Objectives

Participants will:

- Review ergonomic and fitness literature that are foundational for Work Capacity Evaluation in the School Setting.
- Recognize the need for increased physical fitness to increase vocational opportunities.
- Discuss evaluation components and Fit4Work Work Capacity Screen.
- Review and discuss student progress in Fit For Work activities.

Every great idea begins with a story…

and a really cute kid…
The Landscape: Educational Mandates and Scope of Practice

FAPE mandates that special education and related services are designed to:
- Meet students' unique needs
- Prepare them for Further Education, Employment and Independent Living

Students with disabilities need support and transition services to prepare them for
- Further Education
- Employment
- Independent Living
The goal of Physical Education is to develop physically literate individuals who have the knowledge, skills and confidence to enjoy a lifetime of healthful physical activity.

- To pursue a lifetime of healthful physical activity, a physically literate individual:
  - Has learned the skills necessary to participate in a variety of physical activities.
  - Knows the implications and the benefits of involvement in various types of physical activities.
  - Participates regularly in physical activity.
  - Is physically fit.
  - Values physical activity and its contributions to a healthful lifestyle.

National Standards of Physical Education

---

Slide 11

Related Services

- Required to assist a student to benefit from special education.
- Must directly relate to the student's need to
  - Access
  - Make progress

IDEA 34 CFR 300.34 (b)

---

Slide 12

Scope of School Based PT

- Mobility to access the school environment
- Positioning for participation
- Assistive technology
- Providing, recommending, consulting about program activities that support a student's learning needs
Domain of Occupation: AOTA Framework

1. "Participation in academic (e.g., math, reading, degree coursework), nonacademic (e.g., recess, lunchroom, hallway), extracurricular (e.g., sports, band, cheerleading, dance), and vocational (prevocational and vocational) educational activities"

To foster job success, PTs can assist individuals by doing the following:

1. Identifying individualized goals, skills, and potential limitations,
2. Customizing practice or actual work environments,
3. Training in using appropriate assistive technology,
4. Addressing any mobility, self-care, or transportation issues,
5. Promoting health and wellness,
6. Consulting with family members, teachers, employers, vocational/community rehabilitation providers, and related personnel, and
7. Participating in advocacy initiatives."
Olmstead: Community Integration for Olmstead Act (1999)

In 2009, the Civil Rights Division launched an aggressive effort to enforce the Supreme Court's decision in Olmstead v. L.C., a ruling that requires states to eliminate unnecessary segregation of persons with disabilities and to ensure that persons with disabilities receive services in the most integrated setting appropriate to their needs. President Obama issued a proclamation launching the "Year of Community Living," and has directed the Administration to redouble enforcement efforts.

Employment Population Ratios: 2015

Employment Statistics

United States Dept of Labor (2015)
Barriers to Employment

Lindsey (2015)

Individual, Sociostructural and Environmental Expectations and Attitudes

Lack of independence, life skills, and self-care activities (navigating public transportation)

Lack of funding and policies to enhance disability awareness among employers.

---

"Youth with physical disabilities encounter some similar barriers to finding employment compared to their typically developing peers but in a stronger way."

Lindsey (2015)

---

"Social and health professionals... should acknowledge the multiple factors that influence participation at work... and programs should appropriate resources like assistive technology, physical training, self-management in ADL and social rules, problem solving strategies, self-confidence in order to enhance quality of life and well being."

Correia Martins, 2014
What Family Variables Are Associated With Employment After High School?

- Parental expectations that a student would definitely get a paying job
- Expectations that the student would eventually be self-supporting
- Having regular household responsibilities

Affordances to Employment

- High school work experiences related to vocational success
- Participation in home chores related to work

Self Determination Skills

- Self-awareness
- Assertiveness
- Creativity
- Pride
- Problem Solving
- Self-advocacy

Set goals, evaluate options, make choices and then work to achieve goals.
Slide 25

Stakeholders

- Student
- Families
- Teachers
- Community Employers
- Administrators

Slide 26

Fitness statistics: WHO

- Globally, 81% of adolescents aged 11-17 years were insufficiently physically active in 2010.
- Adolescent girls are less active than adolescent boys, with 84% vs. 78% not meeting WHO recommendations.
- Less than 3 in 10 high school students get at least 60 minutes of physical activity every day.

