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TECHNOLOGY

for TALE





In this session, we will directly reference learning from Module 1, Session 7 and Module 3, Session 3. We encourage you to review those sessions before you begin.

FROM ADD-ON TO INTEGRATED: TECHNOLOGY ACROSS LEARNING ENVIRONMENTS

If you are progressing sequentially through this module, you may have been surprised to discover that technology is the very last session topic covered in the leadership module. During the pandemic, one of the top priorities for school and district leaders was to ensure equitable access to technology – hardware, software, and internet connectivity. Without appropriate and adequate technology, “school” just didn’t happen during the pandemic. So why is technology last in the learning sequence? Shouldn’t it have been first?

Here’s why this session is last:



To make effective, informed, and sustainable decisions about technology, school leaders first need to have a deep understanding of and vision for teaching across learning environments (TALE).

Ideally, school leaders will complete all seven modules in the core curriculum for the TALE Academy before making major, long-term technology decisions, such as purchasing multi-year licenses for software, establishing policies, or developing technology implementation plans. All of those leadership decisions need to be guided by the principles and best practices for TALE. Technology needs to be integrated into TALE rather than viewed as an add-on. As one group of educational consultants puts it, “Students doing worksheets on an iPad are still doing worksheets.”

Put another way, you need to lead technology,



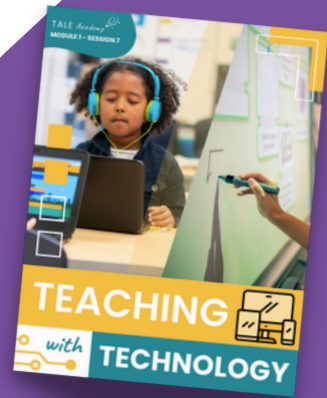
not let technology lead you!

THE TEACHER'S PERSPECTIVE

In Module 1, Session 7, we explored how teachers can effectively use technology to teach across learning environments. We focused on two well-known frameworks for integrating technology in the classroom, both of which put teaching first: SAMR and the Triple E Framework. Teachers can use these frameworks to align and integrate technology with their overall strategies for teaching across learning environments.

SAMR - Embedded Teacher Capacity-Building

The SAMR model helps teachers think about how they currently use technology in their classrooms and then “level up” as they gain confidence with new practices. The levels of technology integration are (1) substitution, (2) augmentation, (3) modification, and (4) redefinition.



Module 1, Session 7
Teaching with Technology

SUBSTITUTION

At the substitution level, technology acts as a direct tool substitute, with no functional change. For example, students may type up notes in a Word file instead of writing by hand in a notebook.

AUGMENTATION

In this stage, technology still acts as a direct tool substitute, but with functional improvements. To continue the note-taking example, students use Google Docs on a tablet and can add hyperlinks and take photos of in-class activities for their notes.

SAMR MODEL

MODIFICATION

Technology significantly transforms the learning activity. In the note-taking scenario, the students may revise their notes for sharing via a blog. This requires them to refine their own thinking to communicate it to others.

REDEFINITION

This level requires the teacher to think about learning activities that were previously inconceivable without technology. In the note-taking scenario, students can work in teams on a shared Google Doc to collaboratively generate and refine their notes, which they can then present to students from other schools via Zoom.

*The SAMR approach is focused on **teacher decision-making and capacity-building**. Note, however, that while we describe the four levels progressively, teachers are encouraged to work across these levels as appropriate for the learning activity.*

THE TEACHER'S PERSPECTIVE (CONT)

Triple E - Technology Implementation with Vision

The Triple E Framework is built around three action verbs that start with the letter E – engage, enhance, and extend – and questions that probe how the technology is being integrated into instruction to help students achieve their learning goals.

The Triple E Framework helps teachers use technology in ways that support teaching across learning environments (TALE), particularly in supporting the four constants of TALE: predictability, flexibility, connection, and empowerment.



The Triple E Framework was developed in 2011 by Professor Liz Kolb at the University of Michigan, School of Education.

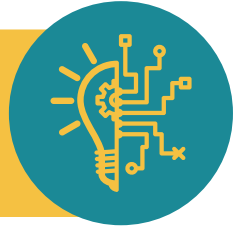


ENGAGE

Does the technology:

- help students focus on the assignment or activity?
- motivate (“hook”) students to start the learning process?
- cause a shift among students from passive to active learners?

ENHANCE



Does the technology:

- help students develop a more sophisticated understanding of content?
- provide scaffolds for learning (understanding concepts or ideas)?
- create unique paths for performance-based learning and assessment that can't be achieved with other tools?



