TOP TIPS FOR DEVELOPING AND IMPLEMENTING WORK-BASED LEARNING OPPORTUNITIES FOR HIGH SCHOOL STUDENTS WITH ASD

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INTRODUCTION

- Co-Principal Investigator of the Center on Secondary Education for Students with ASD
  - Research & Development Center
  - Funded by the Department of Education (IES)
  - [http://csesa.fpg.unc.edu/](http://csesa.fpg.unc.edu/)
  - Work developed by our colleagues at UNC-C (PI: Dave Test)

- Purpose: To develop and study a comprehensive high school program for students on the autism spectrum

- Working with 547 adolescents with ASD and their families in 60 high schools across 3 states, as well as 700+ staff members

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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%

(Shattuck et al., 2012)
“These students finish high school and then go and sit on the couch...”
What are your former students/others you know with ASD doing after completing high school?
- Where are they?
- What do they do during the day?
- Who are they connecting with?
- How would you describe their quality of life?
WHAT CAN WE DO IN HIGH SCHOOL SETTINGS TO IMPROVE OUTCOMES?

- What can we change?
  - Overburdened adult system
  - Disconnect between school and vocational services systems
  - Restrictions around requirements for diplomas
  - Limited family resources

- Today: Focus on malleable factors we can influence in our day-to-day practice
WHAT CAN WE DO IN HIGH SCHOOL SETTINGS TO IMPROVE OUTCOMES?

- Career awareness, occupational courses, paid work experiences, community experiences, and other work-based learning experiences (WBLE) are among the evidence-based predictors of post-school success

(Test, Mazzotti, et al., 2009; Rowe et al., 2014)
WHAT CAN WE DO IN HIGH SCHOOL SETTINGS TO IMPROVE OUTCOMES?

■ National Technical Assistance Center on Transition
■ http://transitionta.org/

Research-Based Predictors of Positive Educational Outcomes
- Inclusion in general education
- Occupational courses
- Paid employment/work experience
- Transition programs
- Vocational education
- Youth autonomy

Research-Based Predictors of Positive Employment Outcomes
- Inclusion in general education
- Occupational courses
- Paid employment/work experience
- Vocational education
- Work study

Research-Based Predictors of Positive Independent Living Outcomes
- Inclusion in general education
- Self-care/Independent living
WHY WBLE?

Helps the student:

- develop relationships,
- learn valuable work skills,
- create a strong work ethic,
- focus on interpersonal skills that will foster a positive work experience,
- increase knowledge of their needs and strengths

(Fast, 2004; Targett, 2006).
WBLE ARE FOR ALL STUDENTS

- Often only considered for students on a modified diploma track
- Outcomes bleak across the spectrum
  - Employment results for those with high-functioning autism (HFA) are generally much lower than would be expected on the basis of the individual’s intellectual functioning.
  - From NLTS2: For students who entered a 4-year college after graduation, less than 20 percent had graduated or were on track to graduate when the study ended
Goal: Students will complete activities within 2 WBLE experiences each school year
# Suggested Timeline Across High School

<table>
<thead>
<tr>
<th>9th Grade</th>
<th>10th Grade</th>
<th>11th Grade</th>
<th>12th Grade and Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Exploration</td>
<td>Career Exploration</td>
<td>Service Learning</td>
<td>Service Learning</td>
</tr>
<tr>
<td>Job Shadowing</td>
<td>Job Shadowing</td>
<td>Internship</td>
<td>Internship</td>
</tr>
<tr>
<td>Work Sampling</td>
<td>Work Sampling</td>
<td>Paid Employment</td>
<td>Paid Employment</td>
</tr>
<tr>
<td>Mentoring</td>
<td>Mentoring</td>
<td>Apprenticeship</td>
<td>Apprenticeship</td>
</tr>
</tbody>
</table>

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

9th Grade: 9th Grade
10th Grade: 10th Grade
11th Grade: 11th Grade
12th Grade and Beyond: 12th Grade and Beyond
CHALLENGE #1

“How do I fit WBLE into my student’s schedule?”
TIP #1 FITTING WBLE IN DURING THE SCHOOL DAY

- Academic Strategies Class
- Homeroom Period
- Lunchtime
- Clubs
- Field Trips
- Meetings with Case Manager
- Peer Tutoring
- Service learning hours
- Embedded in coursework
- Career and Technical Education classes
- Meeting with College Reps
- Advisory Period
- TA Period
- College or Career Fair
English Language Arts Standards » College and Career Readiness Standards » Speaking and Listening » Standard 1: Students will speak and listen effectively in a variety of situations including, but not limited to, responses to reading and writing.

