



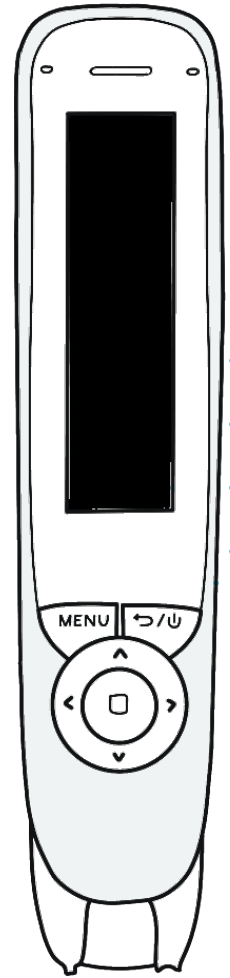
# IMPLEMENTATION SUCCESS AND EXPANSION GUIDE FOR SCHOOLS AND DISTRICTS

**A district-wide literacy support strategy that can be used to provide access and equity with Scanning Pens portable handheld assistive technology.**



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# INTRODUCTION

Effective reading instruction is the first and best way to improve reading when students struggle. Scanning Pens acknowledges the dedication of educators who teach literacy lessons every day.

In addition to high quality instruction and intervention, schools and districts have widely embraced the use of Assistive Technology (AT) to support growth, provide equity of access, and appropriately accommodate learning differences.

This Scanning Pens guide will help determine the level of support needed to improve outcomes for students with characteristics of dyslexia, specific learning disabilities, below grade reading skills, and students learning English as a another language.

This guide also provides suggestions for gathering data that shows the qualitative and quantitative impact of a Scanning Pen for reading support at school and at home.

The process of data collection is straightforward. Collecting information before, during, and after distribution will give you a better understanding of how this portable text-to-speech tool can improve access to:

- Vocabulary
- Comprehension
- Reading fluency
- Content knowledge
- Accurate decoding
- Confidence and Independence

Success in one class or school can be replicated in another using the Cycle of Reporting found in this guide.

This guide is for district leaders, superintendents, special education leaders, 504 plan coordinators, and teachers.

Every educational setting is different. Just as each child brings unique questions, insights, attitudes, and ideas to a classroom, each school setting has a unique set of needs, expectations, policies, constraints, resources, and cultures.

“Students need to be able to make sense of the content of their reading.

Understanding academic vocabulary, paragraph organization, identifying main ideas and supporting details, along with making inferences and summarizing, are skills that are as important as decoding.

Nevertheless, students with dyslexia will not have the opportunity to practice those skills if they cannot decode. Audiobooks and text-to-speech can give them the opportunity to engage with text on an age-appropriate level and develop critical vocabulary and comprehension skills.”

*(Five Myths About Assistive Technology for Students with Dyslexia, Jamie Martin, IDA Perspectives December 2020)*

# WAYS TO EXPAND THE USE OF SCANNING PENS

Offer the ReaderPen™ as a loan to any parent that feels their child requires additional support.

Actively promote through newsletters and assemblies that the pens are available for either short loans or in certain classes for regular use during the pilot period. Promote as part of your school's general positive approach to literacy.

For best results, allow students to use Scanning Pens at school AND at home. Be sure to instruct students on how best to keep the Pen charged.

Include the Pen as part of a student's Assistive Technology toolbox. The pen allows students to start a lesson promptly and read with confidence and independence.



Create a system to check out/in pens and collect student feedback at regular intervals.

Have a number of pens available in the library for use or loan.

Identify a range of students who would benefit from using a ReaderPen™ including, striving readers, students with dyslexia, English language learners, and students with IEPs and 504s.

A Scanning Pen doesn't hinder the ability to actively read, it promotes it.

# DISTRICT LEVEL OVERVIEW

These sections are designed to help expand the use of Scanning Pens in order to create a positive impact on literacy outcomes.

**PLAN** | Examine classrooms and sites who currently use Scanning Pens successfully.

**UNDERSTAND** | Collect qualitative information from staff and students currently using Scanning Pens. Determine what learning subgroups will benefit from using a Scanning Pen.

**PREPARE & DELIVER** | Discuss how and where Scanning Pen expansion will begin. Share this information with the staff.

**USE & SUPPORT** | Discuss how and where Scanning Pen expansion will begin. Share this information with the staff.

**REVIEW & COLLECT DATA** | Use the surveys and questionnaires in this document to capture feed back and qualitative information about using the pens. This information will inform expansion.

## ASK RELEVANT QUESTIONS:

1. Where is our current inventory?
2. Who is currently using a Scanning Pen?

An inventory tracking sheet template can be found in the Appendix or by using the QR code on this page.



# PLAN



## CURRENT PRACTICE

- Are Scanning Pens already in use within the school or district?
- Where are existing Scanning Pens located? Are they being tracked in inventory?
- Are existing sites being used as exemplar or mentor sites for others?
- Are dates scheduled for initial and follow-up professional development for staff?
- Is use of assistive technology encouraged under the practices of UDL (Universal Design for Learning)?



## DEVELOP GOALS

- How many students will benefit from the use of a Scanning Pen?
- What student sub-groups will benefit from decoding, vocabulary, and dictionary support?
- What staff members will mentor at additional sites as distribution continues?
- Who will maintain the inventory document and distribution schedule?
- How will loans and returns be communicated to staff and families?



## CASE STUDIES

- What data can be collected to show growth in confidence, independence, and reading support?
- Can one or more classrooms or schools serve as mentors for assistive technology that supports literacy?
- What data can be collected for students who used a Scanning Pen in a small group, whole class, and home setting?



## SUPPORT MULTILINGUAL LEARNERS

- A pressing issue facing educators is providing wireless speech translation support when English is not the first language.
- A Scanning Pen provides access to print and a translation function. This allows students and families to seamlessly access text in many environments inside and outside of school.

### TIP:

**Partner with local PTA, Masons, Kiwanis, or a similar organization that supports literacy with community-based funding or grants.**

# PLANNING TEMPLATE

ASSESS	Check when complete
Meet with the School/District staff/specialists and talk about reading progress.	
Discuss the reading intervention process with the student support team.	
Assess the self-esteem and confidence of the learner(s).	
List current and past assistive technology tools.	
Evaluate the assistive technology tools providing the most support in various classes or with various subjects.	
Determine what is missing or what additional AT tools might be needed for access to paper-based text.	
PLAN	
Logistics:	
Determine where Scanning Pens are stored.	
Determine how pens travel with students between classes.	
Determine how pens travel with students from school to home.	
Determine how and where pens are charged.	
Determine how staff will be informed.	
Identify a school or class to use for case study data collection.	
Set up:	
Determine which staff members will be trained on Scanning Pen use and support? <i>(Training support is always available from your Scanning Pens Business Development Manager)</i>	
Determine who will teach students how to use features of the pen.	
Communication:	
Create a list of students who will have Scanning Pen (TTS) accommodations on tests and exams.	
Send a letter to parents/guardians about how the Scanning Pen will support the student at school and home.	
Survey students about their learning experiences with the Scanning Pen.	
Include qualitative surveys during student support meetings before and during the use of Scanning Pens.	
Other:	
Partner with local PTA, Masons, Kiwanis or similar organizations that support literacy with community-based funding or grants.	

# UNDERSTAND

Adoption of new technology requires that several different variables work together. Reflect on schools where assistive technology and effective literacy accommodations are already established.

Assistive technology (AT) is any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities. (*www.atia.org, 2021*)

## Examine current practices

- What schools/classrooms have already participated in a trial or pilot of Scanning Pens?
- Identify key learnings on distribution, usage, problems, and successes from the trial/pilot.
- What other assistive technology tools are used successfully in classrooms/schools?
- What classroom/school will benefit from Scanning Pens?
- Use text-to-speech with a Scanning Pen and free teachers and instructional aides for more difficult tasks.

