

Work-Based Learning Experiences for High School Students with Autism Spectrum Disorder (ASD)

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THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Overview

- ◆ Needs of students with ASD approaching adulthood
- ◆ What are Work-Based Learning Experiences?
- ◆ Applications
- ◆ Projects implementing WBLE
- ◆ Suggestions
- ◆ Limitations
- ◆ Implications for Research and Practice

Prevalence of Autism Spectrum Disorder (ASD)

Surveillance Year	1 in ____
2000	150
2002	150
2004	125
2006	110
2008	88
2010	68

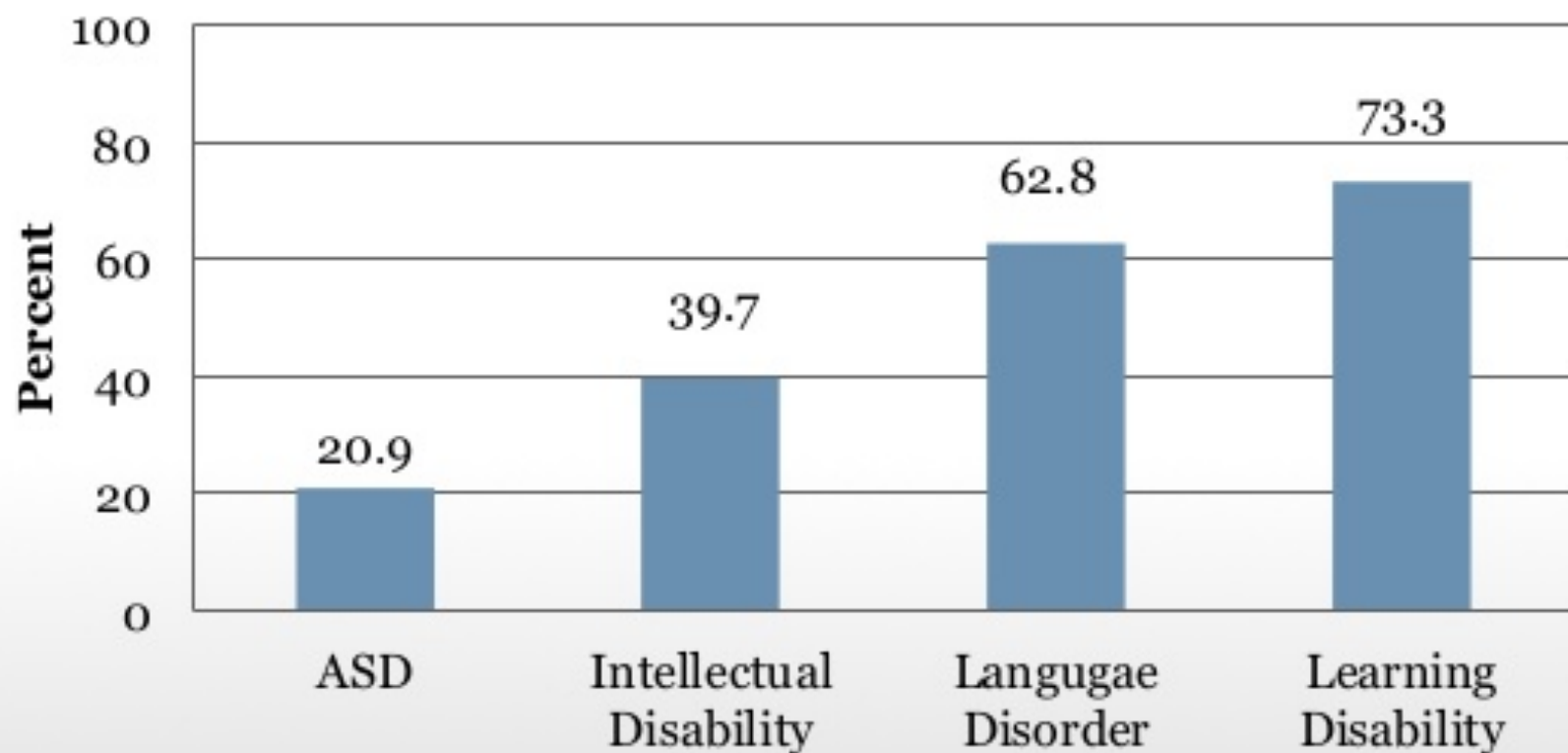
(CDC, 2014)



In 2012, 50,000 individuals with ASD turned 18 years old in the United States.

