹ *What Works in Schools: Translating Research into Practice, Marzano, 2003*

In general, how much time is needed?

The LDOE has requirements for instructional time aligned to Louisiana Revised Statute 17:154.1.

Category	Requirement
Minimum Length of School Year for Students	177 instructional days
Minimum Number of Teacher Work Days	182
Length of School Year	63,720 instructional minutes
Minimum Length of School Day Grades 1-12	360 instructional minutes
Physical Education Requirement	150 minutes per week (K-8 only)

LEAs must also adhere to instructional time minimums to award Carnegie credits at the secondary level. The guidance below is consistent with standards set by the LDOE and the Louisiana Board of Elementary and Secondary Education.

3.1 How much time should be devoted to instruction?

3.1a. Ensure sufficient time for core instruction.

At the high school level, it is best to think about instructional time in terms of hours per year per subject because there are many types of schedule models. Schools systems should adhere to the following recommendations:

- **Core Subjects:** Math, science, ELA, and social studies should all receive *at least* 50 minutes a day, which equates to 150 hours/year in a 180 day school year. This is possible in most schools via either a 7-period or 8-period schedule.
- **Extra Math and/or ELA:** School systems should avoid using double blocks of math or ELA for all students. A better practice is to assign students with need to content-specific intervention courses so that only students who need it receive a double dose of core content.
- **Science:** Lab time should be incorporated into core content time, not scheduled as a separate lab class.

3.1b. Ensure students are set up to meet high school graduation requirements.

Students at the high school level are required to complete between 23-24 credits for graduation, depending on their track. Students on track to complete a [TOPS University College Diploma](#) are required to complete 24 credits. Students on track for a [TOPS Tech Career Diploma](#) are required to complete 23 credits.

When awarding credit based on instructional time, school systems shall provide a minimum of 7,965 instructional minutes for one Carnegie credit. In a 177-day school year in which students receive every class once a day, this equates to a minimum of at least 45-minute periods. In order to grant one-half Carnegie credit, school systems shall provide a minimum of 3,983 instructional minutes, which equates to a minimum of 45-minute periods for half the school year assuming a class runs daily.

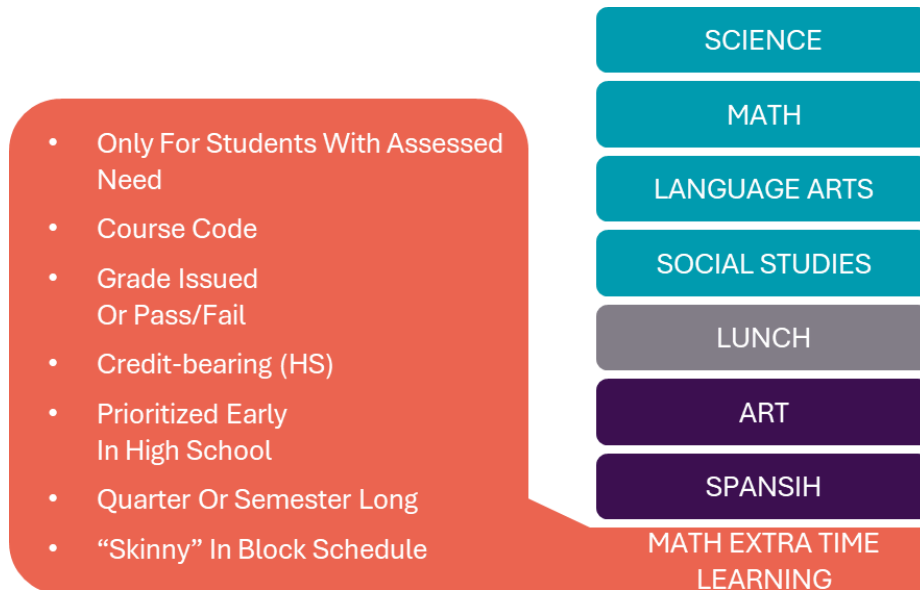
3.2 How much time should be devoted to extra time learning?

3.2a. Extra time learning should come in the form of content-specific intervention or tutoring.

While teachers can help some students catch up on grade-level material during select parts of core classes, other students will still need targeted extra time learning. Students who need targeted intervention or tutoring like this will need additional time built into their schedule.

At the high school level, there should be dedicated extra learning time in the form of content-specific intervention courses that run for at least 45 minutes daily. Students scheduled for extra time learning are those who are struggling to access core content and who are performing below grade level in math or ELA. Not all students will need this dedicated time and not all students assigned to extra time learning will need the support for the full year.

A sample simplified visual of how this time can be built into a school schedule is below.



Best practice secondary schedule for students who need targeted extra time learning. An extra time learning period should be scheduled for students who demonstrate need and should replace a non-core course. This extra time learning period can be focused on either math, reading, or literacy.

3.2b. Ensure extra time learning courses are credit-bearing. Assigning credit to intervention courses can help in the following ways:

- **Making a course credit-bearing adds “weight” to the course:** Peter Drucker, a famous management theorist, is credited with the insight that “what gets measured gets done.” Assigning a course code, grade, and credit to an intervention course is an important form of measurement and a signal to students and teachers alike that the course matters. When a course contributes to a student’s academic record and graduation requirements, it is more likely to be taken seriously. (Note: This practice should *not* be applied to very unique or specialized interventions or for certain students with more severe or significant needs.)

Additionally, when a class is not credit-bearing, it is not always counted towards a teacher’s overall section count because the intervention can often be seen as a supervised study hall or flex period. This often results, reasonably so, in teachers prioritizing planning for credit-bearing academic courses instead of non-credit-bearing intervention courses. There are approved course codes in the course catalog that can be used.

- **Assigning credit to intervention courses reinforces the LDOE’s emphasis on early high school math and English:** The LDOE recently shared new accountability standards that emphasize student performance in early high school math and English courses. Offering students credit-bearing intervention courses to take in parallel to core math and English courses reinforces the importance and value of these core subjects early in a student’s high school career and can help them achieve at a higher level.

Scheduling Credit-Bearing Courses

When it comes to implementing credit-bearing intervention courses, room already exists in most high school schedules for students to take an intervention course. Students at the high school level are required to complete between 23-24 credits for graduation, depending on their track. Students on track to complete a [TOPS University College Diploma](#) are required to complete 24 credits. Students on track for a [TOPS Tech Career Diploma](#) are required to complete 23 credits.

To earn a credit, students must take a course for a minimum of 7,965 instructional minutes, which in a 177 day school year equates to taking a course for 45 minutes a day. Many high schools in the state run schedules in which students take seven or eight academic classes per day that meet this 45 minute requirement. As the table below shows, students in a typical high school can earn between 28-32 credits by the time they graduate assuming they take a full course load every year. Assigning credit to intervention courses would therefore not prevent students in most high schools from taking other required credits and graduating on time (e.g. a student could take both Algebra 1 and a math intervention course in 9th grade and still be on track to graduate in four years).

# of Academic Periods in School Schedule	Projected # of Credits Accumulated Over 4 Years
7 Periods	28 credits (7 per year)
8 Periods	32 credits (8 per year)

3.3 How should time for professional learning and collaboration be incorporated into the schedule?

3.3a. Time for teacher collaboration is driven by the placement of teacher planning periods. Time for teacher planning and collaboration at the high school level is typically driven by deciding which sets of teachers should (or must) have planning time together. . All teachers have at least one planning period; how these are arranged should depend on the combination of teachers the school would like to be able to collaborate. For example, a school may choose to prioritize having all Algebra I teachers share the same planning period. This priority can either be entered into scheduling software or school teams can manually schedule teacher planning time if using Excel or a whiteboard.

Facilitating collaboration across schools: School systems that are interested in facilitating opportunities for teacher collaboration across schools can accomplish this by taking the following three steps:

- **Aligning start and end times:** Schools of the same grade level (e.g. all high schools) should start and end at the same time.
- **Align bell schedules:** Schools must also align bell schedules so that students across schools of the same grade level use the same schedule model (e.g. 7-period day with 50 minute periods).

- **Align planning periods:** Finally, schools must also align the planning periods of teachers they would like to be able to collaborate. For example, all 9th grade math teachers in all schools should have a planning period at the same time to allow teachers to meet virtually, if desired.

3.3b. Effective teacher collaboration requires a systematic approach.