## How can you expand Scanning Pen use?

- Encourage inclusion friendly practices by using Scanning Pens to keep students in the least restrictive environment for core instruction.
- Create a sustainable model by allowing a Scanning Pen to advance grades along with the student. Promote independent access to print in a multi-grade plan.
- Align with ESSA guidelines by considering how many students fall into these categories:
  - Underserved students
  - Students in poverty or low economic status
  - Students who are minorities
  - Students in Special Education
  - Students with 504 plans
  - Students learning English or with limited English language skills
- Align with UDL guidelines and provide a framework for the use of AT:
  - Provide multiple means of Engagement
  - Provide multiple means of Representation
  - Provide multiple means of Action and Expression
- Use Social Emotional Learning guidelines and support the rationale for the use of AT:
  - Improve social emotional skills and attitudes
  - Reduce anxiety, behavior problems, and lack of confidence
  - Support long term improvements in academic performance and prosocial behavior



# UNDERSTAND

- Support multilingual learners:
  - Improve access to word translation/definition to promote vocabulary growth
  - Set and support high expectations for achievement
  - Provide opportunity and access
  - Free teachers and instructional aides for other types of support
  - Integrate content and language
  - Provide word definitions to learners who have “cracked the code”
  - Align with robust standards for language development

The percentage of public-school students in the United States who were multilingual learners (ELL/ESL) was higher in fall 2017 (10.1 percent, or 5.0 million students) than in fall 2000 (8.1 percent, or 3.8 million students).

In fall 2017, the percentage of public-school students who were ELLs ranged from 0.8 percent in West Virginia to 19.2 percent in California.

*IES, National Center for Education Statistics, nces.ed.gov, May 2020; The Condition of Education - Preprimary, Elementary, and Secondary Education - Elementary and Secondary Enrollment - Multilingual learners in Public Schools - Indicator May (2020)*

- Support special education students by offering differentiated learning. A Scanning Pen serves as an accommodation in a variety of educational settings:
  - Presentation
  - Response
  - Setting
  - Timing
  - Scheduling
  - Assignment
  - Curriculum

## INCLUSIVE CLASSROOMS

When general education and special education teachers work together to meet the needs of students there can be many benefits.

Source: *Understood.org, 4 benefits of inclusive classrooms*

Using a Scanning Pen in both the special education **and** general education classroom is less restrictive and promotes independence and improved self-esteem.



# UNDERSTAND

Support IEP goals and FAPE (Free And Appropriate Education):

- **Apply the SETT framework** for assistive technology as an organizational tool to help collaborative teams assign student-centered, useful, and task-focused assistive technology that fosters educational success for students.

The SETT framework is a four-part model intended to promote collaborative decision making in all phases of assistive technology implementation and use. There are several guiding documents that ensure educators support Free and Appropriate Public Education (FAPE) when introducing and implementing assistive technology to support students with IEP goals.



Student



Environments



Tasks



Tools

Use the SETT checklist (QR link) to help align assistive technology to student needs. These free planning worksheets are linked here to help you select students and assign assistive technology tools effectively. Scanning Pens acknowledges and supports the toolbox approach to assistive technology. There is rarely a single tool that meets all the needs of a learner.

- **Apply the UDL Guidelines from CAST** (Center for Applied Special Technology) to support learning for all. The goal of UDL is to remove barriers to learning and provide all students with equal access to learning.

Expand your use of Universal Design for Learning (UDL) with assistive technology through the use of Scanning Pens. The CAST UDL Guidelines are a great tool for supporting differentiated learning. These guidelines offer suggestions and checklists that help ensure learners can participate in meaningful ways through engagement, representation, and action and expression.




## The Universal Design for Learning Guidelines

Provide multiple means of  
**Engagement**



Affective Networks  
The "WHY" of Learning

Provide multiple means of  
**Representation**



Recognition Networks  
The "WHAT" of Learning

CAST | Until learning has no limits™

Provide multiple means of  
**Action & Expression**



Strategic Networks  
The "HOW" of Learning

# PREPARE AND DELIVER

What are the categories for expanded use of pens and opportunities to provide differentiated support?

## DATA-BASED DECISIONS

What percentage of our students?

- \_\_\_\_\_ % speak another language at home
- \_\_\_\_\_ % are immigrants or new to country
- \_\_\_\_\_ % are economically disadvantaged
- \_\_\_\_\_ % are students with disabilities
- \_\_\_\_\_ % are English learners
- \_\_\_\_\_ % are minorities or students of color
- \_\_\_\_\_ % attend high needs schools
- \_\_\_\_\_ % attend continuation high school
- \_\_\_\_\_ % have 504 plans with accommodations
- \_\_\_\_\_ % are homeless and/or come to school hungry
- \_\_\_\_\_ % \_\_\_\_\_
- \_\_\_\_\_ % \_\_\_\_\_

“Assistive technology really gives students the ability to access grade-level content and allows them to be independent.” *Source: EdTech: Focus on K-12, Micha Castelo, Mar.31, 2020*

# WHICH SUBGROUPS WILL BENEFIT?

WHO?	WHERE?	HOW MANY?
Students with Individual Education Plans (IEP)		
504 plans with accommodations for reading, text-to-speech, extra time		
Populations using text to speech (TTS) or human readers		
English language learners (ELL/ESL)		
Economically disadvantaged populations		
Students with characteristics of dyslexia and below grade readers		
Populations with reduced access to instructional and assistive technology tools or Wi-Fi connections		
Transient and migrant populations		
Students receiving inconsistent literacy instruction in their early years		
Learners with difficulty engaging with print due to attentional deficits		
Students who benefit from inclusion practices in the least restrictive environment		
		<b>TOTAL:</b>

# PREPARE AND DELIVER

Data and feedback can be collected from various sources and in different ways.

Consider using digital surveys or focus groups. Allocate time for discussion and feedback regarding the use of Scanning Pens, for example:

- time at a staff meeting
- an informal discussion/survey during shared planning time
- professional development or in-service training time
- designated implementation team meetings
- a weekly Google form for feedback and questions

*(See the Appendix for the link to a template)*

When you have a successful pilot school it can serve as mentor or demonstration school. This school can share best practice, provide mentoring, and give feedback on the implementation process.

## DO:

Assign ReaderPen™ mentors. Use students who are proficient with the Pen to support new users.

Set aside free time with staff and mentors to freely explore Scanning Pen features.

Allow students to create instructional videos for other students.

## REVIEW:

Use or design questions for students about Scanning Pen use.

Meet with student support teams to identify specific ways that access to literacy has improved.

Identify specific ways that wellbeing and social emotional learning has improved.

Identify specific ways that English learner vocabulary knowledge has improved.

## ASK:

Are Scanning Pens being used at school and at home?

Are Scanning Pens being used by any student who struggles with reading, such as general education (504 plans) and reading intervention?

Are Scanning Pens being used by students with IEPs or formal accommodations for text-to-speech?

## Other:

# PREPARE AND DELIVER

## Basic Teacher Training Workshop

The successful expansion of additional Scanning Pens begins with training or webinars.

Scanning Pens has developed a simple PowerPoint presentation that school, or district leaders can use to introduce the basic functionality of each pen.

The Scanning Pen Business Development Manager for your region works with you to understand the presentation and if required, deliver it for you in person or remotely.

### ON DEMAND VIDEO SUPPORT

**Social distancing support with Scanning Pens**

Video (1:42)



**The voices of special education students using Scanning Pens**

Video (3:48)



**ReaderPen™ Overview**

Video (2:03)



**Homework with the ReaderPen™**

Video (1:00)



**Features of the ReaderPen™**

Video (2:12)



# PREPARE AND DELIVER

## Expanding Training and Implementation

We have created a book called the **Helping Hand Detective Agency**. This resource helps students learn how to use the Scanning Pen in a fun and engaging setting.