Slide 27

Physical Fitness: “A set of attributes that are either health or skill-related. The degree to which people have these attributes can be measured with special tests.”

- Health-related fitness includes body composition, cardiorespiratory endurance, flexibility, muscular strength, and muscular endurance.
- Skill-related fitness includes agility, balance, coordination, power, speed, and reaction time.
- Physiological fitness includes aerobic capacity and cardiovascular fitness, and body composition.
Slide 28

**Fitness: Adults**

Physical activity can improve health.

- Live longer
- Lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers.
- Help with weight control
- Improve academic achievement in students.

Slide 29

**Physical Activity Recommendations:**

**Children and adolescents 5-17 years**

- At least 60 minutes of moderate to vigorous-intensity physical activity daily.
- Physical activity of amounts greater than 60 minutes daily provides additional health benefits.
- Should include activities that strengthen muscle and bone, at least 3 times per week.

Slide 30

**Physical Activity Recommendations:**

**Adults aged 18-64 years**

- At least 150 minutes of moderate-intensity physical activity throughout the week, or at least 75 minutes of vigorous-intensity physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.
- For additional health benefits, adults should increase their moderate-intensity physical activity to 300 minutes per week, or equivalent.
- Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.
Supervised moderate intensity resistance exercise training improves strength in Special Olympic athletes

- 2 groups:  
  - SOA (n=15)  
  - TD (n=17)  
- Age 19-24
- 10-12 sessions
- 1 RM increased by 25-50%
- Increased efficiency in vocational tasks

Sample 
2 groups: 
- SOA (n=15)  
- TD (n=17) 
Age 19-24 
Program 
10-12 sessions 
Results 
1 RM increased by 25-50%
Increased efficiency in vocational tasks

Development of Physical Fitness in Children with Disabilities: age 8-12, n=51 (mild ID), n=515 (TD)

- Attributes measured: running speed, aerobic endurance, explosive strength, hand grip strength, trunk strength
- ID statistically significant differences in all measures
- No difference in gender

Physical capacity and functional abilities improve in YA with ID after functional training

- 2 groups: Functional Training Activities (N=20) vs Weight training (N=22)
- Pre fitness testing: HR for 3 min step test, static plank, body weight squat, static bar hang, knee push ups
- Program: 1 hour/wk, twice per week
  - 30 mins functional activities
  - 20 mins cardio
  - 10 min cool down
- Results: Improvement noted for all measures
  - Static plank statistically significant
Are young adults with special needs ready for the physical work demands?

2 groups

- Dev disorders (N = 13)
- with matched control group (TD) (N = 13)

Significant differences in:
- Measures of timed performance
  - Bilateral carry
  - Collars and washers fixed on a table
  - Hand Tool Dexterity test
  - Maximum number of pins put in the holes of PPT (in limited seconds)

Systematic but not significant difference:
- Dynamic strength subtests of the PWPE (mean scores of all weight lifted and carried, grip)

Ratzon, 2010

Ergonomic Literature:
- Functional Capacity Evaluations

How are Ergonomic PT Assessments Performed?

- King recommended individual assessments should be selected based on the person’s physical impairments and how they relate to return to work.

- Task analysis of specific job tasks
  - Documenting frequency of tasks exposure & body position
  - Back posture, arm reach, sitting, standing, walking, twisting, crouching, crawling, kneeling

Gagne, 2010
Work Capacity Programs

“work related, intensive, goal-oriented treatment programs specifically designed to restore an individual's systemic, neuromusculoskeletal and cardiopulmonary functions. The objective of the program is to restore the injured employee's physical capacity and function for return to work.”

APTA, 2014

Ergonomic Literature

4 Components of Job Tasks
- Lifting
- Carrying
- Squatting
- Walking Endurance

Mass Mutual Manual Handling Data
Slide 41

Social Security Exertional Levels

- **Sedentary**
  - Exerts 10# force occasionally or negligible amount
  - Sitting most of the time, brief standing/walking

- **Light**
  - Exerts 20# of force occasionally, 10# of force frequently, or negligible force constantly
  - Significant walking/standing, sitting to pull/push leg/arm controls

- **Medium**
  - Exerts 20-50# force occasionally, or 10-25# frequently, 10# constantly

