Technology Tools for Educators

Finding the right tool for Teaching and Learning

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INTRODUCTION

Technology in the classroom has become ever more accessible and essential. As past and present educators and learners alike, we know the struggles of finding the right technology to use to help students learn in ways that are relevant to them and assist them in reaching learning goals. With that comes the need to seamlessly integrate technology into the classroom environment and classroom activities. A wide variety of technology integration models have been developed for this exact purpose. Using the ADDIE Instructional Design Model, our team analyzed each step of the design process to develop a training program for teachers based on the needs of the educators surveyed. In this project, an in-depth analysis of the problem and needs, learners, context, and task was conducted leading to the development of an instructional training program and assessment plan designed to assist teachers with integrating and implementing technology in the classroom.

TEAM DASHBOARD

Table 1: Team Dashboard

I. Desired Results and Needs Analysis	
I-A. Statement of Instructional Problem Place an introductory paragraph or executive summary here broadly stating the purpose of your training program or instructional/learning system and intended audience. This would be like an Executive Summary. You may be able to revise your project description for this purpose.	All
I-B. Broad Goals and Big Ideas Describe the big ideas and larger goals that this project/initiative will address. These broad goals should align with your evaluation of project success.	Erin, Kendall
I-C. Needs Analysis Design a systematic needs assessment procedure for your given learning system and audience.Describe your data collection methods and results	Jamie, Maria, Kendall
I-D(A) Gap Analysis (if applicable) A gap analysis can be a distillation of the findings of the needs analysis stating the current state, desired future state, and strategies to bridge the difference. Your gap analysis can include other identified factors in the needs analysis besides the required training, with the acknowledgement of what the training itself will resolve in terms of performance gaps.	Maria and Haleigh

I-D(B) Learner Analysis List the learner characteristics you need to consider in planning your offering. Describe your data collection procedures for gathering this information.	Jamie. Maria
I-E Contextual Analysis List the contextual variables you need to consider in planning your offering. Describe your data collection procedures for gathering this information. Then tell what assumptions you are making for the design of learning experiences, including learner and contextual variables (III-C and III-D). Consider performance, learning, cultural, and theoretical contexts.	Jamie, Haleigh
II. Task Analysis	
II-A Task Analysis Describe the task analysis procedures you would use for specifying your content and/or teaching procedural skills. Your task analysis should fit your project needs; you may do a topic analysis or a procedural analysis or a combination. Complete two examples; you do not need to do your complete product or training program. Since these may be long, place the materials for your task analyses in Appendix A.	Jamie, Maria, Kendall
III. Learning Experiences and/or Instruction	
III-A. Learning Objectives Learning objectives for your learners that are consistent with the broad goals, learner analysis, and task analysis.	Erin, Maria
III-B. Types of Learning Experiences and/or Instruction Provide an overview of the types of learning experiences and/or instruction you will provide in the learning system. Ensure learning activities are aligned with learning outcomes. Also ensure that learning experiences describe both what the instructor will do or present and also what activities the learner will engage with to apply the skills or knowledge they will need to demonstrate to successfully attain the learning outcome. Describe its organization using appropriate methods, such as outlines, flowcharts, or other graphic organizers. This section provides the conceptual organization of the planned learning experiences and/or instruction.	All
III-C. Assessment Plan Provide details of formative assessment and summative assessment strategies within the learning experience. These assessment strategies should align with the learning objectives.	All
III-D. Materials for Training Program or Learning System Briefly describe the materials you will use. Describe the technologies you are using and explain the reasoning for your media decisions.	All

Develop a sample of your materials to implement your learning system. These may include actual hand-outs, PowerPoints, materials to go on the website, the top level of your website, etc. If you are developing a software program, you could submit the storyboards and technical development information. Place in Appendix A.	
III-E. Implementation Plan, including Schedule Describe the nuts-and-bolts of your implementation plan, including the actual schedule. Your implementation plan should take into consideration variables identified in your contextual analysis. Describe facilities, equipment, materials, supports, logistics, etc.	Jamie, Erin
IV. Evidence of Acceptable Results (See Table 1.1 for Kirkpatrick's Four-Level Evaluation Model, as well as Chapter 11)	
IV-A. Formative Evaluation Design your formative evaluation procedures and develop your instruments or procedures to carry it out. You should identify questions to be answered related to development and learner satisfaction. (Kirkpatrick's Levels I and II may be used here.) Be sure to describe who will be involved and at what points during your development you will collect this information. Develop two of the instruments you need to carry out formative evaluation and place them in Appendix A.	Erin, Haleigh
IV-B. Summative Evaluation Design your summative evaluation procedures and develop your instruments or procedures to carry it out. Note that your summative assessment plan may also be referenced here as the assessment of learning should factor into your overall summative evaluation plan. Your plan should gather data consistent with the goals and objectives for your learning system. Be sure to describe who will be involved, when, and how you will collect your summative evaluation data. Remember that summative evaluation extends beyond the end of the actual training experience. Develop two of the instruments you need to carry out summative evaluation and place them in Appendix A.	Erin, Haleigh
IV-C. Confirmative Evaluation Confirmative evaluation is a strategy to collect data after the training itself to measure transfer of skills within the performance context. Design a strategy for collecting data after the training has completed to see how learners are incorporating the training skills into practice within their work context.	Erin, Haleigh
V. References	
V-A References You do not need to include general instructional design references provided in the course. However, if you used additional materials or references for development of your ideas, instruments, and materials, give credit appropriately in the narrative, and include in your references. This may also include references used to inform the	All

task analysis.	
VI. Appendices. Task Analysis, Evaluation Materials, Sample Training Materials, Implementation Plan.	
VI-A Appendices. Task Analysis, Evaluation Materials, Sample Training Materials, Implementation Plan. You will create data from surveys, interviews, focus groups, observations and other means. Organize the materials in your appendix in order of the project outline and include them in your table of contents. Pages should be numbered so it is clear which forms/instruments go with which component. This is an opportunity to showcase the work that informed the project without disrupting the flow of the presentation of results throughout the document.	All

PROBLEM STATEMENT

Educators today have a wide array of technology resources available to enhance their instruction and meet their students' learning needs. The challenge many face, however, is knowing which technology tools are best suited for their particular task, subject matter, or students' abilities. Similarly, because of this challenge and other contextual factors, many teachers are simply reluctant to turn to technology while planning lessons for their classrooms. This training program serves as a resource to help teachers determine which technology tools are worth their time and energy, as well as their students' time and energy. When helping teachers (learners) determine the right tools to use, the learners will also make use of the SAMR model in order to focus on a clear evaluation of the effectiveness of these resources.

NEEDS ANALYSIS

Table 2: Roles and Responsibilities

Role	Responsibility
Learner (Teachers)	• Attend training • Apply technology evaluation guide to practice scenarios • Implement the use of technology evaluation guide in the classroom • Evaluate implementation and re-evaluate technology used • Continue process to determine best technology for their classroom
Students (Teacher's Students)	• Learn from use of technology tools in classrooms

	• Provide feedback to teacher • Provide feedback to Instructional Design Team
School and District Administration	• Approval of project and training • Funding approval for project and training • Final project approval
Subject Matter Expert (SME)	• Technology experts determined through surveys conducted within the school/district • Provision of current technology used daily for the school • Provision of successful technology tools personally implemented • Content review and approval
Instructional Designer Team	• Instructional design/development • Develop technology evaluation guide • Implement training tool • Educate teachers • Instructional product testing • Conduct surveys • Project Management

Problems and Needs

Problems:

- There are so many great technology resources that knowing which ones to invest time, energy, and/or money into can be daunting
- It is overwhelming to learn new technology year after year
- Educators feel less confident with new technology tools and the limited time they have to learn them and prepare for using them in the classroom.
- Students are reluctant to use technology for academic purposes and may resist learning new technology tools

Needs:

- An evaluation tool to determine which technology is best for certain scenarios
- Evaluate each tool for how, why, and when it should be used in order to determine the best fit for instructional purposes.
- Suggestions for how to introduce new technologies to students

Data Collection Plan

The data collection involved surveys to determine the needs of all stakeholders. We plan to use Google Form surveys that can be sent out to all stakeholders to determine their level of confidence using technology and determining which tools are best for the job. We also plan to organize small focus

groups to talk with the most and least experienced technology users to determine their areas of strength and need for improvement. We will use subject matter experts (SMEs) to help facilitate the small focus groups. We also plan to review the technology being used school/district-wide and the systems used by students as well. We will conduct a survey for the students to understand what types of technology used in the classroom actually help them learn and what they hope to see change.

Table 3: Types of Data Collection Used for this Report

Data Type	Specific Information Gained	Source	Timeline
Survey	Needs based on technology integration	Learner/Target Audience	Conducted 10/2021
Survey	Technology tools used	Learner/Target Audience	Conducted 10/2021

Broad Goal Statements Based on Data Collection Plan

Goal 1: Learners can quickly evaluate new technology tools to determine if they are worth the time investment to learn and implement in the classroom

Goal 2: Learners can choose technology tools that meet the needs of the students in their classrooms (text to speech, videos or image-heavy, etc.)