EXTEND

Does the technology:

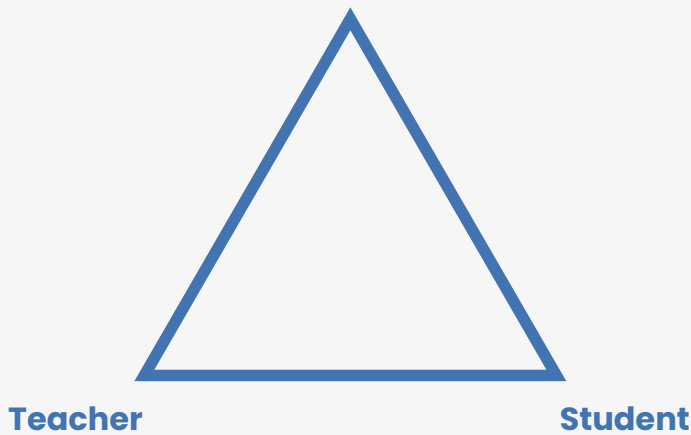
- provide opportunities for students to learn outside the traditional learning environment (physical classroom, class period, school day, etc.)?
- provide bridges to connect learning in the classroom with students' cultural and social lives and experiences?
- allow students to draw from and further develop skills that they use in their everyday lives?

THE SCHOOL LEADER'S PERSPECTIVE

Let's build off of the four constants across learning environments (predictability, flexibility, connection, and empowerment) to establish a technology decision-making framework for school leaders. One way we can do this is to combine the four constants with our expanded understanding of the instructional core for TALE. The expanded instructional core for TALE includes families to make the old triangular instructional core three-dimensional. For our purposes in this session, let's think of technology as the linking lines that connect the four anchors of the instructional core.

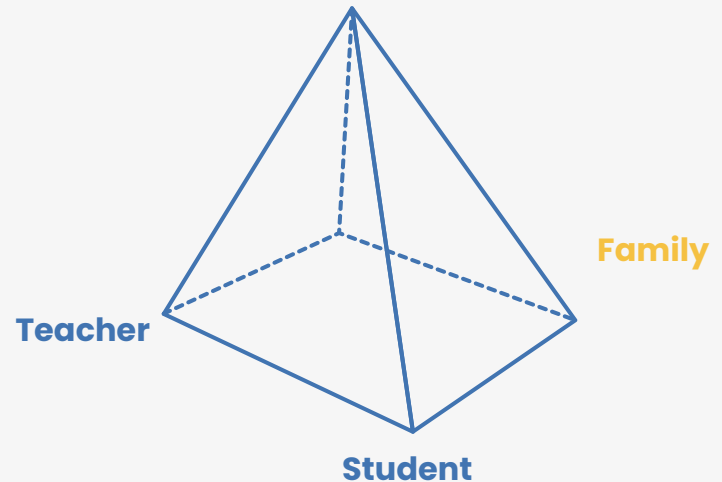
Traditional Instructional Core

Instructional Materials



Expanded Instructional Core

Instructional Materials



Source: [Pandemic Learning Reveals the Value of High-Quality Instructional Materials to Educator-Family-Student Partnerships](#)

The first question leaders should ask, then, when making technology decisions is “How does this technology support the instructional core for TALE?” The related question is “How does this technology support the four constants across learning environments of predictability, flexibility, connection, and empowerment?”

We put together a matrix, on the following page, that provides some keywords to think about when considering a technology tool, policy, practice, or resource. These keywords will have different meanings in different technology contexts, and not every keyword/phrase will be applicable to every technology decision. We suggest you use these keywords/phrases to develop questions for consideration related to the specific technology decision you need to make.

In the second matrix (page 7), we provide a sample question-based matrix using the example of identifying a schoolwide or district-wide learning management system (LMS).

THE SCHOOL LEADER'S PERSPECTIVE (CONT)

Technology Decision-Making Matrix: Keywords

This matrix presents some keywords or phrases related to formats, practices, and usage that school leaders can use as prompts to help them form specific questions related to specific technology decisions. Not all keywords/phrases need to be addressed for every technology or technology decision.

| Predictability | Flexibility | Connection | Empowerment |
|--|---|--|--|
| <i>Instructional Materials</i> | | | |
| Regularized Standardized | Adjustable Multiple Modalities Scaffolds | Collaborate Share Support Encourage | Options Choices Modeling Explicit Instructions |
| <i>Teachers</i> | | | |
| Planning Automations Routines Prompts | Actionable Data Differentiation Personalization | Formal and Informal Communication Reactions Feedback | Options Choices Modeling Privacy Safety Security Norms |
| <i>Students</i> | | | |
| Customization Independent Learning Self-Management | Options Modalities Input | Formal and Informal Communication Reactions Feedback Collaboration Social Media Integrations | Choices Autonomy Multilingual Research Gamification |
| <i>Families</i> | | | |
| Self-Enrollment Opt-Ins Scheduled and Regularized | Options Modalities Input | Formal and Informal Communication Reactions Feedback Collaboration Social Media Integrations | Choices Autonomy Multilingual |

THE SCHOOL LEADER'S PERSPECTIVE (CONT)

