How Do You Know Youth with Disabilities Are College and Career Ready?

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3 Questions...

1. What Does College and Career Readiness Mean for Youth with Disabilities?

2. What Strategies and Interventions are Available to Implement CCR?

3. What Are the Next Steps to Measure CCR Progress?
Brief History: From School Reform to College & Career Readiness

- Nation at Risk
- NCLB Standards-based Reforms
- NASSP “Breaking Ranks”
- NGA P21 Cradle to College
- Multi-Tiered Supports
- Transition EBPPs
- College & Career Ready
- SCANS Report
- IDEA “Transition”
- College-Ready for All
- RTI
- NGA & CCSSO CCSS
- Common CTE Core

1986 - 2015
What are the MOST Important Skills Needed for Adulthood?
Academic Engagement

The acquisition of academic content through interacting and engaging with the material, including cognitive and behavioral skills that students need to successfully engage with academics. These skills may include attendance, homework completion, active participation in class and less observable skills like making connections between content in different courses.

- Content area knowledge (i.e., core academics, career and technical content, electives)
- Knowledge structures (i.e., factual and conceptual knowledge; Blooms taxonomy)
- Organizing concepts (i.e., linking ideas and concepts across and within core and elective content to make knowledge relevant and meaningful to youth)
- Challenge levels (i.e., depth of knowledge)
- CTE course enrollment
- Classroom behaviors (e.g., student behavior towards class work; on-task, active engagement, passive engagement)
- Work habits (e.g., completing homework, in-class activities, productivity)
- Attendance (regular attendance)
- Course completion
Attendance, Behavior referrals and Course completion are factors highly correlated with graduation and dropout prevention.
EBPs for Academic Engagement

Check and Connect for Staying In and Progressing In School

What is the level of evidence?

This practice was identified by the Institute of Education Sciences as having potentially positive effects for progressing in school and positive effects for staying in school. It is labeled by NTACT as a Research-Based Practice. More information on NTACT’s process for identifying effective practices is available here: [NTACT’s Effective Practices](#).

What is the practice?

Check and Connect is an intervention to reduce dropping out. It is based on monitoring school performance, mentoring, case management, and other supports. The “Check” component is designed to continually monitor student performance and progress. The “Connect” component involves program staff giving individualized attention to students in partnership with other school staff, family members, and community service organizations.

Where is the best place to find out how to do this practice?

The What Works Clearinghouse at IES provides this information:

More details on the program are available at the University of Minnesota’s Institute on Community Integration’s website: [http://checkandconnect.umn.edu/](http://checkandconnect.umn.edu/)

With details on statewide implementation here:
[http://checkandconnect.umn.edu/implementation/statewide_sites.html](http://checkandconnect.umn.edu/implementation/statewide_sites.html)

The manual for implementing Check and Connect with fidelity is here:

References used to establish this evidence base:

Process-Oriented Skills

The skills needed to access and engage in academics and may include organizational strategies, test taking, studying, and time management, as well as critical thinking skills such as formulating problems, hypothesize solutions, collect evidence, analyze the evidence, and communicate findings. These skills span across content areas.

- Learning strategies (e.g., organization, note taking, studying, time management)
- Communication & Collaboration (listening, speaking, non-verbal)
- Critical thinking skills (e.g., formulating problems, hypothesize solutions, collect evidence, analyze the evidence, communicate findings & present knowledge).
- Creativity (e.g., brainstorming, developing new ideas, creating new knowledge)
- Accessing content (note taking, organizational strategies, accommodations)
- Technology (e.g., IT literacy, educational technology, consumer technology tools, assistive technology)
EBPs for Process-Oriented Skills

Using Strategy Instruction to Improve Reading Comprehension

What is the level of evidence?

- This is an evidence-based practice for students with disabilities based on six methodologically sound group experimental studies with random assignment across 328 students with disabilities.
- This is an evidence-based practice for students with learning disabilities based on six methodologically sound group experimental studies with random assignment across 318 participants with learning disabilities.

Where is the best place to find out how to do this practice?