(Shattuck et al., 2012)

Full-Time Employment (21-25 Year Olds)

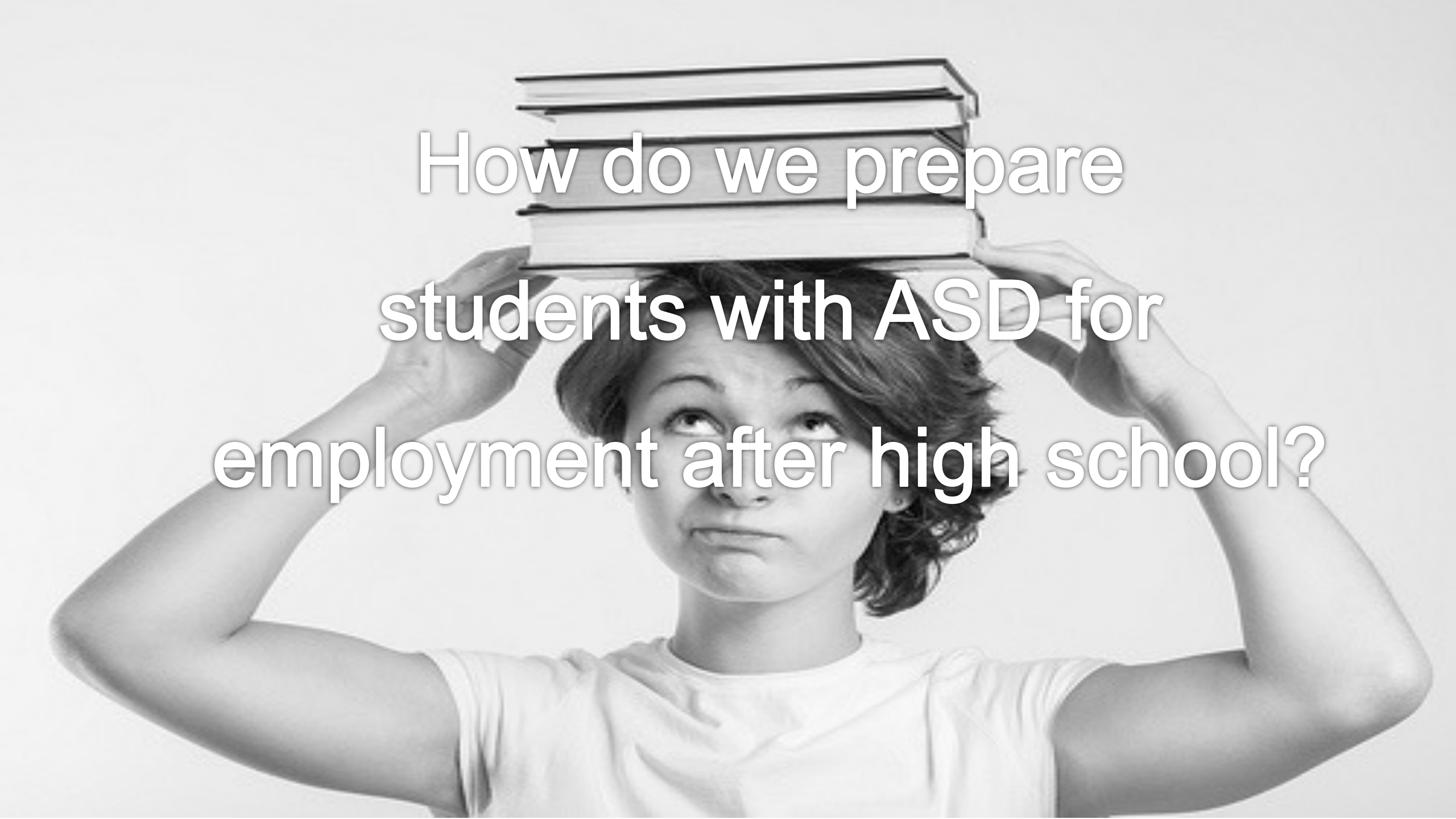


(NLTS2 Study; Roux et al., 2013)

Postsecondary Engagement

◆ Engagement lower than other disability categories across the board in:

- ◆ Any vocational or technical education: 9.3%
- ◆ Any 2-year college: 28.0%
- ◆ Any 4-year college: 12.1%
- ◆ Any paid employment: 55.1%
- ◆ No participation: 34.9%

A black and white photograph of a young woman with short, dark, curly hair. She is wearing a light-colored t-shirt and is balancing a stack of approximately six books on her head. Her hands are raised, resting on the sides of the book stack. She is looking upwards and to the right with a thoughtful or questioning expression. The background is a plain, light color.

How do we prepare
students with ASD for
employment after high school?

