

www.digitability.com

Teaching digital literacy to individuals with cognitive disabilities to promote workforce inclusion.





# Digitability is the bridge from the classroom to the workplace.







# Digitability develops social and emotional capacity while shaping work-ready skills.



Real-world work simulations for generalization



Comprehensive Transition
Curriculum and IEP Goal Bank



Differentiated for cognitive and behaviorial needs



Progress monitoring in one-click!



Capacity building for students and teachers



Social and emotional development











Digitability equips educators with a library of differentiated lesson plans and supplements.

Now, with our IEP Goal Bank, you can address multiple goals all at once, saving you time and energy.

Managing special education can be overwhelming.



Digitability makes it easy.



#### Stage 1:

#### The Internet Navigator Bloom's Taxonomy Levels I & II:

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

**Sample Objectives:** Student will be able to...

- distinguish appropriate online sharing behaviors.
- describe methods for communicating online.
- identify basic concept of online accounts

#### Stage 2:

#### The Digital Citizen

Bloom's Taxonomy Levels II & III: Comprehension and Application Student is able to expand comprehension and practice application of skill sets necessary for using the internet as measured by the unit objectives below.

**Sample Objectives:** Student will be able to...

- manage email within a gmail account.
- create docs in Google Drive
- map a route of transportation using Google Maps.

#### Stage 3:

**GOING!** 

#### Tech-Savvy Ambassador Bloom's Taxonomy Levels III & IV: Application and Analysis

Student is able to apply and analyze mastered skills to think beyond the use of an application as measured by the unit objectives below.

Sample Objectives: Student will be

**Sample Objectives:** Student will be able to...

- apply collaboration tools available in their Google Drive account.
- discuss core job functions and plan timeline of execution
- identify and apply troubleshooting skills while working with classmates

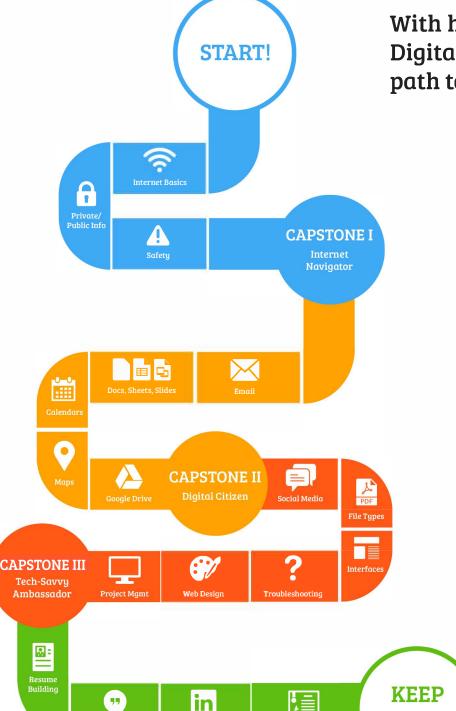
#### Stage 4:

### The Prime Professional Bloom's Taxonomy Levels V & VI: Synthesis and Evaluation

Student is able to develop a professional online portfolio to demonstrate their individual abilities and skill levels as measured by the unit objectives below.

Sample Objectives: Student will be able to

- create a Linkedin Profile that highlights their mastered skills
- create a website to showcase their portfolio of mastered skills.
- identify a job certification program they will complete.

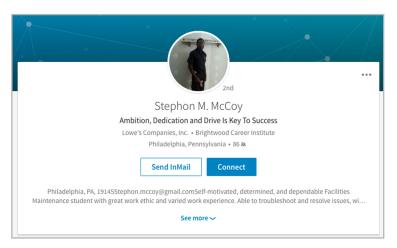


With hundreds of tailored lessons, Digitability's curriculum creates a path to independence.

- With mastered concepts of using the internet, students can define and use basics online applications like browsers and search engine, while demonstrating appropriate and safe online behavior.
- Students learn to use Google maps, calendars, docs and more! These tools develop both independent living and work-ready skills like time and task management, workplace communication and socialization, word processing and presentations, managing a budget, travel training and problem solving.
- Now that students have built routines using Google Apps for their work-life skills, they all have a role to play in project-based learning with classroom job roles. Each role is differentiated according to skill level so all students can showcase their contributions and reflect on their participation.
  - Students package their portfolio of projects that demonstrate both the technical and work-ready skills they developed through the Digitability program. Students explore their job interests and align capacity building toward their transition goals to prepare for the workforce.

#### **DIGITABILITY OUTCOMES: SUCCESS STORY**

## Stephon was an Autistic Support Classroom student in the School District of Philadelphia... And now he's working!



Working through the Digitability program in his high school autistic support classroom gave Stephon the skills and the confidence to pursue his path to independence. He developed a portfolio of projects that showcased his abilities and interests, including a website project sponsored by the Lower Moyamensing Civic Association. Stephon was the project manager and made sure that every one of his classmates in his class contributed to the website in a meaningful way.

"During the time I was in High School I didn't really catch on to why we was learning about writing and working professionally on a computer... but now I do. I just wanted to say thank you because that experience really jump started my life into different ideas."

- Stephon McCoy

#### JOIN THE MOVEMENT FOR PREPARING STUDENTS FOR WORK

#### Learn more: Digitability.com











"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, UPenn, Assoc. Director, Center for Autism Research, CHOP "Digitability combines skill enhancement and real world applications that assist 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

"As a parent, I can tell you that Digitability is a rare find. I signed up to give my child something that would engage him, but also teach him valuable skills. Digitability does this in a manner that keeps my son coming back for more! We can do it together, so I'm learning new skills too!"