The best place to find out how to implement strategy instruction is through the following research to practice lesson plan starters:

- Using the RAP Strategy to Teach Reading Comprehension (Lauterbach & Bender, 1995)

With whom was it implemented?

- Students with
  - Learning disabilities (6 studies, n=318)
  - Intellectual disability (1 study, n = 10)
  - No disability (1 study, n=45)
- Ages ranged from 11-15
- Gender
  - Males (n=217)
  - Females (n=149)
- Ethnicity
  - African-American (n=42)
  - White (n=103)
  - Hispanic (n=30)
  - American Indian (n=1)
  - Other (n=5)
  - None reported (n=284)

RAP Strategy

**Objective:** To teach students to paraphrase text, improve their reading comprehension, and increase their reading skills.

**Setting and Materials:**

**Settings:** any setting that allows the student to read a passage and make an audio recording. Instruction can be one-to-one or small group.

**Materials:** readings at the students’ reading level, grade level readings, audio recorder (e.g., tape recorder, smartphone with a voice recording app), cue cards with steps for paraphrasing written text.

**Content Taught**

A strategy for how to paraphrase a expository text.

**Teaching Procedures**

1. Conduct an assessment to identify the student(s) current reading level.
2. Describe the purpose of the instruction, state your commitment to complete the process, and obtain verbal commitment from the student to complete the entire process.
3. Phase 1:
   i. Explain (a) rationale, (b) where/when to use the strategy, (c) expected results, and (d) describe steps in detail
   1. R – read the passage
   2. A – ask yourself the main idea and two details
   3. P – put the main idea and details into your own words

   *For scoring criteria see the “Evaluation” section*

   ii. Model application of the strategy while “thinking aloud”

   iii. Require student(s) to state the acronym and its components with 100% accuracy

4. Phase 2:
   i. Materials: tape recorder, cue cards
   ii. Utilize 5-paragraph readings at student(s)’ reading levels and make cue cards available
   iii. Have students apply strategy into tape-recorder
     1. R – read the passage
     2. A – ask yourself the main idea and two details
     3. P – put the main idea and details into your own words
EBPs for Process-Oriented Skills

• Online transition curriculum
• Interviewing and job searching practice
• Aligned to Common Core State Standards in English/Language Arts
• Information technology (IT) literacy content integrated
• Emphasizes “T” in STEM initiatives
Interpersonal Engagement

Emphasis on interactions with others in schools as well as self-understanding of social emotional learning. Students show responsibility and adaptability across educational and non-educational settings, collaborate with peers, have an awareness in how others may be feeling or perceiving situations, and possess a sense of belonging with the school.

- Responsibility of self (e.g., internal locus of control, self-awareness of learning and engagement with others)
- Adaptability/flexibility with others
- Leadership, assertion skills
- Collaboration with others
- Social awareness, empathy toward others
- Respect of diversity
EBPs for Interpersonal Engagement

Peer Mentoring

• Peer-to-Peer
• Cross age
• Provides opportunities for collaboration, leadership, & training
• Youth with and without disabilities
• Occurs at school and/or in the community

See National Mentoring Resource Center
https://nationalmentoringresourcecenter.org
EBPs for Interpersonal Engagement

Using Self-Management to Teach Social Skills

What is the level of evidence?
- This is a Research Based Practice for students with disabilities based on two methodologically sound single subject studies across 2 participants.
- This is a Promising Practice for students with emotional and behavioral disabilities based on one methodologically sound single subject study with 3 participants with emotional behavioral disabilities.
- This is a Promising Practice for students with intellectual disabilities based on one methodologically sound single subject study with 4 participants with severe intellectual disabilities.

Where is the best place to find out how to do this practice?
- Using Self-Management Instruction to Social Skills
  - Game-related Social Skills (Moore, Carretelege, & Heckaman, 1995)

With whom was it implemented?
- Students with
  - Emotional and Behavioral Disabilities (1 study, n=3)
  - Severe intellectual disability (1 study, n=4)
- Ages ranged from 11 to 19
  - Males (n=4), females (n=0), gender not specified (1 study, n=4)
- Ethnicity
  - None reported (n=4)
  - African American (n=2)
  - White (n=1)
- Other

What is the practice?
Self-management is defined as a process by which individuals learn to change their behavior to improve their quality of life. It involves identifying and addressing the specific behaviors that need to be changed, setting clear and achievable goals, and developing strategies to help achieve those goals. It is a process that requires ongoing practice and support to be effective.