Work-Based Learning Experiences

- ◆ Identified as a predictor of post-school success
- ◆ Organized and structured within Richard Luecking's 2009 *The Way to Work*
- ◆ Planned to assist students in developing skills and an increased knowledge of their needs and strengths
- ◆ Support a student's postsecondary goals regarding college and careers

Types of Work-Based Learning Experiences

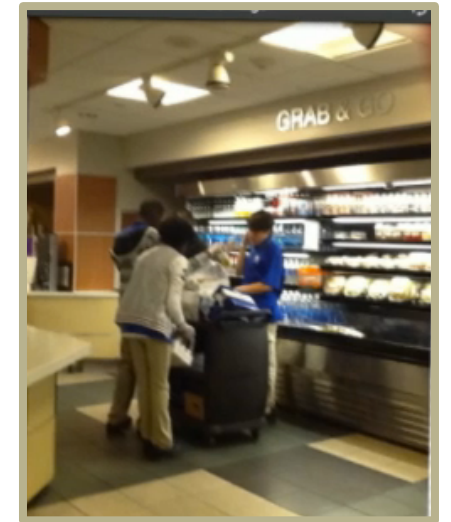
1. Career Exploration
2. Job Shadowing
3. Work Sampling
4. Internships
5. Service Learning
6. Mentoring
7. Apprenticeships
8. Paid Employment



(Luecking, 2009)

Career Exploration

- ◆ Learn about jobs and the skills required performing them
- ◆ Visits and meetings with employers and people in identified occupations outside of the workplace are also types of career exploration activities from which youth can learn about jobs and careers
- ◆ Brief exposure to a specific kind of work environment or job type



(Luecking, 2009)

Job Shadowing

- ◆ Extended time, often a full workday or several workdays, spent by a youth in a workplace accompanying an employee in the performance of his or her daily duties
- ◆ Introduce students to workplace circumstances and provide them with initial knowledge about work and careers



(Luecking, 2009)

Work Sampling

- ◆ Learn aspects of potential job tasks and “soft skills” required in the workplace
- ◆ Especially useful for youth who have difficulty generalizing their education from situated environments, discover work preferences and interests, and identify accommodation needs



(Luecking, 2009)

Internships

- ◆ Internships are formal agreements whereby a youth is assigned specific tasks in a workplace over a predetermined period of time
- ◆ Internships may be paid or unpaid, depending on the nature of the agreement with the company and the nature of the task



(Luecking, 2009)

Service Learning



- ◆ Hands-on volunteer service to the community that integrates with course objectives
- ◆ It is a structured process that provides time for reflection on the service experience and demonstration of the skills and knowledge required

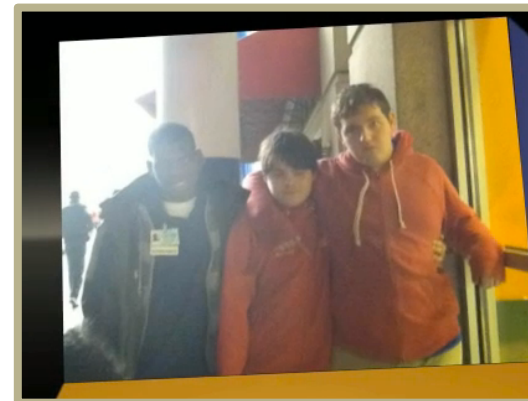


(Luecking, 2009)

Mentoring



- ◆ Mentoring relationships provide valuable support to young people, especially those with disabilities, by offering not only academic and career guidance, but also effective role models for leadership, interpersonal, and problem-solving skills



(Luecking, 2009)

Apprenticeships

- ◆ Formal, sanctioned work experiences of extended duration
- ◆ Learn specific occupational skills related to a standardized trade, such as carpentry, plumbing, or drafting
- ◆ Many apprenticeships also include paid work components



(Luecking, 2009)

Paid Employment

- ◆ May include existing standard jobs in a company or customized work assignments that are negotiated with an employer, but these jobs always feature a wage paid directly to the youth
- ◆ Such work may be scheduled during or after the school days. It may be integral to a course of study or simply a separate adjunctive experience



(Luecking, 2009)

WBLE Can Be...

- ◆ Applied across a variety of settings with individuals with and without disabilities
- ◆ Informing the transition assessment process and increase students' skills, in preparation for their postsecondary goals

WBLE with Students with ASD

- ◆ Currently there is limited research in individuals with ASD
- ◆ Current projects:
 - Project SEARCH
 - Hospital settings
 - CSESA

ASD with WBLE

- ◆ Continued need for program development between school and community settings
- ◆ Individuals with ASD are a heterogeneous population with diverse needs
- ◆ Support for students can include practices from 27 evidence-based practices identified for individuals with ASD

(Seltzer, Shattuck, Abbeduto, & Greenberg, 2004; Wong et al., 2014)