Teacher collaboration is associated with a range of positive effects, including improved teacher self-efficacy (cf. Puchner and Taylor, 2006), increased teaching effectiveness (cf. Graham, 2007), and improvement of instructional quality (cf. Jackson and Bruegmann, 2009; Hochweber et al., 2012), among many other benefits. Common best practices when organizing teacher collaboration time effectively (in addition to what is outlined in the [LDOE Professional Learning Roadmap](#)) include:

- **Clear meeting lead with skills facilitating collaboration meetings:** The most effective meetings have a clear meeting lead that manages the agenda and keeps the meeting on track. Staff leading teacher collaboration time, such as principals, instructional coaches, curriculum leads, master teachers, or deans, should have skill facilitating meetings and should have content expertise when at all possible.
- **Utilize expertise in the room:** Simply putting a group of teachers in a room together does not make them all more effective teachers. Effective collaboration requires a leader in the room for every session that is a master teacher with insights and abilities worth sharing. This can be a classroom teacher, a principal, an instructional coach, master teacher, or other highly skilled person.
- **Set clear agenda and meeting purpose:** There are many good and important reasons for teachers to meet. Best practice calls for teams of teachers to set a clear agenda and goal prior to or at the beginning of every meeting. Agendas should follow the HQPL cycle outlined in the LDOE Professional Learning Roadmap and be shared with attendees prior to the meeting.
- **Prepare data ahead of time:** If the team is reviewing student data during the meeting, any analyses of the data should be completed prior to the meeting. Time for teacher collaboration is best spent discussing data and using it to inform decisions about instructional choices and student groupings—not compiling, organizing, and running analyses of data, all of which should happen prior to the meeting. The data being reviewed should be timely and relevant to upcoming instruction.
- **Connect to teacher development and professional learning:** Best practice teacher collaboration is a driver of teacher growth and development. It connects to teacher certification steps, is aligned to teacher development goals, and is a time in which teams can collaboratively support one another.
- **Refinement in teacher practice, not just “rich discussion:”** Outcomes only change when teachers change. Too often, collaboration time is a thoughtful discussion, an analysis of a challenge, or a hope for something new from the district. Effective collaborative planning should create a change in teacher action or practice in the next few days.
- **Candid assessment of impact:** Effective collaboration actually measures effectiveness of collaboration. Often systems celebrate the act of collaborating, rather than the results of collaborating. Surveys of teachers to gauge the inputs and tracking of student growth to

gauge the outcomes should be designed into the plan from the start.

- **Set a clear meeting cadence:** Highly structured and facilitated teacher collaboration does not need to happen every day. A better practice is to set a clear meeting cadence for what types of meetings happen on what days of the week (or cycle).

3.4 Sample Best Practice Schedules

School systems can access a catalog of best practice high school schedules using the [LDOE high school schedule catalog](#). No schedule model is “perfect”; the purpose of this catalog, instead, is to provide school systems with sample schedules that align to the guidance outlined throughout this document and reflect the needs and context of students and staff in Louisiana generally. Schools and school systems can adapt the schedule models to system-specific circumstances.

3.5 Best Practice Schedule Checklist

There is no one best practice high school schedule. In fact, there are hundreds of schedules that are best practice schedules. What they all have in common is that they incorporate critical elements. A best practice high school schedule includes all of the following:

- 150 hours a year of core instruction per subject:** At least 50% of a student’s day is devoted to core instruction yielding approximately 150 hours of instruction each in Math, ELA, Science, and Social Studies.
- Extra time learning:** All students who struggle have access to extra time learning in math, reading, or writing built into the schedule in addition to brief scaffolding during core instruction.
- Grade Level Learning:** All students have access to and are expected to succeed in grade-level learning opportunities.
- Course and elective offerings:** Classes should be determined by student need, academic level, and school priorities, not by precedent or history.
- Voice and Choice:** Student voice is taken into consideration when determining course offerings and students are given some level of choice over the courses they take.

A few cautions:

Scheduling practices to avoid include:

- **Do not focus on block (A/B or semester) versus non-block.** What is important is having the elements of best practice, which are possible in a block schedule (with some modifications) or a traditional 6-, 7-, or 8-period schedule. Existing research has not identified a correlation between block versus traditional schedules and student achievement.
- **Avoid block schedules that do not teach two core subjects for half a year.** These so-called “semester block schedules” can be very challenging for students who

struggle, students with disabilities, and English learners. The equivalent of summer slide can happen during the school year, given long gaps between learning a subject.

3.6 What is the best process to create a high school schedule?

Building a best practice schedule needs a best practice scheduling process as well. Too often, schools get frustrated that they can't build a schedule that brings the guidance to life. In most cases, it's the process that causes the challenge. Effective scheduling requires integrating structures, systems, and players in the right order.

3.6a. Define priorities and non-negotiables. It is important to prioritize the most important goals in a school schedule. This will help your team make tough decisions about scheduling trade-offs when you build the schedule. It is helpful to make a short list of specific top priorities, and then based on these priorities, your team will decide what must be present in the schedule, or a "non-negotiable." Sample non-negotiables include:

- All students who need extra time learning in math or ELA have access to daily extra time learning with a content expert.
- Student participation in grade-level courses is prioritized.
- Singleton courses in smaller schools scheduled at strategic times.

3.6b. Determine staffing needs, especially for content-strong extra time learning teachers. Based on assessed student need and section requirements for extra time learning gathered in the previous steps, determine staffing requirements to effectively staff extra time learning support.

3.6c. Ensure the budget reflects required core and extra time learning staffing. Avoid "locking in" school budgets and staffing decisions until you have determined the number of students who are struggling academically, the content areas in which they have gaps in learning, and the staffing that will be required to effectively serve them. Work with the central office budget and human resources teams to make adjustments to the budget and staffing plans, as necessary, to reflect students' assessed learning needs.

3.6d. Task an expert scheduler to run draft schedules. With a clear picture of which students will receive which extra time learning support and which teachers should teach each intervention or tutoring course, task an expert scheduler to build the schedule that incorporates extra time learning. Scheduling is a skill that some are better at than others. When building your scheduling team, it is important to recognize who on or outside your team has scheduling expertise to use the scheduling software effectively.

A caution: The scheduler should be asked to run a schedule based on non-negotiables and students identified for extra time learning. They should not be expected to set the strategy, but just implement it.

3.6e. Identify roadblocks and reschedule based on input from school leadership. Building schedules involves navigating many tradeoffs. The scheduler should work closely with

school leadership and elevate challenges or issues that prevent the non-negotiables from being scheduled.

3.6f. Escalate obstacles to system-level office as needed. An escalation protocol is a plan for bringing scheduling sticking points to a higher authority. Often a school-based leader can not meet the non-negotiables because of a limitation or constraint that is beyond their authority. This can include a shared staff member not available when needed or a rule or expectation that makes the schedule “impossible.” Often only a district leader has the authority to remove the obstacle.

3.6g. Update the schedule as new information is available. Sometimes school-based staff strive to finish the schedule “as early as possible.” They view this as well-managed, and students and staff have early notification of what’s to come. Unfortunately, new information often emerges over the summer. Planning for a late summer update can lead to a better schedule.

PART 4: What about unique scheduling considerations?

4.1 School schedules in a balanced calendar

In a balanced calendar schedule, year-round learning is allowed without increasing the number of school days. The long summer break and its associated summer slide are eliminated and shorter breaks are scheduled throughout the year (e.g., students attend school for approximately 45 days, then transition into periods of intersession or off-days).

4.1a. Importance of scheduling intersession periods. Intersession days should be used to provide professional learning or to provide extra support for students who struggle.

4.2 Scheduling virtual classes

As technology's role in education continues to expand, the trend of incorporating virtual classes into the school day is growing. In this type of programming, students are online at one school site taking a virtual class being taught by an instructor in another location. This can look like students at one high school taking virtual Physics from a teacher at another, or advanced 8th graders taking English I online from a teacher at the high school, or students taking a dual enrollment course taught virtually by a professor at a local college.

Who can benefit from adding a virtual instruction program?