- Leslie Barretta, Parent of an Exceptional Child

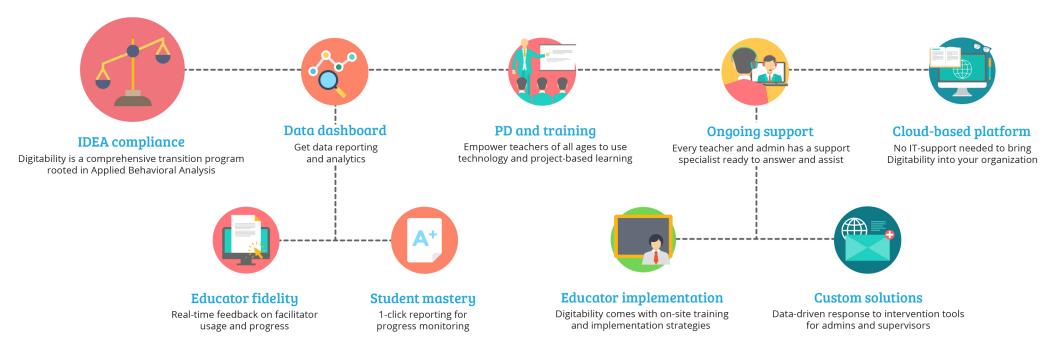
# Digitability for Educators

Digitability makes managing special education easy.





Digitability equips educators with a modern model to successfully launch students into life.



# ALIGNING IEP GOALS TO PROJECT-BASED LEARNING

This Digitability program will transform the classroom from one that was heavily led by the facilitator to one that empowers students at all levels of the transition stage to become leaders in their own learning. The Digitability program aims to make everyone's life easier through project-based learning. That's why our program supplies all of the supplemental resources, lesson plans, rubrics and the IEP Goal Bank needed to make the implementation of our program easy and accessible for all facilitators.

#### **SAMPLE PROJECT:**

#### CREATING A PRESENTATION USING GOOGLE SLIDES

**OBJECTIVE:** Students will be able to create a presentation using a variety of Google apps to summarize a story they have read either as a whole class or independently.

After obtaining incremental mastery of each application in the Google Apps Suite, each students will use Google Calendar, Google Docs, Google Search, Google Slides, Google Forms and Google Sheets to complete a work order as a member of a professional team. Project-based learning will allow students to practice skills such as time management, writing, reading comprehension, communication, pragmatic-language, mathematics and finance. Digitability will guide facilitators in assigning roles based on their abilities. Project-based learning will create a professional learning atmosphere that prepares students for their transition into the workplace.

#### **PROJECT SEQUENCE:**



#### **LESSON 1:**

Project Introduction and Project Deadline Review Using Google Calendar



#### **LESSON 5:**

Students Presentation Rehearsal with Partners and Self-Assess Presentation Using a Rubric in Google Forms



#### **LESSON 2:**

Creating an Outline for a Presentation Using a Brainstorming Template in Google Docs



#### LESSON 6

Students Practice Giving Approriate Feedback to Prepare for the Presentations



#### **LESSON 3:**

Students Research Content and Images for Presentation



#### **LESSON 7:**

Students Present and Receieve Feedback from Classmates



#### **LESSON 4:**

Student Begins Drafting Presentation in Google Slides



#### FSSON 8.

Students Manage Earnings in Google Sheets Based upon Teacher-graded Rubrics

#### **CAPACITY BUILDING**

Digitability will guide facilitators in assigning roles based on their abilities. These roles will create a professional learning atmosphere that will help prepare your students for transitioning into professional communities.

The Digitability Project Based Learning Model teach students the following professional skills:













#### ANNUAL IEP GOALS ADDRESSED

VIA PROJECT-BASED LEARNING SUPPLEMENTAL MATERIALS

#### IEP GOAL BANK FOR LIFE SKILLS

MONEY MANAGEMENT • EDUCATIONAL PLANNING • JOB SEEKING/MAINTENANCE SKILLS KNOWLEDGE OF RESOURCES • INTERPERSONAL SKILLS

**TIME MANAGEMENT:** Given a list of job tasks from the Digitability Work Simulations, [Student] will be able to create a week of events in their online calendar measured by the Digitability Time Management Rubric.

**WRITING:** Given a writing assignment at a \_\_\_ (grade/proficiency level), [Student] will be able to demonstrate organization, creativity/voice, grammar/syntax, punctuation and spelling as measured by the Digitability Writing Domain Rubric.

**READING COMPREHENSION:** Given printed materials at a \_\_\_ (grade/proficiency level), [Student] will be able to summarize content of materials as measured by the Digitability Writing Rubric.

**SOCIALIZATION/COMMUNICATION:** Given a workplace scenario from the Digitability Work Simulations, [Student] will be able to initiate and maintain interactive communication during a [five] minute work presentation as measured by the Digitability Oral Presentation Rubric.

**SOCIALIZATION/COMMUNICATION:** Given a scenario from the Digitability Work Simulations, [Student] will be able to respond appropriately to questions and feedback statements as measured by the Digitability Oral Presentation Rubric.

**PRAGMATIC-LANGUAGE FUNCTIONS:** Given a scenario from the Digitability Work Simulations, [Student] will be able to provide specific feedback on a classmate's presentation using the sandwich approach to questions and feedback statements as measured by the Digitability Oral Presentation Rubric.

**MATHEMATICS:** Given a math probe at a \_\_\_ (grade/proficiency level), [Student] will be able to track money earned in the Digitability Work Simulations by adding and subtracting dollar amounts with 80% accuracy as measured by the Digitability Show What You Know math probes.

**FINANCE:** Given a specific budget scenario from the Digitability Work Simulations, [Student] will be able to identifying the amount of money they will need to earn each week to pay bills and purchase privileges with 80% accuracy as measured by the Digitability Budget Reflection Form.



# 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.

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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



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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.

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

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









**TechCrunch** 

For more information, visit www.digitability.com