- **Heavy**
  - Exerts 50-100# of force occasionally, or 25# constantly

- **Very Heavy**
  - Exerts 100# of force occasionally, 50# constantly

-- THE MEDICAL-VOCATIONAL RULES OF APPENDIX 2

https://www.ssa.gov/OP_Home/rulings/di/02/SSR83-10-di-02.html

---

Slide 42

Traditional Physical Therapy Evaluation for High School Students

- **Review of Systems**
- **Observation of areas of concern**
- **ROM**
- **Strength**
- **Balance**
- **Functional mobility**

**Barriers to employment**
- Physical impairments
- Mobility
- Strength
- Balance
- Endurance
- Cognition

**Job opportunities**

**Community supports**

**MEDICAL CONSIDERATIONS**
Slide 43

ICF MODEL

“Health Condition”
(disorder or disease)

Body Functions
and Structures

Activities
Participation

Personal
Factors
Environmental
Factors

Motivation
Interest

Personal
preferences

Cerebral palsy
Down syndrome
Seizure disorder

CBI, Job sites

Accessibility

Temperature
Light

Slide 44

Tools for Work Assessment for Youth With Disability

- Autism Work Skills Questionnaire
- VocFit Assessment
- Becker Work Assessment Profile-2
- Children Helping Out: Responsibilities, Expectations, and Supports

Slide 45

A Novel Decision Support System for Systematic Job Matching of Individuals With DD

Vocational Fit Assessment
- Designed to assess individual worker abilities, job demands, identify pros/cons of job match and identify areas of need for intervention.
- 30-60 mins
- Generates report for free
- Initial validity studies completed.

Andrew Persch, OT, PhD
http://www.vocfit.com/vfa.html
Internal Structure of the Children Helping Out: Responsibilities, Expectations, and Supports (CHORES) Measure

3 groups: TD (n=65), cognitive/behavioral disorder (n=44), PD (n=23)

Age 6-10 (n=79), age 11-14 (n=53)

Younger participants and PD scored lower than other groups

Rasch analysis showed good fit for all items

Dunn, 2014

Fitness:

• Body Composition: BMI
• Muscular Strength: Push/pull, dynamometer, 5 Times Sit to Stand Test, Timed Up and Go Test
• Muscular Endurance: 5 Times Sit to Stand Test, Timed Up/Down Stairs Test, Timed Floor to Stand Test
• Cardiorespiratory endurance: 6 MWT, 2 MWT, 30 Second Walk Test, Muscle Power Sprint Test, Energy Expenditure Index

• Flexibility

• Brockport Fitness Test

• POMA/Tinetti
• HiMAT

Functional Skills

• CHORES assessment
• ABAS-3 Household tasks, Fit4Work Screen
• Functional Movement Screen
• Autism Work Skills Questionnaire

Batteries

• Voc-Fit
• Becker Work Adjustment Profile-2

Fit4Work: Physical Therapy Evaluation of Work Capacity in School Settings for Students with Disabilities

©
Slide 49

Tools for Work Capacity
Home Chore Checklist
Squat Checklist

Slide 50

Fit4Work Screen

<table>
<thead>
<tr>
<th>Task</th>
<th>Amount of Weight</th>
<th>Good Body Mechanics?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifts weight floor to hip height</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifts weight hip to overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifts milk crate from floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walks and carries weight 60'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moves from squat to stand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moves from stand to squat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holds squat 10 seconds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Slide 51

Station 1: Lift Capacity

Task:
- Lifting
- Lifting & Carrying

Materials:
- Milk crate
- 2, 5, 8, 10# weights
- Weighted Bar
- Cones
Station 2: Walk and Carry

Task:
- Move in/out of squat
- Balance in squat

Materials:
- Poly-spots,
- Stop Watch

Station 3: Squat

Task:
- Move in/out of squat
- Balance in squat

Materials:
- Poly-spots,
- Stop Watch

Station 4: Walking Speed

Task:
- Measure Walking Speed: (f/m)
- 6MWT
- 10 meter walk test

Materials:
- Cones
- Stopwatch
Slide 55

Squat Checklist

<table>
<thead>
<tr>
<th>Preparation</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feet: Shoulder width apart. Can be slightly toed out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Eyes straight ahead</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Squat Sequence

| 3. Bends knees to ½ squat | | |
| 4. Bends knees to full squat | | |
| 5. Eyes straight ahead | | |