Current Project: CSESA

Center on Secondary Education for Students with Autism Spectrum Disorder (ASD)

- Research & Development Center
- Funded by the Department of Education (IES)
- Purpose: To develop and study a comprehensive high school program for students on the autism spectrum



The Goal of CSESA

To improve postsecondary outcomes for students by using high quality professional development and evidence-based interventions to support practitioners, families, and students





CSESA Sites



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UNIVERSITY



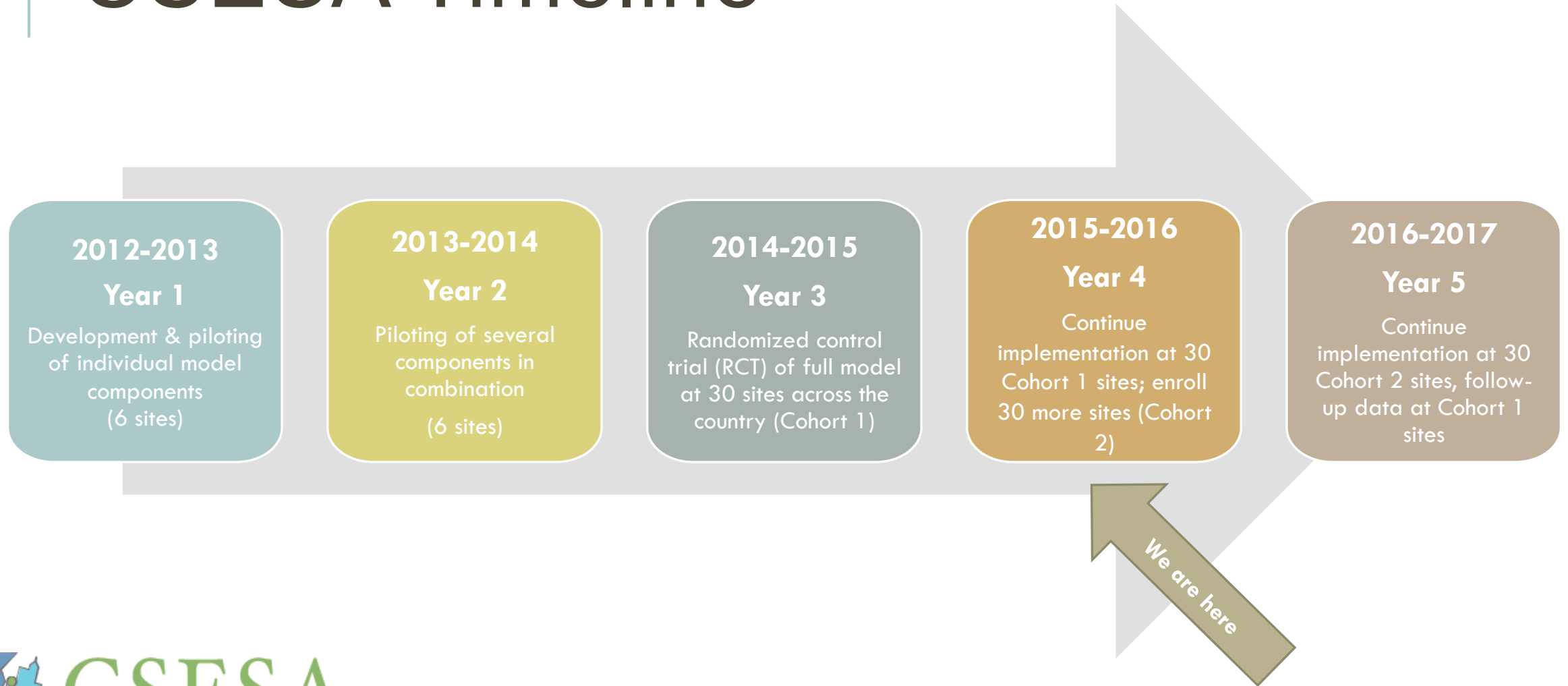
UNC
FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE

UCDAVIS
MIND INSTITUTE

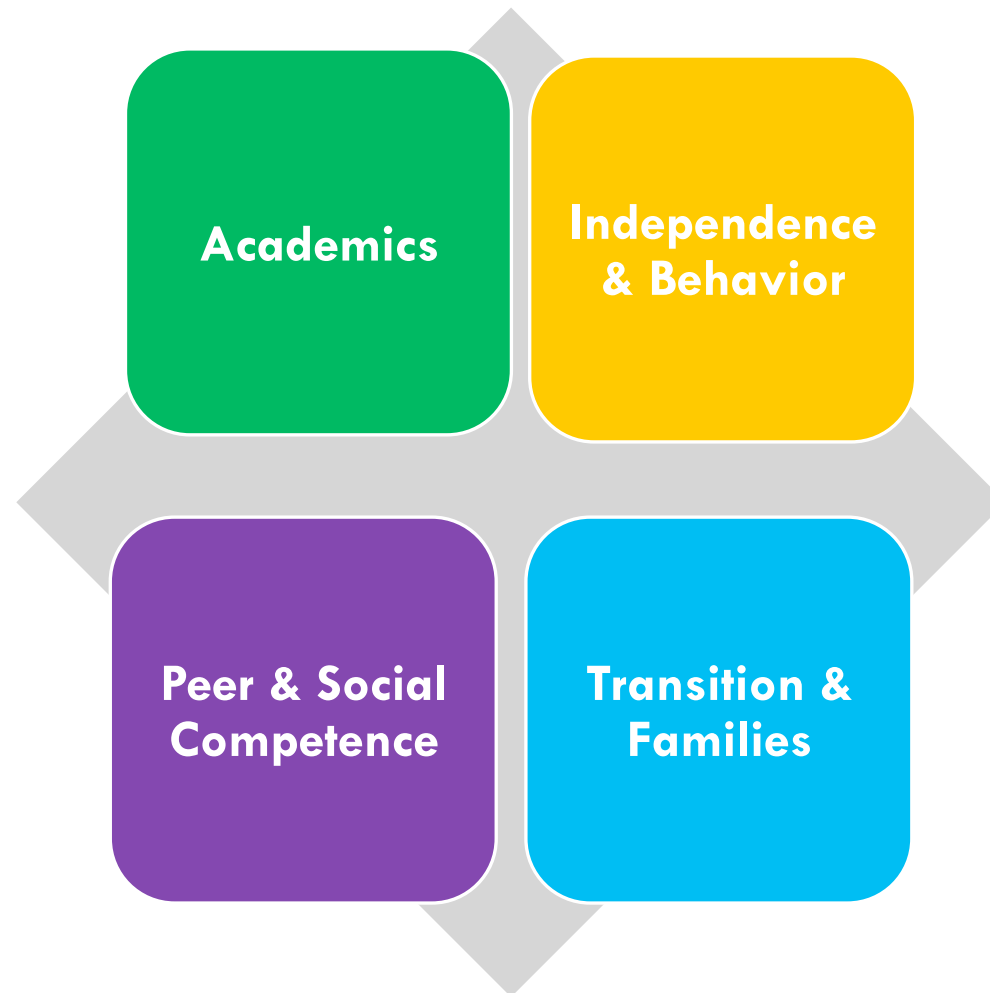


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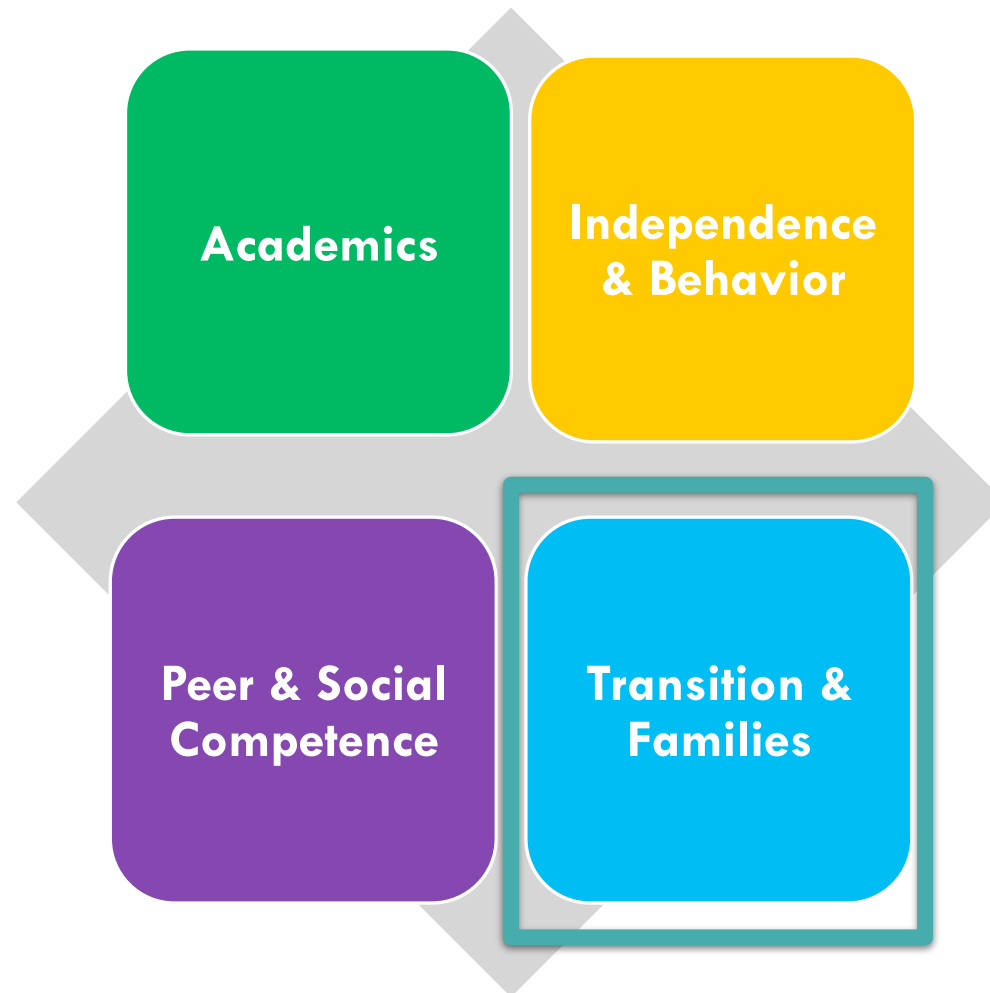
CSESA Timeline



