Promoting Self-Determination and More Positive Transition Outcomes: The Self-Determined Learning Model of Instruction

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“A Bridge to Where?”

Ruth Sienkiewicz-Mercer

“I had never had a place of my own. As a result, I had never worried about buying groceries and planning meals, paying the rent and the phone bill, balancing a checkbook, making appointments, figuring out how to keep the appointments I made – all the things adults just do. But starting out in society at the age of 28, I found these everyday tasks confusing, wonderful, and frightening.” (p. 202)
Changing Expectations: Changing Understanding

Disability

Personal Incompetence

Changing Expectations: Changing Understanding

Personal Competence

Environment

Implications of Changing Understandings of Disability

- Strengths-based
- Focus on environment/context, not fixing individual;
- Emphasizes supports, not programs
**Supports**

- Resources and strategies that:
  - promote the interests and causes of individuals with or without disabilities;
  - enable them to access opportunities, information, and relationships inherent within integrated work and living environments;
  - result in enhanced interdependence, productivity, community inclusion, life satisfaction, and human functioning.
- Personalized array of supports

**An Array of Supports**

**Supported Employment**

**This Matters**

What is Self-Determination?

Self-Determination is a dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined people (i.e., causal agents) act in service to freely chosen goals. Self-determined actions function to enable a person to be the causal agent in his or her life.

Causal agency: To make or cause something to happen in one's life.

Volitional action: Making a conscious choice or decision with deliberate intention.

Self-Determination and Determinism

The philosophical doctrine of determinism posits that actions are caused by events or natural laws that precede or are antecedent to the occurrence of the action. Behavior, then, is governed by these other events or natural laws.

Self-Determination and Determinism

Self-determinism, or self-determination, implies that individuals cause themselves to act in certain ways, as opposed to someone or something else ‘causing’ us to act in certain ways.

People who are self-determined embody the characteristic or quality of ‘self-determination,’ a noun referring to the degree to which that person acts or behaves in ways that are self-(instead of other-) caused.
Self-Determination and Disability

Within the context of the disability rights and advocacy movement, the construct as a personal characteristic has been imbued with the empowerment and “rights” orientation typically associated with the sense of the term as a national or political construct. Empowerment is a term usually associated with social movements, and typically is used, as Rappaport (1981) stated, in reference to actions that “enhance the possibilities for people to control their lives” (p. 15).

What Do We Know About Self-Determination?

- People with disabilities are less self-determined than their non-disabled peers.
  - Seems clear that this is primarily because people with disabilities have fewer opportunities to make choices and express preferences across their daily lives.
  - The environments in which people with disabilities live, learn, and work limit the development of self-determination.
- IQ is positively correlated ($r=.15$ to $r=.20$) with self-determination, but not predictive of self-determination status (high vs. low SD group).
  - IQ is predictive of where one lives/works, which in turn is predictive of self-determination status.
  - Choice-making opportunities vary across environments, but those opportunities are strong predictors of self-determination status.
  - Self-determination status predicts membership in higher quality of life groups.

Self-Determination and Disability

"People with autism should be treated with the same dignity, respect, and equality as people without autism."  Jean-Paul Bovee

"We don't have to be told what self-determination means. We know it is just another word for a life filled with rising expectations, dignity, respect and opportunities."  Robert Williams

What Do We Know About Self-Determination?

- Adolescents with disabilities who leave school as self-determined young people:
  - Are more independent one year after graduation.
  - Are more likely to live somewhere other than where they lived in high school one year after graduation.
  - Are significantly more likely to be employed for pay at higher wages one year after graduation.
  - Are significantly more likely to be employed in a position that provides health care, sick leave, and vacation benefits three years after graduation.
  - Are significantly more likely to live independently three years after graduation.

- Adults with disabilities rank self-determination as more important than do professionals and parents/family members.
- Teachers working with students with disabilities report that:
  - they are familiar with self-determination;
  - believe self-determination is an important component of education;
  - believe that student involvement in education planning is important;
- Parents of school-age students with disabilities perceive promotion of self-determination as important.
  - Report that they do not believe that their sons/daughters receive enough instruction on component elements of self-determined behavior at school.
What Do We Know About Self-Determination?