Using Self-Management to Teach Game Related Social Skills

Objective: To teach students game related social skills.

Setting and Materials:
- School classroom
- Items for skill training:
  1. Supplemental worksheets
  2. Self-monitoring form
- Items offered for play activities in the classroom for evaluation:
  1. Checkers
  2. Chess
  3. Penny hockey
  4. Table football
  5. Playing cards
  6. Old Maid
  7. Connect Four

Content Taught
A skills-training model involving social modeling, behavior rehearsal, and behavior transfer is used, as is self-monitoring to teach the game-related social skills:

1. Appropriate peer reactions:
   a) Student ignores the situation by not responding to the person trying to make him angry
   b) Student attempts to resolve the situation through a discussion of the problem
   c) Student walks away from the conflict
   d) Student seeks help from an authority figure

2. Appropriate reactions to losing:
   a) Student offers a rematch of the same game or a different game
   b) Student offers a congratulatory statement such as “nice game” or “good contest”
   c) Student offers a “thank you” to the opponent
   d) Student offers a pleasant affect as demonstrated by the absence of frowning, scowling, or other unpleasant looks indicative of negative feelings
Ownership of Learning

Entails growth mindset, self-determination, and perseverance. Specifically, that all students have the ability to take academic risks and understand the importance of the growth that comes from making mistakes.

- Sense of belonging
- Growth mindset (e.g., learning from mistakes, academic risk-taking)
- Help seeking
- Self-determination and self-advocacy
- Perseverance, grit
- Motivation, interest in learning
- Goal-setting skills
EBPs for Ownership of Learning

Practice Description

Using the Self-Determined Learning Model of Instruction to Teach Goal Attainment

What is the level of evidence?

- This is an evidence-based practice for students with disabilities based on four methodologically sound group studies and four methodologically sound single-case studies across 531 participants conducted by at least three different research groups in three different geographic locations.

- This is an evidence-based practice for intellectual disabilities based on three methodologically sound group studies and three methodologically sound single-case studies across 164 participants conducted by at least three different research groups in three different geographic locations.

- This is a research-based practice for students with autism based on two methodologically sound group studies across three participants with autism.

- This is a research-based practice for students with learning disabilities based on three methodologically sound group studies across 435 participants with learning disabilities.

Where is the best place to find out how to do this practice?

The best place to find out how to implement the SDLMI is through the following research to practice lesson plan starter:

- [SDLMI] to Teach Goal Setting and Problem Solving (Goffe & Ray-Subramanian, 2009)
- Weinmeier & Palmar, 2009)
- [http://www.selfdetermination.researchld.org/homepage/resources](http://www.selfdetermination.researchld.org/homepage/resources)

With whom was it implemented?

- Students with
  - ADHD (1 study, n=2)
  - autism (2 studies, n=3)
  - emotional and behavioral disabilities (1 study, n=2)
  - learning disabilities (3 studies, n=45)
  - other health impairment (1 study, n=1)

For more information, visit [https://beachcenter.lsi.ku.edu/beach-self-determination](https://beachcenter.lsi.ku.edu/beach-self-determination)
EBPs for Ownership of Learning

The Self-Directed IEP (SD IEP) lesson package

- Four instructional units, including students leading meeting, reporting interests, reporting skills, and reporting options.
- Multimedia package designed to teach students the skills needed to manage their own IEP meetings
- Includes a teacher manual, a student workbook, and two videos that present 11 steps necessary for students to lead their own IEP meetings

Using the Self-Directed IEP to Teach
Student Involvement in the IEP Meeting

What is the evidence base?