CSESA Components



CSESA Components



Transition & Families

- ◆ Transition Process
 - School and Community Resource Mapping
 - Transition Planning Process
 - Student Involvement in the IEP
 - Work-Based Learning Experiences
- ◆ Transitioning Together (with Families)

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CSESA with WBLE

- ◆ Identification of college-ready and career-ready activities

Career-Ready	College-Ready
Student Activities	Student Activities
Resources	Resources

Sample Student Activities & Resources

Career Ready	
Student Activities	<ul style="list-style-type: none">• Participate with a significant adult in a 'take your child to work' day• Disability Mentoring Day through a local company or program• Complete Job-Simulations on Campus• Create Task Prompts while Observing a Job• Job Characteristics Checklist
Resources	<ul style="list-style-type: none">• The High School/High Tech Program (HS/HT) provides Job Shadowing experiences including careers in science, mathematics, and technology

College Ready	
Student Activities	<ul style="list-style-type: none">• Shadow a student in a major of interest• Conduct a role-play with a disability services counselor• Conduct a role-play with a professor
Resources	<ul style="list-style-type: none">• George Washington University: toolkit will give you tips on how to request up-coming opportunities to shadow at a local college/ university• Norwich University: ways to strategize methods to help you overcome some of those temporary barriers

Suggested Timeline Across High School

9th Grade

Career Exploration
Job Shadowing
Work Sampling
Mentoring

10th Grade

Career Exploration
Job Shadowing
Work Sampling
Mentoring

11th Grade

Service Learning
Internship
Paid Employment
Apprenticeship
Mentoring

12th Grade and Beyond

Service Learning
Internship
Paid Employment
Apprenticeship
Mentoring



Students will complete activities
within **2 WBLE experiences** each
school year

B-1.1 Lesson: Job Shadowing – Career Readiness: Disability Mentoring Day**Common Core Standards:****Warm Up:**

- Learn about the importance of mentoring through reading about Disability Mentoring Day. Participating in this day will help build a mentoring relationship with another individual

Differentiation: Checklist**Lesson:**

- Student will read about Disability Mentoring Day and the opportunities it offers students participating in it

Differentiation: Picture prompts, definition**Guided Practice:**

- Read about Disability Mentoring Day with student

Differentiation: Picture prompts, read aloud with student**Independent Practice:**

- Student will answer questions on a worksheet about Disability Mentoring Day

Differentiation: Model answering the first series of questions; provide a choice list for the student**Assessment:**

- Student's answers on the worksheet about Disability Mentoring Day

Differentiation: Model writing a goal, photo/picture/word prompts of choices**Vocabulary:**

Mentoring

Disability

**Teacher
Materials/
Technology:**Smart board/
White boardDesktop/
Laptop
Computer**Within Each Lesson:**

- ☐ Warm Up
- ☐ Lesson
- ☐ Guided Practice
- ☐ Independent Practice
- ☐ Assessment
- ☐ HW/Product
- ☐ Vocabulary
- ☐ Teacher Materials/
Technology
- ☐ Differentiation

- To be incorporated in the classroom or in practice at a
- Community-Based Instruction site
- Embed relevant Evidence-Based Practices

