

Digitability™

**Preparing students
with cognitive disabilities
for our tech-driven workplace.**

digitability.com





Examples of Differentiated Instruction Resources for Special Education



STAGE 1: INTERNET NAVIGATOR

SUPPLEMENTAL MATERIALS GUIDE

DIFFERENTIATED ACTIVITIES

We know that one size doesn't fit all!

The following strategies will help you differentiate the unit activities and provide a variety of tools to help learners achieve their objectives. Each lesson plan has differentiated supplemental materials and activities to assist you along the way.

<p>Internet Basics</p>	<p>Browser Basics</p>	<p>Search</p>	<p>Web Apps</p>
<p>Sharing</p>	<p>Connecting</p>	<p>Google Services</p>	<p>Popular Icons</p>

FIVE BASIC TYPES OF PROMPTS

For each of activity type listed above, you may need to use prompting to accommodate the needs and abilities of the learner. Prompts cue a learner to display the desired behavior.



VERBAL

Verbal prompts are words instructions or questions that direct a learner to engage in a target response. Verbal prompts should be simple and explicit. Verbal prompts will range from saying the entire word or phrase that you are trying to elicit from the learner, to providing only the first sound or syllable to cue the learner. We encourage you to use the vocabulary and language being taught in the learning modules to keep things consistent.



GESTURAL

Gestural prompts includes pointing to, looking at, motioning or nodding to indicate a correct response. These are easy to become dependent on when teaching a learner how to interact with a computer. We encourage you to use the vocabulary and language being taught in the learning modules to keep things consistent.



MODELING

You can act out of the target behavior or have the learner's peer act it out to encourage the learner to imitate. Modeling can be done in full or the behavior can be partially modeled. Modeling may also include verbal prompts.



POSITIONAL

Positional prompting involves arranging given materials so that the correct item is close to or in front of the learner. For example, if a task consists of picking a picture of an object from a group of three pictures, you might initially arrange the pictures so that the correct choice is directly in front of your learner, while the two incorrect choices are on the other side of the table. As your learner progresses, the other cards can be gradually moved closer until they are even with the correct choice.



PHYSICAL

Tactile prompting involves actually touching the child. A full physical prompt might involve moving the child through the entirety of the behavior (for example, moving his hand to select the right card from an array, and then moving it further to hand the card to you or someone else). A partial physical prompt might be just touching a hand or shoulder to get the child started on the behavior.

***** *It is important to establish a balance when using prompts. The goal is to have your learner complete the task independently and not develop a learned dependency.*

INCREASING ASSISTANCE

(LEAST TO MOST PROMPTS)

Depending on the needs of the learner, you may need to increase prompting. You may initially present the request without any prompting and then increase assistance until the learner displays the requested behavior. When increasing assistance remember to give the learner the opportunity to respond correctly by waiting a specific interval of time (often 5-10 seconds). This interval should remain constant during the instruction.

EXAMPLES

- The desired behavior is for the learner to: **“Click on the address bar.”**
The student does not respond within the specified time period of five (5) seconds.
- You provide a verbal prompt by asking a question: **“Where is the address bar?”**
The student does not respond within the specified time period of five (5) seconds.
- You provide an additional verbal prompt by giving a hint:
“The address bar is a long, white rectangle at the top of your browser.”
The student does not respond within the specified time period of five (5) seconds.
- You provide a gestural prompt by pointing to the address bar.
The student does not respond within the specified time period of five (5) seconds.
- You provide a physical prompt by guiding the learners hand over mouse and clicking on the address bar.

Prompts can be used in conjunction with each other. For example:

While providing a physical prompt of guiding the student’s hand over the mouse, you may also provide the verbal prompt, **“Click on the address bar.”**

OR

While providing a gestural prompt of pointing to the address bar, you may also provide the verbal prompt, **“The address bar is a long, white rectangle at the top of your browser window.”**

DECREASING ASSISTANCE

(MOST TO LEAST PROMPTS)

As your learner gains mastery of a task at a specific level of prompting, you can decrease assistance by delaying, fading or removing prompts. The rate and approach to decreasing assistance will depend on the needs of your student. The goal is to have your learner complete the task independently and not develop a learned dependency on any specific prompt.

REINFORCEMENT

Reinforcement is very important in increasing the desired behavior for your learner. Positive reinforcement is when you reward a learner for exhibiting a desired behavior that you want to encourage and maintain. Positive reinforcers are the rewards you give. These reinforcers are only effective if they are motivating the learner to repeat or increase the behavior.

In the Digitability learning system, learners receive a variety of positive reinforcers from verbal praise, “Congratulations! You unlocked the Internet badge!” to token reinforcers like our virtual badges.

Achievements made in the Digitability system can be supplemented with other reinforcers. For example, when a student earns their Master Badge (earned at the completion of a Unit) they can receive a tactile reinforcer in the form of a Digitability Master Badge sticker to go on their sticker chart. This allows the learner to track their progress. It also motivates learners to continue learning and of course, to unlock more badges! When implementing Digitability Supplemental Materials, be sure that you are positively reinforcing your learner’s achievements.