Goal 3: Learners can identify which category of technology tool best supports specific types of learning objectives and assignments

Goal 4: Learners feel confident introducing new technology tools to their students and implementing them in the classroom

Summary of Needs Analysis Information for Stakeholders

Our needs analysis produced essential data to help us understand the learners and the specifics of their needs revolving around the use of technology tools in the classroom and their confidence in implementing those tools when teaching their students. We came to the conclusion that the need requires an instructional solution, such as how to evaluate the usefulness of various technology tools and how they can be successfully integrated into the curriculum.

The data we received from our initial survey revealed that while many teachers are comfortable using technology in their classrooms and expect students to use technology on a regular basis, they still struggle to determine which technology is best suited for their specific tasks/ as well as which new technologies to explore and implement. The data also revealed that many teachers perceive their students as reluctant technology users, at least in regards to using technology for academic purposes, and feel that their students resist learning new technology tools. Based on this data, we feel it is best to

focus on helping teachers evaluate various technology tools that are available so that they can easily choose which tools are best to implement in their classrooms. We would also like to include suggestions for using technology tools in deeper and more meaningful ways so as to engage reluctant students who are bored with technology as substitution.

LEARNER ANALYSIS

Learner Characteristics Statement

Our intended audience is the typical high school educator. Our learner data comes from two schools in the state of Missouri.

Primarily, our focus is on Battle High School, which is one of 4 high schools in Columbia Public Schools in Columbia, Missouri. There are 19,052 students in the district, spanning Kindergarten through 12th grade. We will be providing instruction for Battle High School teachers working with 9-12th graders. The school has approximately 1,598 students, with nearly 60% of students receiving free and reduced lunch, and over 200 students identified as having a disability. These factors make for unique challenges when implementing new technologies in the classroom.

We have also gathered data from Raymore-Peculiar High School. It is the only high school in the district and serves just shy of 2,000 students. The district itself is home to approximately 6,000 students. Only 20% of the students qualify for free or reduced lunch in the district. There are around 300 students identified as having a disability. The school is also returning to a fully in-person schedule from the previous year of hybrid learning. The school is also situated just outside of a nearby major city, but serves many rural students as well.

Table 4: Characteristics of Learners

Characteristics	Implications
Demographic & Group Data	
School-wide Demographics: - Number of Teachers: 105 - Grades taught: 9-12 - Approximate ages: 23-65 - Average years of teaching: 12	- Many teachers in this building would be considered “veteran” teachers and have mastered the basic necessities of classroom instruction and management - Due to the large age range, there is also a gap in comfort level of using technology. Many teachers are comfortable with technology for personal use but not always comfortable teaching their students how to use technology
Physiological Characteristics	
- Unknown- none of the teachers indicated a need for accommodations	- While special needs are not anticipated, the training will be held on the main level

	of the building in a wide open space to allow for any potential mobility concerns - All teachers have a personal laptop provided by the school district, so it is assumed that any technology accommodations have already been provided
Cognitive Abilities	

School-wide Demographics:
- Highest Degree Held:
  - Bachelors: 28
  - Masters: 70
  - Doctorate: 1
  - Other: 6
	- The high level of education indicates that teachers value learning and are willing to continue their educational journey to master new skills
	- We can assume that the learners will be able to stay alert and focused throughout the entire training session, with only a few planned breaks
	- The learners will be able to use their cognitive abilities and prior experience to synthesize and apply the information we are presenting

Prior Knowledge	
Based on survey data: - 91% of respondents are comfortable using technology in their personal life - 67% of respondents are comfortable using technology in the classroom - 56% of respondents question their ability to choose new technology tools to implement in the classroom - 66% of respondents expect their students to intentionally use technology 4-5 days of the week	- The learners will be using their personal devices during the training to increase their comfort level in learning a new skill - We will focus on increasing comfort level of using technology in the classroom and more specifically how to evaluate which tools to implement
Motivations & Other Affective Characteristics	
Based on Survey Data: - Participants and their students all have access to personal laptops provided by the school district - Participants are generally inclined to use technology in the classroom but struggle to know which tools are best/ worth their time - Participants feel that they do not have	- Learners are comfortable and familiar with the technology they will have access to during the training - Overall, learners are technology-savvy and expect their students to be as well - Learners will be provided the tools they need to quickly evaluate technology and its merits in their classroom - Learners will be given time to specifically

enough time to adequately explore new technologies and/ or teach them to students	analyze a few key apps that they might be interested in implementing

CONTEXTUAL ANALYSIS

Cultural Context

At Battle High School, teachers are expected to implement technology in a variety of ways; however, because of a lack of emphasis on training and continuity, many educators are left wondering how to successfully integrate technology. Without the support of professional development or even a building technology specialist, teachers are left to figure things out on their own, which often leads to a lack of exploration of new technologies or failing to integrate technology effectively at all.

Many students fall into the category of reluctant technology users when it comes to educational technology, so it is difficult to motivate them to try new tools on their own, especially if the teachers are unfamiliar with the tools themselves; this ultimately causes teachers to become reluctant in their own use of technology so instead of a potentially engaging tool, they might resort to traditional activities.

Learning Context

The learning experience for educators will take place in an open workshop space. Learners will use personal devices to complete the training and explore each of the educational applications covered in the training. They will leave the training with knowledge to help them evaluate various technology tools and which tools are best to meet their classroom objectives and learning goals. The training will be led by a building teacher and SME and learners will be expected to complete the training with their PLC/ grade-level team.

Performance Context

The “learners” teach in secondary classrooms filled with students aged 14 - 18. The physical characteristics will vary depending upon the make-up of each teacher’s classes. Teachers have reported that their students are familiar with technology, but are somewhat reluctant to use technology for academic purposes.

Teachers will be able to use their knowledge of technology tools and the SAMR model covered in the training to continue growing their knowledge of and their interactions with technology in a classroom setting.

While not necessarily applicable to all educators, it is also possible that our learners have children who are school-aged. Having a clearer understanding of the purpose of educational technology tools and their implementation will allow them to help their own children better engage with and utilize the tools their teachers may provide.

Table 5: Learner Factors and Data Collection

	Learner Factors	Data Collection for Information

Cultural Context	- How long have the participants been teaching?
	
	- Do participants have regular access to technology?
	  - Do their students?
	
	- How comfortable is the participant in…
	  - using technology for personal use?
	  - using technology to teach?
	  - teaching their students about technology?
	
	- What is the participants' attitude toward using new technology tools?
	
	- Is participation in this training voluntary or mandatory?
		- Needs Analysis educator survey
		
		- Pre-training questionnaire (completed by participants before training begins)

Learning Context	- Do all learners have access to their school-provided laptop and teaching materials during the training?
	
	- Are learners able to complete their training with their PLC/ grade-level team?
	
	- What is the participant's opinion on…
	  - teaching with technology?
	  - encouraging student technology use?
	  - benefits of technology in the classroom?
	
	- Does the participant easily adapt to new technologies or do they need extra time and support?
		- Pre-training questionnaire (completed by participants before training begins)

Performance Context	- How will participants evaluate their current technology use and adapt the new tools they have been given? - What kind of follow-up support does the participant want/ need?	- Post-training questionnaire (completed by participants after training session)

Summary of Contextual Analysis Information

This training session will consist of an introduction explaining how to evaluate various technologies and information to evaluate how technology is being used in their classroom. Learners will have a chance to work with their PLC or grade-level team to evaluate various web applications based on the information provided.

At the conclusion of the training, participants will be able to not only evaluate the usefulness of various technologies, but also how to appropriately use them in their classroom in all levels of the SAMR model. The resources provided will also be available for them in a Schoology course whenever they need to refresh or review the information.

GAP ANALYSIS

Table 6: Gaps in Learner Understanding of Technology Tools

Instructional Opportunity	Root Cause	Evidence of Cause	Strategies to Address
Educators avoid using technology tools in the classroom	Fear of difficulty or disarray if a tool fails	Observation of educators who choose to forego technology and instead stick to traditional handwritten work; often, teachers share that they avoid technology because it is a hassle or they are worried it will not work properly	Focus training on one or two tools to build educator confidence in knowing that it will work successfully when they implement the tool
Educators are stuck on the same few technology tools in the classroom	Lack of time to explore new options, lack of support for troubleshooting when challenges arise.	Observation of educators who use the same tools over and over, even when there are better technologies to use for the particular task.	Offer a quick-guide reference to explain various technologies the teacher may not be familiar with and time to explore new technologies with support.
Educators receive continued reluctance from students when trying to implement new technology tools in the classroom.	Choosing a technology tool or particular implementation plan without taking into account student feedback.	Follow-up surveys of students conducted by educators and shared with trainers or administration after a technology tool has been implemented.	Guide educators through a mini training on how to use the feedback provided from students to adapt a lesson plan to help integrate the technology tool based on student needs.