This book reads like a story and functions like a lesson plan by asking students to use various pen functions as they progress through the story.



## Home/School Loan Agreement

An important element of the use of the Scanning Pens is to let it be seen as a routine way of supporting learning both at school and at home.

In the Appendix you will find a sample technology agreement and a sample letter for families and caregivers to review together.

## Train the Trainer Model

Scanning Pens supports this popular model for coaching new trainers. Our Education Department offers training and professional learning so that less experienced staff can become proficient at supporting fellow staff members.

Scanning Pens can help you prepare teachers, coaches, specialists, and instructors to present information effectively, respond to questions, and lead activities. Staff can turn over unexpectedly. Having skilled internal trainers is a vital part of successful support for assistive technology.

# UNDERSTAND

Qualitative data can be collected in many ways from a variety of stakeholders. These simple surveys allow for the observation of literacy patterns over time.

Staff can create ways for students to share their experience using the Scanning Pen through:

- Demonstration and how-to videos
- Student made posters and flyers
- Student made instructional videos
- Video testimonials
- Student experts or mentors who are available to help guide other students

Scanning Pens has information gathering forms available for schools and districts. Please see the Appendix for more information about:

- Implementation Checklist
- Usability Checklist
- Dyslexia in the Classroom Reflective Tool
- Implementation Support
- Literacy Information Form

This cycle of reporting will inform teachers and the school about who is succeeding with the use of the ReaderPen™ and where potential issues may occur. Surveys support conversations and promote consistent use of the technology school or district wide.





# PREPARE AND DELIVER

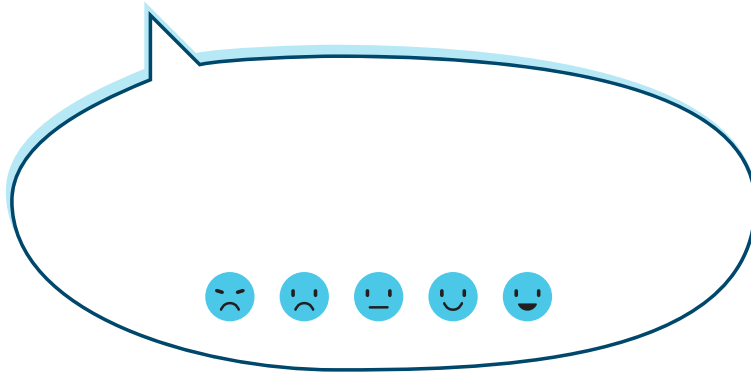
The Student Point of View form (pictured) is part of a qualitative feedback cycle that provides support for transition and information sharing. This survey is in the Appendix.

## STUDENT POINT OF VIEW

Name: \_\_\_\_\_

Write your thoughts or circle words you agree with.

### 1. Without reading support I feel...

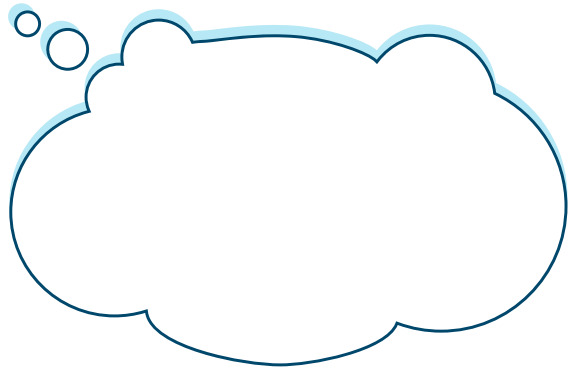


- Angry
- Overwhelmed
- Confused
- Sad
- Tired
- Frustrated
- Left behind

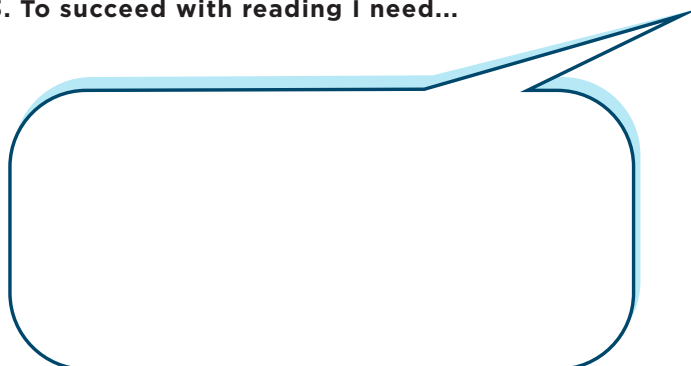


### 2. With a ReaderPen™ I can...

- Be independent
- Keep up
- Feel equal
- Enjoy reading
- Understand more



### 3. To succeed with reading I need...



- Brain breaks
- Your patience
- Encouragement
- Extra time

# REVIEW AND COLLECT DATA

## School Reporting

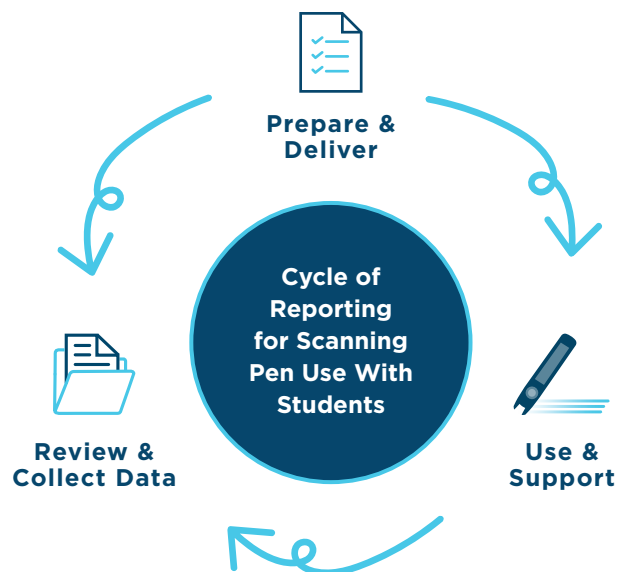
At the beginning of Scanning Pen expansion in a school or district discuss the impact the Scanning Pen will have on student engagement, equity of access, and ability to learn independently. The student and teacher surveys in the Appendix can help generate qualitative data.

District leaders can ask for feedback from schools. Teachers and schools can share the qualitative data generated from relevant surveys and questionnaires. Discuss how the team can measure reading improvement.

The questions below help you consider key aspects of incorporating assistive technology into your school or district plan.

- What are the changes and expectations associated with the use of a Scanning Pen?
- What is the timeline for continued expansion?
- Who is making decisions about Scanning Pen implementation?
- How will these efforts be managed at the school level?
- What models or trials best exemplify the direction we are heading?
- What is the most important information to provide first and to whom?
- How can the district monitor and ensure that all educators and school leaders receive the appropriate message?
- What pre-existing newsletters, online communities, or meeting routines could be used to support this message?
- What communication channels allow for feedback and troubleshooting so that the district can monitor success and intervene with problems?

## CYCLE OF REPORTING



# SUMMARY

The first and best way to improve literacy outcomes is through high quality instruction and intervention. Educators at all levels and in a variety of roles strive to support literacy outcomes for struggling students.

At the same time, providing access to paper-based print with the use of a proven accommodation for text-to-speech (TTS) provides further support, differentiation, and equity of access for students striving to keep pace with their peers.

The reality is that remediation and accommodation can work hand-in-hand, allowing students with dyslexia to improve their literacy skills while remaining “equal participants in school-based learning experiences.” (*Puckett & O’Bannon, 2012, p. 199*)

Portable TTS tools like a ReaderPen™ can be included in 504 plans, Individual Education Plans (IEP), special education students who benefit from inclusion practices, and informally used for students with unique literacy demands like English learners.