- Despite wide acceptance of the importance of self-determination, research has consistently found that explicit instruction to promote self-determination is limited.
- Meta-analytic (group and single-subject design) studies show that students with disabilities can acquire component elements if taught.
- Student-directed learning strategies are particularly powerful.
- Research documents that students with disabilities are not actively engaged/involved in educational planning meetings.
- Research has also shown that students with disabilities can learn the skills to be active participants in their education planning meetings.
- Research suggests that student involvement has a reciprocal effect with self-determination. That is, students who are more self-determined are more likely to be involved in their educational planning, but getting students involved in their planning—indeed of their level of self-determination—enhances self-determination.

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Five Year Longitudinal Study (Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2013)

- Purpose: Examine the effects of interventions to promote self-determination
- Randomized trial, placebo control group design study
- 50 school districts in six states (Arkansas, Kansas, Missouri, Nebraska, Oklahoma, and Texas)
- Students with diverse disability labels and their teachers participated
- Students' school campuses were randomly assigned to a treatment or control group


Participants

- 493 middle and high school students
- Age
  - Range: 11-22 years
  - Mean: 16 years (SD 2.2)
- Disability
  - Learning Disability - 31%
  - Intellectual Disability - 27%
  - Other Health Impairment - 11%
  - Emotional/Behavioral Disorder - 9%
  - Autism - 5%
  - Other - 17%
- Gender
  - Female - 36%
  - Males - 64%
- Race/Ethnicity
  - Native American - 1%
  - Asian - 2%
  - African American - 19%
  - White - 60%
  - Hispanic - 18%
  - Other - 1%

Interventions

- The ChoiceMaker Curriculum (with The Self-Directed IEP materials)
  - Martin, Marshall, Maxson, & Jerman, 1993
- NEXT S.T.E.P. Curriculum
  - Halpern, Herr, Doren, & Wolf, 2000
- Self-Advocacy Strategy
  - Van Reussen, Bos, Schumaker, & Deshler, 2002
- Self-Determined Learning Model of Instruction
  - Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000
- Steps to Self-Determination (2nd Ed.)
  - Hoffman & Field, 2005
- Whose Future is it Anyway? (2nd Ed.)
  - Wehmeyer, Lawrence, Kelchner, Palmer, Garner, & Soukup, 2004
Research Question

- Do interventions designed to promote self-determination lead to improvement in the self-determination scores of students with disabilities?
- Multi-level latent growth curve models (LGMs)
  - IV: Treatment Group, Disability, Gender
  - DV: The Arc's Self-Determination Scale, AIR Self-Determination Scale

Findings

The Arc's Self-Determination Scale

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Access – 1 Year Post*</td>
<td>1.078</td>
<td>0.293</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Community Access – 2 Years Post</td>
<td>0.948</td>
<td>0.363</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Employment – 1 Year Post*</td>
<td>0.504</td>
<td>0.215</td>
<td>.01</td>
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<tr>
<td>Employment – 2 Years Post</td>
<td>0.238</td>
<td>0.208</td>
<td>.25</td>
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<tr>
<td>Financial Independence – 2 Years Post</td>
<td>-0.449</td>
<td>0.214</td>
<td>.04</td>
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Follow-Up Study: Self-Determination and Adult Outcomes

Two Year Study of SDLMI

Two Year Longitudinal Study of the impact of the Self-Determined Learning Model of Instruction
- Randomized trial, modified placebo control group design study
- 20 school districts participated in three states (Kansas, Missouri, and Texas)
- Students with intellectual disability and learning disabilities and their teachers participated
- Student's school campuses were randomly assigned to a treatment or control group
Intervention

• Self-Determined Learning Model of Instruction
  – Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000
  – During Year 1 of the project, teachers at treatment campuses were trained in the SDLMI
  – Teachers at control campuses continued with typical instruction
  – Year 1 provided a pretest-posttest control group comparison study
  – During Year 2, teachers on control campuses were trained in the SDLMI in the same fashion
  – Teachers at treatment campuses continued implementing the SDLMI with participating students
  – All students received intervention in Year 2.

Research Questions

• Are there differences in the latent self-determination means of students assigned to the control group and the treatment group over time as a function of exposure to the SDLMI?
• Do students with intellectual disability and learning disabilities who receive instruction using the SDLMI show greater attainment of academic and transition goals than students who do not receive instruction using the Self-Determined Learning Model of Instruction?
• Do students with intellectual disability and learning disabilities who receive instruction using the SDLMI show enhanced access to the general education curriculum compared to students who do not receive such instruction?

