CHAPTER 4
THE PUTTING OUT FIRES FRAMEWORK

IN THE WORLD OF EDUCATION, we are actively involved in solving problems every day. Some problems warrant quick solutions, while others require us to go through a design process to identify multiple creative solutions. Educators are putting out fires every single day. Putting out fires day after day feels so natural that we often resemble the people from the river parable in Chapter 2.

To break this cycle, I created the *Putting Out Fires* Framework (**Figure 4.1**) to help educators solve problems—and additionally to help them categorize potential solutions so that the best solution can be implemented. Design thinking and upstream thinking offer excellent strategies for problem categorization and selection, but fall short once potential solutions are identified, often leaving us with numerous solutions and no further strategy for judging the merits of the solutions we have identified.

Prevent

The problem has been eliminated but the solution involves time, resources, and people.

Contain

The problem has been confined to a small space, limiting harm, while it is studied.

Detect

The problem has been analyzed by looking directly at the symptoms involved.

Extinguish

The problem is quickly assessed and addressed but will likely return.

FIGURE 4.1 The *Putting Out Fires* Framework.

The *Putting Out Fires* Framework helps to categorize solutions so that we may select the most appropriate solution for the problem. The four categories of the *Putting Out Fires* Framework echo the four fire-prevention categories: prevent, detect, contain, and extinguish (International Fire Safety Standards Coalition, 2020). The *Putting Out Fires* Framework aligns these four fire-prevention strategies with different types of solutions, to aid in the selection of the most appropriate solution.

- A solution in the **Extinguish** category quickly assesses and addresses the problem, but the solution applied does not address the root of the problem, so the problem will likely reoccur.
- A solution in the **Detect** category reflects time spent analyzing the symptoms and root of the problem before implementation.

- A solution in the **Contain** category confines the problem to a small space where the causes can be further studied, limiting the harm caused.
- A solution in the **Prevent** category eliminates the problem permanently but involves time, resources, and people.

Let's view the parable from Chapter 2 according to the *Putting Out Fires* Framework. Multiple solutions could address the issue of children drowning in the river. At first, the people in the parable were stuck in their cycle of response, and the problem kept reoccurring, which fits nicely into the Extinguish category. A solution in the Detect category might be to provide life preservers and make lifeguards available, which would allow time to research the problem in hopes of identifying a better solution later. A solution in the Contain category might be to teach kids to swim, so they avoid drowning altogether, which would contain the problem entirely no matter what body of water kids might encounter. A solution in the Prevent category might be to drain the river, so kids simply cannot drown in that particular river, but this solution would require a good deal of time, resources, and people to implement.

Prevent

Drain the river of water so the kids cannot drown.

Contain

Teach the kids to swim so they avoid drowning in the river.

Detect

Provide life preservers and make lifeguards available.

Extinguish

Fishermen are stuck in a cycle of rescuing kids from drowning in the river.

FIGURE 4.2 The parable from Chapter 2 viewed according to the *Putting Out Fires* Framework.

Most of these solutions are practical and doable, although draining the river would likely create a whole host of other problems. The framework helps us assess all potential solutions in the various categories before selecting the best solution possible. In this scenario, the most appropriate solution is in the Contain category, where we teach kids to swim so they avoid drowning in all bodies of water, not just in the river. However, it might be important to begin with the Detect solution of providing lifeguards on the river while kids are being taught to swim.

This is a very simplistic example of the *Putting Out Fires* Framework. In future chapters, we will consider each of these categories in more detail. To start, let's identify many potential solutions for your chosen problem so that we can organize the solutions using the four categories. However, before we jump into organizing solutions, we need to identify them, and before we identify them, we need to understand our own levels of capacity and influence over potential solutions.

LEVELS OF CAPACITY AND INFLUENCE

Many factors will influence your choice of the best solution to a problem. The two most important factors are the levels of capacity and influence you have over both the problem area and potential solutions.

Consider the following questions to determine your capacity when it comes to the problem and potential solutions. We will look further into this concept in the Fire Drill! section of this chapter.

Ask yourself the following: To support a given solution,

- Do you have the people needed?
- Do you have funds available?
- Do you have the necessary supplies?
- Do you have the time?
- Do you have the physical space?
- Do you have the mental space?
- Do you have the policies needed?
- Do you have support from your team and/or leadership?

You may be asking yourself, what if I don't have capacity in many of these areas? Maybe your grant application was not approved, or your administration is not supportive. You can still effect change in your classroom or school without meeting all of the capacity considerations.

