GK	Hello Christina, and hello, listeners. It's hard to believe we are finally at the eighth and final session in Module 7 of the TALE Academy, 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. Lots of acronyms are coming!+-
CLH	So listeners, 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 ensuring equitable access to technology, including hardware, software, and internet connectivity. Without appropriate and adequate technology, "school" just didn't happen for us at that time. So why is technology last in the learning sequence? Shouldn't it have been first?
GK	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, referred to as TALE.
CLH	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!
GK	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.
CLH	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 substitution, augmentation, modification, and redefinition. Or, "SAMR", and there are four levels to it.

GK	At the most basic level, substitution 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. At the augmentation level, 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.
CLH	Technology significantly transforms the learning activity in the modification level. 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. The redefinition 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.
GK	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 <u>work across these levels</u> as appropriate for the learning activity. Those 3 E's stand for engage, enhance, and extend.
CLH	The Triple E Framework, developed in 2011 by Professor Liz Kolb at the University of Michigan, 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, particularly in supporting the four constants of TALE, which are predictability, flexibility, connection, and empowerment. Let's ask some questions to ground ourselves in the Triple E Framework.
GK	Under engage, we want to ask ourselves, does the technology… ● help students focus on the assignment or activity? ● motivate, or hook, students to start the learning process? ● cause a shift among students from passive to active learners? Under enhance, does the technology… ● help students develop a more sophisticated understanding of content? ● provide scaffolds for learning to help students understand concepts or ideas?

	● create unique paths for performance-based learning and assessment that can't be achieved with other tools? Under extend, does the technology… ● provide opportunities for students to learn outside the traditional learning environment, meaning outside the 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?
CLH	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 set of self-guided thinking prompts for making technology decisions. These are organized around 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.
GK	Let's look at instructional materials first. Keywords for predictability include regularized and standardized. Keywords for flexibility include adjustable, multiple modalities, and scaffolds. Keywords for connection include collaborate, share, support, and encourage. And keywords for empowerment include options, choices, modeling, and explicit instruction. You can use these keywords to help you search for and determine if the technology you are considering supports predictability, flexibility, connection, and empowerment related to how the technology works with instructional materials.
CLH	Next, let's look at how technology interacts with teachers. Keywords for predictability include planning, automations, routines, and prompts. Keywords for flexibility include actionable data, differentiation, and personalization. Keywords for connection include formal and informal communication, reactions, and feedback. Keywords for empowerment include options, choices, modeling, privacy, safety, security, and norms.
GK	Now, let's look at students. Keywords for predictability include customization, independent learning, and self-management. Keywords for flexibility include options, modalities, and input. Keywords for connection include formal and informal

	communication, reactions, feedback, collaboration, social media, and integrations. Keywords for empowerment include choices, autonomy, multilingual, research, and gamification.
CLH	Finally, let's look at how our potential use of a specific technology can support our families. Keywords for predictability include self-enrollment, opt-ins, scheduled and regularized. Keywords for flexibility include options, modalities, and input. Keywords for connection include formal and informal communication, reactions, feedback, collaboration, social media, and integrations. Keywords for empowerment include choices, autonomy, and multilingual.
GK	To help make a specific technology decision, we can 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 sample questions to support identifying a learning management system, or LMS, that is right for a school/district. Let's start with instructional materials again. A question you can ask related to predictability is: Does the LMS have templates, icons, and other tools to make the presentation of instructional materials consistent and clear to users?
CLH	Questions you can ask related to flexibility are: Does the LMS support both synchronous and asynchronous learning? Does it allow teachers to differentiate based on learner variability and students' individual needs?
GK	Questions you can ask related to connection are: Does the LMS support interactive use of instructional materials through such tools as groups, discussion boards, video conferencing, and other collaborative software/apps? A question you can ask related to empowerment is: Does the LMS allow teachers to provide choices among instructional materials in ways that are clear to users?
CLH	Next, let's look at questions we can ask that indicate the LMS will support teachers. Questions you can ask related to predictability are: Does the LMS allow teachers to plan/design ahead, such as 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? Questions you can ask related to flexibility are: 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, such as assign unique targets and related assessments?
GK	Questions you can ask related to connection are: 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? Questions you can ask related to empowerment are: 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?
CLH	Now, let's look at how this potential LMS supports students. Questions you can ask related to predictability are: 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? Questions you can ask related to flexibility are: 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, such as forums that support audio and video files, and written responses?
GK	Questions you can ask related to connection are: 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.? Questions you can ask related to empowerment are: 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.?
CLH	Finally, let's look at how a potential LMS can support families. Questions you can ask related to predictability are: Does the LMS provide "family views" related to instruction and performance? Does it support push notifications so that families receive timely communications? Questions you can ask related to flexibility are: Does the LMS support family views of student work, progress, and outcomes? Does the LMS allow families to collaborate with teachers, such as to provide and receive feedback? Questions you can ask related to connection are: 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.? Finally, questions you can ask related to empowerment are: Does the LMS support multilingual communication? Does it help families engage in best practices in digital citizenship, such as security protocols and privacy settings?
GK	Teaching across learning environments 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, including purchasing, policies, and implementation, 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!
CLH	Now it's your turn! Keep handy the [Technology Decision-Making Guide](#) pages 6 through 8 of the reading option for this session. We've linked it in the transcript for you so you don't have to hunt it down. In your workbook, you will generate your own questions to guide your leadership team in making technology decisions driven by your school's priorities. The goal of the TALE Academy is to help teachers rethink education so that everyone–students, families, educators, school leaders, and communities–all have the opportunity to succeed. You've just added another tool to your toolbox when you implement technology for teaching across learning environments. Thanks for listening!