Key Findings: Impact on Self-Determination

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (95% C.I.)</td>
<td>M (95% C.I.)</td>
<td>M (95% C.I.)</td>
</tr>
<tr>
<td>AIR Self-Determination Scale</td>
<td></td>
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<tr>
<td>Intervention</td>
<td>.00 (.00 – .00)</td>
<td>-.07 (.17 – .11)</td>
<td>.30 (.08 – .52)*</td>
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<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>.16 (-.10 – .42)</td>
<td>.11 (-.15 – .37)</td>
<td>.17 (-.10 – .44)</td>
</tr>
<tr>
<td>Latent d</td>
<td>-.20</td>
<td>-.05</td>
<td>.14</td>
</tr>
<tr>
<td>The Arc’s Self-Determination Scale</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>.00 (.00 – .00)</td>
<td>-.06 (-.21 – .10)</td>
<td>.24 (.06 – .42)*</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>-.01 (-.27 – .25)</td>
<td>-.06 (-.32 – .21)</td>
<td>.03 (-.26 – .33)</td>
</tr>
<tr>
<td>Latent d</td>
<td>.01</td>
<td>.00</td>
<td>.23</td>
</tr>
</tbody>
</table>

Key Findings: Goal Attainment

Least Square Means for Disability*Treatment Groups for Academic and Transition GAS Scores

<table>
<thead>
<tr>
<th></th>
<th>Academic GAS Scores</th>
<th>Transition GAS Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SE</td>
</tr>
<tr>
<td>Learning Disability - Control</td>
<td>44.78</td>
<td>1.79</td>
</tr>
<tr>
<td>Learning Disability – Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Disability - Control</td>
<td>48.07</td>
<td>0.98</td>
</tr>
<tr>
<td>Intellectual Disability – Treatment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Key Findings: Impact on Access to the General Education Curriculum

Estimates for Access Score Intercept and Slopes for the Disability and Treatment Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Access Score at the Beginning of the Year (SE)</th>
<th>Access Score at the End of the Year (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Disability</td>
<td>2.2 (.44)</td>
<td>3.3 (.49)</td>
</tr>
<tr>
<td>Learning Disability</td>
<td>3.3 (.24)*</td>
<td>3.4 (.26)</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Disability</td>
<td>2.5 (.51)</td>
<td>4.6 (.52)*</td>
</tr>
<tr>
<td>Learning Disability</td>
<td>3.6 (.35)*</td>
<td>5.1 (.37)*</td>
</tr>
</tbody>
</table>

### Self-Determined Learning Model of Instruction

- A plan or pattern that can be used to shape curricula, design instructional or assessment materials, and guide instruction in the classroom and other settings.
- Models of teaching derived from theories about human behavior, cognition, or learning (e.g., information processing models; behavioral models; social interaction models, etc.).

**Models of teaching**

- **Setting a Learning Goal:**
- **Constructing a Learning Plan:**
- **Adjusting Behaviors:**
- **Each Phase has 3 components:**
  - Student questions:
  - Teacher objectives:
  - Instructional strategies.
Student Questions:
Are stated in “First-person voice”
- Follow a definite sequence
  so that problem can be solved
- Should be answered …
  … in numerical order

Teacher Objectives:
- Linked to Student Questions
- Serve as “Road Map” for teacher to ENABLE
  student to use Student Questions
- Example: When students need to identify what
  actions have been taken, the teacher’s objective
  is to support student self-evaluation

Educational Supports:
- Enable students to successfully self-direct their
  learning.
- Enable students to modify and regulate their own
  behavior.
- Provide a means for educators to enable students
  to begin to teach themselves.
- Examples: Strategies such as self-monitoring,
  self-evaluation, decision-making…Teaching
  students to identify preferences and interests

What is Student-Directed?
- The key to student-directed is that the
  student retains control over his or her
  learning process, even when others
  (teachers, parents, peers) participate.
- Not the same as doing everything by
  yourself. That is, students will vary a
  great deal in the degree to which they can
  work through the materials independently.
  Factors which influence this include:
    - Reading or writing skills;
    - Confidence in working alone or in small groups;
    - Practice with self-directed instruction.
What is the Teacher’s Role?

- Facilitator
  - Do what it takes to enable student to succeed;
  - Provide accommodations and support;
- Teacher
  - Share expertise in promoting learning;
  - Source of information about education;
- Advocate
  - Communicate to students that they can succeed;
  - Work collaboratively with student to achieve shared goals.