While many school systems can benefit from incorporating virtual instruction programming, those that will see the greatest benefits are:

- **Smaller school systems** that want to be able to offer a more variety in course offerings for their students
- **School systems with large variation in school sizes** who want to provide the same opportunities at all school sites
- School systems looking to offer **more dual enrollment opportunities** to their students
- School systems **struggling to hire** hard to staff courses

Keys to successful implementation

For those that wish to implement virtual instruction programming, there are several factors to consider in order to do this well:

- **Aligned bell schedules.** Participating schools must have aligned bell schedules in order to do this well. One-off courses (such as middle school students taking one course from a high school teacher) may be scheduled without having to align bell schedules.
- **Virtual instructor spaces.** Have a dedicated space in buildings where your virtual instructors can teach from. This way the space can be equipped with the proper technology and resources that they need.
- **Virtual classroom student spaces.** There should also be a dedicated space(s) in

buildings where students will go when attending virtual classes. This room should be listed on students' schedules, and there may be students taking many different virtual classes all in one space at once.

- **Facilitators for virtual classroom student spaces.** In each virtual classroom student space, there should be at least one facilitator who can assist. This individual would not be responsible for any teaching or instructional support. These facilitators should receive training in behavior management and technology support in order to help students.
- **Sufficient technology.** Students will all need access to a laptop and high-quality headphones during the periods that they are engaging in virtual learning. Instructors will need high-powered laptops and large screens to see all students at once.

Common pitfalls to avoid

When implementing virtual instruction programming, there are a few common pitfalls that school systems often find themselves running into.

- **Hybrid learning.** If students across a district with five different high schools are all sitting down to take a journalism course taught by a teacher at one of the schools, it can be tempting to have the students that are at that same school physically in the room with that teacher, while the students at the other schools engage with the course online. This strategy of “hybrid learning” that was prevalent during the height of the pandemic is less effective for both in-person students and online students, as it divides the teacher’s attention and makes it more challenging to teach either group well. Even if students are taking a virtual course taught by a teacher in their own building, they should still engage in the course online alongside their peers.
- **Student enrollment without clear communication.** Learning in a virtual environment requires students to be able to thrive in a somewhat less hands-on environment. While there do not need to be explicit requirements students need to meet in order to enroll, schools should work closely with individual students and families to determine if virtual classes are a good fit.
- **Teachers switching between in-person and virtual teaching.** Teachers who are teaching virtual courses should generally only be teaching virtual courses, rather than flipping between in-person and virtual classes. Switching between the two different modalities of teaching can often add additional difficulties and should be avoided as much as possible.

PART 5: How can school systems staff strategically to maximize the impact of staff?

The best practice guidance for supporting students who struggle, students with disabilities, and English learners requires a systems thinking approach to implementation. A number of interrelated steps must be taken in order to implement the system well. Aligning staffing to support the best practices is a key step to effective implementation.

In fact, one common reason schools that embrace best practices fail to achieve expected student outcomes is the lack of alignment in staffing to support these practices. Staffing is also an important aspect to ensuring fair access to support and that the most effective teachers work with students with the greatest need.

5.1 What positions are impacted by the best practice guidance?

To effectively implement the best practice guidance and support students who are struggling academically, schools and systems need staff with the right skills and training. Key roles that are central to implementing the best practices include the following.

- Highly skilled **classroom teachers** are the foundation of high-quality core instruction. No strategy, program, or curriculum can be effective without highly skilled classroom teachers. Nothing in this guidance is a substitute for high-quality teaching. In fact, the guidance requires and prioritizes high-quality teaching above all else.
- Effective support from **instructional coaches** can be instrumental in improving the quality of core instruction. Given the critical role of classroom teachers, instructional coaches are greatly valued. Research shows that instructional coaching is the most impactful means to improving classroom teacher effectiveness. Instructional coaching may come from designated instructional coaches, master teachers, or school leadership with instructional coaching experience.
- Experienced **teachers of foundational literacy skills and reading** are important for ensuring that all students who struggle to read get extra help from content-strong staff. Helping striving readers catch up is foundational to the best practices. Teaching striving readers is a very specialized skill.
- **Content-strong math and ELA interventionists** are key to providing effective extra time learning. This is especially true at the secondary level as content is complex, and usually only certified math and ELA teachers have the required skills and content expertise to provide the needed extra time learning services. As the number of students who struggle grows, so must the number of qualified math and ELA teachers. School systems might consider using approved vendors to boost the number of content-strong math and ELA teachers.
- **EL teachers** play a vital role in providing the intentional support, resources, and instruction necessary to drive English Language Development and English language proficiency.
- **Counselors, social workers, and others with mental health expertise** play an

important role in meeting the well-being needs of students, which is central to meeting their academic needs. In today's world, there are significant levels of stress, anxiety, and trauma facing students.

- An experienced and savvy **scheduler** will also help to ensure an efficient plan. As outlined in the prior section, aligning schedules to the best practice guidance is also critical.
- **Tutors** can play an important role in supporting students who struggle. Tutors from outside the school should bring a high level of content expertise, be available on a regular basis, bring a passion for working with students, and be from a LDOE-approved vendor. Current or recent college students often make for effective tutors.

5.2 What are the key skills needed and reasonable staffing levels for these critical roles, and how might staff be fairly allocated across schools?

It's not sufficient to simply have the right number of full-time equivalents (FTE) in these critical roles, nor is it enough to just focus on the skillset of the staff. School systems should make sure to place importance both on having enough staff to do the work, as well as that the staff they have are the right ones for the job. A leading reason that these best practice strategies fail to make a meaningful difference is that historic staffing patterns lead to too few staff and key players being stretched thin or reassigning the staff they already have that are closest to what is needed even if they lack some key skills. While both patterns are understandable given the pressures and challenges, both also result in too many students with needs going unserved.

For example, imagine a highly skilled teacher of reading providing extra time learning services to students who struggle. On the surface, this is good, but what if the teacher of reading was assigned 100 striving readers? It is unlikely they could meet often enough or have small enough groups to be effective. Similarly, imagine a school with 100 striving readers and five teachers of reading that lack the skills needed to be highly effective. In either scenario, students aren't getting the support they need. It would be better to think strategically and intentionally to ensure there are enough staff and that the staff have the skills needed.

Once the right number of people with the right skills are identified, school systems must determine how to fairly allocate staff. It is critical that fairness be at the forefront of serving students who struggle. Unfortunately, staffing practices have been a common cause of unfairness in the past.

Staffing levels should be based on student need, not overall enrollment, historic staffing patterns, 1-per-school staffing rules and ratios, or relying solely on Title I to ensure sufficient extra resources.

Key skills needed, staffing level recommended actions, and how to fairly allocate staff for the identified positions and roles are provided below:

5.2a. Classroom teachers

- **Key Skills:** All the qualifications that make for effective, content-strong teachers still

apply. A highly skilled teacher should be one that implements strong core instruction, provides effective extra time learning, and supports students who are struggling academically.

To the extent that schools and systems have data about the strengths of teachers, leaders can consider pairing teachers with students based on the relative strengths and needs of staff and students. For example, a school might ensure that staff who are skilled at and have the required literacy training to teach foundational reading skills teach students who have a need in foundational reading skills. Said another way, teachers with the highest evaluation scores should support students with the greatest needs.

- **Reasonable Staffing Levels:** Reducing class size as a strategy to address missed instruction or prerequisite or unfinished learning is not supported by the research, with one exception.

One exception to the rule: Research has shown that in grades K-3, in schools serving students primarily living in poverty, reducing class sizes to 15 *and* staffing these classes with a skilled teacher can be effective. Slightly reducing class size from say 22 to 18 students is not impactful, nor is the strategy helpful in older grades or serving students not living in poverty.

- **Staffing Allocation:** Research shows that reduced class size does not raise achievement. Providing other supports in greater numbers such as instructional coaches, interventionists, mental health counselors and behaviorists does help improve student outcomes.

A smaller class size strategy can actually harm student achievement. If new, inexperienced teachers are hired to staff the added classrooms, then students in these classrooms could make fewer academic gains than if they had a slightly larger classroom with a more effective teacher. If resources for smaller classes preclude hiring of sufficient instructional coaches, skilled teachers of reading or content-strong secondary interventionists, then students' gains are also likely diminished.

5.2b. Instructional coaches

- **Key Skills:** To be an effective instructional coach requires two distinct skills. 1) Being an effective teacher of students and 2) being a tactful, helpful guide for adults.