AT can provide the independence that will motivate them to engage with written language, even when it is difficult for them to do so. (*Svensson et al., 2019*)

Finally, learning to use assistive technology in class and at home requires time, training, and lots of opportunities to practice. Scanning Pens can help with training, support, and coaching so that students, staff, and families experience success and improved literacy outcomes when using a ReaderPen™.

Our goal is to ensure that equitable access to print is available to all who are striving to become proficient readers, outstanding students, and lifelong learners.

While it is important for students with dyslexia to ultimately gain autonomy in their use of AT, they will have a hard time reaching a maximum level of independence without guidance from their teachers and parents. (*Nordström et al., 2018*)

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# SAMPLE LETTER TO TEACHERS AND STAFF

*Use this letter to communicate with teachers and instructional aides about the benefits of using the ReaderPen™ both at school and at home.*

---

Our school will work to expand the use of the ReaderPen™ assistive technology for portable text-to-speech support.

Please encourage students to use the ReaderPen™ if they are striving readers, learners with dyslexia, English language learners, or students with 504 or IEP plans for reading.

We expect students to build confidence and independence with print-based reading activities. Students can use the ReaderPen™ with many types of paper-based print in all content areas.

A form entitled “Student Point of View” is available to help you determine how the ReaderPen™ supports students with:

- reading
- time on task
- confidence
- levels of anxiety
- feelings of success

Students are encouraged to use the pen while at school and at home. A technology school-to-home agreement is included in the Appendix or use the one provided by your site or administrator.

Support and training videos are available on the Scanning Pens YouTube channel.

During the implementation and expanded use of ReaderPens you will have an opportunity to reflect and discuss the impact of using ReaderPens with students.



Sincerely,

# SAMPLE LETTER TO PARENTS AND GUARDIANS

*Use this letter to communicate with parents and guardians about the benefits of using the ReaderPen™ both at school and at home.*

---

Dear Parent or Guardian,

We use many tools at school to help support learning. Your child will be participating in the use of assistive technology called the ReaderPen™ to help her/him when reading print-based words and stories.

The Scanning Pen is a portable text-to-speech device that your child can use at school and at home. The Scanning Pen can help when reading sentences or difficult words in books or homework packets. It can read, translate, provide definitions of words, and more.

Your child will receive training and support using the Scanning Pen while at school. At home, please encourage use of the Scanning Pen with homework, math word problems, definitions of unknown words, or anything your child feels will support reading.

We hope this pilot project provides a tool that fosters your child's engagement, confidence, and independence with reading related tasks.

Please contact your child's teacher if you have questions. You can learn more about Scanning Pens by visiting this website: [www.scanningpens.com](http://www.scanningpens.com).

Sincerely,

# FREQUENTLY ASKED QUESTIONS

## Q: How does the 30-day trial work for schools?

A: Please go to [www.scanningpens.com](http://www.scanningpens.com) and click Request Trial on the drop-down tab. Then select School. We will then process an order in our system for the trial pen which will be dispatched from our warehouse within 2-3 days. You will receive an invoice shortly after dispatch, but this is not a commitment to purchase. If the trial is successful, then please process the invoice as normal. If you wish to return the pen, please contact us and we will send Instructions.



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## Q: Can I make a purchase with a purchase order?

A: Yes schools, universities, and colleges can purchase with a PO. Please email a copy of the Purchase Order to [usorders@scanningpens.com](mailto:usorders@scanningpens.com). We will process the order and quote the PO number. You will then be invoiced per usual. If you take advantage of the 30 day trial, you can also create a PO in your system and sent it to us. Your invoice for the trial pen quotes the correct PO number which helps your finance department process payment if the trial is successful.

---

## Q: Can I receive a quote?

A: Yes, we can provide a quote. Please email [usorders@scanningpens.com](mailto:usorders@scanningpens.com) and we will complete or contact us via live chat on the website, [www.scanningpens.com](http://www.scanningpens.com)

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## Q: How long will it take to receive my order?

A: Orders are usually delivered within 3-5 days after being dispatched from our warehouse.

---

## Q: How do I use the pen to scan?

A: Make sure the pen left/right hand setting is properly set. When the pen touches paper the trigger is activated, and the scanning light comes on. Ensure you hold the pen at a 75-degree angle on the paper. Starting just to the left of the word or sentence you want to scan, slide the pen along the text line. When you lift the pen, the text will be read aloud.

---

## Q: What is the difference between the ReaderPen™ and the ExamReader™?

A: In simple terms the ReaderPen™ (the white pen) scans printed text, reads text aloud or via headphones, and stores what it scans. Scanned text can be stored as a text file or be inserted into other documents. The ReaderPen™ also has a voice recorder and a dictionary function that includes English, French and Spanish. The ExamReader™ (the orange pen) is a pen that scans printed text and reads aloud or via headphones. The key difference is that the ExamReader™ does not store any content.

# FREQUENTLY ASKED QUESTIONS

## Q: What training is available to help us understand the Scanning Pen Products?

A: Scanning Pens offers flexible training options in person or online. Visit our YouTube channel for instructional videos. Or, as your regional Business Development Manager to help set up training.




## Q: What do I do if the Scanning Pen is faulty?

A: If the pen is not working properly you have several options.

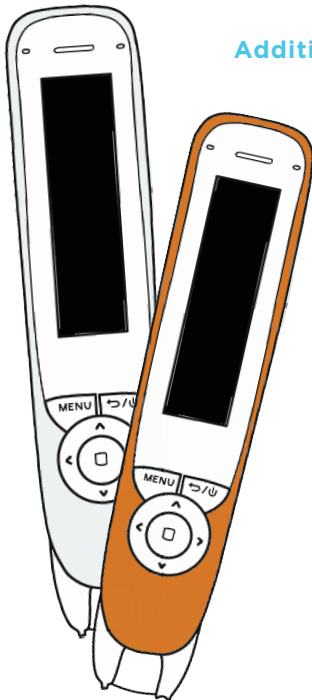
 Use the Live Chat feature at: [www.scanningpens.com](http://www.scanningpens.com)

 Email us at: [ussupport@scanningpens.com](mailto:ussupport@scanningpens.com)

 Call us at: **1-727-316-8101**

If the pen is faulty then we instruct you how to return the pen. When we receive the pen we will test the pen and send a replacement if a fault is found.

Additional FAQs can be found on our website, [FAQs | Support | Scanning Pens Inc.](#)





# SAMPLE TECHNOLOGY USE AGREEMENT

(Adapted from Midway Texas USD; [www.midwayisd.org/Page/19560](http://www.midwayisd.org/Page/19560))

## DISTRICT/SCHOOL

With this educational opportunity comes responsibility. It is important that you and your parent read the Student Responsible Use Agreement, ask questions if you need help understanding them, and sign the form. Inappropriate use of the District's technology resources may result in revocation or suspension of the privilege to use these resources, as well as other disciplinary or legal action, in accordance with the Student Code of Conduct and applicable laws.

"DISTRICT/SCHOOL" provides computer, network, e-mail, and Internet access to individuals as part of the learning environment. The use of these resources is a privilege and not a right. While these systems have the power to deliver a vast number of resources to classrooms and enhance education, their effectiveness depends on the responsible and ethical use by every individual.

### Policies

Users of the "DISTRICT/SCHOOL" network are required to adhere to state and federal law as well as board policy. The following Student Responsible Use Agreement is based on district policy and regulations. For more information, refer to the following laws and "DISTRICT/SCHOOL" documents.