Speaking and Listening » Recursive Reading Strand: Students will develop and apply effective communications skills through speaking and active listening.

9th Grade English I Objectives
- OAS.9.1.R.1 Students will actively listen and speak clearly using appropriate discussion rules with control of verbal and nonverbal cues.

Research-Identified Employment and Further Education Skill to be Taught: Use socially acceptable language; show respect for others (Ju, Zhang, & Pacha, 2012)

<table>
<thead>
<tr>
<th>Most Complex</th>
<th>Least Complex</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Activities</strong></td>
<td></td>
</tr>
<tr>
<td>Students will use appropriate language and grammar when answering the class phone and simulated situations such as dealing with an angry customer or coworker, handling a phone call for which he or she does not know the answer, taking messages, and responding to email.</td>
<td>Students will use appropriate language and grammar when answering the class phone and simulated situations such as dealing with an angry customer, handling a phone call for which he or she does not know the answer, taking messages, and responding to email.</td>
</tr>
<tr>
<td>Students will use appropriate language and grammar when answering the class phone or greeting class guests.</td>
<td></td>
</tr>
</tbody>
</table>

**Earning an Income**

Describe the cost versus benefit of choosing at least two different jobs.

**Sample Annual Transition Goals**
- The student will use socially acceptable language and grammar when conducting work-related tasks such as answering email, dealing with angry customers and coworkers, and using the phone 5 demonstrations.
- Students will use appropriate language when answering a phone and taking messages 4 out of 5 demonstrations.
- Students will use appropriate language when answering the class phone or greeting class guests 4 out of 5 demonstrations.
TIP #2  CREATING A NEW COURSE

Lakeview High School seniors learn life skills in class

By Maggie Nelson  |  on March 21, 2027

Inaugural life skills program wraps up at CCHS

By Emily Beckett
Email the author
Published 4:06 pm Tuesday, May 13, 2014
But all my students want to be video game designers...
TIP #1 | HELP STUDENTS IDENTIFY THEIR INTERESTS, STRENGTHS, AND SKILLS

- Ongoing transition assessments & survey of student and family preferences
  - http://transitionta.org/
    - https://transitioncoalition.org/
Transition Planning Inventory
Second Edition

TPI•2
Gary M. Clark
James R. Patton

TTAP
LEACCT Transition Assessment Profile
SECOND EDITION
Gary Melbaek
Jean H. Thomas
S. Michael Capparelli
Eve Shiehler

HOW I SEE MYSELF
* Remember always ask your teacher if you don’t know what a word means.

What do people like and admire about you?

My Goals After I Graduate from High School

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Completed Checklist</td>
<td>6th</td>
<td>9th</td>
<td>10th</td>
<td>11th</td>
<td>12th</td>
<td></td>
</tr>
</tbody>
</table>

1. Jobs and Job Training – After I graduate from high school I want to be a:
   - [ ] Chef
   - [ ] Factory work
   - [ ] Factory worker
   - [ ] Teacher
   - [ ] Counsellor
   - [ ] Mechanic
   - [ ] Machinist
   - [ ] No employment
   - [ ] Trucker
   - [ ] Shovel
   - [ ] Work with support
   - [ ] Carpenter
   - [ ] Administrative Assistant
   - [ ] Work with support
   - [ ] Hospital
   - [ ] Other:

2. Recreation and Leisure – After I graduate from high school, these are what I will do:
   - [ ] Bowling
   - [ ] Baseball games
   - [ ] ATV
   - [ ] Activities with support
   - [ ] Weightlifting
   - [ ] Hunting
   - [ ] Video games
   - [ ] Camping
   - [ ] Concerts
   - [ ] Boating
   - [ ] Dancing
   - [ ] Swimming
   - [ ] Watching videos
   - [ ] Roller-Blading
   - [ ] Movies
   - [ ] Other:__________________________
   - [ ] Going to football games
   - [ ] Skiing
   - [ ] Segregated activities
   - [ ] Snowmobiling
TIP #2  COLLEGE & CAREER EXPLORATION

• Helping students know what other choices are out there

<table>
<thead>
<tr>
<th>Career Ready</th>
<th>College Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Activities</td>
<td>Student Activities</td>
</tr>
<tr>
<td>• Company Tours/Field Trips</td>
<td></td>
</tr>
<tr>
<td>• Interview Employers</td>
<td></td>
</tr>
<tr>
<td>• Career Interest Questionnaires</td>
<td>• Go on a campus tour</td>
</tr>
<tr>
<td></td>
<td>• Select a dormitory on campus and talk to the Resident Advisor about the rules</td>
</tr>
<tr>
<td></td>
<td>• Visit the financial aid office at your local college/ university</td>
</tr>
<tr>
<td></td>
<td>• Visit disability services</td>
</tr>
</tbody>
</table>
TIP #3 FOCUS ON STEPS TO GET THERE
WHEN CAN CAREER/COLLEGE EXPLORATION ACTIVITIES TAKE PLACE AT YOUR SCHOOL?
“How can I use what we already have at my school?”