It may seem obvious that in order to help others become more effective teachers, instructional coaches themselves must be highly effective teachers of students. In many schools, however, this may not be the case. When selecting individuals for instructional coaching roles, be sure to keep the following in mind:

- **Emphasizing skill over seniority:** In some schools, there is an expectation that veteran staff should get these roles. Research indicates little correlation between teacher effectiveness and longevity after the first few years of teaching. It matters more that staff selected for these positions

have the requisite skill sets.

- **Value effectiveness over energy:** Highly effective teachers generate above-average growth in student learning. If effectiveness is measured by observation, rather than student growth scores, a teacher with energy, enthusiasm, and high student engagement can be mistaken for highly effective. (As defined by the LDOE, a highly effective teacher is determined by their final evaluation from the previous year. For the 2023-2024 school year, this would be a teacher who scores a 3.5 overall in COMPASS or LEADs.)
- **Using the instructional coaching role to remove a teacher from the classroom:** Sometimes a less-than-effective teacher is put into an instructional coaching position to be placed outside the classroom (though still in the school system). This is not best practice and the school system must avoid doing so.

Simply being an effective teacher of students is not sufficient to be an effective instructional coach. Teaching adults is very different. An instructional coach must be able to help their adult peers change behavior. This skill set requires the following:

- The ability to explain to others best teaching practices, not just knowing instinctively what to do
- The ability to build trust and rapport with colleagues
- The tact to deliver constructive feedback in a way that avoids defensiveness
- Courage to have sometimes challenging conversations

A tip: Neither observing a teacher work with students nor a standard interview is an effective means to assessing a teacher's skill at working with adults. Real-life roleplay and observing a mock feedback session are more indicative of future success.

- **Reasonable Staffing Levels:** No position is more prone to being stretched too thin than instructional coaches. Despite being one of the highest-leverage investments to improve outcomes for students who struggle, coaches are often chronically understaffed in many systems.

Ideally, schools will have the equivalent of one full-time instructional coach per every 20 teachers to be supported. This does not have to be one person working full-time as an instructional coach. It could be two part-time coaches or two people who teach half the day and are coaches the other half

If a person, for example, spent 50% of their time teaching students, then they would be expected to support 10 teachers, not 20. Similarly, if a person spends 25% of their time as an interventionist, they would be expected to support 15 teachers.

Because instructional coaching can be so impactful for improving core instruction and high-quality core instruction is the foundation of supporting the needs of students who struggle, every minute in an instructional coach's day is precious. To

maximize their impact, their schedules should include:

- 75% of their time is spent working with, observing, and modeling for classroom teachers. Time for planning, writing up notes, and other activities should be limited to 25% of their instructional coaching time.
- Giving mostly verbal feedback rather than detailed written feedback is quicker. It is also less threatening and easier to provide in the moment.
- Coaching with individual staff should take place weekly or every other week.
- Small group coaching during common planning, team time, or department meetings can extend the reach of the instructional coach. The majority of time, however, should be spent working with individual teachers.

A tip: Which teachers receive coaching should not be left up to the coach. Haphazard assignments put coaches and teachers in an awkward position. Generally, all teachers benefit from instructional coaching, not just new teachers. Instructional coaches should work closely with their school's Instructional Leadership Team (ILT) to determine which teachers receive coaching.

A caution: Instructional coaching is not intended to primarily support teachers who struggle. Coaches should have systems and structures in place that ensure all teachers are supported.

- **Staffing Allocation:** Instructional coaches might have different staffing ratios based on staff experience. While the system-wide target could be one full-time equivalent (FTE) for instructional coaching for every 20 teachers supported, a school serving students with greater needs might have a lower ratio, such as 1:15, and a school serving students with fewer needs might have 1 FTE to every 25 teachers supported. This is influenced, in part, because schools serving high-needs students tend to have less experienced teachers.

5.2c. Teachers of reading

- **Key Skills:** Teaching students who struggle to read and comprehend well is a skill.

Certification, however, is not a strong indicator of skill. Reading teachers must be deeply trained in reading best practices. Their training, rather than their certification, is a better indicator.

The best indicator of who is an effective teacher of reading is past student growth. A highly effective teacher of reading can be expected to help readers who struggle make 18 months of reading gain in a single school year, as measured by literacy screeners.

At the secondary level, teachers of reading should have training or experience specific to teaching foundational literacy skills to middle and high school students.

This specialty is often in short supply.

Typically, secondary ELA teachers do not have the required specialized background in teaching foundational literacy skills. They possess different skill sets. They expect students to read and comprehend, so they can teach how to analyze, express their understanding of what they've read, and think critically.

- **Reasonable Staffing Levels:**

How many striving readers can a teacher of reading support?

		GROUPS TAUGHT PER DAY				
		5	6	7	8	9
AVERAGE GROUP SIZE	4	20	24	28	32	36
	5	25	30	35	40	45
	6	30	36	42	48	54

# of Groups	5	6	7	8	9
Hours of Teaching Per Day	2.5	3	3.5	4	4.5

A tip: If more than 40% of a school's students need reading intervention, then classroom teachers also need to provide intervention in addition to core instruction. In some models, most classroom teachers also provide intervention to readers who struggle, not just dedicated teachers of reading.

5.2d. Content-strong math and ELA interventionists

- **Key Skills:** Intervention at all levels requires staff with deep content expertise. To teach core content that addresses student needs takes the same skills and knowledge as any other core content. If a certified math or ELA teacher normally taught the material in the past, they are best suited for teaching it in the future.

Intervention for students who are struggling academically also requires instructors with deep content knowledge. Because students who struggle often have already been taught a concept in the past, but haven't yet mastered it, the instructor will need multiple means of teaching the concept. Ideally, teachers will be able to see a wrong answer and infer where the student had a misunderstanding. Both skills require deep content expertise. School systems should staff these roles with certified math and ELA teachers.

A caution: Too often students with mild-to-moderate disabilities, especially at the secondary level, do not receive extra help or intervention from staff with content expertise. Some IEPs are written for students to get this help from special educators or paraprofessionals. Often, these staff members lack the required level of content expertise to directly support students' academic needs. Students with mild-to-moderate disabilities can and should receive intervention and/or extra help from general education, content-strong teachers. See section 2.5 for more information on possible IEP language.

Some special educators of course have deep content expertise, and they too are well equipped to provide intervention. Some special educators have the interest and aptitude to develop content expertise but are not provided the opportunity. Including interested special educators in general education, content-specific teacher collaboration, instructional coaching sessions, department meetings, and other professional learning can increase the number of content experts in a school. Not all special educators need to be content experts as there are a multitude of other key responsibilities necessary for the successful implementation of special education programming including student advocacy, instructional support, pupil appraisal, IEP development and maintenance, related services provision, compliance monitoring, and case management.

- **Reasonable Staffing Levels:** These are often not a full-time role. They are often either a few sections of a math or ELA teacher's teaching load or a few sections taught by a part-time teacher. For setting staffing levels at the secondary level, it is easiest to calculate the total full-time equivalents (FTE) needed even if work is distributed across many people.

A full-time interventionist at the secondary level can support approximately 75-100 students who struggle. This estimate assumes class sizes (grouped by similar areas of need) of 15-20 and a typical full-time teaching load of 5 periods a day. Small groups within that class with targeted instruction should still be 4-6 students based on student need.

- **Staffing Allocation.** Content-strong interventionists should be staffed based on the number of students who struggle in ELA or math in a school. For example, the greater the number of students who struggle in ELA or math, the greater the number of content-strong interventionists.

5.2e. EL teachers

- **Key Skills:** Teaching students English as a second language requires a mix of skills. There is a science to language acquisition. Beyond this, having a solid understanding of how to teach reading is very beneficial. More information on supports for EL teachers and students can be found in the [LDOE English Learners Library](#).

- **Reasonable Staffing Levels:** The best practices don't call for more EL staff, but they place a high value on their time. EL teachers should spend as much time with students each day as core subject teachers at the secondary level. Based on schedule sharing data from staff in over a hundred systems across the country, in some systems, EL staff spend 30-50% less time with students than many of their peers.

5.2f. Counselors, social workers, and others with mental health expertise

- **Key Skills:** Formal training in counseling and mental health-related services is of the greatest value.
- **Reasonable Staffing Levels:** In recent years, the needs for counseling services have increased significantly. Given this great need, it may be prudent to allocate funds for additional mental health providers such as social workers and counselors.