- Federal and state mandates including the Family Education Rights and Privacy Act (FERPA), the Children's Internet Protection Act (CIPA), the Children's Online Privacy Protection Act (COPPA), the Individuals with Disabilities Act (IDEA), and the Health Insurance Portability and Accountability Act (HIPAA)
- Student Code of Conduct, Student Device Agreement
- Board Policy CQ (Technology Resources)
- Board Policy FNCE (Personal Telecommunications/Electronic Devices)
- Board Policy FFH (Freedom From Discrimination, Harassment, and Retaliation)
- Board Policy FFI (Freedom From Bullying)
- Other Associated Board Policies

If a violation of any of the policies, including this Student Responsible Use Agreement occurs, you must immediately report to a supervising teacher or district technology representative any known violation of the policies and guidelines. You must also report any requests for personally identifiable information (name, address, phone number, age, sex, race, etc.) or contact from unknown individuals, as well as any content or communication that is abusive, obscene, pornographic, sexually oriented, threatening, harassing, damaging to another's reputation, or illegal.

The District permits use of personal telecommunications or other electronic devices by students for instructional purposes while on campus OR AT HOME only as authorized by your teacher. When using the device for instructional purposes while on campus, you must join the District wi-fi network and are prohibited from using personal wireless service. When not using the device for instructional purposes while on campus OR AT HOME, you must follow the rules and guidelines for non-instructional use as published in the student handbook.

## Student Responsibilities

1. **I AM RESPONSIBLE FOR USING SCHOOL-ISSUED TECHNOLOGY DEVICES PRIMARILY FOR EDUCATIONAL PURPOSES.** I understand that Internet, bandwidth, and email usage at school should be related to school assignments during class time. I understand that websites, content, and media should be properly cited with respect to copyright. I will also report any suspicious behavior or other misuse of technology to my teacher or other campus administrator.
2. **I AM RESPONSIBLE FOR USING MY PERSONAL DEVICE ACCORDING TO DISTRICT GUIDELINES AND IN AN ETHICAL MANNER.** I understand that personal devices must remain turned off during all testing and cannot be used in the classroom unless they are approved by the teacher for instructional purposes.
3. **I AM RESPONSIBLE FOR MAINTAINING MY DISTRICT ISSUED DEVICES AND ACCOUNTS.** I understand that I will be provided network and email accounts and that I must not share this information with anyone. I will only use my school email address for teacher directed accounts. I will not allow others to use my account name and password. I will also not download or sign up for any online resource or application without prior approval from my teacher or other District administrator.
4. **I AM RESPONSIBLE FOR MY PERSONAL INFORMATION.** I understand I must always keep my personal information and the personal information of others private. I know this includes names, ID numbers, addresses, photographs, or any other personally identifiable or private information.

## Inappropriate and Irresponsible Use

The following are examples of inappropriate and irresponsible use of technology resources.

1. Using any device or technology to copy or capture an image or the content of any District materials (such as tests or exams) without permission of a teacher or administrator
2. Making, participating in the making of, transmitting to another via an electronic device, or posting to the Internet a digital, video, or audio recording or image of an actual or simulated act that involves a crime or conduct prohibited by the Student Code of Conduct
3. Using any device or technology to record the voice or image of another in any way that disrupts the educational environment, invades the privacy of others, or without the prior consent of the individual being recorded
4. Using any device or technology to record the voice or image of another to take, disseminate, transfer, circulate, exhibit, present, or share audio, images, video, or photos that reveal private parts of the body that are normally covered by clothing (aka sexting)
5. Using email, websites, or electronic devices to engage in or encourage illegal conduct, violations of the Student Code of Conduct, or to threaten school safety
6. Storing non-educational files on school provided resources

## Digital Citizenship

Technology allows unlimited resources to enhance our education with vast collaborative partnerships. Learning to be a good digital citizen allows us to utilize technology in safe, responsible, and productive ways.

# REFLECTION & SURVEY TOOL

## REFLECTION TOOL FOR DYSLLEXIA IN THE CLASSROOM

Name of School:

Date:

This checklist should be completed by a team that includes members of leadership, teaching staff, and support staff.

Names:

Title/Location:

<b>School Policy and Practice</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
All teaching staff are familiar with the district or state dyslexia guidelines.			
The leadership teams demonstrate a commitment to supporting learners with characteristics of dyslexia.			
The school or district development plan includes a focus on developing, establishing, and enhancing dyslexia friendly schools.			
Leadership time is set aside to review the above policy and practice on a regular basis.			

<b>Professional Learning</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
Staff professional learning is offered that provides an overview of dyslexia. This includes identification and intervention.			
Staff professional learning is available to explicitly support with dyslexia friendly practices in classrooms and schools.			

<b>Professional Learning</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
There is a stated goal to be dyslexia friendly. This goal is made evident for new and existing staff.			
Training opportunities include updates on assistive and adaptive technologies and learning support tools that are available for students to use.			
Schools are provided with training and materials needed to host dyslexia simulation events.			

<b>The Learning Environment</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
An emphasis is placed on the positive and open use of assistive and adaptive technologies in all classrooms.			
Students are encouraged to be independent learners through the use of technology.			
Provision for distanced learning that supports independent reading is in place.			
Tools that support personal organization, mind mapping, dictation, or decoding are available.			

<b>Assessment for Learning</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
Writing assessments for students with dyslexia are based on content rather than spelling accuracy.			
Accommodations for text to speech (TTS) are included where appropriate for 504 and special education students.			
Students use text to speech and other assistive technology tools on a regular basis as part of accommodations during classwork, homework, and tests.			
Staff members understand the process for securing tools to support neurodiverse learners, like speech therapy, occupational therapy, AT (assistive technology) evaluations, special education, and 504 plan services.			

<b>Social Emotional Learning</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
Students are taught about the nature of their difficulty where appropriate, including areas of strength and preferred learning accommodations.			
Students are involved in setting and reviewing targets and progress.			
Students are involved in identifying and implementing their own learning strategies.			
Students are encouraged to focus on strengths and achievements.			
The staff encourages students to feel confident about discussing their concerns.			

<b>Partnership with parents</b>	<b>Yes</b>	<b>No</b>	<b>Partially</b>
Parents are informed about assistive technology that is used in school. They are encouraged to use the same supports at home.			
It is recognized that students with dyslexia may have parents who also have dyslexia. Communication support is in place to facilitate information sharing.			
Resources exist to help parents understand dyslexia and to understand the instructional methods used to teach and support their child.			
Students are encouraged to focus on strengths and achievements.			
Parents are encouraged to express concerns as they occur and the school ensures that concerns are documented and supported.			

# REFLECTION TOOL FOR DYSLEXIA IN THE CLASSROOM

## SUMMARY OF REFLECTION

<b>Action Items</b>	
<b>Areas of strength:</b>	
1.	
2.	
3.	

<b>Action Items</b>	<b>Stakeholder</b>
<b>Areas for development:</b>	<b>Who is responsible?</b>
1.	
2.	
3.	

**Open Response Questions**

**Current Use of Scanning Pens:**

Are you currently using ReaderPens in your school?  
Where are they located? How are they stored? How many are in use?

Do you have a member of the team who is responsible for Scanning Pens in your school?  
Who are they? How are Scanning Pens assigned to students?

**Has your school chosen to take part in a Scanning Pens case study?  
Who would take overall responsibility for the project?**

Name & Role:

Email Address:

Contact Number:

**Please select staff members who would be involved in the day to day implementation of a case study project.**

Name & Role:

Email Address:

Contact Number:

# STUDENT POINT OF VIEW

Name: \_\_\_\_\_

Write your thoughts or circle words you agree with.