Every person has a circle of influence. In the Fire Drill! section of this chapter, you will complete an activity involving two circles (inner and outer). Items that are within the inner circle are within our realm of influence. For example, as a teacher, you have major influence over your classroom, because even if you do not determine the content or policies, you still decide how the content is taught or how discipline is delivered. For example, you might choose to have restorative practices instead of punitive discipline. As an administrator, you decide how the budget is spent and what professional development will be offered throughout the year. These are all items within our realm of influence. Items in the outer circle are things we cannot influence. For example, a teacher does not decide how the annual budget is spent, and an administrator cannot control how a teacher presents content.

Trying to implement solutions outside of our realm of influence and level of capacity will likely be frustrating, exhausting, and ultimately unsuccessful. Of course, we can work toward gaining allies who have influence where we need it, but that step needs to be taken before tackling problems outside of our influence.

You *can* effect change and implement a potential solution. You simply need to be realistic about your capacity and influence. If you do not have access to funds, do not select a solution that requires a hefty purchase. If you do not have the support of administrators, do not select a solution that requires a major overhaul of policies and procedures. Remember, there are numerous solutions to every problem. Putting a solution in place that honors your capacity and is within your realm of influence might open more avenues and resources for you later, once your solution shows results.

FIRE DRILL!

Welcome to your next Fire Drill! You can now put into practice what you've learned throughout this chapter, including using the *Putting Out Fires* Framework to categorize potential solutions, considering your capacity, and determining your realm of influence. Scan the QR code to hear more detailed information from the author about the activities in this section.