CHALLENGE #3
TIP #1 | CONSIDER JOB SHADOWING OR WORK SAMPLING AVAILABLE IN THE SCHOOL

• Shadowing: Student spends extended time in a workplace accompanying an employee in the daily duties of his/her occupation.

• Sampling: Student “spends meaningful time in a work environment to learn aspects of potential job task and ‘soft skills’ required in the work place.”

(Luecking, 2009)
TIP #1 | JOBS AROUND THE SCHOOL

Athletic Trainer
Nurse
Psychologist
Arts-Related (e.g., lighting, sound)
Custodial Staff
CTE Experts (e.g. auto mechanic, marketing)
Coach
Clerical Staff
Counselor
Resource Officer
Paraprofessional
Grounds Crew
Teacher
Cafeteria Staff
Instructional Technology
Management/Administration
Data Entry
Arts-Related (e.g., lighting, sound)
CTE Experts (e.g. auto mechanic, marketing)
TIP #1 | ACTIVITIES FOR JOB SHADOWING OR WORK SAMPLING

Interview
Surgeon
Dr. Greg May

Q: What do you do at your job?
A: "Well, I interview my patients to find out what their problem is. I also look at their background information. Then I perform surgery to fix their problems. But, mainly I do surgeries. I have them lined up one after another."

Q: What do you have to do in order to get your job?
A: "It's a lot of hard work. I went to college in Atlanta. I graduated from University of Miami school of Medicine. I also had to do 7 years of residency at Emory University Hospital. It drove me crazy!"

Q: What do you like the most and least about your job?
A: "What I like the most is that I get to make the most out of my patients. You get to see them happy and healthy, and it just makes me feel good inside. What I like the least is having to wake up 2 or 3 o'clock in the morning to an emergency call. That's really tiring."

What I learned about being a:

<table>
<thead>
<tr>
<th>setting:</th>
<th>education:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be good for this job because:</td>
<td>I would not fit this job because:</td>
</tr>
</tbody>
</table>

A question I have about this job is:

For me, this job is: (horrible) 1 2 3 4 5 6 7 8 9 10 (perfect)

Another job I am interested in:
TIP #2 | CAPITALIZE ON AVAILABLE SERVICE LEARNING ACTIVITIES

- Student engages in hands-on volunteer service to the community
- The volunteer service integrates with course objectives
- The learning process is structured to provide time for reflection on the service experience and demonstration of the skills and knowledge required

Service-Learning Implementation

Each school will develop a strategy to ensure that all students can fully participate in service-learning projects during their years in high school. For the graduating classes of 2016, 2017, 2018, 2019 ONLY schools can choose from among the following options:

- One classroom-integrated service-learning project + 25 individual service hours
- Two classroom-integrated service-learning projects + 15 individual service hours
- Three classroom-integrated service-learning projects
**TIP #2 | SERVICE LEARNING IDEAS**

<table>
<thead>
<tr>
<th>Clubs</th>
<th>Courses</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Service-oriented clubs – e.g., Key Club, Beta Club</td>
<td>• Select a service learning course as an elective - e.g., teacher cadet,</td>
<td>• Community events/organizations - Blood drive, election registration, clothing drive, food bank, Habitat</td>
</tr>
<tr>
<td>• Interest-oriented clubs – e.g., Amnesty International, Environmental Club</td>
<td>• Courses with service component – e.g., auto, horticulture</td>
<td>• Complete a volunteer match application (volunteermatch.org)</td>
</tr>
</tbody>
</table>
TIP #2 | SERVICE LEARNING EXAMPLES
TIP #3  |  OFFER TO SUPPORT EXISTING OR ONGOING INITIATIVES

• Social worker - needs
  • E.g., Backpacks with food for the weekend or holidays

• Existing committees and initiatives
  • E.g., Sunshine committee, PSAs during certain months/weeks

• Existing school-based enterprises
  • E.g., coffee cart, athletic apparel sales
WHAT DO YOU HAVE AVAILABLE ON YOUR CAMPUS?
“I’m so sick of recycling!”