Instructional Process for SDLMI

- Each phase has a problem to solve
  - Phase 1: What is my goal?
  - Phase 2: What is my plan?
  - Phase 3: What have I learned?
- A problem is a task, activity, or situation for which a solution is not immediately identified, known, or obtainable.
- Solving a problem is the process of identifying a solution that resolves the initial perplexity or difficulty.

Instructional Process for SDLMI

- Solving the problem in each phase leads to the next phase.
  - Solving the “what is my goal” problem leads to setting a goal.
  - Setting a goal leads to the need for an action plan.
  - Solving the “what is my plan” problem leads to the design and implementation of an action plan to achieve the goal.
  - Implementing the plan leads to the need to track progress toward the goal.
  - Solving the “what have I learned” problem leads to either goal completion, revision of the plan, or revision of the goal.

Instructional Process for SDLMI

- The problem in each phase is solved by answering a set of four questions.
- The questions change based on the problem to be solved, but they represent the four steps in any problem solving process:
  1. Identify the problem
  2. Identify potential solutions to the problem
  3. Identify barriers to solving the problem
  4. Identify consequences of each solution
### Phase 1: Set a Goal

<table>
<thead>
<tr>
<th>Student Problem to Solve: What is my goal?</th>
<th>Teacher Objective: Enable Students to identify specific strengths and instructional need.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Questions</td>
<td>Teacher Objective: Enable Students to communicate preferences, interest, beliefs, and values.</td>
</tr>
<tr>
<td>What do I want to learn?</td>
<td>Teacher Objective: Teach students to prioritize needs.</td>
</tr>
<tr>
<td>What do I know about it now?</td>
<td>Teacher Objective: Enable students to identify their current status in relation to the instructional need.</td>
</tr>
<tr>
<td>What must change for me to learn what I don't know?</td>
<td>Teacher Objective: Enable students to decide if action will be focused toward capacity building, modifying the environment, or both.</td>
</tr>
<tr>
<td>What can I do to make this happen?</td>
<td>Teacher Objective: Teach students to state a goal and identify criteria for achieving goal.</td>
</tr>
</tbody>
</table>

### Phase 2: Create a Plan

<table>
<thead>
<tr>
<th>Student Problem to Solve: What is my Plan?</th>
<th>Teacher Objective: Enable Students to self-evaluate current status and self-identified goal status.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Questions</td>
<td>Teacher Objective: Enable students to gather information about opportunities and barriers in their environment.</td>
</tr>
<tr>
<td>What can I do to learn what I don't know?</td>
<td>Teacher Objective: Enable students to choose a need to address from the prioritized list.</td>
</tr>
<tr>
<td>What could keep me from taking action?</td>
<td>Teacher Objective: Enable students to determine plan of action to bridge gap between self-evaluated current status and self-identified goal status.</td>
</tr>
<tr>
<td>What can I do to remove these barriers?</td>
<td>Teacher Objective: Enable students to self-evaluate progress toward goal achievement.</td>
</tr>
<tr>
<td>When will I take action?</td>
<td>Teacher Objective: Enable students to self-monitor progress.</td>
</tr>
</tbody>
</table>

### Phase 3: Adjust Goal or Plan

<table>
<thead>
<tr>
<th>Student Problem to Solve: What have I learned?</th>
<th>Teacher Objective: Enable students to self-determine goal attainment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Questions</td>
<td>Teacher Objective: Enable students to self-evaluate progress toward goal achievement.</td>
</tr>
<tr>
<td>What actions have I taken?</td>
<td>Teacher Objective: Enable students to decide if goal remains the same or changes.</td>
</tr>
<tr>
<td>What barriers have been removed?</td>
<td>Teacher Objective: Enable students to decide if action plan is adequate or inadequate given revised or retained goal.</td>
</tr>
<tr>
<td>What must change for me to know what I don't know?</td>
<td>Teacher Objective: Enable students to change action plan if necessary.</td>
</tr>
<tr>
<td>Do I know what I want to learn?</td>
<td>Teacher Objective: Enable students to self-monitor progress.</td>
</tr>
</tbody>
</table>

### Advantages of Model

- Valid means of teaching students educationally relevant goals.
- Promotes student self-determination, problem-solving, goal setting skills.
- Enhanced motivation
  - Fisher and colleagues findings that the act of choosing is, in and of itself, reinforcing.
  - Sailor and colleagues ‘hypothesis of functional competence’ suggests that motivation factor implicit in the mere act of ‘causing something to happen.’