## 1. Without reading support I feel...

- Angry
- Overwhelmed
- Confused
- Sad
- Tired
- Frustrated
- Left behind

## 2. With a ReaderPen™ I can...



- Be independent
- Keep up
- Feel equal
- Enjoy reading
- Understand more

## 3. To succeed with reading I need...

- Brain breaks
- Your patience
- Encouragement
- Extra time





# ASSISTIVE TECHNOLOGY CONSIDERATION: STUDENT, ENVIRONMENT, TASKS AND TOOLS (SETT)

An Assistive Technology Device is any item, piece of equipment, or product system that is used to increase, maintain, or improve the functional capabilities of a child with a disability. An Assistive Technology Service is any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. IDEA, 2004 P.L. 108-446, Section 602

Student: \_\_\_\_\_ Grade/Age: \_\_\_\_\_ School Building: \_\_\_\_\_ District: \_\_\_\_\_  
 Contact/Case Manager: \_\_\_\_\_ Email: \_\_\_\_\_ Date: \_\_\_\_\_  
 Team Participants (Names/Titles): \_\_\_\_\_

**AT Consideration:** Select the instructional or access areas in which the student is experiencing difficulty completing daily tasks and/or goals.

Y N Written Expression	Y N Spelling	Y N Reading	Y N Math
Y N Study/Organizational Skills	Y N Listening	Y N Communication	Y N Seating/Positioning
Y N Daily Living Activities	Y N Recreation and Leisure	Y N Vision	Y N Mobility
Y N Environmental Control	Y N Hearing	Y N Pre-Vocational/Vocational	Y N Other - Specify:

If yes (and linked to an IEP goal, identify that goal(s): \_\_\_\_\_

STUDENT: What are the students needs?	ENVIRONMENT: Classes and situations where help is needed.	TASKS: What are the tasks that the student needs to be able to accomplish daily?	TOOLS: (Complete Last) What AT tools or services will address these tasks?

**Conclusion:** Circle one of the three boxes.

Student's needs are being met WITHOUT assistive technology=> "considered but not needed" on IEP	Student's needs are being met WITH assistive technology=>List items and related and support services on IEP	AT concerns continue to exist => Further assessment necessary
---	---	---

## THESE ARE THE QUESTIONS A TEAM SHOULD ASK ITSELF WHEN CONSIDERING AT FOR A STUDENT.

### Concerning the STUDENT

- What does the Student need to do?
- What are the Student's special needs?
- What are the Student's current abilities?

### The Student's learning ENVIRONMENTS

- What materials and equipment are currently available in the environment?
- What is the physical arrangement? Are there special concerns?
- What is the instructional arrangement? Are there likely to be changes?
- What supports are available to the student?
- What resources are available to the people supporting the student?

### The TASKS the student is being asked to complete

- What naturally occurring activities take place in the environment?
- What is everyone else doing?
- What activities support the student's curricular goals?
- What are the critical elements of the activities?
- How might the activities be modified to accommodate the student's special needs?
- How might technology support the student's active participation in those activities?

### The TOOLS the student has or may need to complete the tasks

- What no tech, low tech, mid tech and high tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments?
- What strategies might be used to invite increased student performance?
- How might these tools be tried out with the student in the customary environments in which they will be used?
- Does the student require accessible, alternate format versions of printed textbooks and printed core materials?

# WATI ASSISTIVE TECHNOLOGY ASSESSMENT CHECKLIST

## **SEATING, POSITIONING AND MOBILITY**

- Standard seat/workstation at correct height and depth
- Modifications to standard seat or desk
- Alternative chairs
- Adapted/alternate chair, sidelyer, stander
- Custom fitted wheelchair or insert

## **MOBILITY**

- Walking devices - crutches/walker
- Grab bars and rails
- Manual wheelchair
- Powered scooter, toy car or cart
- Powered wheelchair w/ joystick or other control
- Adapted vehicle for driving

## **COMMUNICATION**

- Concrete Representation
- Simple speech generating device
- Speech generating device with levels
- Speech generating device with icon sequencing
- Speech generating device with dynamic display
- Text based device with speech synthesis

## **COMPUTER ACCESS**

- Positioning of student
- Standard Keyboard/Mouse with accessibility/access features built into the operating system
- Standard Keyboard/Mouse with Adaptations
- Rate Enhancement
- Alternate Keyboard/Mouse
- Onscreen keyboard
- Voice recognition software
- Eye Gaze
- Morse Code
- Switch Access

## **MOTOR ASPECTS OF WRITING**

- Environmental and seating adaptations
- Variety of pens/pencils
- Adapted pen/pencil
- Writing templates
- Prewritten words/phrases
- Label maker
- Portable word processor
- Computer with accessibility features
- Computer with word processing software
- Alternative keyboards
- Computer with scanner
- Computer with word prediction
- Computer with voice recognition software

## **COMPOSITION OF WRITTEN MATERIAL**

- Picture Supports to write from/about
  - Pictures with words
  - Words Cards/Word Banks/Word Wall
  - Pocket Dictionary/ hesaurus
  - Written templates and Guides
  - Portable, talking spellcheckers/dictionary/thesaurus
  - Word processing software
  - Word prediction software
  - Digital templates
  - Abbreviation expansion
  - Word processing with digital support
  - Talking word processing
  - Multimedia software with alternative expression of ideas
  - Tools for citations and formats
  - Voice recognition software
- ## **READING**
- Book adapted for access
  - Low-tech modifications to text
  - Handheld device to read individual words
  - Use of pictures/symbols with text
  - Electronic text
  - Modified electronic text
  - Text reader
  - Scanner with OCR and text reader
  - Text reader with study skill support

## **MATHEMATICS**

- Math manipulatives
- Low-tech physical access
- Abacus/math-line
- Adapted math paper
- Adapted math tools
- Math "smart chart"
- Math scripts
- Math tool bars
- On-screen calculator
- Alternative keyboards/portable math processors
- Virtual manipulatives
- Math software and web simulations
- Voice recognition math software

## **SELF-MANAGEMENT**

- Sensory regulation tools
- Movement and deep pressure tools
- Fidgets
- Auditory Reminders
- Visuals

## **INFORMATION MANAGEMENT**

- Tabs
- Sticky Notes
- Highlighters
- Key Words
- Study Guides

# WATI ASSISTIVE TECHNOLOGY ASSESSMENT CHECKLIST

- \_ Task Analysis
- \_ Digital Highlighter and Sticky Notes
- \_ Handheld Scanner/electronic extraction
- \_ Study grid generators/grading rubrics
- \_ Online search tools
- \_ Online webtracker
- \_ Online sorting file tools
- \_ Digital Graphic Organizer
- \_ Online manipulatives, interactive, tutorials, animations

## **TIME MANAGEMENT**

- \_ Checklist
- \_ Paper planners/Calendars
- \_ Visual Schedules
- \_ Portable, adapted timekeepers
- \_ Electronic reminders
- \_ Digital planners
- \_ Web-based planning tools

## **MATERIAL MANAGEMENT**

- \_ Low-tech organizers
- \_ Checklists
- \_ Container System
- \_ Coding System
- \_ Electronic filing and storage
- \_ Portable electronic storage
- \_ Computer-based tools
- \_ Tactile measuring devices
- \_ Abacus
- \_ Talking calculator

- \_ Models or 2D and 3D geometric shapes
- \_ Tiger embossed, PIAF Tactile representation

## **VISION - COMPUTER ACCESS**

- \_ Color scheme
- \_ Large operating system features
- \_ Built-in magnification
- \_ Fully-featured magnification
- \_ Screen reader
- \_ Screen reader with Braille device

## **VISION - READING**

- \_ Glasses
- \_ Color Filter
- \_ Slant-board
- \_ Large print
- \_ Optical Magnifier
- \_ Electronic Magnifier
- \_ CCTV
- \_ Monocular
- \_ CCTV with distance camera
- \_ Audio text
- \_ Computer-based reading software
- \_ Electronic Braille note-taker

## **VISION - MATHEMATICS**

- \_ Large print measuring tools
- \_ Large key calculator
- \_ Tactile measuring

