Accelerating Student Learning During Summer Learning Programs and Through the Academic Year

In order for schools and districts to accelerate student learning as a result of the COVID-19 pandemic, it is critical to create acceleration plans using evidence-based strategies and practices that provide students with more time and dedicated attention. These should be focused on immersing students in grade-level standards. Plans should target students who most need the additional time and support, based on formative assessment data, early warning systems and other local sources of data.

This guidance focuses on evidence-based strategies for accelerating student learning through summer learning programs and during the academic school year. While summer presents schools and districts with an opportunity to begin accelerating student learning, support will need to continue throughout the school year.

Whenever providing students with opportunities to accelerate their learning, though, they must be in a physical and emotional state that enables them to learn. Therefore, it is critical that acceleration plans also include strategies that support students’ social-emotional and behavioral needs.

This guidance includes research-based recommendations for:
- Creating effective summer learning programs designed to accelerate student learning;
- Integrating social-emotional learning (SEL) into summer learning programs; and
- Using high-intensity tutoring and vacation academies throughout the academic school year to provide ongoing support to meet students’ academic needs.

Best Practices for Summer Learning

The following practices and associated recommendations are adapted from research conducted by the RAND Corporation (2018) and the Wallace Foundation (2018 and 2019), which examined the effectiveness of several types of summer learning programs and their impact on student outcomes. These recommended practices meet Every Student Succeeds Act Tier I standards in regard to impacting student achievement in math, and Tier III standards for impacting student achievement in reading and social and emotional learning.

According to the research, the most effective summer programs share the following structure:
- Five to six weeks in duration;
- Five days of programming per week;
- 60-90 minutes of math and 90-120 minutes of reading/writing instruction per day;
- Two-three hours for enrichment activities; and
- Small classes of up to 15 students per teacher.
Schools and districts, however, may need to adapt this structure based on their local needs assessment and student data.

The following research-based practices may be used to assist local schools and districts in designing and implementing summer learning programs. All research-based practices below are recommendations, and no data is required for state-level reporting.

**Practice 1: Use an effective planning process.**
A good planning process might be the most important characteristic of a strong summer learning program, as it reduces logistical problems and increases instructional time.

**Recommendation 1: Conduct early, robust planning.**
- Commit early to allow time for teachers to be hired and for the curriculum to be ready for teacher training and planning.
- Designate a summer program director/lead who has decision-making authority, sufficient time devoted to planning and launching the program, and strong project management skills.
- Identify your district planning team.
  - Include cross-departmental departments, such as curriculum and instruction, student services (e.g., family resource worker, district social worker, district health coordinator), transportation, food services, human resources, information technology and finance; and
  - Engage both site-level and relevant community-level staff in the planning process.
- Align your focus. Connect summer program goals to larger district goals.
- Determine which students to target and plan accordingly. This decision may be made by analyzing spring data, examining available resources and identifying district priorities.
- Create a regular meeting schedule, defined roles and responsibilities, and a master schedule with timelines for key actions and tasks.

**Recommendation 2: Plan for both academics and enrichment activities.**
- Create a schedule that includes opportunities for a variety of daily enrichment experiences, movement and brain breaks.
- Ensure scheduling allows for students with disabilities to be served within their least restrictive environment and with the appropriate accommodations and modifications.

**Recommendation 3: Engage in a continuous improvement process.**
- Set goals for program quality and student outcomes. Monitor outcomes.
  - Data sources may include:
    - Pre- and post-tests that are aligned with the summer curriculum at the beginning and end of the summer program;
    - Student attendance and no-show rates;
Practice 2: Utilize highly effective teachers and provide high-quality professional learning.
A strong body of evidence shows that the quality of teaching has the largest school-based impact on student outcomes of any factor. Hiring the most effective teachers and giving them the support they need are critical steps to maximizing student achievement.

Recommendation 1: Recruit and hire the district’s most highly effective teachers.
- Prioritize hiring teachers with relevant content knowledge and grade-level experience.
- Hire experts to support students with special needs (e.g., English learners, students with Individual Education Programs.). Based on the research on effective summer learning programs, small class sizes did not negate the need for specialized supports.