Some examples of positive reinforcement might include:

- verbal praise
- token reinforcement (tokens that can be redeemed for reward)
- preferred activity, objects and games
- time with a favorite adult or peer

 *A few things about positive reinforcement: You should provide an appropriate unit of reward for the expected unit of behavior.*

Remember, giving reinforcement after an exhibited behavior will increase the behavior. Be sure that you are positively reinforcing appropriate behaviors only.

Be sure to refer to this guide as you continue to implement the Digitability Supplemental Activities.

STRATEGIES ICON KEY



DIFFERENTIATION

Use this icon to see how you can differentiate student product and outcomes



POSITIVE REINFORCEMENT

Use this icon to build incentive programs using Digitability's Dollar Earnings Tracker



PRIOR KNOWLEDGE

Use this icon to help build and activate prior knowledge



IMMEDIATE FEEDBACK

Use this icon to give immediate feedback using the following formula:

[STUDENT NAME] + [THE BEHAVIOR] + [THE CONSEQUENCE] + [REPLACEMENT BEHAVIOR OR REINFORCEMENT]

POSITIVE: "Marcus, you raised your hand and answered the question correctly. You earned a dollar. Nice job!"

REDIRECTION: "Marcus, you just interrupted. You lost a dollar. Next time raise your hand to answer the question."



POSITIVE NARRATION

Use this icon to redirect students to follow expectations by spotlighting students that are following the given expectation

EXAMPLE: "I know that [student's name] is actively watching because he has his eyes on the screen and he is actively listening by giving a thumbs up when he hears the word web app."

////////////////////////////////////
PARENT COLLABORATION LETTER

Date: _____

Dear Families,

I am excited to welcome you to using Digitability! We have a very exciting year ahead of us and we are looking forward to working with you and your learner to make the rest of the year a successful one.

In our Digitability classrooms we will be stressing academic as well as non-academic skills to prepare the students for success this year and as they continue in the future.

Our particular style of teaching is based on three things: setting HIGH expectations for **EVERY** student, creating a mutually respectful classroom in which students can succeed, and last, but certainly not least, parental involvement. We believe that when parents and teachers work together, only success can come for the student.

In order to create a positive learning environment as well as develop our sense of responsibility, we implement a classroom economy with specific expectations for all students.

Students will have the opportunity to earn “money” based on behavior and academic performance. At the same time, they will lose “money” for norm violations. They will also be responsible for maintaining a budget and paying their “bills.” Every student in the classroom will work together to achieve our learning goals with few interruptions. Attached is an explanation of how students will earn their income. You will be able to review their earnings via their **My Digitability Progress** tracker.

High school is an important transition for our students as they become increasingly independent. Digital literacy is a necessary life skill for the 21st century learner. Digitability embeds digital literacy skills, collaboration, and real life work simulations in their curriculum to ensure that students are gaining mastery so they can find a quality job/career in their lives after high school.

To help your learner succeed with Digiability, there are 3 simple things that you can do at home:

- 1. My Digitability Progress:** After each unit, your student will complete a unit assessment that not only assesses their comprehension of Digitability’s curriculum, but also personalized goals outlined in your student’s IEP. Students will input their progress and dollar earned at the end of each unit. To better support your student, there is a column on this tracker that you will need to sign to make sure that the student is being held accountable for their progress.
- 2. Digitability Emails:** Digitability allows your student to have multiple emails assigned to their account so that you can check your student’s progress with the program in real time. These emails are sent anytime your student unlocks a badge, finishes a stage, and/or is having trouble on a specific lesson.
- 3. Ask Questions:** Have your learner explain what they learned in their Digitability lesson(s) each day. This simple routine will help them review and find holes in their comprehension.

We look forward to an exciting and productive year with you and your learner. If you have any questions, concerns or would like to schedule a time to meet, please feel free to contact me. You can call the school (school number), email me (teacher’s email) or leave a note in your learner’s **My Digitability Progress** tracker.

Thank you in advance for all of your support.

Sincerely,

Teacher name

Teacher position

Co-teacher’s name

Co-teacher’s position

EVIDENCE-BASED PRACTICES

For educators attempting to meet the diverse range of learning needs for students with cognitive disabilities, decisions regarding the types of interventions to implement in the classroom and the limited research on numerous strategies can be both misleading and confusing. It is important for teachers, administrators, and other school personnel to be knowledgeable about evidence-based approaches to adequately address the needs of their students. Here is a list of evidence-based practices used with Digitability.

Differentiation:

Adaptations that educators use to instruct a diverse group of students with diverse learning needs in the same environment.

Positive Reinforcement:

Presenting a motivating item to a person after the desired behavior is exhibited, making the behavior more likely to happen in the future.

Time Bound Activity:

A goal or task that is measured or restricted by time; students will have a certain amount of time to complete the task.