## **VISION - WRITING**

- \_ High contrast pen
- \_ Portable word processing device
- \_ Typing with audio support
- \_ Braillewriter
- \_ Typing with Braille support
- \_ Electronic Braille note taker
- \_ Voice recognition

## **VISION - MOBILITY**

- \_ Cane
- \_ Monocular
- \_ Braille/Talking compass
- \_ Electronic travel device
- \_ GPS device

## **VISIONS - PICTORIAL INFORMATION**

- \_ Enlarged format
- \_ CCTV
- \_ Models or objects
- \_ Tactile graphics
- \_ Tactile-audio graphics

## **VISION - NOTE TAKING**

- \_ Slate and stylus
- \_ Tape or digital recording device
- \_ Computer-based recording software
- \_ Electronic Braille note taker

## **HEARING - TECHNOLOGY**

- \_ FM
- \_ Infrared
- \_ Induction Loop
- \_ 1:1 Communicators
- \_ Personal amplification

## **HEARING - COMMUNICATION**

- \_ Telecommunication supports
- \_ Closed captioning
- \_ Person to person
- \_ Classroom/group activities
- \_ Voice to text/sign
- \_ Real-time captioning

# UDL GUIDELINES CHECKLIST

## Principle I. Provide Multiple Means of Representation

### Guideline 1: Provide options for perception

*Checkpoint 1.1 - Offer ways of customizing the display of information:*

Display information in a flexible format so that the following perceptual features can be varied:

- The size of text, images, graphs, tables, or other visual content
- The contrast between background and text or image
- The color used for information or emphasis
- The volume or rate of speech or sound
- The speed or timing of video, animation, sound, simulations, etc.
- The layout of visual or other elements
- The font used for print materials

*Checkpoint 1.2 - Offer alternatives for auditory information*

- Use text equivalents in the form of captions or automated speech-to-text (voice recognition) for spoken language
- Provide visual diagrams, charts, notations of music or sound
- Provide written transcripts for videos or auditory clips
- Provide American Sign Language (ASL) for spoken English
- Use visual analogues to represent emphasis and prosody (e.g., emoticons, symbols, or images)
- Provide visual or tactile (e.g., vibrations) equivalents for sound effects or alerts
- Provide visual and/or emotional description for musical interpretation

*Checkpoint 1.3 - Offer alternatives for visual information*

- Provide descriptions (text or spoken) for all images, graphics, video, or animations
- Use touch equivalents (tactile graphics or objects of reference) for key visuals that represent concepts
- Provide physical objects and spatial models to convey perspective or interaction
- Provide auditory cues for key concepts and transitions in visual information
- Follow accessibility standards (NIMAS, DAISY, etc.) when creating digital text
- Allow for a competent aide, partner, or “intervener” to read text aloud
- Provide access to text-to-speech software

### Guideline 2: Provide options for language, mathematical expressions, and symbols

*Checkpoint 2.1 - Clarify vocabulary and symbols*

- Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners’ experience and prior knowledge
- Provide graphic symbols with alternative text descriptions
- Highlight how complex terms, expressions, or equations are composed of simpler words or symbols
- Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations)
- Embed support for unfamiliar references within the text (e.g., domain specific notation, lesser known properties and theorems, idioms, academic language, figurative language, mathematical language, jargon, archaic language, colloquialism, and dialect)

*Checkpoint 2.2 - Clarify syntax and structure*

- Clarify unfamiliar syntax (in language or in math formulas) or underlying structure (in diagrams, graphs, illustrations, extended expositions or narratives) through alternatives that:
  - Highlight structural relations or make them more explicit
  - Make connections to previously learned structures
  - Make relationships between elements explicit (e.g., highlighting the transition words in an essay, links between ideas in a concept map, etc.)

*Checkpoint 2.3 - Support decoding of text, mathematical notation, and symbols*

- Allow the use of Text-to-Speech
- Use automatic voicing with digital mathematical notation (Math ML)
- Use digital text with an accompanying human voice recording (e.g., Daisy Talking Books)
- Allow for flexibility and easy access to multiple representations of notation where appropriate (e.g., formulas, word problems, graphs)
- Offer clarification of notation through lists of key terms

*Checkpoint 2.4 - Promote understanding across languages*

- Make all key information in the dominant language (e.g., English) also available in first languages (e.g., Spanish) for learners with limited-English proficiency and in ASL for learners who are deaf
- Link key vocabulary words to definitions and pronunciations in both dominant and heritage languages
- Define domain-specific vocabulary (e.g., “map key” in social studies) using both domain-specific and common terms
- Provide electronic translation tools or links to multilingual glossaries on the web
- Embed visual, non-linguistic supports for vocabulary clarification (pictures, videos, etc)

*Checkpoint 2.5 - Illustrate through multiple media*

- Present key concepts in one form of symbolic representation (e.g., an expository text or a math equation) with an alternative form (e.g., an illustration, dance/movement, diagram, table, model, video, comic strip, storyboard, photograph, animation, physical or virtual manipulative)
- Make explicit links between information provided in texts and any accompanying representation of that information in illustrations, equations, charts, or diagrams

**Guideline 3: Provide options for comprehension**

*Checkpoint 3.1 - Activate or supply background knowledge*

- Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)
- Use advanced organizers (e.g., KWL methods, concept maps)
- Pre-teach critical prerequisite concepts through demonstration or models
- Bridge concepts with relevant analogies and metaphors
- Make explicit cross-curricular connections (e.g., teaching literacy strategies in the social studies classroom)

*Checkpoint 3.2 - Highlight patterns, critical features, big ideas, and relationships*

- Highlight or emphasize key elements in text, graphics, diagrams, formulas
- Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships
- Use multiple examples and non-examples to emphasize critical features
- Use cues and prompts to draw attention to critical features
- Highlight previously learned skills that can be used to solve unfamiliar problems



### *Checkpoint 3.3 - Guide information processing, visualization, and manipulation*

- Give explicit prompts for each step in a sequential process
- Provide options for organizational methods and approaches (tables and algorithms for processing mathematical operations)
- Provide interactive models that guide exploration and new understandings
- Introduce graduated scaffolds that support information processing strategies
- Provide multiple entry points to a lesson and optional pathways through content (e.g., exploring big ideas through dramatic works, arts and literature, film and media)
- “Chunk” information into smaller elements
- Progressively release information (e.g., sequential highlighting)
- Remove unnecessary distractions unless they are essential to the instructional goal



### *Checkpoint 3.4 - Maximize transfer and generalization*

- Provide checklists, organizers, sticky notes, electronic reminders
- Prompt the use of mnemonic strategies and devices (e.g., visual imagery, paraphrasing strategies, method of loci, etc.)
- Incorporate explicit opportunities for review and practice
- Provide templates, graphic organizers, concept maps to support note-taking
- Provide scaffolds that connect new information to prior knowledge (e.g., word webs, half-full concept maps)
- Embed new ideas in familiar ideas and contexts (e.g., use of analogy, metaphor, drama, music, film, etc.)
- Provide explicit, supported opportunities to generalize learning to new situations (e.g., different types of problems that can be solved with linear equations, using physics principles to build a playground)
- Offer opportunities over time to revisit key ideas and linkages between ideas

## **Principle II. Provide Multiple Means of Action and Expression**

### **Guideline 4: Provide options for physical action**



#### *Checkpoint 4.1 - Vary the methods for response and navigation*

- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically responding or indicating selections (e.g., alternatives to marking with pen and pencil, alternatives to mouse control)
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard



#### *Checkpoint 4.2 - Optimize access to tools and assistive technologies*

- Provide alternate keyboard commands for mouse action
- Build switch and scanning options for increased independent access and keyboard alternatives
- Provide access to alternative keyboards
- Customize overlays for touch screens and keyboards
- Select software that works seamlessly with keyboard alternatives and alt keys