Recommendation 2: Provide teachers with high-quality professional learning prior to the summer learning program.
- Provide opportunities to practice delivering the curriculum during staff training. Include strategies to differentiate the curriculum for students of varied academic ability levels and ways to integrate social-emotional learning into everyday practice.
- Engage all instructional support staff in the professional learning sessions. All adults who work in the classroom need to understand the curriculum and how to use instructional strategies that promote the development of academic and key social-emotional skills.

Practice 3: Ensure sufficient time on task. Maximize active class instruction.
Research shows that productive academic learning time is more predictive of student achievement than the amount of student time in the classroom. Therefore, how summer learning programs use time is critical.

Recommendation 1: If possible, operate the program for five to six weeks with 60-90 minutes of math and 90-120 minutes of reading/writing instruction per day, and two to three hours for enrichment activities.
- Schools and districts may need to adapt this structure based on their local needs assessment and student data.

Recommendation 2: Schedule academic classes to occur in one continuous block. Maximize instructional time by providing time for transitions in the master schedule.
Recommendation 3: Provide teachers with strategies for maximizing instructional time.
- Establish predictable, clear classroom routines and positive behavioral expectations for:
  - Opening and closing of class;
  - Transitions between activities; and
  - Independent practice.
- Model activities during training or coaching to minimize time lost at the start and end of class, during the afternoon “slump” and during independent practice time.

Practice 4: Prioritize student recruitment and attendance.
Studies show that students need to attend at least 20 days over the course of the summer program to experience academic benefits. In addition to offering enrichment activities, accurate recruitment materials and incentives can help maintain good attendance.

Recommendation 1: Develop accurate, timely informational materials that explain requirements and attractive features of the program, the enrollment process, transportation routes and the program schedule.
- Include some form of personalized communication to increase the effectiveness of recruitment efforts.

Recommendation 2: Establish a firm enrollment deadline. This is important for program planning, ensures higher average daily attendance rates and improves learning.
- Parents can be notified in advance of transportation routes.
- Districts can staff the program to meet desired student-to-adult ratios and avoid making last-minute hires.
- Teachers learn who their students are before the program starts.

Recommendation 3: Establish a clear attendance policy and track no-show rates as well as daily attendance.

Recommendation 4: If resources allow, provide incentives to parents and students for attendance.

Practice 5: Use a common local curriculum and HQIRs matched to student needs.
To maximize the effectiveness of instruction during the summer program, teachers should have a common local curriculum and high-quality instructional resources (HQIRs) that are matched to student needs and a small class size. Having a single curriculum for each subject promotes an equitable learning environment for all students and maximizes resources.

Recommendation 1: Anchor the program in a common local curriculum and HQIRs that align with grade-level standards and student needs.
• Set program goals for student outcomes. Determine if you need to find or develop a new summer learning curriculum or if you can revise an existing curriculum that is aligned to the program goals. Assess what instructional resources you already have and what additional resources are needed to support quality instruction.

• Apply the same best practices to social-emotional learning as you do to academics. Determine how you might adapt specific lessons from your current social-emotional curriculum or how you might integrate key social-emotional competencies into the summer learning curriculum.

• Develop pacing guides to reflect priorities for instructional time with suggested time allocations for various components of each day’s lesson, including scheduled transition times.

• Ensure teachers receive training on the curriculum and effective use of the HQIRs prior to the start of the summer program.

Recommendation 2: Serve students in small classes or groups.

• Cap class size at 15 students per adult, if possible. With a small class, a teacher can more quickly establish rapport with students, get to know their individual learning needs and provide more individualized attention. Also, ensure scheduling allows for students with disabilities to be served within their least restrictive environment.

Practice 6: Offer carefully planned enrichment.

Summer learning should feature fun and engaging enrichment activities (i.e., art, physical activities and science exploration), which differentiate their programs from traditional summer school. These engaging enrichment activities help to attract students and promote attendance.

Recommendation 1: Select a model for providing enrichment activities.

• Determine how enrichment programming will help meet the school and/or district’s overall program goals.

• Consider which existing partners or other high-quality providers in the local community may be the right fit for the school and/or district’s program. Possible options include hiring district teachers or contracting directly with enrichment providers.

Recommendation 2: Ensure that enrichment instructors have strong content knowledge.