- This is an evidence-based practice for students with disabilities based on one methodologically sound group study with random assignment across 130 students with disabilities and four methodologically sound single-subject studies across 15 students with disabilities.
- This is a research-based practice for students with learning disabilities based on one methodologically sound group study with random assignment across 89 students with learning disabilities and two methodologically sound single-subject studies across two students with learning disabilities.
- This is a research-based practice for students with intellectual disability based on one methodologically sound group study with random assignment across 11 students with intellectual disability and three methodologically sound single-subject studies across six students with intellectual disability.

Where is the best place to find out how to do this practice?

The best place to find out how to implement the SD IEP is through the following research to practice lesson plan starter:

- Using SD IEP to teach student involvement in the IEP meeting: Self-Directed IEP (Allen et al., 2002)

With who was it implemented?

- Students with
  - Intellectual Disability (4 studies, n=17)
  - Learning Disabilities (3 studies, n=95)
  - Emotional and/or Behavioral Disorders (2 studies, n=18)
  - Other Health Impairment (2 studies, n=11)
  - Autism Spectrum Disorder (2 studies, n=5)
  - ADD/AGHD (1 study, n=3)
  - Orthopedic Impairment (1 study, n=2)
  - PDD, Visually Impaired, Hearing Impaired (1 study, n=1)
Transition Competencies

Skills and activities that facilitate competency in employment, postsecondary education, and independent living, with a focus on understanding shifting cultures and responsibilities within each unique setting. Students must be able to understand and act on underlying processes leading to college and career outcomes.

• Understanding differences between high school and college environments (living, academic expectations, etc.)
• College culture (e.g., campus resources, program of study, faculty expectations, campus living)
• Career culture (professionalism, supervisor and co-worker relations, workplace fit, employer expectations)
• Early planning (goals tied to interests, applications, interviews, financial planning, individual and environment fit)
• Adult roles and responsibilities (financial literacy, health wellness, accessing community)
Early Planning

Leverage school-business partnerships at job and college fairs and with co-funded school resource officers.
EBPs for Transition Competencies

Using Computer-Assisted Instruction to Teach Job Specific Skills

What is the evidence base?
- This is a research-based practice for students with disabilities based on two methodologically sound single-subject studies across 7 participants with disabilities.
- This is a research-based practice for students with intellectual disability based on two methodologically sound single-subject studies across 7 participants with intellectual disability.

Where is the best place to find out how to do this practice?
The best place to find out how to implement CAI is through the following research to practice lesson plan starters:

Using CAI to teach job specific skills
- Computer Assisted Instruction - Employment Lesson1 - Office Job Skills
- Computer Assisted Instruction - Employment Lesson2 - Service Job Skills

With whom was it implemented?
- Students with
  o Mild to moderated intellectual disability (1 study, n=4)
  o Moderate intellectual disability (1 study, n=3)
- Ages ranged from 16 – 21
- Males (n=3), females (n=4)
- Ethnicity
  o Hispanic (n=1)
  o White (n=3)
  o None reported (n=3)

Teaching Job Skills Using Computer Based Instruction

Objective: To teach students water a plant, deliver mail, and change paper towels.

Setting and Materials:
Settings: Instruction is conducted in a small office four times per week. Skill generalization is measured in the community at a job site.

Materials: Materials include a laptop computer, a PowerPoint computer software program, digital video camera, Windows Movie Maker, a CD ROM, and a Magic touch touch screen. Materials for skill generalization include a 24 inch canvas bag with a strap, plastic bottle filled with water, one roll of paper towels without plastic wrapping, an empty roll of paper towels, and a legal size envelope.

Content Taught
1. The student is taught how to perform 3 job tasks (watering a plant, delivering mail, and changing paper towels in a restroom) using “life-like” scenarios via computer based video instruction.
2. Task analysis includes the following steps:

<table>
<thead>
<tr>
<th>Photograph on Computer Screen</th>
<th>Video recording of Task Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job skill 1 – Watering a plant</td>
<td></td>
</tr>
<tr>
<td>1. Elevator</td>
<td>1. Walk to elevator</td>
</tr>
<tr>
<td>2. Inside elevator floor panel</td>
<td>2. Touch “3”</td>
</tr>
<tr>
<td>3. Scene to left of elevator on 3rd floor</td>
<td>3. Turn, walk to left</td>
</tr>
<tr>
<td>4. Plant</td>
<td>4. Walk to plant</td>
</tr>
<tr>
<td>5. Water Bottle</td>
<td>5. Water plant</td>
</tr>
<tr>
<td>Job skill 2 – Delivering mail</td>
<td></td>
</tr>
<tr>
<td>1. Elevator</td>
<td>1. Walk to elevator</td>
</tr>
<tr>
<td>2. Inside elevator floor panel</td>
<td>2. Touch “2”</td>
</tr>
<tr>
<td>3. Scene to left of elevator on 2nd floor</td>
<td>3. Turn, walk to left</td>
</tr>
<tr>
<td>4. Table in office</td>
<td>4. Walk to table</td>
</tr>
<tr>
<td>5. Envelope on table</td>
<td>5. Put envelope in bag</td>
</tr>
<tr>
<td>6. Elevator</td>
<td>6. Walk to elevator</td>
</tr>
<tr>
<td>7. Outside elevator “up/down” Panel</td>
<td>7. Touch “down” arrow</td>
</tr>
<tr>
<td>8. Inside elevator floor panel</td>
<td>8. Touch “1”</td>
</tr>
<tr>
<td>9. Counter on 1st floor</td>
<td>9. Walk to counter</td>
</tr>
<tr>
<td>10. Envelope on counter</td>
<td>10. Put envelope on counter</td>
</tr>
</tbody>
</table>
EBPs for Transition Competencies

Working at Gaining Employment Skills (W.A.G.E.S) Curriculum

A job-related social skills curriculum consisting of 33 comprehensive lesson plans in four domains:

- self-regulations
- teamwork
- communication
- problem solving (NTACT, 2019)
How can we measure student CCR progress?

This aligns with my district’s view of CCR
**School-wide College and Career Readiness**

*Who is included? Are students with disabilities included? If so, which ones?*

<table>
<thead>
<tr>
<th>Disability</th>
<th>Non-responders</th>
<th>SPED responders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Disability</td>
<td>23%</td>
<td>44%</td>
</tr>
<tr>
<td>Other Health Impairment</td>
<td>33%</td>
<td>36%</td>
</tr>
<tr>
<td>Emotional Disturbance</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Autism Spectrum Disorder</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Intellectual Disability</td>
<td>25%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>
College and Career Readiness for Transition (CCR4T)
Development and Validation of a Student Measure

Measurement Study funded by the Institute of Educational Sciences to be carried out from 2019-2023

Key personnel: Jennifer Freeman, Jane Rogers, Hariharan Swaminathan, Allison Lombardi, Mary Morningstar, Valerie Mazzotti,
Purpose of CCR4T scores

• To collect student perceptions of their own college and career readiness
• To correlate the perception data with other observed variables routinely collected by the school (attendance, GPA)
• To underlie an automated data reporting system with individual users (students, parents, teachers, can log in and view data reports)
• Ultimately, school teams, students, and parents can use the data to make decisions about more intensive support needs within the domains
Potential uses of CCR4T Scores

• To identify students who are in need of more intensified supports in one or more of the domains;
• To progress-monitor within the domains
• To foster student and parent engagement
• To design interventions and identify curricula that match the needs of students at each level
• To obtain data for age-appropriate transition assessment and the SOP;
• To craft higher-quality IEP goals
College and Career Readiness for Transition (CCR4T)  
Development and Validation of a Student Measure

Measurement Study funded by the Institute of Educational Sciences to be carried out from 2019-2023

Seeking school partners to:
• 2019-2020 – participate in virtual focus groups, specifically secondary general and special education teachers, other school personnel  
• 2020-2021 OR 2021-2022 - Field-test the measure in schools. Administer the CCR4T to students school-wide in an online survey format, which will take about 30-50 minutes (potentially a class period)  
• 2022-2023 - Provide feedback on usefulness of scores, data reports. Access to data will be provided to all school partners.

• Visit http://ccr4t.education.uconn.edu  
• Questions? Email allison.lombardi@uconn.edu
Envisioning the Future...

- ALL students are College and Career Ready
- Supports in place to provide academic and non-academic readiness
- Students achieve successful adult lives