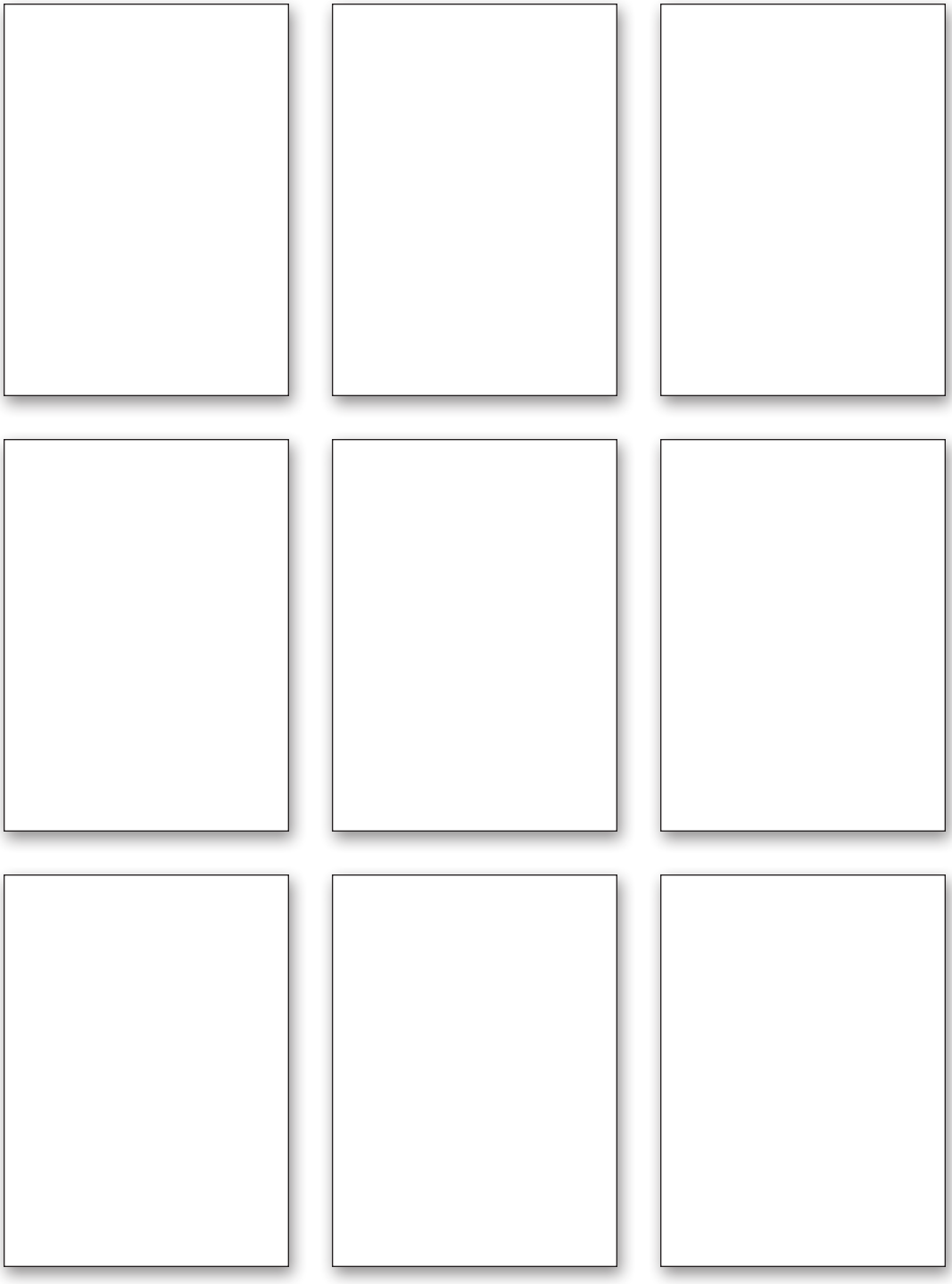
kaylahholland.com/puttingoutfires/audio

ONE HUNDRED IDEAS

It is now time to create potential solutions! This activity is challenging because we typically think of perhaps up to three solutions, but coming up with one hundred seems difficult. Completing this activity will stretch your brain to consider many options.

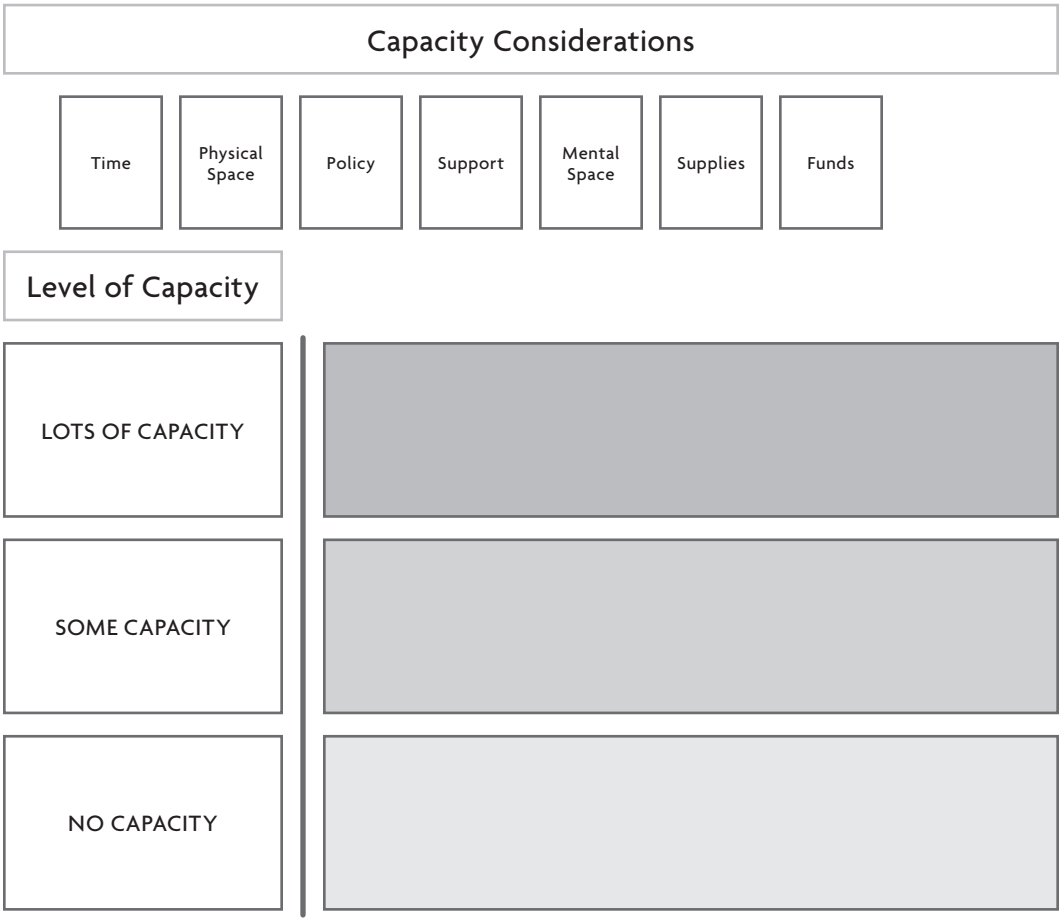
1. Grab a timer and set it to fifteen minutes.
2. Begin making a list of potential solutions in the spaces provided. Write down anything that comes to mind! Be creative, dream big, and do not worry about being realistic. The goal is to have as many potential solutions as possible.
3. When the timer ends, see how many solutions you have. (Don't worry if you didn't make it to one hundred.) Go through the list and place a star next to the solutions you think have the most potential (Bolger, 2022).