• As with academics, prioritize the content knowledge of enrichment applicants. Research shows that those with strong content knowledge more frequently demonstrated and modeled skills, corrected student techniques and built on student strengths.

Recommendation 3: Keep class sizes small.

• As with academic classes, cap class size at 15 students per adult, if possible.
**Practice 7: Focus on creating a unique positive climate.**

Positive site climate drives student daily experiences and enjoyment of the program and is correlated with higher student attendance. Four important characteristics of a positive climate include clarity, consistency, warmth and engagement.

**Recommendation 1:** Train all staff on the importance of positive adult engagement with students throughout the day, not only in classes.
- Stress the importance of positive teacher-student interactions, not only during classes, but also during transitions and mealtimes.
- Create structures where students feel included and appreciated by adults and peers. For example:
  - Morning meeting or advisory;
  - Positive greetings at the door; and/or
  - Projects in which students have an opportunity to collaborate and share what they have learned.

**Recommendation 2:** Develop a clear, positive message about the summer site culture and ask staff to convey it consistently to students.
- Develop an explicit message about the values of the program and how students are to be treated to promote a coherent culture and consistent application of proactive behavior management techniques.
- Create a safe and supportive learning environment by using clear and consistent behavioral expectations and classroom routines.

**Recommendation 3:** If resources allow, consider hiring staff to support positive student behavior and social-emotional wellness.
- Consider hiring school counselors, social workers and/or behavioral management specialists to offer on-site support for students’ social-emotional and behavioral needs.

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**Practice 8: Implement cost-saving measures.**

By minimizing costs, schools and districts can maximize value from an investment in summer learning to support sustainability of the program moving forward.

**Recommendation 1:** Hire staff to achieve desired ratios based on projected daily attendance, not the initial number of enrollees.
- Utilize historical no-show and attendance rates to decide on numbers of staff needed for the summer program to reach desired adult-student ratios. If historical data is not available, consider using data from research which estimates that two out of 10 students who sign up do not attend and those who do attend tend to come to about 75% of the summer program days.
Recommendation 2: Consider cost-efficiencies in the design of the program, but weigh them against potential impacts on program quality.

- Partner with community-based organizations.
- Reduce the number of summer facilities.
- Centralize planning activities.
- Continue the summer program over time.

Best Practices During the School Year to Accelerate Student Learning

One of the most important factors in accelerating student learning during the academic school year is access to quality, standards-aligned Tier 1 instruction. According to the New Teacher Project (2018), well-intentioned approaches that pull students out of grade-level instruction to reteach previous grade-level content reinforces low expectations and creates vicious cycles of underachievement.

Instead, teachers need to provide students with exposure to grade-level expectations that are scaffolded with just-in-time support necessary for them to engage with the content. To do this, teachers need to prioritize the building blocks from previous grade-level content required for students to be successful with the current grade-level expectations.

In addition to quality, standards-aligned Tier 1 instruction, some students may need supplemental supports to meet grade-level expectations. Two research-based approaches to providing students extended learning time to meet the grade-level expectations are high-intensity tutoring and vacation academies.

High-Intensity Tutoring

High-intensity (high-dosage) tutoring is a research-based approach to accelerating student learning in which students who are behind in grade-level content are provided with individualized tutoring sessions three or more times a week that address content that meets students where they are, but also links back to what is being taught in the regular classroom. This provides students with just-in-time support to meet the grade-level expectations (Dorn, Hancock, Sarakatsannis, & Viruleg, 2020).

High-intensity tutoring programs are much more effective than low-intensity volunteer tutoring which provide tutoring on a weekly or as-needed basis and have not been shown to have any significant impact on academic progress. According to the research, students participating in high-intensity tutoring learned one to two additional school years of mathematics in a single year (Dorn, Hancock, Sarakatsannis, & Viruleg, 2020).
Vacation Academies

Vacation academies, also referred to as acceleration academies, offer students 25 hours of targeted instruction in a single subject during week-long vacation breaks. This expanded learning time has been shown to help students gain up to three months of additional learning in the targeted subject area (Dorn, et al., 2020).

Based on research from the Anneberg Institute at Brown University (2021) and McKinsey & Company (2020), the following “At a Glance” pages highlight research-based design principles for implementing effective high-intensity tutoring programs and vacation academies.

