HLP 19:
Use Assistive and Instructional Technology

High-Leverage Practices
for Students with Disabilities

Use of technology is quite common in the lives of teachers and students. Despite the prominence and inescapable nature of technology, it is not always utilized in effective ways to support the individual needs of students with disabilities in schools. While technology is readily available, little evidence exists about specific products and their effectiveness in supporting students with disabilities. Therefore, educators must be careful about picking technology "off the rack" and expecting immediate changes in student learning and performance. All IEPs have a designated section to indicate student needs related to assistive technology, both in terms of access to the general education curriculum and extracurricular activities. This can include communication and mobility devices, and other tools to assist with writing, reading, or taking notes. Teams should thoughtfully consider how assistive technology can be used to help students achieve long- and short-term goals (HLP 11). Students also need to be explicitly taught how to use various technology tools (HLP 16) and receive feedback on their performance (HLP 8/22).

This resource is intended to support school leaders looking to embed the HLPs in professional development, implementation, teacher observation and feedback efforts at their school site.

The major source for content within this resource is the chapter by Maya Israel in *High-Leverage Practices in the Inclusive Classroom*; the book *High-Leverage Practices in Special Education: The Final Report of the HLP Writing Team*, and content on **www.highleveragepractices.org**.

Teachers Who Effectively Promote Active Student Engagement

Support Learning Through Assistive Technologies (AT)
- Consider the AT needs of students as they relate to goals, access to the general curriculum, and extracurricular activities through the Student, Environment, Tasks, and Tools (SETT) process. SETT focuses on:
    - The students' strengths and needs;
    - The environments in which the student learns and socializes, as well as the supports currently available in those environments;
    - The tasks that the student is expected to do; and
    - The tools, including AT devices and services, that might support the student in successfully participating in tasks
- Directly integrate AT into the student's IEP goals, as applicable.
- Collect and analyze data about the student's use of AT across instructional settings to determine if changes to AT devices or services are needed.

Support Learning Through Instructional Technologies (IT) in Core Academic Content Areas
- Evaluate how IT can minimize reading challenges, increase engagement, reduce cognitive load, or provide additional methods of presenting information.
- Evaluate accessibility barriers that students may face when using IT.
- Provide students with:
    - Explicit instruction in how to use IT;
    - The purpose for using it;
    - A model of how to use it; and
    - Scaffolded practice opportunities to build to independence.
- Evaluate the effectiveness of IT to support students with achieving learning goals.
- Consider principles of the UDL framework when designing and delivering instruction, including:
    - Using technology to increase engagement
    - Using technology to increase access to content
    - Using technology to provide options for students to demonstrate understanding

Tips for School Leaders to Support Teachers
- Provide educators with instruction, professional development, and/ or coaching in a range of AT and IT options that can be used in a wide variety of settings/content areas.
- Observe teachers using IT and provide feedback on the extent to which it is a good match for students' needs and the demands of the curriculum.
- Encourage collaboration among content teachers, technology coordinators, and special education teachers to learn about new technologies or "tricks" to using familiar technologies.
- Provide support to teachers and other staff members who may be hesitant or uncomfortable with using (or helping students use) AT and/or IT. Help them use technology by making the benefits of its use visible through modeling/coaching.

Questions to Prompt Discussion, Self-Reflection, and Observer Feedback
- Why should educators be critical evaluators of technologies that they use with students (both with and without disabilities)?
- What is an example of an instance where IT cannot provide enough support to a student and AT should be considered instead?
- Why is it necessary to explicitly teach students the purpose of using technologies, and how to use it for that reason?

Online Resources

[Innovations in Special Education Technology (ISET)](#)
> A special interest division of the Council for Exceptional Children focused on providing educators (current & future), professionals, and family members innovative technology-based solutions for today's needs.

[Universal Design for Learning Implementation and Research Network (UDL-IRN)](#)
> Supports the scaled implementation and research related to Universal Design for Learning. Through collaboration, they support and promote the identification and development of models, tools, research, and practices designed to foster effective UDL implementation in educational environments.

[High-Leverage Practices: A Professional Development Guide for School Leaders](#)
> A downloadable online guide providing school leaders, including administrators, principals, mentors and coaches, with practical tools for engaging staff members in learning about how high-leverage practices can enhance student learning in the school and district.

Journal Articles

Bausch, M. E., & Ault, M. J. (2008). Assistive technology implementation plan: A tool for improving outcomes. *TEACHING Exceptional Children, 41*(1), 6–14. https://doi.org/10.1177/004005990804100101

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Floyd, K., Galyon, C. L., & Floyd-Norris, K. (2020). Overcoming barriers: Use of assistive technology to access curriculum. *TEACHING Exceptional Children, 52*(6), 436–439. https://doi.org/10.1177/0040059920936135

Kellems, R. O., Grigal, M., Unger, D. D., Simmons, T. J., Bauder, D., & Williams, C. (2015). Technology and transition in the 21st century. *TEACHING Exceptional Children, 47*(6), 336–343. https://doi.org/10.1177/0040059915588089

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Marino, M. T., Marino, E. C., & Shaw, S. F. (2006). Making informed assistive technology decisions for students with high incidence disabilities. *TEACHING Exceptional Children, 38*(6), 18–25. https://doi.org/10.1177/004005990603800603

Nelson, N. J., Fien, H., Doabler, C. T., & Clarke, B. (2016). Considerations for realizing the promise of educational gaming technology. *TEACHING Exceptional Children, 48*(6), 293–300. https://doi.org/10.1177/0040059916650639

Temple, C. (2019). The state of the special education profession and assistive technology. *TEACHING Exceptional Children, 52*(1), 42–43. https://doi.org/10.1177/0040059919862150

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