Probing Questions:

Open questions created to elicit anecdotal experiences from participants, designed to stimulate prior knowledge by adding context.

Accessing Prior Knowledge:

Connecting personal experience or background knowledge to new content, increasing comprehension.

Engagement Strategy:

Strategy that keeps participants autonomously engaged.

Positive Narration:

The act of drawing attention to desired behavior instead of misbehavior. Teacher reinforces behavior in a constructive, narrative way.

Peer Encouragement:

When students encourage one another, it fosters a positive social culture. Using Digitability's classroom economy, student behavior can be reinforced.

Directive Prompt:

Prompting a student by giving them the stakes, or what the question is worth before giving them the question.

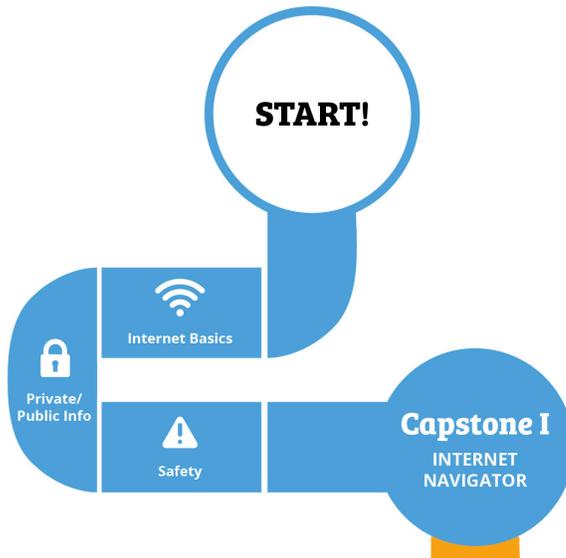
Increasing Assistance with Five Basic Prompts:

- 1. VERBAL:** Verbal prompts are words, instructions, or questions that direct a learner to engage in a target response. They should be simple and explicit. Verbal prompts will range from saying the entire word or phrase that you are trying to elicit from the learner, to providing only the first sound or syllable as a cue. We encourage you to use the vocabulary and language being taught in the learning modules to keep things consistent.
- 2. GESTURAL:** Gestural prompts include pointing to, looking at, motioning, or nodding to indicate a correct response. These are easy to become dependent on when teaching a learner how to interact with a computer. We encourage you to use the vocabulary and language from the learning modules to keep things consistent.
- 3. MODELING:** You can act out the target behavior, or have the learner's peer act it out, to encourage the learner to imitate. Modeling can be done in full or in part. Modeling may also include verbal prompts.
- 4. POSITIONAL:** Positional prompting involves arranging given materials so that the correct item is close to or in front of the learner. For example, if a task consists of picking a picture of an object from a group of three pictures, you might initially arrange the pictures so that the correct choice is directly in front of your learner, while the two incorrect choices are on the other side of the table. As your learner progresses, the other cards can be gradually moved closer until they are even with the correct choice.
- 5. PHYSICAL:** Tactile prompting involves actually touching the child. A full physical prompt might involve moving the child through the entirety of the behavior (for example, moving his hand to select the right card from an array, and then moving it to hand the card to you or someone else). A partial physical prompt might be just touching a hand or shoulder to get the child started on the behavior.



Stage 1: Internet Navigator

[8 Units, 94 Lessons]



GOAL: Student is able to develop conceptual knowledge and comprehension of using the Internet as measured by the unit objectives below.

Unit 2: Browser Basics

[13 Lessons]



Browser Basics

Objective: Student is able to operate basic elements of a browser.

p 3	Lesson 1: Intro to Browsers
p 6	Lesson 2: Types of Browsers
p 9	Lesson 3: Browser Icons
p 12	Lesson 4: Opening a Browser
p 17	Lesson 5: Browser Window
p 21	Lesson 6: URL
p 26	Lesson 7: The Address Bar

p 30	Lesson 8: Deleting & Entering URLs
p 33	Lesson 9: Browser Window Icons
p 38	Lesson 10: Backward & Forward Buttons
p 43	Lesson 11: Refresh
p 48	Lesson 12: Scroll Bar
p 53	Lesson 13: Browser Basics Master

- LESSON PLANS -

Unit 2 Browser Basics

Lesson 6: What is a URL?



Sample Lesson Plan and Supplemental Materials for Differentiation



UNIT 2: BROWSER BASICS

LESSON PLAN INTRODUCTION

LESSON 6: URL

LESSON EXPLANATION

Use this lesson plan to help guide the facilitation of Digitability's Unit 2-Lesson 6. This lesson plan will help you take the learning offline and into the whole classroom, where collaborative learning, direct instruction, and guided practice will help your students reach their goal of achieving digital literacy.

Time: ~25 minutes

OBJECTIVE

Student is able to operate basic elements of a browser.

INSTRUCTIONAL STRATEGIES

The facilitator will use an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning and self-motivation. Using ABA, Gradual Release and Bloom's Taxonomy, instruction will guide students to achieve mastery of the given objective. Facilitator will use modeling, guided practice, independent practice, and assessment methods to determine skill acquisition.