If you are struggling with creating lots of potential solutions, you can try the following two ways to move your brainstorming activity forward. First, you can take your problem to a group of trusted people and complete the activity together. Second, you can use artificial intelligence to ask for solutions using something like the following prompt: "List 20 solutions for [insert your specific problem]".



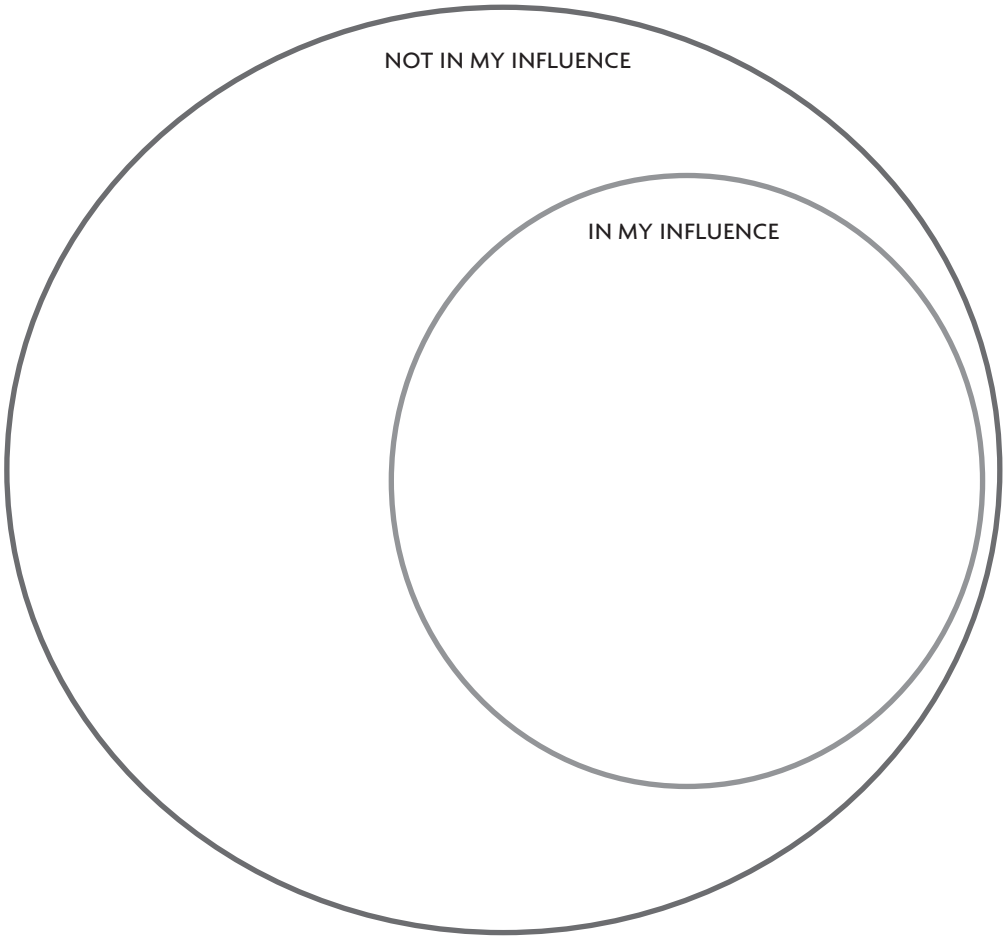
CAPACITY CONSIDERATIONS

Use the activity below to evaluate how much capacity you would need to carry out your potential solutions. Choose two solutions and map out your capacity using the prompts in the boxes. Use two different colored pens to separate the two solutions. Consider both your personal capacity and the capacity of your school or district. For example, your own personal capacity should be considered for the prompts of time and mental space. However, you should consider the capacity of your school or district for prompts such as funding, physical space, and people. Some solutions may automatically be excluded because you simply do not have the capacity to see them through to the end. Other solutions might be so powerful that you decide to create capacity to make it happen.