5.2g. Tutors

- **Key Skills:** Some schools may utilize small group tutoring to support students who are struggling academically. The term tutoring can be misleading. Some leaders have mistakenly assumed that tutors can be typical paraprofessionals or community volunteers. While some effective tutoring models do use non-certified staff, such staff are usually college students or recent college graduates with deep content expertise in relevant fields. For example, tutors majoring in math or engineering might support math, while English or history majors could tutor ELA.

When staffing tutoring, the following hierarchy can ensure skilled staff members are supporting students:

1. Content-strong certified teachers
 2. [Accelerate: High Dosage Tutoring Vendor Guide](#)
 3. College graduates with specific, relevant expertise
 4. Current college students with specific, relevant expertise
 5. Well-trained and closely supervised paraprofessionals (although, their impact is often marginal compared to options 1, 2, 3, and 4)
- **Reasonable Staffing Levels:** Tutoring group sizes should be based on student need and with an eye to maximize tutors' reach, though the ratio of students to every tutor should be no more than 4:1. At least 75% of full-time tutors' days should be spent with students, and tutors should work with the same set of students for the duration of a tutoring cycle to give consistency to students.
 - **Staffing Allocation:** Tutors should also be staffed based on the number of students who struggle in the subjects in which tutors provide support. For example, the greater the number of students who struggle in math, the greater the number of skilled tutors of math.

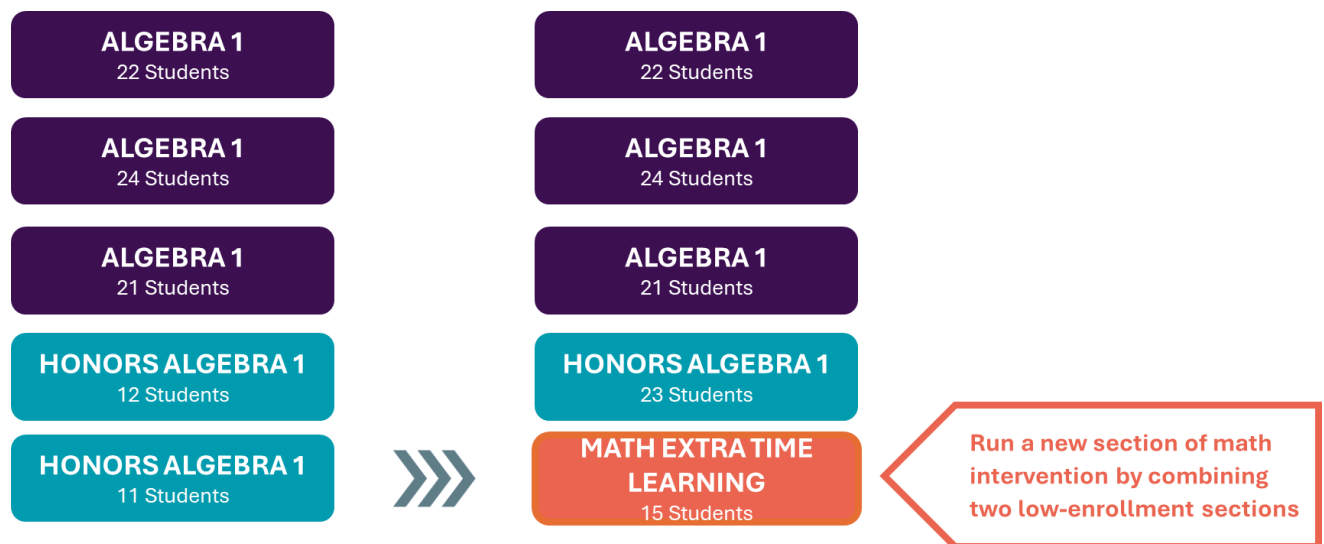
5.3 What are strategies school systems can use to find and retain content-strong staff?

Finding the highly skilled staff needed to implement the best practice guidance can be challenging. While difficult, it is central to meeting the needs of students. The search for such staff should be a top priority and will likely require looking in new places and searching in new ways. Traditional channels and approaches may fall short. Allowing inadequate staffing will be detrimental to students.

Too often when school systems struggle to find sufficient staff with the needed skills and expertise, they either reduce the number of students served or they rely on lower skilled employees.

5.3a. Finding Teachers: Beyond the traditional sources for hiring teachers, a few additional options include:

- **Existing staff used more efficiently can reduce the need for hiring new staff.** By staffing more precisely to class size or group size targets, existing staff can often be freed up for extra time learning. For example, a high school might have a few courses with low-enrollment due to scheduling challenges. The school might consider consolidating sections of similar courses or adjusting offerings to be able to free up time in teachers' schedules to offer additional extra time learning sections.



Note: Systems should not increase class sizes above system targets. However, staffing precisely to class size targets can help to free up staff for extra time learning or other supports.

- **Hire from the LDOE non-traditional pathways:** In Louisiana, there are [three pathways to teaching](#) that individuals can pursue. Hiring and supporting candidates through the two less traditional pathways is a growing trend:

- **Aspiring Educator/Pre-Educator Pathway:** Many school systems have turned to this pathway to cultivate and grow the next generation of teachers within their own communities. Through this program, high schools can offer courses and programming that can support aspiring educators to get a jump start on teacher certification and investment in the field. More resources and details can be found [here](#).
- **Post-Baccalaureate:** There are three types of post-baccalaureate programs that aspiring teachers can pursue: practitioner teachers programs (intensive coursework paired with full-time teaching), master’s degree programs (best for individuals who might need more support developing as a teacher), and certification-only programs (best for those not wanting to participate in full-time coursework who already have natural teaching instincts). For all of these programs, direct billing to the school systems when teachers don’t have the funds to front can be a successful strategy in hiring candidates. More resources and details on programs can be found [here](#).
- **Look to job matching and hiring platforms:** Platforms such as Indeed.com or LinkedIn can actually be great places to find strong teaching candidates. While this can be most effective for hiring career switchers, it can be a great place to source already certified teachers as well.

Part-Time Teachers

- **Retired teachers** are an important source for teachers of reading, instructional coaches, and content-strong interventionists. Many retired teachers do not want full-time work but miss working with students. These critical roles can easily be served by part-time retired teachers.
- **Teachers who left to care for children or parents** are also a source for part-time roles similar to retired teachers. Nearly half of all teachers leave the profession within their first 5 years. Some individuals leave because they do not want full-time jobs given the need to care for children or parents. Many would welcome a part-time opportunity.

A tip: To attract and retain part-time staff, it is important that the school and teacher schedule is “part-time friendly.” This means the schedule is based on the days of the week, Monday through Friday, and class times do not rotate or drop. A part-time person can, for example, plan around working Monday and Tuesday or working 9:00 to 11:00 but not on ‘A’ days, that might be a Monday one week and a Tuesday the next. Bell schedules that place period 1 at 9:00 am one day and 10:00 am the next also make part-time work very difficult.

5.3b. Finding Tutors: Some of the most successful places to find tutors can be:

- **Approved vendors for tutoring services** can be a source for additional skilled staff. See the [Steve Carter Literacy Tutoring Providers](#) for additional information.
- **Recent college graduates with math, science, and English majors.** The role of a tutor for extra time learning need not be a certified teacher. A college graduate with content expertise (supported by training, supervision, and high-quality curriculum)

can be a better option than a less content-strong paraprofessional.

- **Current college students with math, science, and English majors.** Similar to recent college graduates, current college students can supplement the pool of tutors on a part-time basis.