ACADEMIC DOMAINS

Reading Comprehension, Writing, Verbal/Nonverbal Communication, Social Skills, Math Ability

MATERIALS

Smartboard/Projector, device with internet access, Digitability Unit 2-Lesson 6 video, student writing/typing tool, Digitability classroom word wall badge, Picture Exchange Communication System (IECS Cards), Vocab Blocks Exit Slip, Trace 'n' Learn Card, Dollar Earnings Tracker, My Digitability Earnings

PRINT PREPARATION

Teacher will:

1. Print, copy or laminate **IECS cards** for students, if necessary
2. Print, copy or laminate **Reading Maze #1 Exit Slip** worksheet
3. Locate **Dollar Earnings Tracker**
4. Have each student locate **their My Digitability Earnings** sheet

ONLINE PREPARATION

Teacher will:

1. Sign into Digitability
2. Click **LESSONS** tab
3. Select **Stage 1 - Internet Navigator**
4. Select **Unit 2 - Browser Basics** in the 2nd drop-down menu
5. Select **Lesson 6- URL**



UNIT 2: BROWSER BASICS

LESSON PLAN

LESSON 6: URL

WARM UP

1.  Write the word **URL** on the board.
2. Ask students to jot down the first word that comes to mind when thinking of the word **URL**

POSSIBLE ANSWERS: youtube.com, digitability.com

DIFFERENTIATION

- T1** Write down answer in their notebook or a post-it to stick on the board
- T2** Opportunity to choose to write their answer or share their word using a verbal response with a Tier 1 partner.
- T3** Draw the word or have student point to a **IECS card** (see lesson supplements)

3. Call on students and have each student state the word they chose during the warm up
4.  Give immediate feedback and praise after students answer. See example:
[STUDENT NAME] + [THE BEHAVIOR] + [THE CONSEQUENCE] + [REPLACEMENT BEHAVIOR OR REINFORCEMENT]

Marcus + you answered correctly+ you earned a dollar + nice job!

5.  Give students who stay on task \$1 and record earnings on the **Dollar Earnings Tracker**

GUIDED WATCHING

1. Ask, **“For a participation dollar, who can tell me the name of our next badge?”** (answer: **URL**)
“Yes, URL! Nice job participating, [student]! You earned a participation dollar. The name of our next badge is ‘URL.’”
2. Ask, **“What do you think a URL is?”**
Listen to several student responses and give immediate feedback.
3. Ask, **“Why do we need to know what a URL is?”**
Listen student responses and award dollars to students who participate.

POSSIBLE ANSWER: so that we can get to the website we want

4. Bring attention to screen, **“Let’s watch this lesson. I know that [student’s name] is actively watching because he has his eyes on the screen and he is actively listening by giving a thumbs up when he hears the word URL.”**
3. Ask students to give a thumbs up every time they hear and/or see the word **areful** in the video
4. **Play video.**
5.  Give students who give thumbs up \$1 and record earnings on the **Dollar Earnings Tracker**



DIFFERENTIATION

-  **T1** Put thumbs up
-  **T2** Puts thumbs up or holds up **thumbs up card** (see lesson supplements)
-  **T3** Holds up or points to **thumbs up card** (see lesson supplements)



Invite a student to facilitate the guided watching activity.

INFORMAL ASSESSMENT (AFTER PLAYING VIDEO)

1. Ask, **“What is a URL?”**
Structure prompting to get students to come up with a definition using language from the video.

EXAMPLE: “A URL is a website’s address.”

Write the term and definition on the board after student responses.

2. Ask, “Does a URL **start** with **.com** and **end** with **www.**?”
3. Ask, “Is the URL for Google **www.google.com**?”
4.  Give students who stay on task \$2 and record earnings on the **Dollar Earnings Tracker**



DIFFERENTIATION

-  Verbal response
-  Verbal response or holds up **YES/NO IECS card** (see lesson supplements)
-  Holds up or points to **YES/NO IECS card** (see lesson supplements)

PLAY ACTIVITY VIDEO

1. Ask the class, “**Who would like to unlock the URL Badge for \$1?**”



Increase the dollar amount for shy students or to increase motivation

2. Student discusses with class to choose the correct answer.
- 3a. If student chooses correct answer, have student or whole class **dance**.
- 3b. If student chooses incorrect answer, repeat Step 2 until student unlocks the badge.
4. Student that unlocked the badge will paste the URL Badge print out on the classroom’s word wall.