LEVEL OF INFLUENCE

Once you realize your capacity for individual solutions, you then need to determine your realm of influence. Fill in the circles below with items that are under your influence and those that are beyond your influence (Schaffner, 2023).



SAMPLE PROBLEMS

Let's check in with the sample problems introduced in Chapter 2. How did the teacher and administrator complete the activities in the Fire Drill! section for this chapter?

TEACHER: PURPOSEFUL TECHNOLOGY USE TO ENHANCE STUDENT LEARNING

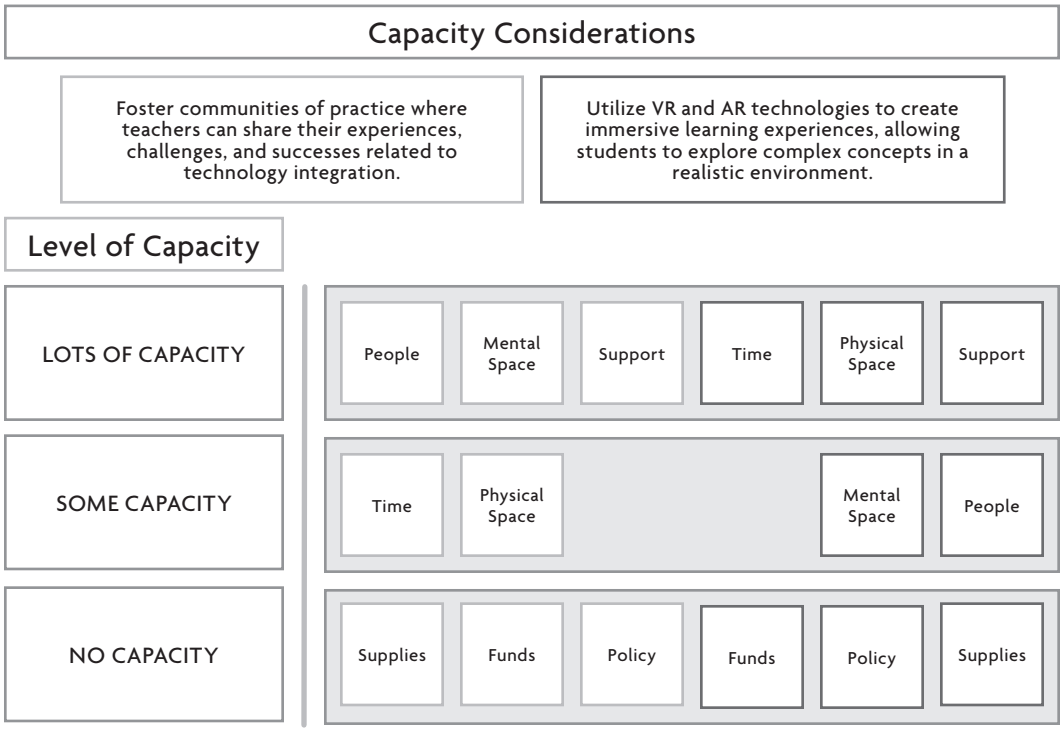
The teacher created more than twenty potential solutions to the problem of using technology to enhance student learning.