Staffing Tutors Post-ESSER: The end of ESSER funding does not necessarily mean school systems need to reduce the number of tutors available to students. [Potential funding streams](#) that can replace ESSER funding to help provide highly effective tutoring in new, cost-saving ways include:

- **Title 1:** Of all the federal Education Department’s funding streams, Title 1 is the best-known, the largest, and the most appropriate for tutoring. It was designed to target extra resources to high-need schools, specifically for math and reading. Tutoring is most important for students struggling to demonstrate proficiency in reading by the end of third grade or in Algebra 1 by the end of ninth. School systems should look at how they are spending Title 1 dollars and potentially reallocate some to tutoring to help students reach these two goals.
- **AmeriCorps:** One of the priorities of this program is to support effective tutoring for high-need students. AmeriCorps awards tens of millions of dollars in grant funding for tutoring and mentorship in early learning and K-12 schools. School systems can apply directly for federal funds through their State AmeriCorps commissions. These three-year grants can largely cover the costs of tutors and supervisory staff. School systems can also seek vendors that are AmeriCorps partners to provide tutoring, which brings a subsidy from the vendor directly into the school system.
- **Work-study:** This program enables lower-income students to work their way through college and allows colleges to use federal funds to subsidize work by their students. Recent guidance has called on colleges and universities to spend at least 15% of those funds on community-based jobs, and tutoring is among the roles prioritized. With a school system as a community partner, a college can subsidize up to 100% of a tutor’s wages.
- **U.S. Department of Education teacher preparation funds:** The Hawkins Program is designed to increase the number of well-prepared teachers from varying backgrounds. The program has a focus on the teacher preparation pipeline, including the recruitment, support, and placement in under-resourced schools with underserved students. This fund goes directly to institutes of higher ed; school systems can partner with local colleges to design a tutor-to-teacher pathway.
- **U.S. Department of Labor apprenticeship funds:** These can support apprenticeship programs for future teachers and help systems address teacher shortages by strengthening the pathway to the classroom through the real-world experience of tutoring in schools.

5.3c. Finding Counselors: There is a limited pool of social workers, counselors, and other mental health staff who want to work full-time in K-12. More than other positions, mental health professionals may work in a variety of settings including private practice, community-based centers, or larger hospital systems. Fortunately, schools can tap into this

larger pool:

- **Engage fee-for-service providers.** As an alternative to full-time staff, school systems can utilize fee-for-service providers as contractors. Often much of the cost of them providing services can be offset by other funding sources as well.
- **Utilize tele-therapy.** In recent years, Zoom-based counseling has become a very popular alternative.
- **Hire a director of community mental health partners.** Having a dedicated resource responsible for finding and managing outside, community-based mental health providers can double or even triple the number of staff with mental health expertise available to students.

5.3d. Additional strategies for hiring and retaining content-strong staff

In addition to role-specific strategies, there are a number of other strategies and tools that school systems across the state have used to hire and retain content-strong staff. These include the following:

Systems-Level

- **Creating a hiring calendar and data tracking.** Develop a clear hiring calendar and start the process early. Track application and hiring data in order to follow up with potential candidates.
- **Implementing values-based recruiting.** Ensure there is a clear vision and set of values for the school and clarity on what a successful staff member in that school looks like. Share this early and often in the recruiting process. This can include highlighting the school environment and the community staff would be joining.
- **Clearly organizing and communicating all incentives and benefits.** Have a clearly communicated resource, such as a flier, that contains all the details surrounding the benefits and incentives offered.
- **Offering staff referral bonuses.** Provide financial incentives for staff when they refer individuals that end up being hired.

Leveraging Staff

- **Position principals as talent recruiters.** Staff are more likely to accept offers when they feel they are aligned with the vision for the school set by the principals. Principals should play an active role in the recruiting process and be able to clearly communicate how any prospective teacher's skills and experiences can contribute to the school's overall mission and vision.
- **Utilize talent recruiters.** Hire individuals with connections and recruiting skill sets to recruit staff across the state.

Financial Resources and Support

- **Organize housing support.** Provide resources and supports for finding housing opportunities that are affordable or mortgage assistance programming.
- **Offer competitive benefits.** Competitive benefits packages are more important than ever. In addition to offering health care benefits, other benefits programs can also attract and retain candidates (such as PeopleJoy, Headspace, gym reimbursements, nutritionists, etc.).
- **Provide flex time or personal days.** Where possible, offer staff opportunities for flexible work schedules or additional personal time to provide more flexibility to staff.
- **Offer moving expense coverage.** When trying to attract staff that would have to move in order to be hired, some school systems have experienced success with offering support with moving expenses.
- **Provide tuition assistance.** Provide tuition assistance for staff pursuing masters programs, loan support, etc.
- **Create competitive salary ladders.** Staff teachers, administrators, and other staff efficiently to ensure the ability to offer competitive salaries with bonuses or increased benefits associated with retention.
- **Ensure sufficient resources and classrooms.** Provide teachers and staff with well-stocked classrooms and resources to best support students.

Growth and Professional Learning

- **Set clear administrator pathways.** For teachers and staff who might be interested and most qualified, offer pathways to earn administrator licenses.
- **Offer high-quality professional learning, instructional coaching, mentorship, and growth opportunities.** Offer teachers and other staff opportunities to grow through professional learning and instructional coaching that includes strong modeling and exemplars, as well as cultivating a strong mentorship program.

5.3e. What do school systems need to know regarding hiring retired teachers?

Content-strong staff providing extra time learning is critical to successfully supporting students who are struggling academically, and hiring retired teachers is one way to expand the pool of these high-skilled staff. Some school systems have had great success hiring highly skilled retired teachers. Many school systems, however, worry that they will run afoul of the many rules governing retired teachers returning to work.

Given the importance of content-strong expertise and chronic teacher shortages, fully understanding the steps necessary to hire retired teachers is a worthwhile investment of time and energy. Any effort to hire retired teachers should be reviewed by a school system's human resource administrator and Teachers' Retirement System of Louisiana (TRSL).

5.3f. What if highly skilled teachers do not want to leave the classroom?

Some positions like teachers of reading, interventionists, instructional coaches, and content leaders (such as math department heads or English department heads, etc.) have limited pools of applicants because staff do not want to leave the classroom. These roles can be structured so that teachers do not completely give up classroom instruction, thus expanding the pool of highly skilled candidates.

Instructional coaching: At the secondary level, effective teachers can split their time between teaching and coaching. They might teach a few periods and coach a smaller number of teachers.

Content-strong math and ELA interventionists: Schools could consider splitting a teacher's time between core content and intervention. For example, a math teacher could teach three periods of core math such as Algebra 1, then two periods of intervention.

5.3g. Can incentive pay help fill staff shortages?

Unlike most other sectors, traditionally, all types of teachers and positions are paid the same based on the school system, experience, and graduate courses taken. Supply and demand do not factor in. In most other sectors, employers raise the compensation of positions in short supply to attract more people with the needed skills.

Systems might consider incentive pay for selected positions, such as content-strong interventionists, instructional coaches, content leads, or mental health professionals.

A few cautions:

- **Avoid long-term commitments that may be difficult to keep.** People like when their compensation goes up but tend to be very unhappy when it goes down. Extra pay incentives can sometimes be hard to maintain. It can be important to message that the incentive is not a permanent salary adjustment but is instead a bonus that will most likely last for just 1 or 2 years. While additional pay should accompany additional responsibilities, systems must plan for sustainability for years to come.
- **Consider the cost to existing staff.** It's not just the additional staff that typically get an incentive boost, as existing staff in the role would also be subject to the boost. Consider the case of a system with 10 reading interventionists searching for one additional teacher to add to its staff. After struggling to hire through conventional means, the district offers a \$10,000 incentive. This equates to paying an extra \$110,000 plus their regular salary for this one extra teacher, as the existing 10 teachers will receive the extra \$10,000. Other alternatives such as tapping into retired or part-time teachers may be more cost-effective.

5.4 What is the role of superintendents in staffing decisions?

All superintendents already play a large and important role in staffing decisions in accordance with ACT 1. As a key architect of each year's budget, superintendents have a significant role in determining the number of FTE in each line of the budget. However, staffing best practices require superintendents to play a larger role in two specific ways:

5.4a. Setting guidelines or expectations of the skills of staff who support students who struggle academically. Too often students who struggle reading at the secondary level are supported by English teachers who also lack expertise in teaching students the fundamentals of reading. Sometimes, a student with disabilities receives math support from teachers who may have also struggled with math.

In all these cases, staff care and work hard, but achievement gaps seldom close. These less effective strategies are deeply ingrained in many school systems and superintendent leadership is required to set the bar higher.

5.4b. Ensuring sufficient FTE with the required skills. In a time of tight budgets and staff shortages, even school systems that do set the bar high for the skills and background of staff who support students who struggle academically can find it difficult to fund and find sufficient people. Here too, superintendent leadership is key.