Full Squat

| 6. Balances Hands Free | | |
| 7. Elbows rest on knees | | |
| 8. Stands up | | |
| Time? (up to 20 sec) | | |

TOTAL /9

Adapted from Myer, 2014

CCJohnson, 2015

Johnson, 2015. For personal use only. Please do not reprint without authors permission

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Slide 56

Squatting

---

Slide 57

Home Chores Checklist

<table>
<thead>
<tr>
<th>Does not apply</th>
<th>Does not do or seldom does</th>
<th>1-3x per month</th>
<th>1-2x per week</th>
<th>1-2x per week or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carry items from car to house (eg groceries, packages)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carry items to the car</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brings items up/down stairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picks up items off of the floor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes trash from house to can</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes trash can(s) to curb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Returns trash can(s) to house</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Johnson, 2015. For personal use only. Please do not reprint without authors permission

---
Case scenario: Aiden, 16 years old

Pleasant young man
Very hard worker

ROS:
• Strengths: tremendous upper body
   strength, can dominate Specialist
   in rugby, box, and wrestling
• Struggles with completing tasks
   that require a lot of standing and walking
   (Indicated with PROMIS® Pediatric Item Bank v.1.0 – Pain Interference – Short Form 8a
   © 2009-2012 PROMIS® Health Organization and PROMIS Health Organization)

What Else Can We Do?

NEVER
I had trouble sleeping from pain, I felt angry when I had pain, I had trouble doing schoolwork when I had pain, it was hard for me to stand when I had pain

OFTEN
It is hard for me to run when I have pain, it is hard for me to walk one block when I have pain, it is hard for me to have fun when I have pain, it is hard for me to stand when I have pain.
Slide 61

Arm length 33.5”

Slide 62

<table>
<thead>
<tr>
<th>Balance</th>
<th>No Flat Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>• BBS: 26/28</td>
<td></td>
</tr>
<tr>
<td>• Unable to perform SLS &amp; tandem</td>
<td></td>
</tr>
<tr>
<td>• No Fall Risk</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Posture</th>
<th>Right knee valgus, left knee varus, right foot pronated, left foot supinated, lumbar lordosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>R/L: popliteal angle 135-160, AOF 15</td>
<td></td>
</tr>
<tr>
<td>• Right knee valgus, left knee varus, right foot pronated, left foot supinated, lumbar lordosis</td>
<td></td>
</tr>
<tr>
<td>Strong, probably long standing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strength</th>
<th>Tenderness</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Right hip, shoulder, knee</td>
<td></td>
</tr>
<tr>
<td>• Discomfort</td>
<td></td>
</tr>
<tr>
<td>• No reduced strength</td>
<td></td>
</tr>
<tr>
<td>• Both</td>
<td></td>
</tr>
<tr>
<td>• Right</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gait</th>
<th>No Chronic Gait</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I even/uneven surfaces</td>
<td></td>
</tr>
<tr>
<td>• I up/down stairs</td>
<td></td>
</tr>
<tr>
<td>• Trendelenberg gait</td>
<td></td>
</tr>
<tr>
<td>• Walking speed 3.69 ft./sec (typical 4.59 sec)</td>
<td></td>
</tr>
<tr>
<td>• O2 95-97</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cardio</th>
<th>HR at rest 92</th>
</tr>
</thead>
<tbody>
<tr>
<td>• During PT eval 140-148</td>
<td></td>
</tr>
</tbody>
</table>

Slide 63

Fit for Work Screen:

<table>
<thead>
<tr>
<th>Task: Lifting</th>
<th>Weight Lifted</th>
<th>Good Body Mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift Weight Floor → Hip</td>
<td>15 #</td>
<td>no, looks down</td>
</tr>
<tr>
<td>Lift Weight Head → Overhead</td>
<td>15 #</td>
<td>no, with VC</td>
</tr>
<tr>
<td>Walks 5 Carries Weight 100</td>
<td>25 #</td>
<td>yes</td>
</tr>
<tr>
<td>Task: Squatting</td>
<td>Performs?</td>
<td>Good Body Mechanics</td>
</tr>
<tr>
<td>Moves Stand → squat</td>
<td>yes</td>
<td>No, jumps to get up</td>
</tr>
<tr>
<td>Moves Stand → squat</td>
<td>no</td>
<td>No</td>
</tr>
<tr>
<td>Holds Squat 10 Seconds</td>
<td>yes</td>
<td>No, backs up for balance</td>
</tr>
</tbody>
</table>
Exertion levels