Calendar of Community-Based Instruction Sites

~ January 2014 ~						
< December						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 Winter Break	2	3	4
5	6 Habitat Restore	7 Classroom Central	8 Raptor Center	9 Reading Partnership with Metro 9:30 – 11:30	10 LaRia Equestrian Center	11
12	13 Exams - 2nd period	14 Exams - 3rd period	15 Exams - 2nd period GoState for our Exam	16 Exams - 3rd period LaRia Equestrian Center for Exam	17 Exams (Make ups)	18
19	20 Holiday	21 Workday	22 Sow Much Good	23 Reading Partnership with Metro 9:30 – 11:30	24 The Laurel's Assisted Living and Retirement Home	25
26	27 Habitat Restore	28 Classroom Central	29 Raptor Center	30 Tour Johnson and Wales OR EMT/Medic/Fire and K9 Officer OR work on GoState Boards TBD	31 LaRia Equestrian Center	Notes: K9 Officer Johnson & Wales CPCC March 20

Sample Task List

Today's Site: Habitat Restore

- ☐ Wash windows
 - Get rags from kitchen
 - Get Windex from cupboard in kitchen
 - Clean all the front windows
- ☐ Wash front doors
 - Use rags
 - Use Windex from cupboard in kitchen
 - Clean with two front doors at the front of the store
- ☐ Check with Supervisor

Evidence-Based Practices for Individuals with ASD

- ◆ 27 identified in a recent report by the National Professional Development Center (NPDC) housed at UNC-Chapel Hill



The National Professional Development Center
on Autism Spectrum Disorder

- ◆ Online modules released by Autism-Focused Internet Modules (AFIRM)



AFIRM Autism Focused Intervention
Resources and Modules

Antecedent-Based Intervention	Functional Communication Training	Peer-Mediated Instruction and Intervention	Reinforcement	Social Narratives	Video Modeling
Cognitive Behavioral Intervention	Modeling	Picture Exchange Communication System	Response Interruption/Redirection	Social Skills Training	Visual Support
Discrete Trial Training	Naturalistic Intervention	Pivotal Response Training	Scripting	Technology-Aided Instruction and Intervention	
Exercise	Parent-Implemented Intervention	Prompting	Self-Management	Time Delay	

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Modeling

“Demonstration of a desired target behavior that results in imitation of the behavior by the learner and that leads to the acquisition of the imitated behavior. This EBP is often combined with other strategies such as prompting and reinforcement.”

New EBP identified in the 2014 review

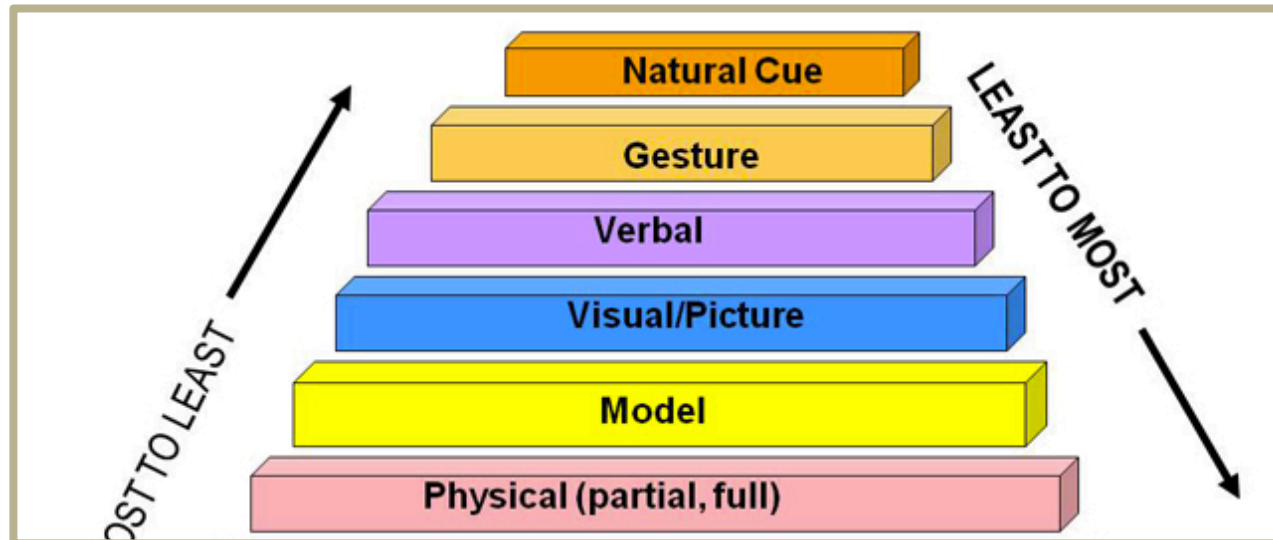
Practice brief not yet available



(Wong et al., 2014)

Prompting

“Verbal, gestural, or physical assistance given to learners to assist them in acquiring or engaging in a targeted behavior or skill. Prompts are generally given by an adult or peer before or as a learner attempts too use a skill.”