TASK ANALYSIS

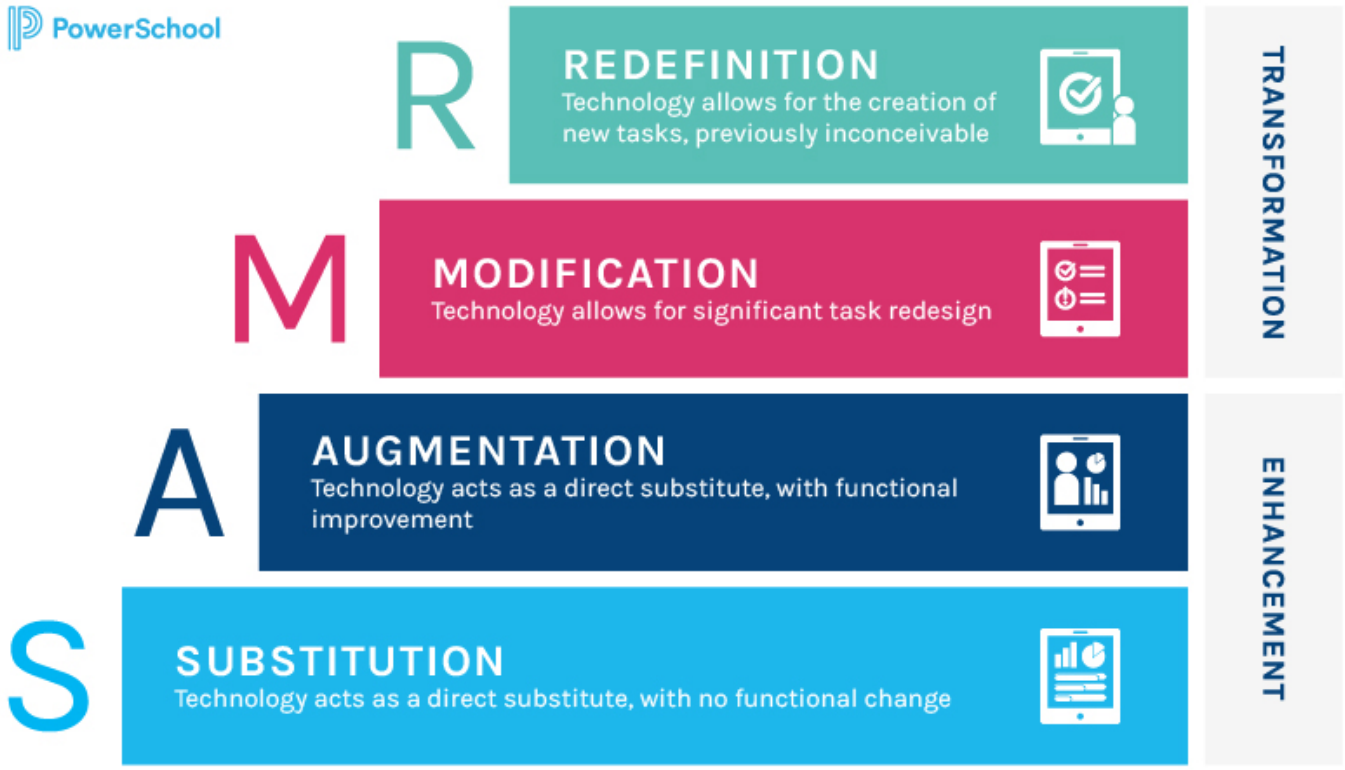
Task Analysis Statement

For this task analysis, we used the procedural analysis to prepare our training. Based on data collected from current teachers at Battle High School, we developed a set of three modules for a training session to assist teachers in efficiently selecting their technology tool and guidance for preparing their students for use of the technology tool in order to increase confidence of teachers as they use various technology tools to meet their pedagogical needs and reduce reluctancy of students when presented with new technology tools. As the task analysis is based entirely on the data taken, there was a universal need for efficiency in choosing a technology tool and helping integrate tools smoothly in order to best help students learn and be successful. In addition, the data directed us toward developing an integration process that could be iterative, effective, and efficient. The procedures are intended to be standard for all teachers at Battle High School in need of integrating technology, and standard based on any technology tool teachers intend to use. The training and resulting procedures are meant to be of a low difficulty level in order that both new and veteran teachers are able to easily integrate technology in their classroom.

Facts

Technology Tool Terminology

- LMS Tools - learning management system technology tools refer to a variety of software applications that provide multiple tools within the system to facilitate the learning environment. These tools include: administration, documentation, tracking, reporting, automation, and delivery of educational courses
- Using Technology for Productivity - “Learning professionals frequently use technology as a *productivity tool* to perform administrative tasks related to learning. This includes recording grades, administering tests, tracking attendance, developing instructional materials, and providing progress data and recommendations for learners” (Larson & Lockee, p. 257)
- Learning from Technology - “Individuals learn *from* technology when they complete an online tutorial or listen to a podcast lecture” (Larson & Lockee, p. 257)
- Learning about Technology - “Individuals learn *about* technology when they learn a specific software program or learn how to reformat a computer hard drive” (Larson & Lockee, p. 257)
- Learning with Technology- “The most engaging option is to learn *with* technology, using it as a partner or mindtool in the learning process” (Larson & Lockee, p. 257)
- SAMR Model- The “SAMR Model” is an approach of evaluating technology based on the level of sophistication or transformation it allows for classroom activities: Substitution, Augmentation, Modification, and Redefinition.
    - Substitution: Technology acts as a direct substitute, with no functional change
    - Augmentation: Technology acts as a direct substitute, with functional improvement.
    - Modification: Technology allows for significant task redesign.
    - Redefinition: Technology allows for the creation of new tasks, previously inconceivable.
- Students - defined as the individuals who are the primary learners using the tools
- Teachers - defined as the facilitators of learning using the tools to instruct and engage learning



Procedural Analysis Statement

Due to the training consisting of three modules based on the three learning goals, the procedural analysis is broken down into sections based on those learning goals. Each objective has sub-goals for teachers to meet as they prepare to fully integrate technology in the classroom using SAMR, as defined above. Please note that due to the ever-changing world of technology, this procedural analysis provides a guide to determining specifics about any technology tool a teacher may discern to use. The full procedural analysis is listed in Appendix B.

Attitudes/Dispositions:

It is essential to follow your level of proficiency in order to determine which tools on the guide would be best. Choosing a tool that is too advanced for you or too easy for you may result in adverse effects when you give your lesson.

This is not an all-inclusive guide to every technology tool. This guide will adapt as tools change.

Some understanding of trial and error is important when implementing technology tools. Despite using the guide, some tools may still not be the right fit. Be willing to try new things and learn from them as to whether they match your proficiency, the students you are teaching, or your pedagogical style.

INSTRUCTIONAL OBJECTIVES

Goal 1: Learners can quickly evaluate new technology tools to determine if they are worth the time investment to learn and implement in the classroom

1.1. Learners will evaluate a new technology tool given by instructors, judging whether the tool would be valuable for use in their classroom, and justify their argument by discussing at least two evidence-based reasons with a group.

1.2. Learners will list three characteristics of effective technology tools in an open-response question on a summative evaluation.

Goal 2: Learners can choose technology tools that meet the needs of the students in their classrooms (text to speech, videos or image-heavy, etc.) and provide strategies for successful implementation of technology in a given learning environment.

2.1. Learners will be able to identify types of activities that effectively engage students, and use the SAMR to evaluate how technology might enhance and engage students in active learning by contributing to a group discussion.

2.2. Learners will list three options to meet diverse student needs when presented with a case study on a summative assessment.

Goal 3: Learners can identify which category of technology tool best supports specific types of learning objectives and assignments

3.1. Given a learning objective, learners will be able to categorize example activities using the SAMR model and justify their answer through a discussion.

3.2 Learners will be able to choose technology tools that would support the SAMR model in their classroom by writing a technology based activity/ lesson plan for an objective of their choice that corresponds with each level of the SAMR model.

IMPLEMENTATION AND ASSESSMENT PLAN

Learning Experiences/Implementation Plan Overview

This training program will consist of a four hour workshop to be held during a regularly scheduled professional development day. The session will be facilitated by building teachers as the instructors and will include built-in time to work with each learners' PLC or grade-level team to analyze their current technology integration and apply the new learning to their own classroom.

Participants will have access to an instructor during the workshop sessions and support from designated personnel throughout the academic year following the training. Course content will remain available to the learners in a Schoology course for individual practice and review, as well as to be accessed by new hires.