A great many principals across the state have reported that often they don't have sufficient candidates with the required skills. While the central office budgeted for staff with the right mix of skills and training, the job of hiring them often falls to school leaders. School leaders, however, can't grow the pool of candidates, but superintendents can help. This includes:

- Supporting and streamlining the hiring of retired teachers: principals report that they are not receiving sufficient help in this area from many HR departments.
- Contracting with online tutoring companies, which is difficult to do at the school level.
- Embracing and simplifying the hiring process for alternative certified "career switcher" teachers with backgrounds in math or science.
- Empowering principals to "swap" x number of paraprofessionals for a certified reading interventionist.

PART 6: Best Practice References

Practices outlined in this document are based in part on the following research.

Scheduling:

- Aronson, J., Zimmerman, J., & Carlos, L. (1998, April). Improving student achievement by extending school: Is it just a matter of time? [Whitepaper]. WestEd.
https://www2.wested.org/www-static/online_pubs/po-98-02.pdf
- Caesar, Julio; Lamm, Rik; Rodriguez, Michael C.; Heistad, David J.. (2021). Changes in School Start Time have a Significant Effect in the Amount of Sleep and Reported Grade Point Average of Students. Retrieved from the University Digital Conservancy, <https://hdl.handle.net/11299/219373>.
- Blackburn, B. (2013). The beginner's guide to understanding rigor.
<https://www.barbarablackburnonline.com/rigor/>
- Brenneman, R. (2016, March 23). Gallup student poll finds engagement in school dropping by grade level. Education Week.
<https://www.edweek.org/leadership/gallup-student-poll-finds-engagement-in-school-dropping-by-grade-level/2016/03>
- Centers for Disease Control and Prevention. (2019). School connectedness.
https://www.cdc.gov/healthyyouth/protective/school_connectedness.htm
- <https://cppl.law.columbia.edu/content/about-time-master-scheduling-and-equity>
- Corley, L. (2022, June 14). Q&A with retiring Bibb Schools Superintendent Curtis Jones. The Macon Newsroom.
<https://macon-newsroom.com/13719/news/local/qa-with-retiring-bibb-schools-superintendent-curtis-jones/>
- Dunster, G. P., de la Iglesia, L., Ben-Hamo, M., Nave, C., Fleischer, J. G., Panda, S., & de la Iglesia, H. O. (2018, December 12). Sleepmore in Seattle: Later school start times are associated with more sleep and better performance in high school students. *Science Advances*, 4(12).
[https://www.science.org/doi/10.1126/sciadv.aau6200#:~:text=The%20Seattle%20\(WA\)%20School%20District,devices%20\(Actiwatch%20Spectrum%20Plus%2C%20Philips](https://www.science.org/doi/10.1126/sciadv.aau6200#:~:text=The%20Seattle%20(WA)%20School%20District,devices%20(Actiwatch%20Spectrum%20Plus%2C%20Philips)
- Ellerson, N. (2011). School budgets 101. American Association of School Administrators.
https://www.aasa.org/uploadedfiles/policy_and_advocacy/files/schoolbudgetbrieffinal.pdf
- Farbman, D., & Kaplan, C. (2005). Time for a change: The promise of extended-time schools for pro-moting student achievement. Massachusetts 2020.
<https://files.eric.ed.gov/fulltext/ED534912.pdf>
- Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W. D. (2008). Assisting students struggling with reading: Response to Intervention and multi-tier intervention for reading in the primary grades. A practice guide (NCEE 2009-4045). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. <http://ies.ed.gov/ncee/wwc/publications/practiceguides/>
- Grossman, P. (2021, March 11). Want to improve learning outcomes? Give students more time. EdWeek.
<https://www.edweek.org/leadership/opinion-want-to-improve-learning-outcomes-give-students-more-time/2021/03>
- Hanover Research. (2016). Best practices in middle school program design: Prepared for Rockwood School District. Hanover Research.
- Harlacher, J. E., Sanford, A. K., & Nelson, N. (2014, May 15). Distinguishing between Tier 2 and Tier 3 instruction in order to support implementation of RTI. Education Faculty Publications and

- Presentations, 132. <https://archives.pdx.edu/ds/psu/25582>
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. SAGE.
 - Irmsher, K. (1996, March). Block scheduling. *Educational Management*, 104.
http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/2a/25/a4.pdf
 - Ivok, L. (1944). *How to prepare the schedule for a secondary school*. Harvard University Press.
 - Ladd, G. W., & Etekal, I. (2013, December). Peer-related loneliness across early to late adolescence: normative trends, intra-individual trajectories, and links with depressive symptoms. *Journal of adolescence*, 36(6), 1269–1282. <https://doi.org/10.1016/j.adolescence.2013.05.004>
 - Levenson, N. (2020). *Six shifts to improve special education and other interventions: A commonsense approach for school leaders*. Harvard Education Press.
 - Louisiana Department of Education. (2021, September 21). *Staffing and scheduling best practices guidance*.
<https://www.louisianabelieves.com/docs/default-source/academics/staffing-and-scheduling-guidance.pdf>
 - Marzano, R. (2003). *What works in schools: Translating research into action*. ASCD.
 - Mendler, A. (2001). *Connecting with students*. ASCD.
 - Murray, J. (2013). *Access to rigor: Who gets it, who doesn't, and what does it mean*.
<https://fordhaminstitute.org/ohio/commentary/access-rigor-who-gets-it-who-doesnt-and-what-does-it-mean>
 - National Assessment of Educational Progress. (2019a). *NAEP Report Card: 2019 NAEP Mathematics Assessment*. <https://www.nationsreportcard.gov/highlights/mathematics/2019/>
 - National Assessment of Educational Progress. (2019b). *NAEP Report Card: 2019 NAEP Reading Assessment*. <https://www.nationsreportcard.gov/highlights/reading/2019/>
 - National Institute of Child Health and Human Development, NIH, DHHS. (2000). *Report of the National Reading Panel: Teaching Children to Read (00-4769)*. U.S. Government Printing Office.
 - O'Brien, E. M. (2006). *Key lessons: What research says about reorganizing school schedules*. Center for Public Education.
 - Pope, N. (2016). How the time of day affects productivity: Evidence from school schedules. *The Review of Economics and Statistics*, 98(1), 1–11.
<https://direct.mit.edu/rest/article-abstract/98/1/1/58293/How-the-Time-of-Day-Affects-Productivity-Evidence>
 - Reeves, P. M., Pun, W. H., & Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. *Teaching and Teacher Education*, 67(8), 227–236.
 - Rettig, M., & Canady, R. L. (1999, March 1). The effects of block scheduling. *School Administrator*, 56(3), 14–16, 18–20. <https://www.aasa.org/schooladministratorarticle.aspx?id=14852>
 - Reynolds, D. (2008). *How professional learning communities use student data for improving achievement*. University of Southern California, PhD dissertation.
 - Rodriguez-Delgado, C., Wang, F. K. W., Hays, G., & Chavez, R. (2021). *Schools across the country are struggling to find staff. Here's why*.
<https://www.pbs.org/newshour/education/schools-across-the-country-are-struggling-to-find-staff-heres-why>
 - Schleifer, D., Rinehart, C., & Yanisch, T. (2017). *Teacher collaboration in perspective: A guide to research [Whitepaper]*. Spencer Foundation and Public Agenda.
<https://files.eric.ed.gov/fulltext/ED591332.pdf>
 - Schwartz, S. (2021, May 24). *What's the best way to address unfinished learning? It's not remediation, study says*.
<https://www.edweek.org/teaching-learning/whats-the-best-way-to-address-unfinished-learning-its-not-remediation-study-says/2021/05>