Teacher's One Hundred Ideas

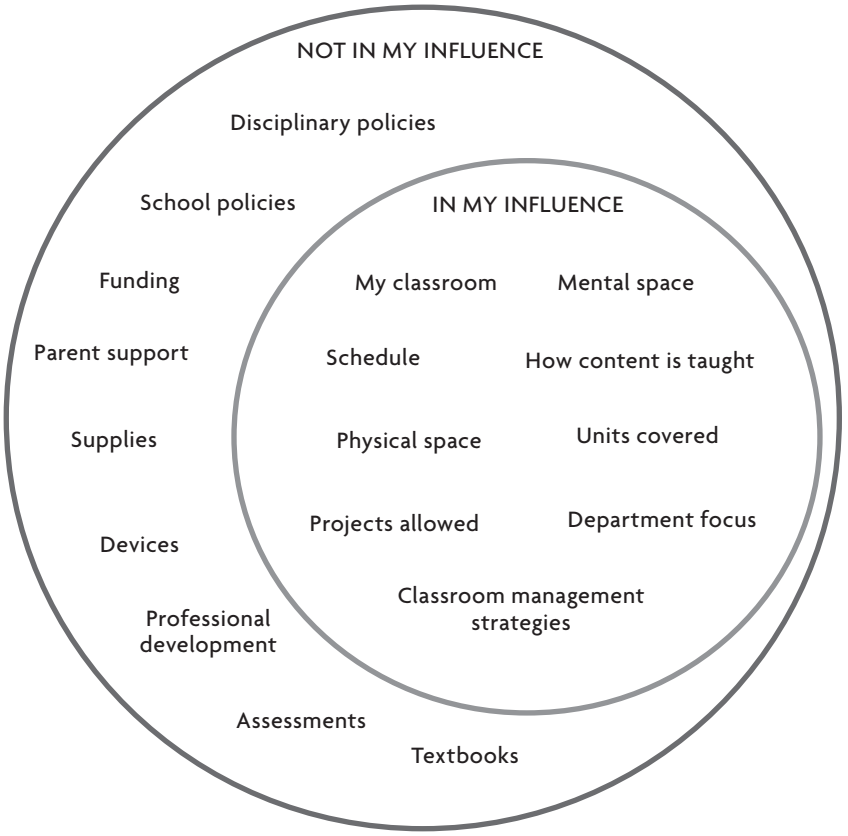
Conduct regular workshops and training sessions to educate teachers about effective and purposeful use of technology in the classroom.	Create online repositories of educational technology tools, lesson plans, and resources for teachers to access and implement in their classrooms.	Encourage experienced teachers to mentor their peers, sharing successful strategies for integrating technology effectively.	Implement interactive online platforms that allow students to engage with educational content in a dynamic and personalized manner.	Develop educational apps that cater to various subjects, enabling students to learn at their own pace and according to their own style.
Introduce digital assessment tools that provide instant feedback to both students and teachers, facilitating a more responsive learning environment.	Encourage the flipped classroom approach, where students engage with digital content at home and utilize classroom time for discussions and collaborative activities.	Utilize AR and VR technologies to create immersive learning experiences, allowing students to explore complex concepts in a realistic environment.	Integrate educational games and gamified elements into the curriculum, making learning more engaging and interactive for students.	Organize podcasts and webinars with industry experts, giving students access to real-world insights and experiences.
Foster creativity by encouraging students to create digital stories, videos, and presentations to demonstrate their understanding of various subjects.	Facilitate collaborative projects that require students to work together online, promoting teamwork and digital communication skills.	Use cloud-based tools for document collaboration, allowing students and teachers to access and work on assignments from any device with an internet connection.	Leverage social media platforms to create educational communities, where students can discuss topics, share resources, and collaborate on projects.	Provide access to online tutorials and instructional videos that support classroom learning and cater to different learning styles.
Integrate lessons on digital ethics, online safety, and responsible internet use to promote good digital citizenship among students.	Establish a support hotline or chat service where teachers can seek immediate assistance with technology-related issues.	Ensure that all devices and software used in classrooms are up to date, providing a seamless user experience for both teachers and students.	Educate parents about the educational benefits of technology and involve them in their child's digital learning journey.	Advocate for universal internet access, ensuring that all students have equal opportunities to benefit from online resources.
Implement adaptive learning systems that assess students' abilities and tailor educational content to meet their specific needs and learning pace.	Collaborate with technology companies to provide schools with discounted or free access to educational software and hardware.	Use data analytics to track students' progress and identify areas where technology integration has been particularly effective or needs improvement.	Foster communities of practice where teachers can share their experiences, challenges, and successes related to technology integration	Invest in research to continuously evaluate the impact of technology on student learning, adapting strategies based on evidence-based practices.

The teacher then considered their capacity for two of the solutions. As you can see, this teacher has different types of capacity based on which solution is being mapped, but has no capacity for either solution in the categories of supplies, funds, or creating policies. Therefore, the teacher should not select a solution that requires any of those three categories. The teacher then determines what they can and cannot influence.

Teacher's Capacity Considerations



Teacher's Level of Influence



ISTE Standards: For Educators

2.5b: Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning. (ISTE, 2017).

2.5c: Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning (ISTE, 2017).