Training Location:

Battle High School Media Center

Time for Training:

Approximately 4 hours

Materials Needed:

Projector and screen, computer for each participant, internet access, paper, writing utensils

Table 7: Instructional Approach

Learning Objective	Instructional Approach	Assessment Strategy
1.1. Learners will demonstrate knowledge of technology tool evaluation techniques by evaluating a new technology tool given by instructors, judging whether the tool would be valuable for use in their classroom, and justify their argument by discussing at least two evidence-based reasons with a group.	Presentation: A short presentation will cover basic and deeper level questions instructors can ask to determine if a technology tool will be useful in their classroom.	Discussion: (Formative) Learners will evaluate instructor provided technology tools and work in small groups to determine if they meet the basic and deeper level criteria for an effective technology tool to use in their own classroom. *See Appendix D: Student Materials for Technology Integration Presentation ("Evaluating Technology" Activities #1 and #2)

1.2. Learners will demonstrate an understanding of technology tool evaluation by listing three characteristics of effective technology tools in an open-response question on a summative evaluation.	Presentation: A short presentation will cover basic and deeper level questions instructors can ask to determine if a technology toll will be useful in their classroom.	Question: (Summative) Learners will answer an open response question on a summative assessment *See Appendix D: Summative Assessment (Question #1)
2.1. Learners will be able to identify types of activities that effectively engage students, and use the SAMR to evaluate how technology might enhance and engage students in active learning by contributing to a group discussion.	Presentation: A short presentation discussing ways to adapt technology to meet diverse student needs.	Discussion: (Formative) Learners will participate in a group discussion where they will evaluate the usefulness of instructor-selected technology tools to fit the needs of students in their own classroom. *See Appendix D: Student Materials for Technology Integration Presentation ("Adapting for Student Needs" Activities #1 and #2)
2.2. Learners will demonstrate an understanding of resources for classroom technology differentiation by listing three options to meet diverse student needs when presented with a case study on a summative assessment.	Presentation: A short presentation discussing ways to adapt technology to meet diverse student needs.	Question: (Summative) Learners will answer an open response question on a summative assessment. *See Appendix D: Summative Assessment (Question #2)
3.1. Given a learning objective, learners will be able to categorize example activities using the SAMR model and justify their answer through a discussion.	Presentation: A short presentation of the SAMR model and its usefulness in creating technology based activities/lesson plans.	Discussion: (Formative) Learners will participate in a group discussion where they will categorize activities based on the SAMR model. *See Appendix D: Student Materials for Technology Integration Presentation ("Engaging Uses of Technology" Activity #1)
3.2 Learners will be able to choose technology tools that would support the SAMR model in their classroom by writing a	Presentation: A short presentation of the SAMR model and its usefulness in creating technology based	Assignment: (Summative) Learners will answer a question on a summative assessment (complete a lesson plan

technology based activity/lesson plan for an objective of their choice that corresponds with each level of the SAMR model.	activities/lesson plans.	assignment). *See Appendix D: Student Materials for Technology Integration Presentation (Engages Uses of Technology Activity #2), and Summative Assessment (Question #3) and Lesson Plan Template

Table 8: Training Schedule

Training Schedule	
Time Required	**Topic Covered**
15 minutes	Introduction & Summary of Training Goals/Objectives Pre-Survey
1 hour	Part One: Determining if a Tech Tool is Worth Your Time
15 minutes	Break
1 hour	Part Two: How Do We Adapt Technology to Meet Our Student's Needs?
15 minutes	Break
1 hour	Part Three: The SAMR Model to Design Engaging Tech Focused Activities
15 minutes	Conclusion & Summative Evaluation/Post Survey
30 minutes	Work time on lesson plan

EVIDENCE OF ACCEPTABLE RESULTS

Formative Assessment

Though our primary data shows that many teachers have the ability to utilize technology tools, it is still important to pose frequent formative checks for learning so we can assess whether the learners are able to implement the learning they get from the training. The learners will first complete a pre-assessment form that allows the trainers to gauge their current self-assessed knowledge, skills, and attitudes toward the content we are presenting. This provides learners with a private place to respond prior to engaging in the learning, where we will shift to more discussion and group-based conversations about their learning.

Key questions that we hope to gain insight on throughout the formative evaluation are as follows:

1. Is the training successful in increasing positive attitudes toward the evaluation of technology tools?
2. Are the face-to-face delivery method and group work time effective for the learning process, or should another method be considered?
3. Were the work time and group discussions beneficial to the learners?
4. Do the learners feel equipped to use today's learning after leaving the training?

Approach 1: Pre and Post-Training Survey

In order for the trainers to assess learner growth, the learners will complete a survey at the start of training and a similar survey at the end of the training as they leave. The initial survey asks the learners to identify where they currently see themselves in terms of understanding and comfort with technology integration evaluation. There is also space for the learners to share their attitudes toward technology integration with the instructors so that we can better prepare for any reluctance we may be met with.

The post-training survey mimics the original survey so that learners are able to reflect on their growth after the training. This gives us the opportunity to collect data that shows whether learners truly felt they gained valuable information after participating in the training so that if we need to adjust before delivering the training again, we can do so. The survey also asks the learners to justify their responses to some of the questions, which provides further insight to the trainers on what methods of delivery worked well and what might need adjustment. Finally, this allows the learners a place to privately ask more questions if they felt any bit of discomfort asking them during the group-focused training. (See Appendix D for the forms or view the live Pre-Assessment Here and Post-Assessment Here).

Approach 2: Group Discussion and Work Time with Check-ins

Because we will deliver the training to large groups of educators, and we know that they are likely working closely with teachers of the same grade level, we will have the learners sit with their grade-level collaboration groups. This will create ease in transitions from the delivery of information to group discussion and work time that we have built into the training. To formatively assess the learners throughout training, there are several built-in stopping points with focused polls or discussion prompts that the learners will respond to on the spot. The prompts for polling and discussion are implemented in the training materials using Slido, which will allow trainers to see responses in live time and view them after the training to address any possible changes that need to be made. This allows the trainers to immediately provide feedback on polls and engage with the questions or ideas presented in the responses from the learners.

See Formative Assessment instruments in Appendix D.

Learning Objectives Assessed Formatively

1.1. Learners will demonstrate knowledge of technology tool evaluation techniques by evaluating a new technology tool given by instructors, judging whether the tool would be valuable for use in their classroom, and justify their argument by discussing at least two evidence-based reasons with a group.

2.1. Learners will be able to identify types of activities that effectively engage students, and use the SAMR to evaluate how technology might enhance and engage students in active learning by contributing to a group discussion.

3.1. Given a learning objective, learners will be able to categorize example activities using the SAMR model and justify their answers through a discussion.

Summative Assessment

While the formative assessments throughout the training will allow trainers to adjust their delivery, answer questions, or guide learners in the right direction, the summative assessment will allow trainers to determine whether the learners understood the training and whether they can apply the learning to their own individual content areas. The summative assessment will evaluate learners primarily on Level 2 of Kirkpatrick's Evaluation Model: their responses to the final prompts, as well as their completion of the technology-based lesson plan, will determine whether they developed new learning from the training. We are also able to observe the environment and energy of the room, which provides further insight on our Level 1 evaluation - a focus on the attitudes of the learners.

Approach 1: Open-Ended Question & Free-Response

Before sending learners straight to the lesson-plan design stage, there will be brief open-ended questions posed to the learners for them to consider cases in which this learning might be applied. The learners will be asked to respond to questions about using specific technology in a classroom setting, as well as creating activities that could be used to implement each tier of the SAMR Model in their course level. This will come at the end of the training right before we ask the learners to work with their course level groups–although this does assess their overall learning from the training, it also provides one last opportunity for the trainers to redirect or help the learners if they are having difficulty grasping any part of the learning.

Approach 2: Formal Lesson Plan Creation

Finally, we will ask the learners to spend time with their course level groups creating a lesson plan using a technology tool of their choice to satisfy a learning objective of their choice. This summative assessment will show the trainers whether the learners are able to appropriately evaluate and implement technology tools based on the SAMR Method that we trained them to utilize. This also works nicely to set the trainers up to review the confirmative evaluation because the learners are creating something that they will use explicitly in their classrooms, rather than something they may never look at again.

Preview the lesson plan template in Appendix D or view the document here.

Learning Objectives Assessed Summatively:

1.2. Learners will demonstrate an understanding of technology tool evaluation by listing three characteristics of effective technology tools in an open-response question on a summative evaluation.

2.2. Learners will demonstrate an understanding of resources for classroom technology differentiation by listing three options to meet diverse student needs when presented with a case study on a summative assessment.

3.2. Learners will be able to choose technology tools that would support the SAMR model in their classroom by writing a technology-based activity for an objective of their choice that corresponds with each level of the SAMR model.

Confirmative Evaluation

Several months after the training, we will reach out to participants to participate in the confirmative evaluation. This will allow us to assess learners on levels 3 and 4 of Kirkpatrick's Evaluation Model. While our summative assessment certainly touched on the learning that occurs at level 3, as we saw the learners apply their learning to something they will use later in the classroom, the training does not allow us to observe the actual application of learning. Thus, the confirmative evaluation will allow us to assess whether teachers implemented the learning in the classroom and what the final results of the training really are. The hope is that teachers will now stop and consider the SAMR Model as they continue implementing technology in the classroom and that they will understand how to implement that technology in an engaging way for students to learn. We will send out the questionnaire and then evaluate and potentially adjust portions of our training again based on those results.