## **Guideline 5: Provide options for expression and communication**

### *Checkpoint 5.1 - Use multiple media for communication*

- Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture or video
- Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks)
- Use social media and interactive web tools (e.g., discussion forums, chats, web design, annotation tools, storyboards, comic strips, animation presentations)
- Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, visual art, sculpture, or video
- Solve problems using a variety of strategies

### *Checkpoint 5.2 - Use multiple tools for construction and composition*

- Provide spellcheckers, grammar checkers, word prediction software
- Provide Text-To-Speech software (voice recognition), human dictation, recording
- Provide calculators, graphing calculators, geometric sketchpads, or pre-formatted graph paper
- Provide sentence starters or sentence strips
- Use story webs, outlining tools, or concept mapping tools
- Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software
- Provide virtual or concrete mathematics manipulatives (e.g., base-10 blocks, algebra blocks)
- Use web applications (e.g., wikis, animation, presentation)

### *Checkpoint 5.3 - Build fluencies with graduated levels of support for practice and performance*

- Provide differentiated models to emulate (i.e. models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc.)
- Provide differentiated mentors (i.e., teachers/tutors who use different approaches to motivate, guide, feedback or inform)
- Provide scaffolds that can be gradually released with increasing independence and skills (e.g., embedded into digital reading and writing software)
- Provide differentiated feedback (e.g., feedback that is accessible because it can be customized to individual learners)
- Provide multiple examples of novel solutions to authentic problems

## **Guideline 6: Provide options for executive functions**

### *Checkpoint 6.1 - Guide appropriate goal-setting*

- Provide prompts and scaffolds to estimate effort, resources, and difficulty
- Provide models or examples of the process and product of goal-setting
- Provide guides and checklists for scaffolding goal-setting
- Post goals, objectives, and schedules in an obvious place

### *Checkpoint 6.2 - Support planning and strategy development*

- Embed prompts to “stop and think” before acting as well as adequate space
- Embed prompts to “show and explain your work” (e.g., portfolio review, art critiques)
- Provide checklists and project planning templates for understanding the problem, setting up prioritization, sequences, and schedules of steps
- Embed coaches or mentors that model think-alouds of the process
- Provide guides for breaking long-term goals into reachable short-term objectives



*Checkpoint 6.3 - Facilitate managing information and resources*

- Provide graphic organizers and templates for data collection and organizing information
- Embed prompts for categorizing and systematizing
- Provide checklists and guides for note-taking



*Checkpoint 6.4 - Enhance capacity for monitoring progress*

- Ask questions to guide self-monitoring and reflection
- Show representations of progress (e.g., before and after photos, graphs and charts showing progress over time, process portfolios)
- Prompt learners to identify the type of feedback or advice that they are seeking
- Use templates that guide self-reflection on quality and completeness
- Provide differentiated models of self-assessment strategies (e.g., role-playing, video reviews, peer feedback)
- Use of assessment checklists, scoring rubrics, and multiple examples of annotated student work/performance examples

### **Principle III. Provide Multiple Means of Engagement**

#### **Guideline 7: Provide options for recruiting interest**



*Checkpoint 7.1 - Optimize individual choice and autonomy*

- Provide learners with as much discretion and autonomy as possible by providing choices in such things as:
  - The level of perceived challenge
  - The type of rewards or recognition available
  - The context or content used for practicing and assessing skills
  - The tools used for information gathering or production
  - The color, design, or graphics of layouts, etc.
  - The sequence or timing for completion of subcomponents of tasks
- Allow learners to participate in the design of classroom activities and academic tasks
- Involve learners, where and whenever possible, in setting their own personal academic and behavioral goals



*Checkpoint 7.2 - Optimize relevance, value, and authenticity*

- Vary activities and sources of information so that they can be:
  - Personalized and contextualized to learners' lives
  - Culturally relevant and responsive
  - Socially relevant to age and ability appropriate
  - Appropriate for different racial, cultural, ethnic, and gender groups
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Invite personal response, evaluation and self-reflection to content and activities
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

*Checkpoint 7.3 - Minimize threats and distractions*

- Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
  - Charts, calendars, schedules, visible timers, cues, etc. that can increase the predictability of daily activities and transitions
  - Creation of class routines
  - Alerts and previews that can help learners anticipate and prepare for changes in activities, schedules, and novel events
  - Options that can, in contrast to the above, maximize the unexpected, surprising, or novel in highly routinized activities
- Vary the level of sensory stimulation
  - Variation in the presence of background noise or visual stimulation, noise buffers, number of features or items presented at a time
  - Variation in pace of work, length of work sessions, availability of breaks or time-outs, or timing or sequence of activities
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation Involve all participants in whole class discussions

**Guideline 8: Provide options for sustaining effort and persistence**

*Checkpoint 8.1 - Heighten salience of goals and objectives*

- Prompt or require learners to explicitly formulate or restate goal
- Display the goal in multiple ways
- Encourage division of long-term goals into short-term objectives
- Demonstrate the use of hand-held or computer-based scheduling tools
- Use prompts or scaffolds for visualizing desired outcome
- Engage learners in assessment discussions of what constitutes excellence and generate relevant examples that connect to their cultural background and interests

*Checkpoint 8.2 - Vary demands and resources to optimize challenge*

- Differentiate the degree of difficulty or complexity within which core activities can be completed
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

*Checkpoint 8.3 - Foster collaboration and community*

- Create cooperative learning groups with clear goals, roles, and responsibilities
- Create school-wide programs of positive behavior support with differentiated objectives and supports
- Provide prompts that guide learners in when and how to ask peers and/or teachers for help
- Encourage and support opportunities for peer interactions and supports (e.g., peer-tutors)
- Construct communities of learners engaged in common interests or activities
- Create expectations for group work (e.g., rubrics, norms, etc.)

*Checkpoint 8.4 - Increase mastery-oriented feedback*

- Provide feedback that encourages perseverance, focuses on development of efficacy and self-awareness, and encourages the use of specific supports and strategies in the face of challenge
- Provide feedback that emphasizes effort, improvement, and achieving a standard rather than on relative performance
- Provide feedback that is frequent, timely, and specific
- Provide feedback that is substantive and informative rather than comparative or competitive
- Provide feedback that models how to incorporate evaluation, including identifying patterns of errors and wrong answers, into positive strategies for future success

**Guideline 9: Provide options for self-regulation**

*Checkpoint 9.1 - Promote expectations and beliefs that optimize motivation*

- Provide prompts, reminders, guides, rubrics, checklists that focus on:
  - Self-regulatory goals like reducing the frequency of aggressive outbursts in response to frustration
  - Increasing the length of on-task orientation in the face of distractions
  - Elevating the frequency of self-reflection and self-reinforcements
- Provide coaches, mentors, or agents that model the process of setting personally appropriate goals that take into account both strengths and weaknesses
- Support activities that encourage self-reflection and identification of personal goals

*Checkpoint 9.2 - Facilitate personal coping skills and strategies*

- Provide differentiated models, scaffolds and feedback for:
  - Managing frustration
  - Seeking external emotional support
  - Developing internal controls and coping skills
  - Appropriately handling subject specific phobias and judgments of “natural” aptitude (e.g., “how can I improve on the areas I am struggling in?” rather than “I am not good at math”) Use real life situations or simulations to demonstrate coping skills

*Checkpoint 9.3 - Develop self-assessment and reflection*

- Offer devices, aids, or charts to assist individuals in learning to collect, chart and display data from their own behavior for the purpose of monitoring changes in those behaviors
- Use activities that include a means by which learners get feedback and have access to alternative scaffolds (e.g., charts, templates, feedback displays) that support understanding progress in a manner that is understandable and timely

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