DIFFERENTIATION

-  Student will use verbal prompting to unlock the badge with the class
-  Student will use verbal prompting and hand signals to unlock the badge with the class
-  Student will use hand signals, pointing, or adult/Tier 1 partner support to unlock the badge with the class

ASSESSMENT/EXIT SLIP

1. Students will complete the **Vocab Blocks** or **Trace ‘n’ Learn** worksheets for their new term: **URL**
2. Student will staple the worksheet into their notebook

3.  Give students \$1 for completing activity. Record **Dollar Earnings Tracker**



DIFFERENTIATION

T1

Student completes **Vocab Blocks** worksheet (see lesson supplements)

T2

Option to complete **Vocab Blocks** worksheet or **Trace 'n' Learn** card (see lesson supplements)

T3

Student completes **Trace 'n' Learn** card (see lesson supplements)

IMMEDIATE FEEDBACK/NEXT STEPS

1. Read off **Dollar Earnings Tracker** and announce how many dollars each student earned during the lesson
2. Students will fill in their dollar earnings from the lesson using their **My Digitability Earnings** sheet. Have students staple this sheet into their notebooks so they can use it for the entire unit.
3. If time permits, you can either have students log into their student accounts for independent practice **or** continue on to the next lesson plan.



DIFFERENTIATION

T1

Log in independently using password cards

T2

Log in independently using their password card with the help from a Tier 1 partner for any required troubleshooting

T3

Teacher or Tier 1 assistance to help student log in using their password card



UNIT 2: BROWSER BASICS

SHOW WHAT YOU KNOW

STAGE GOAL

Student is able to develop conceptual knowledge and comprehension of using the Internet as measured by the unit objectives below.

OBJECTIVE

Student will be able to identify basic Internet terminology in a paragraph using the TAG writing strategy as measured by Digitability's Unit 2: Show What You Know rubric.

Student will be able to count denominations of money in their equivalent amounts in order to add up the total sum of money earned as measured by Digitability's Unit 2: Show What You Know rubric.

WORK SMARTER, NOT HARDER!

Domains: Reading Comprehension, Writing, Math Ability and Money Skills

INCLUDED RESOURCES

- TAG mini-lesson
- Differentiated writing probes
- Differentiated conceptual math probes
- Differentiated Rubrics
- Paychecks

EXPLANATION FOR WRITING AND MATH PROBES

Now that students are able to **operate basic elements of a browser**, you can use this activity to address other personalized, educational goals.

Students are given writing probes based on ability and tiered levels. Students complete a writing prompt and math probe based on vocabulary used. Use Digitability Paychecks to positively reward students for the dollars students earn in the math probe.

This activity assesses your students' comprehension of Unit 2 through reading comprehension, writing, math ability and money skills.



GUIDED WATCHING



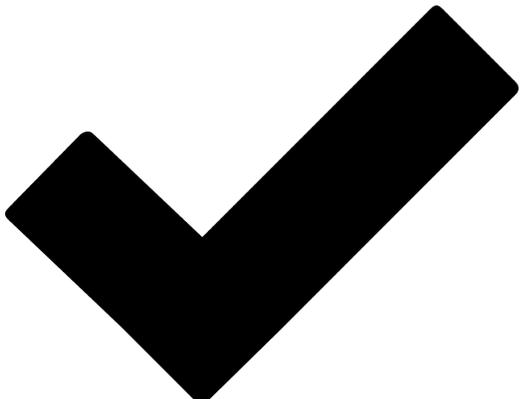
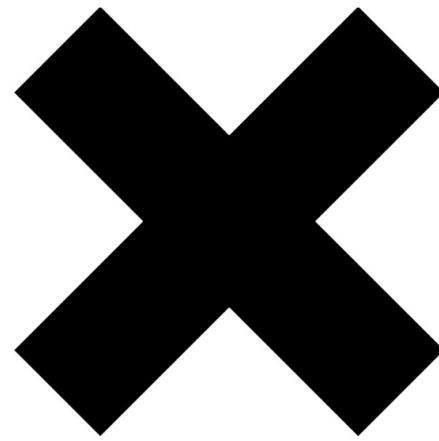
thumbs up



thumbs down



IECS CARDS

 <p>YES</p>	 <p>NO</p>
--	--



TAG WRITING PROMPT

1

Name: _____

Date: _____

Choose a writing prompt to answer using the TAG writing strategy:

- What can you do on a browser?
- How can you navigate a browser?
- What is your favorite browser to use? Which tools do you use on this browser?

WORD BANK

browser (\$1) browser icons (\$1) types of browsers (\$1) browser window (\$1) address bar (\$2)
URL (\$2) entering URLs (\$2) refresh button (\$2) scroll bar (\$4) back and forth buttons (\$4)



TAG: ADD IT UP!