<table>
<thead>
<tr>
<th>Sedentary Work</th>
<th>Light Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>work involves exerting up to 10 pounds of force occasionally or a negligible amount of force frequently to lift, carry, push, pull, or otherwise move objects, including the human body... work involves sitting most of the time, but may involve walking or standing for brief periods of time.</td>
<td>work involves exerting up to 20 pounds of force occasionally, or up to 10 pounds of force frequently, or a negligible amount of force constantly to move objects.</td>
</tr>
</tbody>
</table>

Physical demand requirements are in excess of those for Sedentary Work

Standards of U.S. Department of Labor

Area of Need: Participation in Work Activities

Strengths:
- Aiden has lower body strength/range of motion impairments affect his ability to access jobs that include work at floor level and that involve squatting or stooping. Andrew needs to increase his ability to perform work tasks that are on the ground level or below his knees. He has not complained about back pain to his mother.

Needs:
- Aiden has lower body strength/range of motion impairments affect his ability to access jobs that include work at floor level and that involve squatting or stooping. Andrew needs to increase his ability to perform work tasks that are on the ground level or below his knees. He has not complained about back pain to his mother.

IEP

Goal:
- Aiden will increase his ability to perform work relatet job tasks that involve squatting/bending as measured on 2 of 3 opportunities quarterly.

Objectives:
- Aiden will balance in squat position with back upright with hands free, 20 seconds on 2 of 3 opportunities quarterly.
- Aiden will get at least a score of 6 out of 8 on a checklist to complete a full squat with good body mechanics on 2 of 3 opportunities quarterly.
Plan of Care

- Direct physical therapy services weekly
- Consultation with PE
- Job site visits monthly
- Coordination with parents on home activities
- Recommend the student f/u with MD regarding cardio, wt management and ortho

---

Outcomes

<table>
<thead>
<tr>
<th>Functional Tasks</th>
<th>Sept 2015</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifts Milk crate from floor</td>
<td>25# poor body mech. same</td>
<td></td>
</tr>
<tr>
<td>Lifts floor to hip</td>
<td>15# poor body mechanics</td>
<td>Good body mechanics no cues</td>
</tr>
<tr>
<td>Walks 60' carrying weight</td>
<td>25#, good body mech.</td>
<td>Same</td>
</tr>
<tr>
<td>Denver Squat/Walk</td>
<td>Yes, &quot;jumps&quot;</td>
<td>Yes, smoothly</td>
</tr>
<tr>
<td>Denver Simple Squat</td>
<td>Yes, poor body mechanics</td>
<td>Yes, good body mechanics</td>
</tr>
<tr>
<td>Hold Squat 10 Seconds</td>
<td>No, hands on floor to balance</td>
<td>6 sec, hands free</td>
</tr>
<tr>
<td>Electrolyte category</td>
<td>Sedentary</td>
<td>Light</td>
</tr>
<tr>
<td>Ankle dorsiflexion R. L</td>
<td>0/0</td>
<td>0/0</td>
</tr>
<tr>
<td>Walking speed</td>
<td>3.57 ft/sec</td>
<td>3.69 ft/sec</td>
</tr>
</tbody>
</table>

---

Squat Checklist

<table>
<thead>
<tr>
<th>September 2015</th>
<th>June 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feet: Shoulder width apart</td>
<td>Slightly toed out</td>
</tr>
<tr>
<td>2. Head up, eyes up</td>
<td>Y Y</td>
</tr>
<tr>
<td>3. Stand to Squat: Trunk erect</td>
<td>No, 15-20°</td>
</tr>
<tr>
<td>4. Bends knees to full squat</td>
<td>Y</td>
</tr>
<tr>
<td>5. Hold Squat 10 sec, 2 tries on knees</td>
<td>1 try on stable surface</td>
</tr>
<tr>
<td>6. Timely</td>
<td>Y Y</td>
</tr>
<tr>
<td>7. Moves smoothly squat to stand</td>
<td>Y</td>
</tr>
<tr>
<td>8. Moves smoothly stand to squat</td>
<td>N Y</td>
</tr>
<tr>
<td>Total</td>
<td>3/8 7/8</td>
</tr>
</tbody>
</table>
Slide 70