Approach 1: Questionnaire following the Training

The questionnaire will be short and specific so that we can formally gather data following the training. We will ask participants about whether they continue to use the learning they gained during the training session, as well as for them to reflect on the implementation of their learning in the actual classroom setting.

Summative Evaluation

After the completion of the training, the trainers will give the learners a quick questionnaire to gather information on what they felt was useful or needed improvement. This survey, as well as using the pre and post-training survey helps us to evaluate learners on levels 1 and 2 of Kirkpatrick's Evaluation Model. The post-training survey will give us insight into the learners' reactions to the training, while both surveys come together to give us data on whether their learning and skills grew throughout the training; similarly, the second approach with group discussions will allow us to see where learners are in terms of direct learning from the training. All of this data will then be used to assess whether any portions of the delivery need immediate adjustment before any further presentations are given. We will also use the information from the confirmative evaluation (assessed months after the original

training delivery) to continue making any necessary adjustments to our training process and the information we give the learners.

CONCLUSION

Working through each step of the ADDIE model allowed our team to analyze what learners truly need in order to select the most effective technology for their classroom. Throughout the process, we experienced many shifts in our instructional approaches because of the data we collected, as well as our engagement with the ADDIE model, which shows the importance of evaluating the information we gathered and put together. Ultimately, this led to a comprehensive training that helps our learners (teachers) to streamline the process of finding the right tools for their classroom.

REFERENCES

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Murray, J. (2019, July 24). *How to evaluate tech tools you've never used in less than seven minutes*. NEA. Retrieved October 27, 2021, from https://www.nea.org/advocating-for-change/new-from-nea/how-evaluate-tech-tools-youve-never-used-less-seven-minutes.

PowerSchool. (2021). *Samr Model*. PowerSchool: Powering Brighter Futures. Retrieved October 27, 2021, from https://www.powerschool.com/resources/blog/samr-model-a-practical-guide-for-k-12-classroom-technology-integration/.

APPENDICES

Appendix A: Target Audience Survey

ISD - Final Project Data Collection

This survey will help our group work toward our technology applications training guide for Instructional Systems of Design. Please answer any questions you are comfortable answering, and skip any that you are unsure of. Names will not be used/shared in final project.

1. How long have you been teaching?

Mark only one oval.

- ◯ 1-2 years
- ◯ 3-5 years
- ◯ 6-10 years
- ◯ 11-15 years
- ◯ 16-25 years
- ◯ 25+ years

2. What is your comfort level with using technology in your personal life?

Mark only one oval.

	1	2	3	4	5	
Low	◯	◯	◯	◯	◯	High

3. What is your comfort level with using technology as a tool in the classroom?

Mark only one oval.

	1	2	3	4	5	
Low	◯	◯	◯	◯	◯	High

4. If you wanted to incorporate a new technology tool in your classroom, how confident would you feel about choosing which tool would be best to implement?

Mark only one oval.

	1	2	3	4	5	
Not at all confident	◯	◯	◯	◯	◯	Very confident

5. What is your students' average level of prior understanding of technology in the classroom?

Mark only one oval.

	1	2	3	4	5	
Low	◯	◯	◯	◯	◯	High

6. On average, how many days per week do you personally use technology while teaching?

Mark only one oval.

- 1
- 2
- 3
- 4
- 5

7. On average, how many days per week do you expect your students to intentionally use technology in your classroom?

Mark only one oval.

- 1
- 2
- 3
- 4
- 5

8. When introducing new technologies to your students, what is their typical reaction?

Mark only one oval.

	1	2	3	4	5	
Very reluctant. Might ask if they can "just make a poster instead."	◯	◯	◯	◯	◯	Very confident. Eager to explore a new tool and are willing/ able to jump right in.

9. What kinds of technology do you most frequently implement in your classroom? Select all that apply.

Check all that apply.

- [ ] Learning from Technology (students use digital tools and activities to learn and review target information)
- [ ] Learning about Technology (students are specifically taught how to use various technological tools and their purpose)
- [ ] Learning with Technology (students are given activities and assessments that enhance their basic understanding of course content while using technology)
- [ ] Other: _____

10. When incorporating student technology use, how much freedom do you give your students in choosing which technologies they use?

Mark only one oval.

	1	2	3	4	5	
I always tell my students exactly which technologies they should use for a given assignment/ activity	◯	◯	◯	◯	◯	My students always have the ability to choose which technologies they will use to complete an assignment/ activity

11. What is your favorite tech-tool to use in the classroom (app or otherwise?)

12. What frustrates you about using educational apps for teaching/learning?

13. When do you feel most inclined to use educational apps for teaching?

14. Can you think of anything that you wish an educational application could help you with in the classroom?

(Link to Target Audience Survey for Google Forms Version)

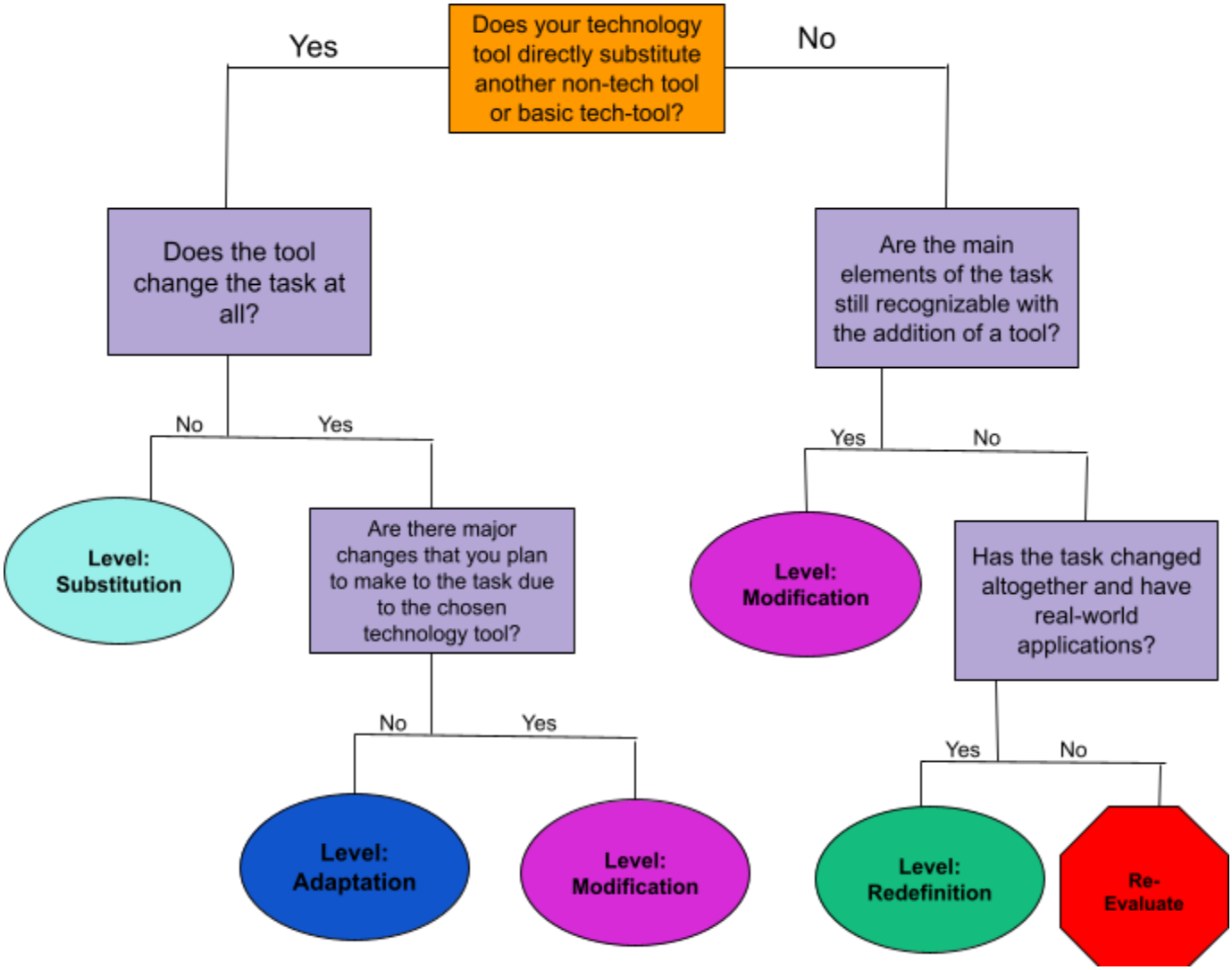
Appendix B: Procedural Analysis

Evaluating Technology Tools in Preparation for Implementation

1. Choose a technology tool to evaluate
2. Evaluate the tool based on 3 essential questions (approximately 2 minutes of your time):
    a. Question 1: Is it free or a small fee?
    b. Question 2: Does it connect with our LMS?
    c. Question 3: Is it easy to install?
3. Examine the technology tool further. Explore its features. If there is a free account available or a trial platform, play around with the tool. If there are videos on the website or platform, watch those as well. (Approximately 5 minutes of your time)
    a. Question 1: How easy is it to use?
    b. Question 2: How distracting could it get when using it in the classroom?
    c. Question 3: Does it offer difficulty levels?
    d. Question 4: Will it be useful for students later in life? OR Does it have real-world applications?
    e. Question 5: How often do ads appear while using the tool?
    f. Question 6: Does it have in-app or internal purchasing requirements?
    g. Question 7: Is it easy to set up a learning activity within the platform to use in the classroom?
4. Based on your answers to all of the questions in Step 2 and Step 3 determine whether the technology tool is the right tool for your task/activity/lesson and if it is worth your time enough to move forward with choosing it.