1

Name: _____

Date: _____

WORD USED:	AMOUNT FOR USING THE WORD CORRECTLY:	FIND THE SUM OF EACH WORD USED CORRECTLY:
browser	\$1	+ _____
browser icons	\$1	+ _____
types of browsers	\$1	+ _____
browser window	\$1	+ _____
address bar	\$2	+ _____
URL	\$2	+ _____
entering URLs	\$2	+ _____
refresh button	\$2	+ _____
scroll bar	\$4	+ _____
back and forth buttons	\$4	+ _____

DOLLARS EARNED: \$ _____



TAG WRITING PROMPT

2

Name: _____

Date: _____

WORD BANK

address bar

refresh button

back and forth buttons

types of browsers

browser icons

URL

browser

browser window

Browsers can be used to do many things. A 1. _____ lets you view websites on the internet. There are many different 2. _____ that you can pick from and use; such as, Google Chrome, Safari, and Internet Explorer. You will see that each browser has their own 3. _____, which is a picture that stands for each type of browser. After you click on a browser icon, a 4. _____, or a the square that surrounds the outside of a website, will appear. The browser window has many of tools. One tool that you can use is the 5. _____, which is a long and white rectangle at the top of the window. You can use the address bar to enter 6. _____, which are website addresses. Also, you can use different browser buttons to navigate the internet. Some examples of these buttons are scrollbar, the 7. _____ to help you move from one web page to another, and the 8. _____ which helps you replay, reload, or update information on the browser.

SCORE: Student correctly answered ___ /8 vocabulary terms with _____% accuracy.



TAG WRITING PROMPT

3

Name: _____

Date: _____

Browsers can be used to do many things. A **(1. browser/website)** lets you view websites on the internet. There are many different **(2. internet/types of browsers)** that you can pick from and use. You will see that each browser has their own **(3. scroll bar/browser icon)** which is a picture that stands for each type of browser. After you click on a browser icon, a **(4. browser window/URL)**, or a the square that surrounds the outside of a website, will appear. The browser window has many of tools. One tool that you can use is the **(5. browser/address bar)** at the top of the window. You can use the address bar to enter **(6. URLs/ types of browsers)**, which are website addresses. Also, you can use different browser buttons to navigate the internet. Some examples of these buttons are the the back and forth button and the Some examples of these buttons are the scroll bar, **(7. back and forth button/scroll bar)** to help you move from one web page to another, and the **(8. refresh button/back and forth buttons)**, which helps you replay, reload, or update information on the browser.

SCORE: Student correctly answered ___ /8 vocabulary terms with _____% accuracy.



TAG: CHECK YOUR ANSWERS!

2

Name: _____

Date: _____

WORD USED:	IF YOU GOT IT CORRECT, CIRCLE THE DOLLAR AMOUNT:	IF YOU GOT IT CORRECT, ADD IT UP:
browser (\$1)		+ _____
types of browsers(\$1)		+ _____
browser icons (\$1)		+ _____
browser window (\$1)		+ _____
address bar (\$3)		+ _____
URLs (\$4)		+ _____
back and forth buttons (\$4)		+ _____
refresh buttons (\$5)		+ _____

DOLLARS EARNED: \$ _____

SCORE: Student correctly answered ___ /8 vocabulary terms with _____% accuracy.



VOCAB BLOCKS

EXIT SLIP

Name: _____

Date: _____

Define	Sentence	
Examples	URL	Draw



TRACE 'N' LEARN CARDS

Name: _____

Date: _____

URL

this is a
website's address



WORD WALL PRINTOUT



This is a website's address



DIFFERENTIATION

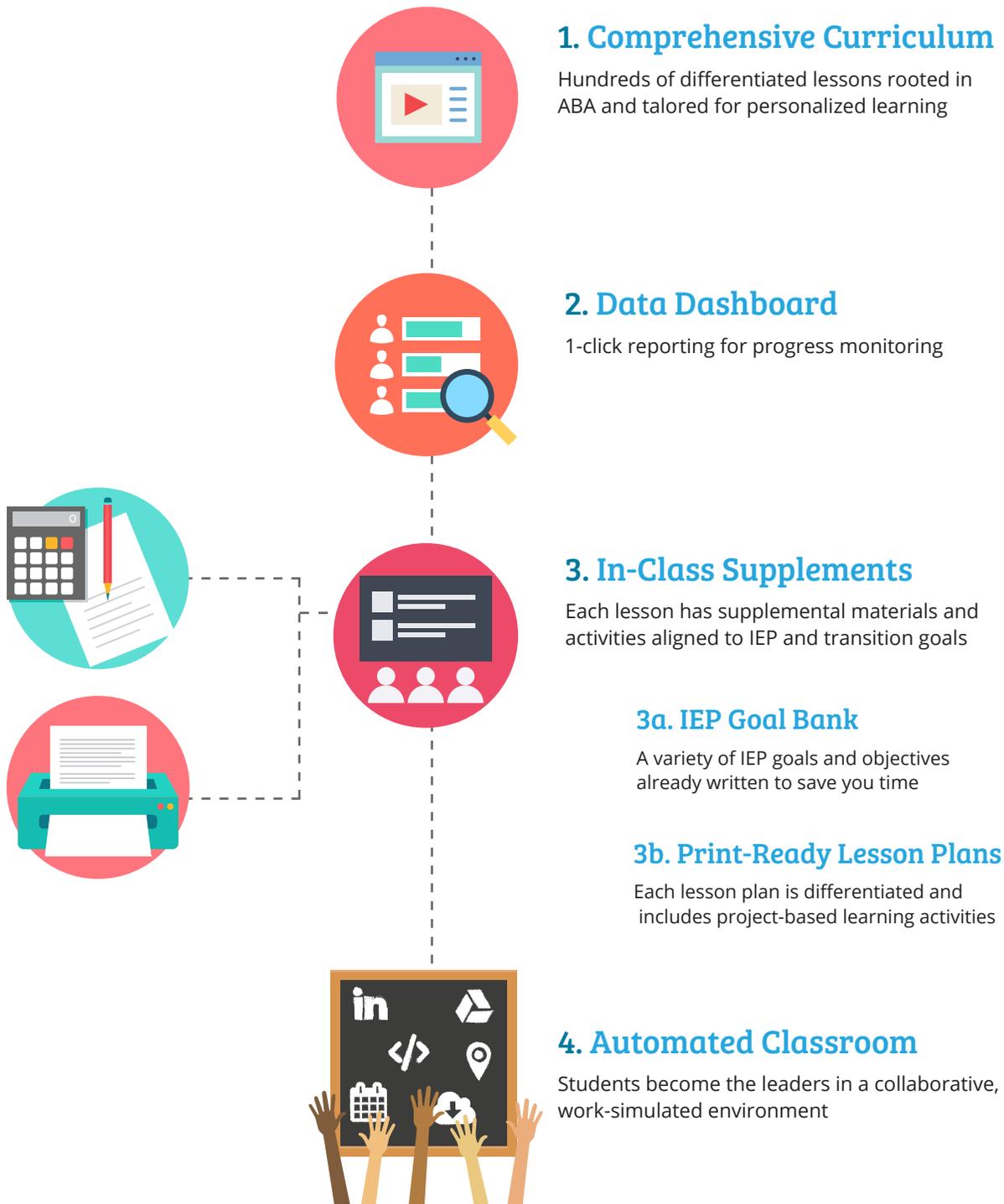
Choose to cut out the badge and definition or only the badge for your classroom word wall