Fit4Work
Top 5 Interventions

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1. PE Program Support: Collaboration, Education, Program Development, Consultation

Slide 72

2. School Based Program Support: Collaboration, Education, Program Development, Consultation
3. Meeting Physical Activity Guidelines: Increasing Endurance

**School:**
- Increase opportunities for walking, standing, movement within and between classrooms
- Carrying personal and weighted items
- Participating in activities in PE
- Fitness: HIIT, Cardiovascular (walking, running, cycling), weight training
- Games: Active engagement in games that promote cardiovascular activity, overhead activity (e.g., volleyball)

**Home:**
- Unstructured play/sport,
- Walking programs

**Community:**
- Participation in activities of choice
- Community fitness program

---

Educational Program Targets

**Physical**
- Meet physical activity level guidelines per CDC

**Functional mobility**
- Ability to walk long distances
- Ability to carry items
- Ability to squat
- Ability to lift weighted objects from floor to overhead

**Material management**
- Gather materials
- Restore materials

**Work behaviors**
- Wait in place
- Follow simple directions
- Remain in work space
- Task completion (AOTA, 2014)
- Initiate tasks
- Continue tasks
- Complete tasks

---

Blake & Johnson, 2017
### Slide 76

#### Fit4Work

<table>
<thead>
<tr>
<th>Task</th>
<th>Work Tasks</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squat</td>
<td>Stock shelves</td>
<td>Balance in squat</td>
</tr>
<tr>
<td></td>
<td>Pick up items from the floor</td>
<td>Sit to stand</td>
</tr>
<tr>
<td></td>
<td>Cleaning</td>
<td>Use HIIT squat activities</td>
</tr>
<tr>
<td></td>
<td>Laundry</td>
<td>Biomechanics training</td>
</tr>
<tr>
<td>Lift and Carry</td>
<td>Carrying objects</td>
<td>Practice with 1 hand and 2 hand objects</td>
</tr>
<tr>
<td></td>
<td>Stacking shelves</td>
<td>Obstacle Courses</td>
</tr>
<tr>
<td>Work Overhead</td>
<td>Putting items on high shelves</td>
<td>Lift weight overhead</td>
</tr>
<tr>
<td></td>
<td>Games (throwing, walking, jumping)</td>
<td>Games (throwing, overhead activity)</td>
</tr>
<tr>
<td>Endurance</td>
<td>Walking work site</td>
<td>Meet Physical Activity Guidelines</td>
</tr>
<tr>
<td></td>
<td>Maintaining attention to task</td>
<td>PE/community based ex prog</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Track steps per day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treadmill, walking, elliptical</td>
</tr>
</tbody>
</table>

### Slide 77

#### 4. Job site observation

- Organizing Inventory

### Slide 78

#### 5. Work on SQUAT
Closing Thoughts

- Collaboration
- Evidence Based Practice
- Determine your students' needs
- Program supports already provided
- Strategies

PT/OT Practice Considerations

- Widen your consultation/evaluation lens
- Consider ergonomic literature & task demands for student activity
- Consider exertional levels when looking at job placement
- If a person can't do a particular skill & if that task is crucial to the job, consider options for remediation

Thank you
FIT FOR WORK SCREEN

Items needed: Weights to total 25 pounds, 1 milk crate, stop watch, 1 cone, 2 polyspots

Walk test: walks 100' in ___________Seconds=______________ft/sec
OR 6 minute walk test:_____________________________

<table>
<thead>
<tr>
<th>Task</th>
<th>Amount of Weight</th>
<th>Good Body Mechanics?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifts weight floor to hip height</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifts weight hip to overhead</td>
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<td></td>
<td></td>
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<tr>
<td>Lifts milk crate from floor</td>
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<tr>
<td>Walks and carries weight 60'</td>
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<tr>
<td>Moves from squat to stand</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Moves from stand to squat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holds squat 10 seconds</td>
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<td></td>
<td></td>
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</tbody>
</table>

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References

VOTA 2017