Implementing a Technology Tool in the Classroom

1. After choosing a technology tool, it is time to prepare for and implement the tool. Using the SAMR model, determine how you will implement the tool in order to facilitate classroom engagement based on the levels of the model.
    a. Reminder of SAMR Model Descriptors
        i. Substitution: Technology acts as a direct substitute, with no functional change
        ii. Augmentation: Technology acts as a direct substitute, with functional improvement.
        iii. Modification: Technology allows for significant task redesign.
        iv. Redefinition: Technology allows for the creation of new tasks, previously inconceivable.
2. Review the Procedural Analysis Graphic below and follow the arrows based your particular technology tool and your answers to each question:



Requesting and Evaluating Student Feedback Prior to Implementation

1. Using the survey example provided or one you create separately, have your students complete it based on how they understand technology as shaping their learning.
2. Based on feedback received, evaluate the best path toward implementation of technology:
    a. Which level of the SAMR model would be best to start with as students adjust to new technology in the classroom?
    b. Which level of the SAMR model most matches their needs based on feedback provided in the survey?
    c. Which implementation level and its impact on the task will reduce reluctancy of students at this time?
    d. Which implementation level and its impact on the task will challenge students at this time?

3. Choose a tool and level of implementation from the SAMR model based on what is best for your students.

Appendix C: Training Materials

Pre and Post-Training Questionnaire

Pre-training Questionnaire

Welcome to *Tech Tools for Educators: Finding the Right Tool for Teaching & Learning!* We are excited to help you today as you evaluate how to best leverage the technology used in your classroom. Please take a short moment to complete this brief questionnaire.

1. Do you have access to your school-provided device and your personal teaching resources during this training?

2. Are you completing this training with your PLC/ grade-level team?

3. How are you feeling about participating in this training today? Be honest! :)

4. In your opinion, how important is technology in your teaching practice?

   Low Importance **1 2 3 4 5** High Importance

5. In your opinion, how beneficial is technology in the learning process?

   Low Benefit **1 2 3 4 5** High Benefit

6. How many days per week do you encourage students to use technology in your classroom?

   1 2 3 4 5

7. When thinking about trying out a new technology tool in your classroom, what is your initial reaction?

a. Briefly explain why you feel this way.

8. What are you most hopeful to gain from this training today?

Post-training Questionnaire

Thanks again for participating in *Tech Tools for Educators: Finding the Right Tool for Teaching & Learning!* We hope you are feeling better equipped to incorporate technology in your classroom and are excited to continue on your technology journey. Please take a short moment to complete this brief questionnaire before you go.

1. Which Module did you find most beneficial today and why?

2. What is one way you might use the SAMR model to evaluate and adjust the technology used in your classroom?

3. What extra support can we provide as you work to evaluate the technology used in your classroom?

Technology Integration

An Introduction

Goals for today's PD

Goal 1: Learners can quickly evaluate new technology tools to determine if they are worth the time investment to learn and implement in the classroom

Goal 2: Learners can choose technology tools that meet the needs of the students in their classrooms (text to speech, videos or image-heavy, etc.) and provide strategies for successful implementation of technology in a given learning environment.

Goal 3: Learners can identify which category of technology tool best supports specific types of learning objectives and assignments

The Basic Questions

1. Is it free?
2. Does it connect with our LMS?
3. Is it easy to install?

https://www.nea.org/advocating-for-change/new-from-nea/how-evaluate-tech-tools-youve-never-used-less-seven-minutes

Part 1: Evaluating technology

slido

Join at slido.com
#368370

ⓘ Start presenting to display the joining instructions on this slide.

Evaluate

Working in your grade level team, determine if the technology tool meets the three evaluation questions.

Kahoot

Quizlet

Padlet

Canva

Brittanica Kids

IXL

Grammarly

PearDeck

1. **Is it free?**
2. **Does it connect with our LMS?**
3. **Is it easy to install?**

Part 1: Evaluating technology

slido

Which technology tools meet the basic questions?

ⓘ Start presenting to display the poll results on this slide.

The Deeper Questions

How easy is it to use?

How distracting could it get?

Does it offer difficulty levels?

Will it be useful for the students later in life?

How often do ads show up?

Does it have in-app purchasing?

Is it easy to set up?

Part 1: Evaluating technology

Evaluate -
Do the tools make sense with the deeper questions? Discuss with your grade level team.

Kahoot

Quizlet

Padlet

Canva

Brittanica Kids

IXL

Grammarly

PearDeck

How easy is it to use?

How distracting could it get?

Does it offer difficulty levels?

Will it be useful for the students later in life?

How often do ads show up?

Does it have in-app purchasing?

Is it easy to set up?

Part 1: Evaluating technology

slido

Which Technology Tools Meet the Deeper Questions?

ⓘ Start presenting to display the poll results on this slide.

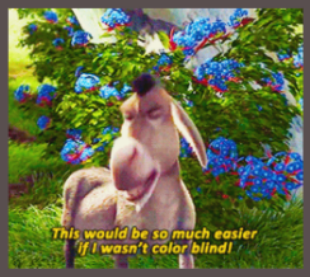
Part Two: Adaptations for Our Students' Needs

How do we *know* that our students will be able to use the technology we select?

Technology Tasks That May Limit Student Participation

- Too much reading - ELLs, Low Performers, ADD/ADHD
- Too much visual stimulation - Autism, ADD/ADHD
- Too much audio - deaf and hard of hearing
- Wrong types of audio or visuals - ELL, autism, ADD/ADHD

Other Things To Consider



Example: Piktochart

Piktochart meets our basic requirements and our deeper questions. Many teachers use it as a replacement for the essay by having students create infographics instead of essays on an assignment

But… if we were to use it in a class of students with ADD or Autism, what one word would describe the students' feelings as they clicked through the program?

Explore Piktochart with your group and be ready to respond with the whole group

Part 2: Adapting Technology

Evaluate: Choose a program and evaluate its usefulness for your grade level's needs.

Consider:
ELL population in your classroom
Types of special needs
Types and levels of technology access at home

10 minutes - Work with a partner to discuss
10 minutes - turn to your grade level group and share.

Part 2: Adapting Technology

Programs:

Quizlet

Kahoot

Piktochart

Padlet

PearDeck

Excel

Google Drive

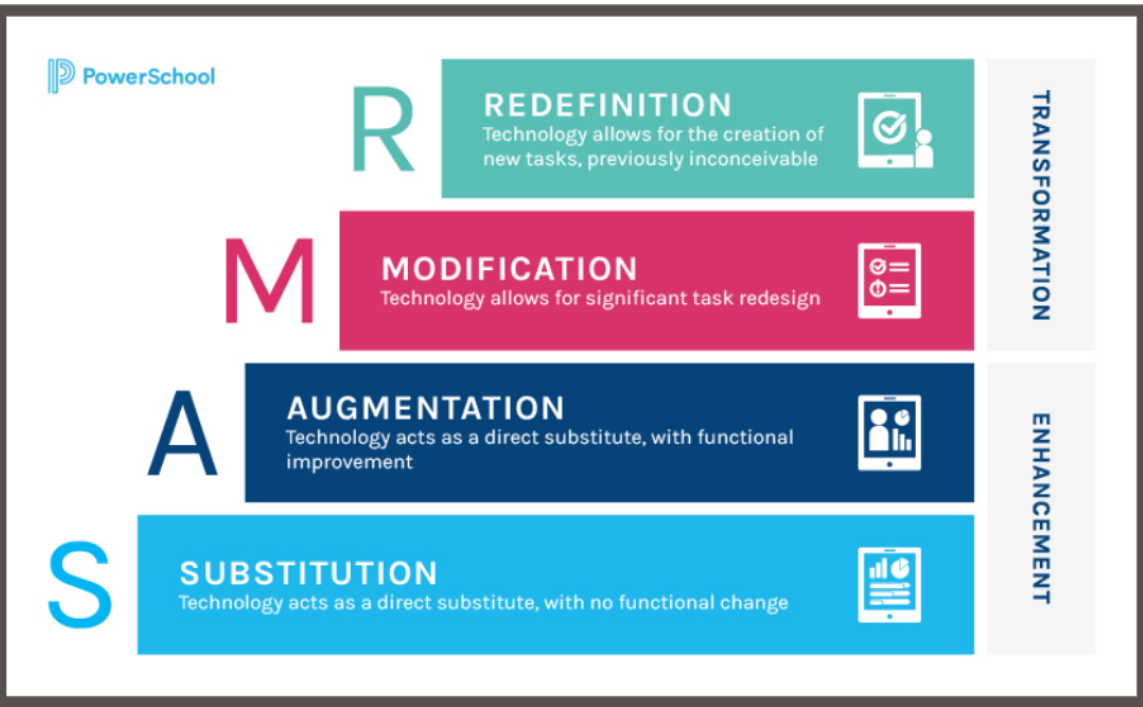
Part Three: Planning Engaging Activities With Technology

When we introduce a new tool, we expect...