ADMINISTRATOR: ENSURING SCHOOLWIDE TECHNOLOGY PROGRAMS MEET THE NEEDS OF DIVERSE LEARNERS

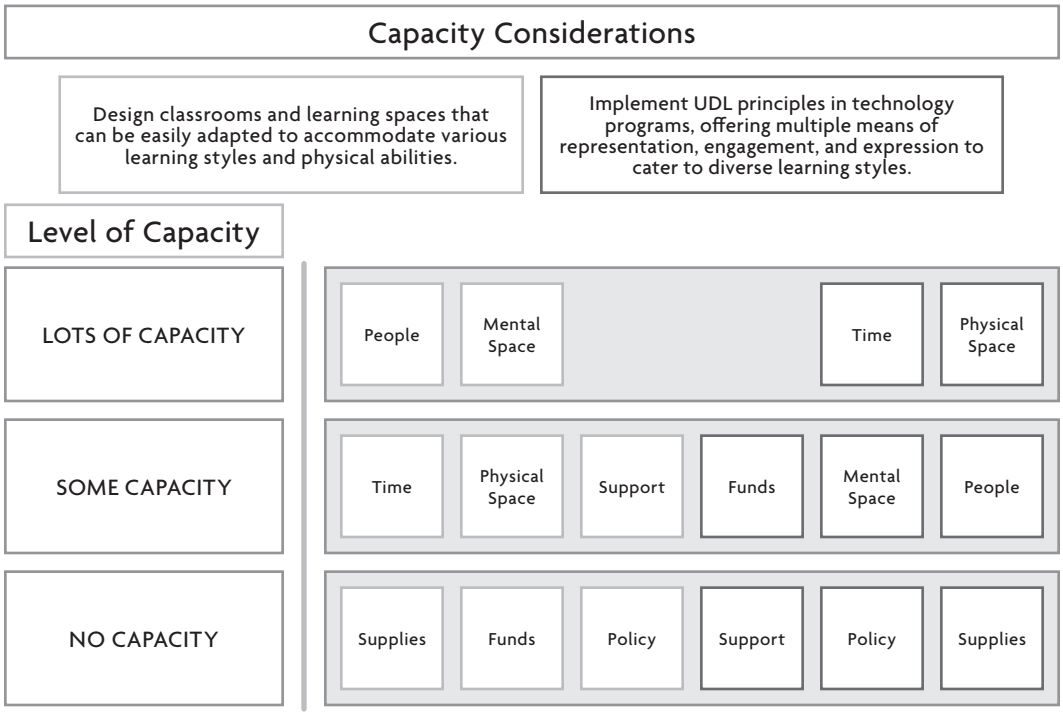
The administrator created twenty-five potential solutions to the problem of using technology meeting the diverse needs of learners.