- Snyder, T. D., & Dillow, S. A. (2011). Digest of education statistics, 2010 (NCES 2011-01). National Center for Education Statistics, Institute of Education Sciences.
<https://nces.ed.gov/pubs2011/2011015.pdf>
- Sutchter, L., Darling-Hammond, L., & Carver-Thomas, D. (2016, September 15). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. Learning Policy Institute.
<https://doi.org/10.54300/247.242>
- The College Board. (2022). Student score distributions, AP Exams – May 2022.
<https://apstudents.collegeboard.org/about-ap-scores/score-distributions>
- Theokas, C., & Saaris, R. (2013). Finding America’s missing AP and IB students [whitepaper]. The Education Trust. https://edtrust.org/wp-content/uploads/2013/10/Missing_Students.pdf
- Underwood, S. (2018). What is the evidence for an uninterrupted, 90-minute literacy instruction block? [Whitepaper]
<https://educationnorthwest.org/sites/default/files/resources/uninterrupted-literacy-block-brief.pdf>
- Vaughn, S., Denton, C. A., & Fletcher, J. M. (2010). Why intensive interventions are necessary for Students with severe reading difficulties. *Psychology in the Schools*, 47(5), 432–444.
<https://doi.org/10.1002/pits.20481>
- Vaughn, S., Wanzek, J., Murray, C. S., & Roberts, G. (2012). Intensive interventions for students struggling in reading and mathematics: A practice guide. RMC Research Corporation, Center on Instruction.
- West, M. R., & Schwerdt, G. (2012, February 15). The middle school plunge. *Education Next*, 12(2).
<https://www.educationnext.org/the-middle-school-plunge/>
- Wheaton, A. G., Ferro, G. A., & Croft, J. B. (2015, August 7). School start times for middle school and high school students — United States, 2011–12 school year. *Morbidity and Mortality Weekly Report*, 64(30), 809–813. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm>
- Zeiser, K., Scholz, C., & Cirks, V. (2018). Maximizing student agency: Implementing and measuring student-centered learning practices [Whitepaper]. American Institute for Research.
<https://files.eric.ed.gov/fulltext/ED592084.pdf>
- Zepeda, S., & Meyers, R. S. (2006). An analysis of research on block scheduling. *Review of Educational Research*, 76(1), 137–170.

General Teaching and Learning Best Practices:

- Eidelman, Hadas, Grindal, Todd, Hehir, Thomas. “Review of Special Education in the Commonwealth of Massachusetts.” Report commissioned by the Massachusetts Department of Elementary and Secondary Education. April 2012.
- Hattie, John. *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge, 2013.
- Levenson, Nathan. *Six Shifts to Improve Special Education and Other Interventions: A Commonsense Approach for School Leaders*. Harvard Education Press, 2020.
- Marcia Mitnacht, “Identifying the Need for Paraprofessional Support”, *Technical Assistance Advisory SPED 2014-3: State Director of Special Education*, March 2014.
- “Seeking Effective Policies and Practices for Students with Special Needs.” Rennie Center for Education Research & Policy. Spring 2009.
- Spark, Sarah, D. “Doubling Down on Algebra Can Pay Off in College, But Who Your Peers Are Matters, Too”, *EducationWeek*, June 2021.
- “Special Education: A Service, Not a Place.” New Jersey School Boards Association. March 11, 2014.

Reading:

- A KIDS COUNT Special Report from the Annie E. Casey Foundation. “Early Warning! Why Reading by the End of Third Grade Matters.” Annie E. Casey Foundation, 2010.
- Armbruster, Bonnie B., Lehr, Fran, Osborn, Jean. “Put Reading First: The Research Building Blocks for Teaching Children to Read: Kindergarten Through Grade 3.” National Institute for Literacy: The Partnership for Reading, 2001.
- Hernandez, Donald J. "Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation." *Annie E. Casey Foundation* (2011).
- “Improving K-5 Literacy Outcomes.” Hanover Research, January 2015.
- Report of the National Reading Panel. “Teaching Children to Read: An Evidence Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction.” National Reading Panel, 2000.
- Shanahan, Timothy, et al. "Improving Reading Comprehension in Kindergarten through 3rd Grade: IES Practice Guide. NCEE 2010-4038." *What Works Clearinghouse* (2010).
- Sweet, Anne P., McGuire, C. Kent, Riley, Richard W. *Ten Proven Principles of Teaching Reading*. National Education Association, 2000.
- What Works Clearinghouse

Academic Interventions:

- *Assisting students struggling with reading: Response to intervention and multi-tier intervention in the primary grades*. US Department of Education, National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, 2009.
- Denton, C. A.; Fletcher, J. M.; Anthony, J. L. and Francis, D. J. “An Evaluation of Intensive Intervention for Students with Persistent Reading Difficulties.” *Journal of Learning Disabilities*, 2006, p. 39, 447-466
- DuFour, Richard, DuFour, Rebecca, Robert Eaker, and Gayle Karhanek. “Whatever it takes: How professional learning communities respond when kids don't learn.” *Bloomington, IN: National Educational Service*, 2004.
- Gersten, R., Compton, D., Connor, C.M., Dimino, J., Santoro, L., Linan-Thompson, S., and Tilly, W.D. (2008). *Assisting students struggling with reading: Response to Intervention and multi-tier intervention for reading in the primary grades. A practice guide*. (NCEE 2009-4045). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/publications/practiceguides/>.
- Grossman, Pam. “Want to Improve Learning Outcomes? Give Students More Time.” *EducationWeek*, 2021
- Harlacher, J., Sanford, A., & Walker, N. (2015). Distinguishing Between Tier 2 and Tier 3 Instruction in Order to Support Implementation of RTI.
- Kelly, Corrie. “Reading Intervention Programs: A Comparative Chart.” *Reading Rockets*, 2001.
- Nathan Jones, Sharon Vaughn, and Lynn Fuchs, “ACADEMIC SUPPORTS FOR STUDENTS WITH DISABILITIES”, *EdResearch for Recovery Project*, June 2020
- The National Center for Learning Disabilities, Inc. “What is RTI?” *RTI Action Network*.

<http://www.rtinetwork.org>. (2016).

- Stiggins, Rick, and Rick DuFour. "Maximizing the power of formative assessments." *Phi Delta Kappan* 90.9 (2009): 640-644.
- Vaughn, S., Wanzek, J., Murray, C. S., Roberts, G. (2012). *Intensive interventions for students struggling in reading and mathematics: A practice guide*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Vaughn, S., Denton, C., & Fletcher, J. (2010). Why Intensive Interventions Are Necessary For Students With Severe Reading Difficulties. *Psychol Sch.*, 47(5), 432-444. doi:10.1002

Importance of Teachers:

- "Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement," Institute of Education Services, National Center for Education Evaluation and Regional Assistance, U.S. Department of Education, 2007.
- Joyce, B., and Showers, B. "Student achievement through staff development" (3rd ed.). Association for Supervision and Curriculum Development, 2002.
- Darling-Hammond, Linda. "Teacher quality and student achievement." *Education policy analysis archives* 8 (2000): 1.
- National Council on Teacher Quality, "Teacher Prep Ratings," 2014.
- Public Impact's OpportunityCulture.org website
- Rice, Jennifer King. *Teacher Quality: Understanding the Effectiveness of Teacher Attributes*. Economic Policy Institute, Washington, DC, 2003.
- Suh, Thomas-Fore. "The National Council on Teacher Quality: Expanding the Teacher Quality Discussion. ERIC Digest." (2002).
- Walsh, Kate, Deborah Glaser, and Danielle Dunne Wilcox. "What education schools aren't teaching about reading and what Elementary teachers aren't learning." *National Council on Teacher Quality* (2006).
- Suter, Jesse C., and Michael F. Giangreco. "Numbers that count: Exploring special education and paraprofessional service delivery in inclusion-oriented schools." *The Journal of Special Education* (2008).

PART 7: LDOE Resources

LDOE has a wide range of additional resources and tools available to school systems related to the topics detailed in this guidance document. These include:

- [LDOE Special Education Playbook for System Leaders](#)
- [Let Teachers Teach Recommendations](#)
- [ELA Guidebooks: Diverse Learners](#)
- [ELA Guidebooks - Curriculum Guide 9-12](#) (includes sample schedules)
- [Math K-12 Resources & Guides to Implementing HQIM](#)
- [Science K-12 Resources & Implementation Guides](#)
- [Bayou Bridges: A K-8 Social Studies Curriculum Guide](#)
- [LDOE Professional Learning Roadmap](#)
- [Comprehensive Literacy State Plan](#)
- [Literacy Road Map](#)
- [Accelerate: High Dosage Tutoring FAQ](#)
- [Accelerate: High Dosage Tutoring \(HDT\) School System Support](#)
- [High-Quality Materials and Resources](#)
- [Comprehensive List of Tiered Reviews](#)
- [ELA Guidebooks](#)
- [Bayou Bridges](#)
- [Louisiana Math](#)
- [High-Quality Science Curriculum](#)
- [FUEL Materials Overview developed by LDOE](#)