CHALLENGE #4
TIP #1 | INCORPORATE STUDENT INTERESTS AND CHOICE

- Use list of existing school jobs and resources as menu of options
- Preference assessments
- Connecting with preferred classes or teachers

<table>
<thead>
<tr>
<th>Work Task Preference Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
</tr>
<tr>
<td>Washing Tables</td>
</tr>
<tr>
<td>Washing Tables</td>
</tr>
<tr>
<td>Washing Tables</td>
</tr>
<tr>
<td>Cleaning Lamination</td>
</tr>
<tr>
<td>Cleaning Lamination</td>
</tr>
<tr>
<td>Dry Erase Board</td>
</tr>
</tbody>
</table>

Most preferred to least:
- Sorting Silverware – 3
- Cleaning Lamination – 2
- Dry Erase Board – 1
- Washing Tables – 0
**TIP #2 | USE ROTATIONS TO PROVIDE A VARIETY OF EXPERIENCES**

- Rotations within curriculum assistance or occupational preparation course
- Have 3-4 week rotations through different jobs during work time
TIP #3 | USE EBPS TO TEACH MORE COMPLEX WORK TASKS

- Task analysis
- Visual supports
- Self-management
- Prompting
- Reinforcement

**Cleaning Buses**

1. Supplies in bucket:
   - 4 large rags
   - 1 window cleaner
   - 1 surface cleaner

2. Ask Brian “What bus do I start on?”

3. Clean Buses
   - If there is a list of people, I can choose one/three buses.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Box 1</th>
<th>Box 2</th>
<th>Box 3</th>
<th>Box 4</th>
<th>Box 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Clean yellow strips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use surface cleaner)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Clean lights above seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use surface cleaner)</td>
<td></td>
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<tr>
<td>c. Clean stop sign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use surface cleaner)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>d. Clean wall next to seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use surface cleaner)</td>
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<td></td>
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<tr>
<td>e. Clean silver handrails</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>(Use surface cleaner)</td>
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<td></td>
</tr>
<tr>
<td>f. Clean black frames around windows and wipe handle</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use surface cleaner)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>g. Clean all mirrors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use window cleaner)</td>
<td></td>
<td></td>
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<tr>
<td>h. Clean area behind driver seat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Use window cleaner &amp; bags)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>i. Get 4 new rags</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

4. At 1:30 CT and get ready to go home.

**Food Lion Bagging Rules**

- Is it **chicken**?
  - If YES, put in blue bag **BY ITSELF**.

- Is it **other kinds of meat**? If YES, put in blue bag. You can put up to 6 other meat items in the blue bag (NO chicken).

- Is it a **cold item**? If YES, put in **blue** bag.

- Is it **bread**? If YES, then put in a bag **BY ITSELF** or **ON TOP**.

- Is it **eggs**? If YES, then put in a bag **BY ITSELF** or **ON TOP**.
“Are these experiences really making a difference?”
TIP #1 | INCORPORATE ASSESSMENTS AND REFLECTIONS INTO WBLE

- Data collection
- Evaluations
- Self assessments
- Videos too!
- Personal reflections
TIP #2 | PUT TOGETHER A STUDENT PORTFOLIO

- Used as part of transition assessment process, for IEP meetings and job interviews

- Career Inventories
- Job Applications
- Resumes
- Personal Reflections
- Work Evaluations
- Photos
TIP #2 | USE TECHNOLOGY TO SUPPORT STUDENT ASSESSMENTS AND REFLECTIONS

- Electronic portfolios
  - Learner Journey
  - Google Docs
  - Dropbox

- Videos to communicate
  - Animotos
FIND CSESA

- [http://csesa.fpg.unc.edu/](http://csesa.fpg.unc.edu/)

- [www.facebook.com/csasa.asd](http://www.facebook.com/csasa.asd)
CSESA RESOURCES

- Professional Development Series
  - 2 presentations with video, facilitator notes, activities, and handouts
  - Designed for middle & high school general educators

- Understanding Autism Guide
CSESA RESOURCES

- Autism-at-a-Glance Series
  - Tips for families & practitioners
- Teen Talking to Teens
- Special Issue in *Remedial and Special Education* Journal
  - Autism, Adolescence, & High School
  - Articles and Snapshots
TEACHING SKILLS REQUIRED FOR WBLE

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

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

(Wong et al., 2014)
In progress:

- Updating the previous review (1990-2011) to include most recent research (2012-2017)
- Identify new evidence-based practices

In the future:

- Update AFIRM modules

We need you!

- Looking for reviewers to help update literature
- Looking for partners to fund next steps

http://ncaep.fpg.unc.edu/
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