(Wong et al., 2014)

Self-Management

“Instruction focusing on learners discriminating between appropriate and inappropriate behaviors, accurately monitoring and recording their own behaviors, and rewarding themselves for behaving appropriately.”



(Wong et al., 2014)

Social Narratives

“Narratives that describe social situations in some detail by highlighting relevant cues and offering examples of appropriate responding. Social narratives are individualized according to learner needs and typically are quite short, perhaps including pictures or other visual aids.”



(Wong et al., 2014)

Task Analysis

“A process in which an activity or behavior is divided into small, manageable steps in order to assess and teach the skill. Other practices, such as reinforcement, video modeling, or time delay are often used to facilitate acquisition of the smaller steps.”

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(Wong et al., 2014)

Technology-Aided Instruction and Intervention

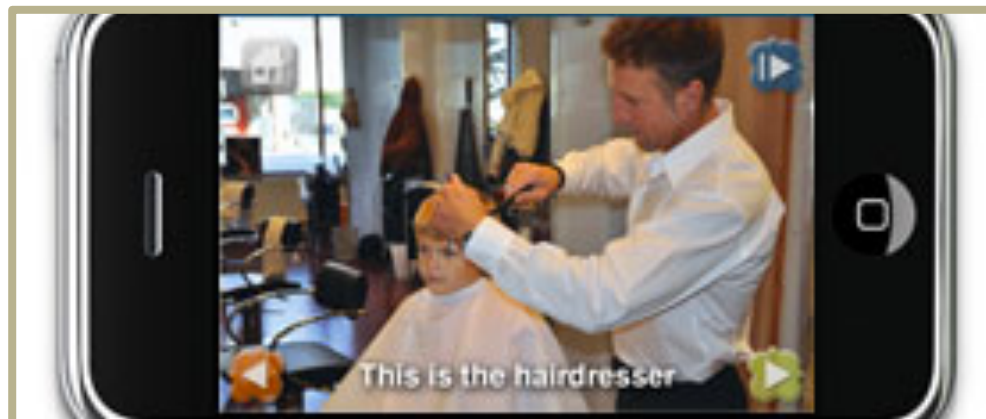
“Instruction or interventions in which technology is the central feature supporting the acquisition of a goal for the learner. Technology is defined as “any electronic item/equipment/application/or virtual network that is used intentionally to increase/maintain, and/or improve daily living, work/productivity, and recreation/leisure capabilities of adolescents with autism spectrum disorders” (Odom, Thompson, et al., 2013).”



(Wong et al., 2014)

Video Modeling

“A visual model of the targeted behavior or skill (typically in the behavior, communication, play, or social domains, provided via video recording and display equipment to assist learning in or engaging in a desired behavior or skill.”



Visual Support

“Any visual display that supports the learner engaging in a desired behavior or skills independent of prompts.”

- Examples of visual supports include pictures, written words, objects within the environment, arrangement of the environment or visual boundaries, schedule, maps, labels, organization systems, and timelines.



Limitations

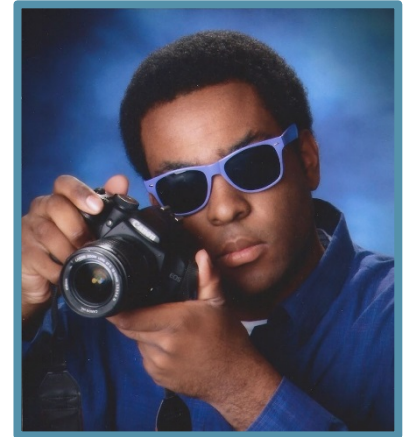
- ◆ CSESA is a two-year project, still waiting on information from coaches and schools about complete WBLE implementation
- ◆ Based on feedback in pilot studies, it can be a challenge to extend WBLE to students with ASD in general education classrooms who may not have a resource room slot/class in their schedule
- ◆ Capturing fidelity that shows WBLE comparably implemented across studies
- ◆ Schools within spread-out or rural communities, makes it difficult to visit job sites
- ◆ Reliance on small, independent businesses, some larger corporations have liability policies and extra hoops for coordinators and school personnel to jump through

Implications For Research

- ◆ Need for more research on the development of work-based learning as a practice for students with ASD
- ◆ Development within a comprehensive transition program
- ◆ Incorporated within transition planning
- ◆ Further understanding of the benefits WBLE may have on future employment

Implications For Practice

- ◆ Identification and application of work-based learning experiences for students with ASD
- ◆ Individualization of practices
- ◆ Incorporate results of transition assessment
- ◆ Embed as a goal within transition planning
- ◆ Let WBLE guide future transition assessments, planning, and goals
- ◆ Service agencies involvement



THANKS! ANY QUESTIONS?

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