### Design Principles for High-Intensity Tutoring At A Glance

<table>
<thead>
<tr>
<th>Focus</th>
<th>Group Size</th>
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</thead>
<tbody>
<tr>
<td>• One of the most effective ways to increase achievement for students of lower-income families</td>
<td>• Three to four students per group, but one-on-one or 1:2 tutoring is most effective, if possible</td>
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<tr>
<td>• In reading, most impactful with K-2 students</td>
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<td>• In math, greater evidence of success with grades 3-12</td>
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<thead>
<tr>
<th>Frequency</th>
<th>Personnel</th>
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<tbody>
<tr>
<td>• Three or more sessions per week</td>
<td>• Can use teachers and paraprofessionals</td>
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<tr>
<td>• 36-60 minutes per session (elementary might benefit from 20-minute session 5 days a week)</td>
<td>• Pairing students with a consistent tutor throughout the program builds positive student-teacher relationships, which are likely to increase student achievement.</td>
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<td>• At least 10 weeks</td>
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<thead>
<tr>
<th>Scheduling</th>
<th>Instructional Resources</th>
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<tr>
<td>• Most impactful when offered during the school day or immediately after</td>
<td>• Utilizes local curriculum and high-quality instructional resources (HQIRs) aligned to grade-level standards</td>
</tr>
<tr>
<td>• Attendance is improved for tutoring sessions that occur during the school day or immediately after.</td>
<td>• Remediation, or giving students grade-level materials that are simpler or from the previous</td>
</tr>
</tbody>
</table>
• Make connections to students’ school experiences, when possible.

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<thead>
<tr>
<th>Measurement</th>
<th>Professional Learning</th>
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<tr>
<td>• Tutoring programs that use the formative assessment process to elicit, interpret and act on student learning data are more likely to be successful and allow tutors to personalize instruction.</td>
<td>• Instructors receive high-quality professional learning (HQPL) aligned to grade-level standards.</td>
</tr>
<tr>
<td>• Data should be routinely gathered and analyzed to determine the effectiveness of the overall tutoring program.</td>
<td>• Can include foundations in the specific content, the local curriculum they’ll be expected to use, and formative assessment/engagement tools or strategies</td>
</tr>
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## Design Principles for Vacation Academies
### At A Glance

<table>
<thead>
<tr>
<th>Focus</th>
<th>Group Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Content-specific academy (focus on single subject area, such as mathematics or reading/writing)</td>
<td>• 8-12 students per group</td>
</tr>
<tr>
<td>• Targets students below proficiency</td>
<td>• 10:1 student ratio, if possible</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>• One week in length</td>
<td>• Most successful academies recruit and utilize talented, highly effective teachers.</td>
</tr>
<tr>
<td>• 25 hours of targeted instruction in a single subject area</td>
<td></td>
</tr>
</tbody>
</table>
### Scheduling
- During vacation breaks (fall, winter, spring or summer)

### Instructional Resources
- Utilizes local curriculum and high-quality instructional resources (HQIRs) aligned to grade-level standards
- Most effective academies reinforce cultural relevance and standards-aligned Tier 1 instruction.

### Measurement
- Academies that use the formative assessment process to elicit, interpret and act on student learning data are more likely to be successful and allow tutors to personalize instruction.
- Data should be routinely gathered and analyzed to determine the effectiveness of the overall academy program and structure.

### Professional Learning
- Instructors receive high-quality professional learning (HQPL) aligned to grade-level standards.
- Can include foundations in the specific content, the local curriculum they’ll be expected to use, and formative assessment/engagement tools or strategies.

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**Additional Resources:**

- **KDE COVID-19 Guidance 2.0:** Adjusting Curriculum for Acceleration and Implementing the Formative Assessment Process
- **Characteristics of High-Quality Professional Learning**
- **High-Quality Instructional Resources Definition and Rationale**
- **Balanced Assessment Professional Learning Modules**
- **Wallace Foundation Summer Learning Toolkit**
- **WWC | Practice Guides**
- **SEL: What Are the Core Competence Areas and Where are They Promoted?**

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**References**


(OTL: mh, cm, js, mr)(COMM:tm_jmg)