But in reality we frequently get....

What types of learning are we doing with technology?

- Powerpoint instead of whiteboard?
- Students making a presentation instead of an essay?
- Students creating a website to campaign for a cause?



Part 3: Engaging Uses of Technology

Substitution

Straight substitution of a task - Overhead became PowerPoint

What example can you think of from your classroom?

Part 3: Engaging Uses of Technology

Adaptation

Some changes to the task, but not many. Think of this as a “quality of life” upgrade.

Part 3: Engaging Uses of Technology

Modification

Changes the task considerably, but the main elements are the same.

Instead of a narrative essay, the student creates an animated video:

Part 3: Engaging Uses of Technology

Redefinition

Changes the task itself and the basic elements of the task. The task now becomes a completely new skill that has meaning and connection to the outside world that previously would have been impossible.

Part 3: Engaging Uses of Technology

slido

A 6th grade class is asked to create an infographic explaining how to make a hamburger.

ⓘ Start presenting to display the poll results on this slide.

slido

In a unit on persuasive argumentation, a 10th grade class is asked to create a social media page for the local animal shelter. They will brainstorm social media marketing campaigns to drive potential pet owners to the shelter, and they are asked to plan two in-person events with the shelter.

ⓘ Start presenting to display the poll results on this slide.

slido

When studying the Bill of Rights, a class is asked to create an animated explainer video to teach younger students about their rights.

ⓘ Start presenting to display the poll results on this slide.

slido

A teacher has students create a Google Slide presentation together instead of making a poster, and assigns the project as homework because the group can work together on the assignment from afar.

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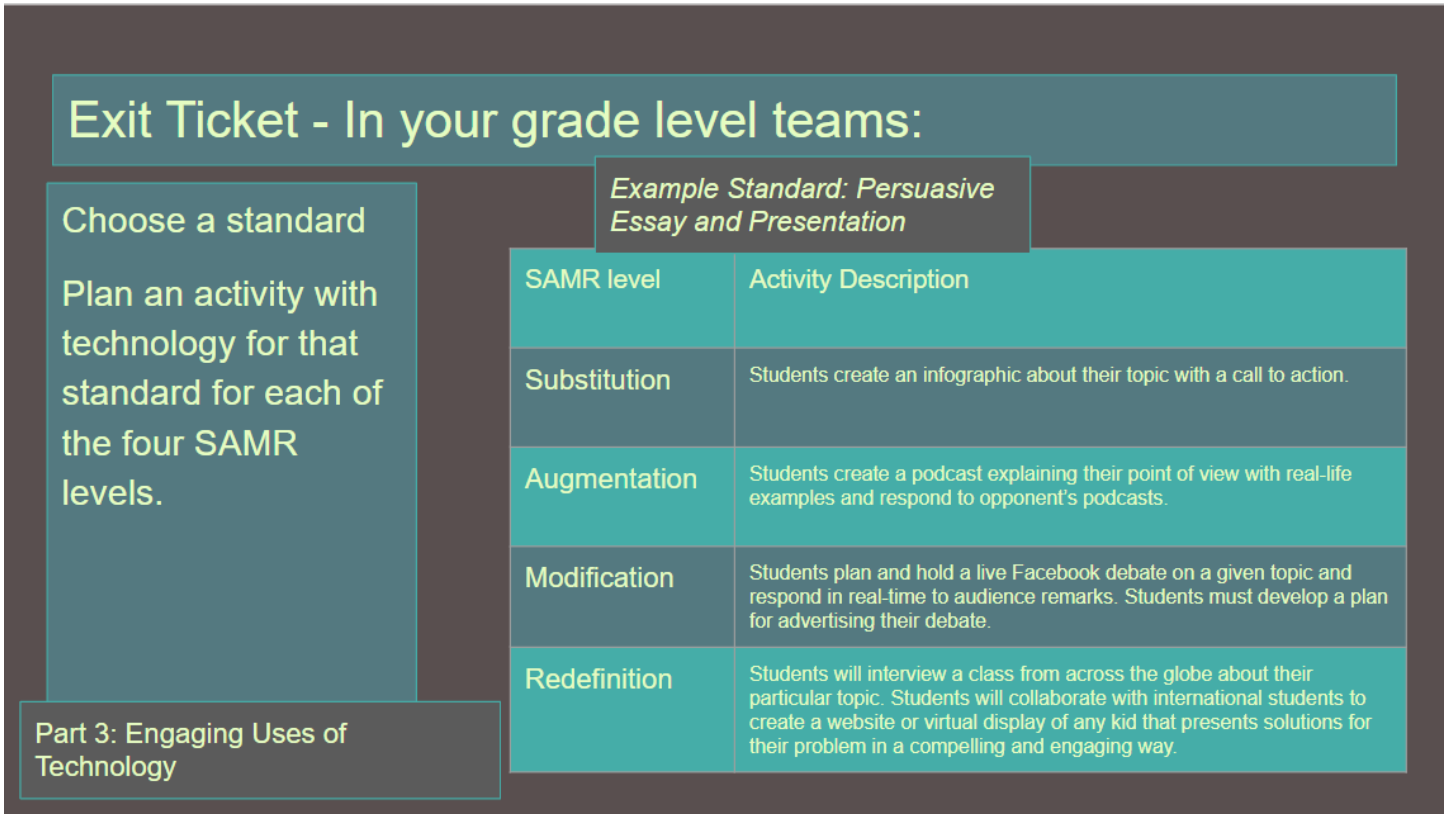
Watch and Discuss: What strategies in the video match the Redesign level of the SAMR model? Which ones match the Substitution model?

Part 3: Engaging Uses of Technology

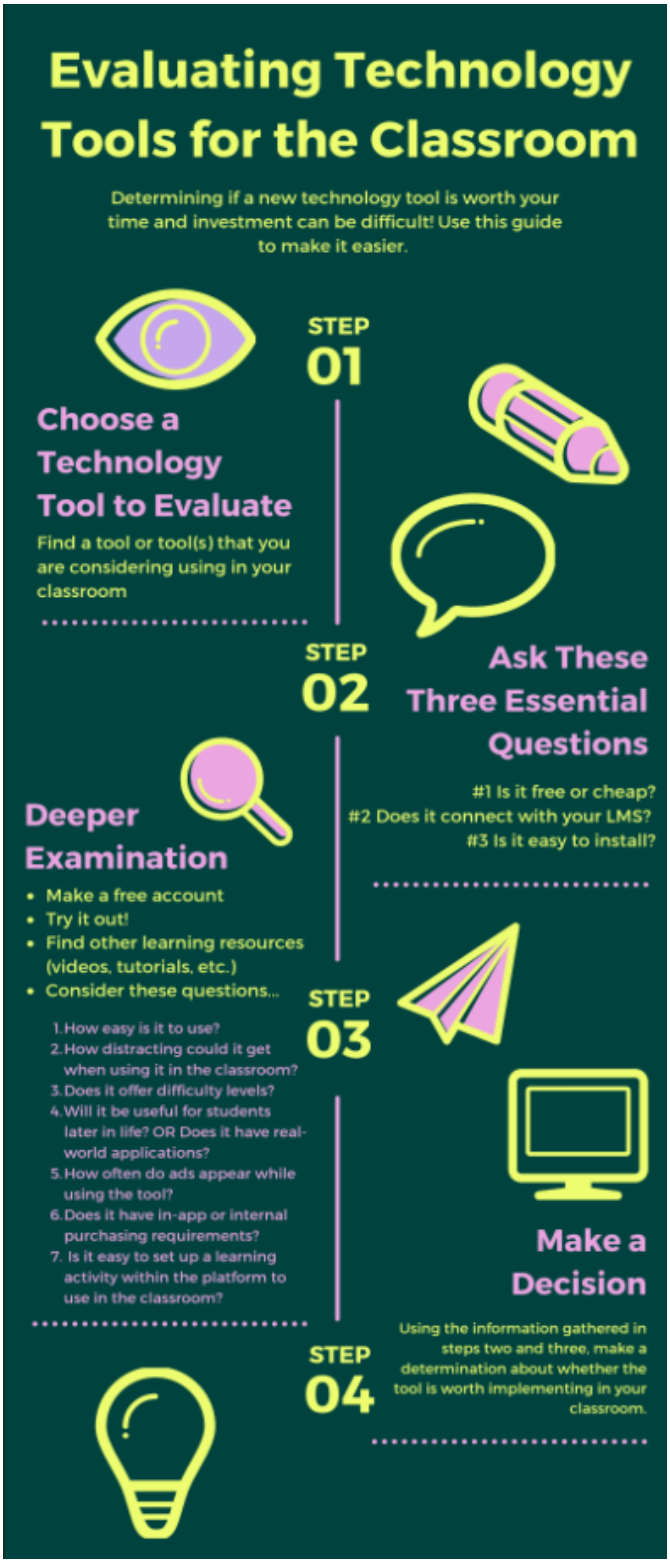
What SAMR level do you most often use in your classroom? How do students respond?