Administrator's One Hundred Ideas

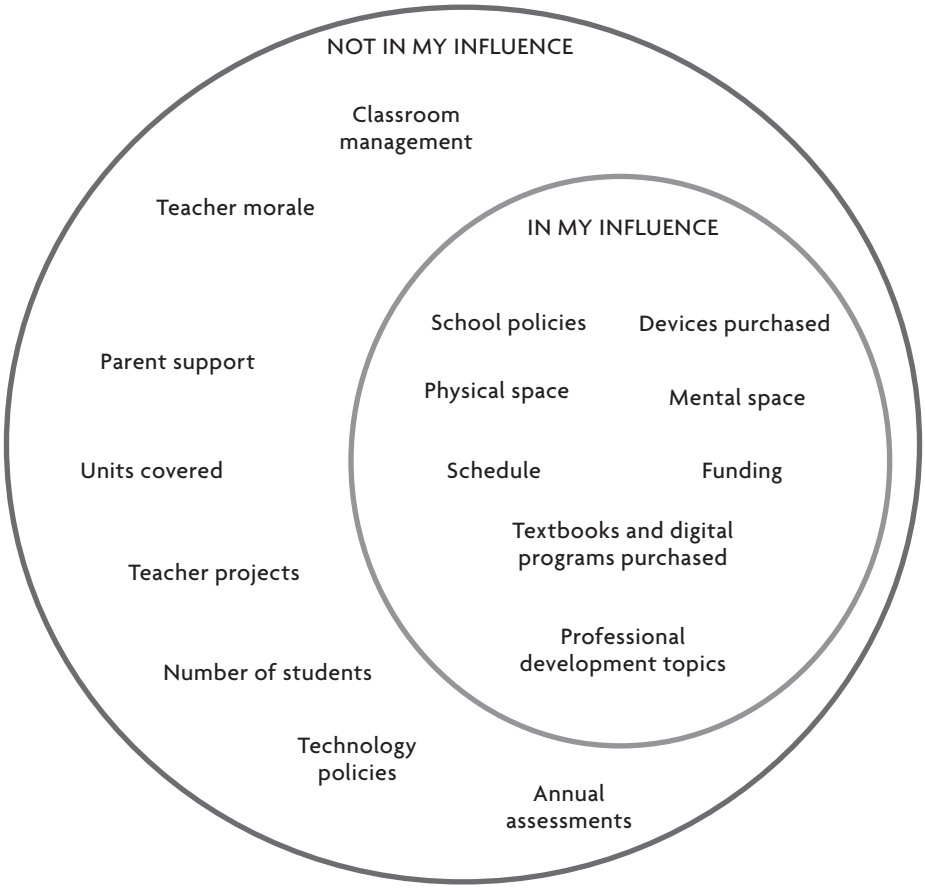
Provide training for teachers and administrators to understand and respect diverse cultural backgrounds, ensuring technology use is culturally sensitive.	Integrate multilingual interfaces and support in educational software and devices to assist students who speak languages other than the primary language of instruction.	Implement UDL principles in technology programs, offering multiple means of representation, engagement, and expression to cater to diverse learning styles.	Develop personalized technology-based learning plans for students with diverse needs, addressing their specific challenges and strengths.	Invest in technology devices that are accessible to students with disabilities, such as adaptive keyboards, screen readers, and other assistive technologies.
Offer ongoing professional development for teachers to enhance their skills in using adaptive technologies and accommodating diverse learners.	Collaborate with special education professionals to develop strategies and tools that address the unique requirements of students with disabilities.	Involve parents and community members in the decision-making process to understand the specific needs of diverse learners outside of the school environment.	Conduct regular assessments to identify the changing needs of diverse learners and adjust technology programs accordingly.	Design classrooms and learning spaces that can be easily adapted to accommodate various learning styles and physical abilities.
Establish peer mentoring programs where advanced students assist those who struggle, leveraging technology for collaborative learning.	Organize workshops for parents to familiarize them with the technology being used in schools, enabling better support for their children at home.	Encourage teachers to create inclusive digital content that represents diverse cultures, backgrounds, and perspectives.	Create channels for students to provide feedback on the effectiveness and accessibility of technology tools, fostering a sense of ownership and inclusion.	Implement learning management systems that are accessible to students with disabilities, ensuring they can fully participate in online learning activities.
Facilitate peer learning through collaborative online projects, allowing students to learn from each other and celebrate diversity.	Establish a tech support hotline where students and parents can seek assistance with technology-related issues, ensuring everyone can effectively use the tools provided.	Involve diverse voices in the development of the curriculum, ensuring it is culturally responsive and relatable to all students.	Continuously review school policies related to technology use to identify and eliminate any barriers or biases that might affect diverse learners.	Develop assessment that accommodates diverse learning styles, allowing students to demonstrate their understanding through various formats, including multimedia presentations and oral exams.
Collaborate with educational technology companies to develop customized solutions that cater to the specific needs of diverse learners.	Implement peer evaluation methods where students provide feedback to each other, promoting empathy, understanding, and acceptance among diverse groups.	Offer digital literacy programs that teach students how to critically evaluate online information, promoting awareness and understanding of diverse perspectives.	Allocate budgets flexibly, ensuring that funds are available for purchasing a variety of technology tools and software that cater to diverse needs.	Use data analytics to track the performance of diverse learners and adjust technology programs based on their individual progress and challenges.

The administrator then considered their capacity for two specific solutions. As you can see, the administrator has different amounts of capacity depending on the selected solution. For example, they have some support for redesigning the physical layout of classrooms but no support for implementing different models of learning. The administrator then completed the influence circles.

Administrator's Capacity Considerations



Administrator's Level of Influence



ISTE Standards: For Education Leaders

3.4b: Ensure that resources for supporting the effective use of technology for learning are sufficient and scalable to meet future demand (ISTE, 2018).

3.5d: Develop the skills needed to lead and navigate change, advance systems and promote a mindset of continuous improvement for how technology can improve learning (ISTE, 2018).

WHAT HAPPENS NEXT?

Now that you have created potential solutions, considered your capacity, and explored your current levels of influence, it's time to decide which solution is the most appropriate to solve your problem. The next several chapters will explore the categories of the *Putting Out Fires* Framework in detail to help you select the best solution. Grab the extinguisher. It's time to put out the fire!