Digitability™

For Educators

Digitability makes managing special education easy.





Digitability™

Project-Based Learning

Our Project-Based Learning Model teaches students the following professional skills:



Capstone #1: Planning a Website

Inclusive Role-Playing with S.M.A.R.T. IEP Goals: Capstone projects include a goal bank with measurable goals for social, communication, academic and vocational goals. All materials are differentiated for a wide range of learning profiles and abilities so everyone has a role.

- 1 Students brainstorm topics and organize content using vocabulary words and concepts like URL, keywords, accounts, web apps.
- 2 Class reviews job roles and students apply for positions. All adults (teachers + aides) participate in the hiring process.
- 3 Students are hired for a position and complete problem solving and communication activities prior to beginning their job.
- 4 Students plan their job tasks and collaborate together to complete their project by the assigned deadline.
- 5 Students present their final work product to the executive team of adults. Students process feedback and restate their next steps.
- 6 Students complete a work-order reflection sheet; they note problems, experiences, and steps taken to solve those problems.



**For complete access to
Digitability's differentiated
lesson plans, request a free
demo with your
administrator by clicking
here.**



How tech means jobs ahead for kids with cognitive disabilities

Individuals with intellectual disabilities have it particularly rough when it comes to getting hired. Here's how some are addressing the problem.

Article by: **Marguerite Reardon**

As a special education teacher at a public high school in Philadelphia, Michele McKeone prepared students with autism for life after graduation. But she quickly discovered a glaring hole in the curriculum: a complete lack of digital literacy.

When the US Bureau of Labor Statistics estimates that more than half of all jobs require some degree of technology skills, that's a problem. McKeone feared her students were destined for menial, low-wage positions, if they could get any jobs at all.

McKeone saw an opportunity to use technology and project-based learning as a way to teach important technical skills, as well as foster the ability to think critically, solve problems and live independently.

She quit her job last year to focus on her startup, Digitability, developer of an online curriculum that teaches those technical skills. Initially, it was called Autism Expressed, but she changed the name after expanding the program to kids with other cognitive disabilities. Her program, which has won several technology contests, is being used throughout the Philadelphia School District, where she used to work, and in schools in several other states, including in New Jersey and California.

Her program is just one way individuals and companies are working to give people with cognitive disabilities a better shot at succeeding in the workplace with higher-skill jobs. Efforts range from promoting more technology education to companies and employers expanding how they look for talent. They help to dispel the misperception that individuals with intellectual disabilities aren't suited to be in tech.

“

There are roles that people with intellectual disability can fill in many businesses, if they have the right training and support. I'm trying to raise the bar to make sure everyone is taught these important skills.

”

These initiatives address a real problem. The unemployment rate for all people with disabilities is nearly twice the rate of people without disabilities, according to the US Labor Department. People with cognitive or developmental differences, such as autism or Down syndrome, are even worse off.

"Most of us want a meaningful job, and people with intellectual disabilities are no different," said Gary Siperstein, director of the Center for Social Development and Education at the University of Massachusetts Boston. "But in spite of tens of millions of dollars spent on programs for better outcomes for people with intellectual disabilities, the needle hasn't moved much."