Part 3: Engaging Uses of Technology



(Link to Training Modules for Google Slides Version)

Quick Guide for Evaluating Tech Tools: : Quick_Guide.pdf



Student Technology Survey

Please answer each question honestly based on your understanding of how you learn and what will be help you learn in the classroom.

Read the question and select the appropriate level of agreement or disagreement based on your comfortability with technology. How easy is it for you to...?

	Very Easy	Easy	Moderate	Hard	I can't do this.
learn new technology?	○	○	○	○	○
troubleshoot technology problems?	○	○	○	○	○
send an email to a teacher?	○	○	○	○	○
create a spreadsheet?	○	○	○	○	○
edit a photo?	○	○	○	○	○
record and edit audio?	○	○	○	○	○
record and edit a video?	○	○	○	○	○
collaborate using online documents?	○	○	○	○	○
receive online information (Google/Other search engines)?	○	○	○	○	○

find out if online information is trustworthy.?	○	○	○	○	○

Read the question and select the appropriate level of agreement or disagreement based on your understanding of your learning.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I learn best when technology is involved in the classroom.	○	○	○	○	○
I learn best when the technology used in the classroom is gamified.	○	○	○	○	○
I prefer completing assignments and projects using technology such as Google Docs or Microsoft PowerPoint.	○	○	○	○	○
I learn best when I have the option to choose what type of technology I want to use to complete classwork.	○	○	○	○	○

I learn best when I am provided with the technology tool to complete classwork.	○	○	○	○	○
I learn best using collaborative technology tools with classmates	○	○	○	○	○
I learn best using technology on my own.	○	○	○	○	○
When technology is used in the classroom, it can enhance my learning.	○	○	○	○	○

I am much more engaged in the classroom when technology is used.	○	○	○	○	○
Technology provides too many distractions when used in the classroom.	○	○	○	○	○

What are some obstacles that occur when you use technology in school or for class assignments? Select as many as apply to you.

- [ ] I am not able to learn technology tools quickly.
- [ ] The is always slow when everyone in the class is using technology.
- [ ] The technology tools/devices provided by the school are not good enough.
- [ ] I do not receive proper instruction on how to use a particular technology tool provided for classwork.
- [ ] It is difficult working with others using technology.

Would you be interested in being a part of a small class group to help provide support to other students in the classroom that may be struggling with technology?

- ○ Yes
- ○ Maybe
- ○ No

Would it benefit your learning to have a mini lesson on a new technology tool when it will be used in the classroom?

- ○ Yes
- ○ Maybe
- ○ No

Who would you rather receive a mini lesson from when a new technology tool is introduced?

- ◯ Teacher
- ◯ Peer/classmate

What experiences have you had with technology or types of technology you have used in the classroom that have helped you learn?

Your answer

What would you like to see changed in regards to the use of technology in the classroom?

Your answer

(Link to Survey for Google Forms Version)

Appendix D: Evaluation Materials

Lesson Plan Template - Technology Integration

Task: With your grade level team, write a technology-based lesson plan supported by the SAMR model that meets a learning objective of your choice.

Lesson Plan Template - Technology Integration Evaluation

Learning Objective(s):
The students will…
SAMR Tier Objective:
[What purpose will the technology tool serve? Substitution, Augmentation, Modification, Redefinition]
Assess/Activate Prior Knowledge:
[Consider whether you must introduce the technology tool or whether students have seen it before - what do they need to know to use the tool effectively?]
Process for Implementation:
[Opening/hook, instruction delivery, monitoring, closure] a. Opening/Attention Grabber: b. Delivery of Instruction: c. Monitoring use of Technology: d. Wrap-Up/Closure

Assessment:
[How will you formatively assess student learning and engagement while they work with the tool? What can you look for to show whether students are getting to the appropriate SAMR tier while meeting the objective for the lesson?]
Reflection (Post-Lesson):
[Use this space to reflect on what parts of the lesson went well, and what may need adjustment in the future - did students achieve the tier of SAMR that you intended?]

Evaluating Technology
The Basic Questions
Activity 1

Technology Tool	Is It Free?	Will It Connect With Our LMS?	Is it easy to install and set up?
Kahoot			
Quizlet			
Padlet			
Canva			
Brittanica Kids			
IXL			
Grammarly			
PearDeck			

Which tools would best answer the needs listed in the three basic questions?
— List them below.

Evaluating Technology
The Deeper Questions
Activity 2

Tool	How easy is it to use?	How distracting could it get?	Does it offer difficulty levels?	Will it be useful for the students later in life?	How often do ads show up?	Does it have in-app purchases?	Is it easy to set up?
Kahoot							
Quizlet							
Padlet							
Canva							
Brittanica Kids							
IXL							
Grammarly							
PearDeck							

Which tools would best answer the needs listed in the deeper questions?
— List them below.

Adapting for Student Needs

Activity 1

What are some of the needs that students with ADD/ADHD or Autism have?

How would those needs be helped or hindered by Piktochart?

What other student groups can you see struggling with this tool if it was used in your classroom?

Adapting for Student Needs

Activity 2

What student needs are present in your classroom? List the three most prevalent.
Example: Low reading skills, ADHD, and limited technology skills.

In the table below, list the ways the chosen technology tool supports or hinders the student needs you identified above.

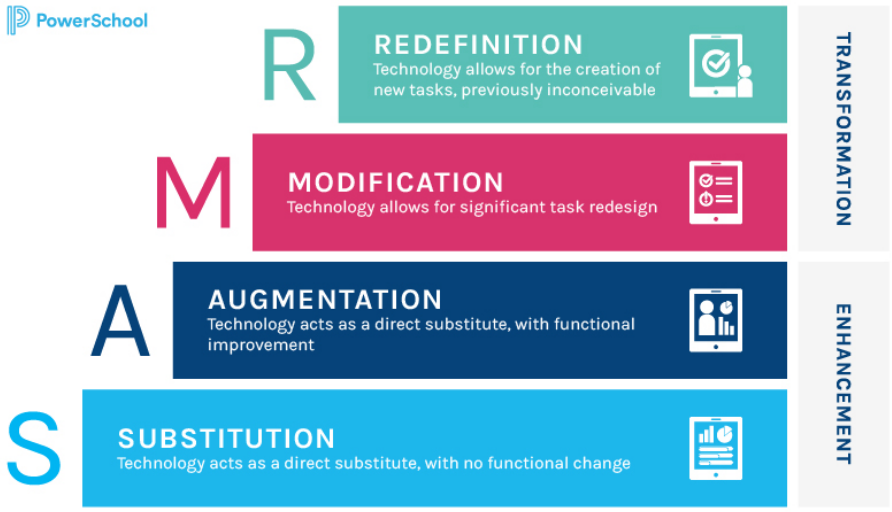
Technology tool:_____

	Need 1:	Need 2:	Need 3:
Supports Available			
Potential Road-Blocks:			

Given the analysis above, would you use this tool in your classroom?

Engaging Uses of Technology

Activity 1



List examples for each of the categories below from your classroom, or from a teammate's classroom:

1. Substitution:

2. Augmentation:

3. Modification:

4. Redefinition:

Engaging Uses of Technology

Activity 2

Objective: _____

_____

Substitution Activity:

_____

_____

_____

Augmentation Activity:

_____

_____

_____

Modification Activity:

_____

_____

_____

Redefinition Activity:

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Summative Assessment - Open Response Questions

1. List three characteristics of an effective technology tool discussed in the training.

2. You decide to start using Nearpod in your classroom. You have a diverse group of students with a wide variety of needs. You have several students who are reluctant to use new technology. You

have three students that are learning English as their second language. You have one student who is deaf. Describe how you will address each of these student needs as you implement this new technology in your classroom.

3. With your grade level team, write a technology based lesson plan supported by the SAMR model that meets a learning objective of your choice.

Summative Evaluation Questionnaire

Summative Evaluation Questionnaire

Thank you for participating in this training, please answer the following questions honestly so that we can gather information about the training for future implementation

1. Did you find this training to be helpful?
2. Do you plan to implement any new technology tools in the next 6 months?
    a. If yes, do you feel confident in doing so?
3. What suggestions do you have to improve this training?

Confirmative Evaluation Questionnaire

Confirmative Evaluation Questionnaire

It has been 6 months since the technology implementation training, please answer the following questions honestly so that we can gather information about the training for future implementation.

1. After implementing your lesson plan created in the training, what did you notice as you reflected on that lesson?
2. In the last six months, how often have you implemented any new technology tools in your classroom?
3. Which of the SAMR levels do you find most successful while implementing technology?