Technology Decision-Making Matrix: From Keywords to **Questions**

To help make a specific technology decision, turn the keywords into specific questions that you and your team can ask in order to make the right decision. Again, not every keyword/phrase needs to be addressed for every technology decision. For example, below are questions to support identifying a learning management system (LMS) that is right for a school/district.

| Predictability | Flexibility | Connection | Empowerment |
|--|--|--|--|
| <i>Instructional Materials</i> | | | |
| Does the LMS have templates, icons, and other tools to make the presentation of instructional materials consistent and clear to users? | Does the LMS support both synchronous and asynchronous learning? Does it allow teachers to differentiate based on learner variability and students' individual needs? | Does the LMS support interactive use of instructional materials through such tools as groups, discussion boards, video conferencing, and other collaborative software/apps? | Does the LMS allow teachers to provide choices among instructional materials in ways that are clear to users? |
| <i>Teachers</i> | | | |
| Does the LMS allow teachers to plan/design ahead (e.g., adaptable templates)? Does it automate routines, such as reminders, automatic release of new lessons, etc.? Does it allow teachers to develop clear learning paths for students to follow? | Does the LMS provide teachers with timely and actionable student data to help them personalize learning? Does it allow teachers to customize learning experiences for individual students (e.g., assign unique targets and related assessments)? | Does the LMS allow teachers to connect with students and families, including providing positive feedback? Does it support such strategies as flexible grouping to encourage peer-to-peer support? Does it support positive feedback? | Does the LMS help teachers provide students with choices in terms of content, activities, and assessments? Does it allow teachers to practice and model digital citizenship? |

THE SCHOOL LEADER'S PERSPECTIVE

Technology Decision-Making Matrix: From Keywords to **Questions**

| Predictability | Flexibility | Connection | Empowerment |
|---|--|--|--|
| <i>Students</i> | | | |
| Does the LMS allow students to customize their landing page, views, graphics, and other interactive components so that their learning experiences can fit their routines and sense of normalcy? | Does the LMS allow students to co-develop learning experiences by proposing choices for materials, activities, or assessments? Does it support multiple modalities for interaction (e.g., forums that support audio and video files, and written responses)? | Does the LMS allow students to connect with teachers and peers in both formal and informal ways? Does it provide tools for formal and informal feedback, such as emoticons, polling, chat functions, etc.? | Does the LMS support multilingual learning, learner variability, and accessibility? Does it support best practices in digital citizenship, such as the posting of norms, security protocols, privacy settings, etc.? |
| <i>Families</i> | | | |
| Does the LMS provide "family views" related to instruction and performance? Does it support push notifications so that families receive timely communications? | Does the LMS support family views of student work, progress, and outcomes? Does the LMS allow families to collaborate with teachers (e.g., provide/receive feedback)? | Does the LMS allow teachers and families to connect in formal and informal ways? Does it provide tools for formal and informal feedback, such as emoticons, polling, chat, etc.? | Does the LMS support multilingual communication? Does it help families engage in best practices in digital citizenship, such as security protocols and privacy settings? |

THE BIG PICTURE: TECHNOLOGY AND *TALE*

Teaching across learning environments (TALE) requires leaders to consider technology as part of the infrastructure for teaching and learning rather than as an add-on to traditional instructional strategies. Leaders can develop and sustain technology infrastructures for TALE by supporting teachers in adopting and integrating technology in logical and evolving manners and framing technology decisions (purchasing, policies, implementation, etc.) within the world of TALE. As you explore the various frameworks and practices introduced in this session, consider how you can develop your leadership skills to support the “next gen” version of education at your school!



Now it's your turn!

Keep handy the Technology Decision-Making Matrices on the previous pages. In your workbook, you will generate your own questions to guide your leadership team in making technology decisions driven by your school's priorities.

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About Us

The TALE Academy

The TALE Academy is a series of virtual learning experiences available to all New York State educators and offers a rich array of resources on topics related to teaching across learning environments (TALE). The TALE Academy is built upon the work New York State educators carried out during emergency remote teaching (ERT) throughout the COVID-19 pandemic and extends it toward the future. TALE invites educators to think beyond online learning to consider a broader perspective on teaching and learning that encompasses teaching across multiple environments (in-person, remote, and hybrid).

The Teaching in Remote/Hybrid Learning Environments (TRLE) Project

The TALE Academy is part of a broader New York State Education Department (NYSED) initiative known as Teaching in Remote/Hybrid Learning Environments (TRLE). In July 2020, NYSED was awarded funding through the United States Department of Education's Education Stabilization Fund-Rethink K-12 Education Models Grant to implement TRLE – a three-year project to build the capacity of teachers and educational leaders to effectively implement remote/hybrid learning for all students. Launched in the depths of the pandemic, the first phase of the TRLE project focused on getting resources to the field through partnerships with Boards of Cooperative Educational Services (BOCES) and school districts across the state. The second phase, which began in February 2022, focused on aggregating lessons learned and emerging teaching and learning strategies to address a broader field of practice: teaching across learning environments.

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