There's reason to be optimistic. The Workforce Innovation and Opportunity Act of 2014 requires schools and state vocational rehabilitation agencies to provide transition services to students with disabilities to help them find "meaningful work." Agencies must allocate at least 15 percent of their federal funding toward such transition efforts. This push from the feds could help spur more schools to think about including digital and computer skills in their curriculum and transition plans for students with disabilities.

Getting tech in their hands

McKeone is both a pioneer and an evangelist when it comes to getting technology in the hands of children with cognitive disabilities. While schools often see the value of providing technology as a way to assist students with disabilities, it's been a harder sell convincing them that people with cognitive impairments should learn skills like web page development and coding.

Even learning how to use the most basic online apps can have a huge impact on people with cognitive differences. For instance, Google Calendar is the mobile equivalent of the wall calendar that many students in special education use to stay on task.

Digital media lets many students showcase their skills in a way that may not be apparent in traditional assessments.

"I just wanted to teach them everything I learned in art school," McKeone said. "We live in this world where everything is digital and they should be able to participate in that."

The program, designed for middle and high school students, includes 250 separate lessons that use



How tech means jobs ahead for kids with cognitive disabilities

Individuals with intellectual disabilities have it particularly rough when it comes to getting hired. Here's how some are addressing the problem.

Article by: **Marguerite Reardon**

research-based approaches for breaking down concepts and teaching skills in explicit steps. The lessons offer short videos with animation to introduce no more than a couple of concepts at a time. Students are continually asked to demonstrate their knowledge and are rewarded with virtual badges.

The curriculum gives them a foundation to build skills that can be used in the workplace. It's divided into four modules and teaches skills like using Gmail and social media, as well as advanced tasks like coding.

McKeone plans to work with companies to develop certification programs so that Digitability can be tailored for specific workplace skills.

'Food, flowers or filth'

Training people with intellectual disabilities to work with technology is the best way to prepare them for jobs outside of "food, flowers or filth," said Jonathan Lazar, a computer science professor at Towson University in Maryland. Lazar is referring to food service jobs, basic landscaping and janitorial work.

But there needs to be a change in how people perceive people with intellectual disabilities such as Down syndrome and autism

"There is this gap in perception, where school boards or rehabilitation service coordinators see providing tech training to people who are blind or deaf as useful, but for people with cognitive impairments they say, Why bother spending the money?" he said.

Lazar has been involved in several research studies looking at how people with Down syndrome use and interact with technology. He found that



they're detail-oriented and often more able than their neurotypical peers to quickly decipher Captchas, the scrambled-letter challenge-response tests used online to determine whether a user is a human or a computer bot.

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We live in this world where everything is digital and they should be able to participate in that.

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As a result, he said, individuals with Down syndrome are good candidates for many jobs in the IT field, including data entry or web content management.

Companies such as Microsoft and SAP, meanwhile, are beginning to look at the strengths, rather than focusing on the weaknesses, of some individuals on the autism spectrum. The companies have begun tailoring their job applications and hiring practices to recruit people with autism who have

technical skills their companies need, but who may never have made it through the interview process because they have quirky social behaviors.

In 2013, SAP committed to recruiting 700 people, or about 1 percent of its workforce, in this way. Microsoft announced a pilot program in 2015 to hire people with autism at its headquarters in Redmond, Washington. Companies like accounting firm Ernst & Young are following their lead.

While experts such as Lazar are happy that companies are focusing on the strengths of a group of people who are usually overlooked, McKeone is bothered that these companies are focusing only on the abilities of a small subset of people on the autism spectrum who may be considered to have greater intellectual capacity, rather than taking a broader approach that looks for ways to incorporate people of all cognitive abilities into their workforce.

"There are roles that people with intellectual disability can fill in many businesses, if they have the right training and support," she said. "I'm trying to raise the bar to make sure everyone is taught these important skills."

Read the full article:
bit.ly/digitability



If our expectation is that people with autism or other disabilities will have opportunities available to them to fully participate in communities to be gainfully employed and to have meaningful life experiences, then teaching digital literacy is going to be a big part of that.

–David Mandell, Sc. D. Director, Center for Mental Health Policy and Services Research, University of Pennsylvania, Associate Director, Center for Autism Research, The Children’s Hospital of Philadelphia

Digitability is impressive and very useful for students with and without disabilities learning to use technology in the classroom.

– Patrick Timony, Adaptive Technology Librarian, DC Public Library

Digitability combines skill enhancement & real world applications that assists students with learning how to understand, interact, and develop the tools to find their voice in this world.

–Alton Strange, Transition Coordinator, School District of Philadelphia

Digitability is a forward-thinking program, facilitating inclusion for people of varied abilities, including those on the autism spectrum, in a way no other program does.

– Dennis Morgan, Executive Director for Educational Services at The Bancroft School



**For more information, visit
www.digitability.com**