



AIR Self-Determination Scale[®] and User Guide

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 - Burnett Academy
 - Erickson Elementary School
 - Gunderson High School
 - Hacienda Elementary School
 - Hoover Middle School
 - Leland High School
 - Lowell Elementary School
 - Horace Mann Elementary School
 - Pioneer High School
 - San Jose High Academy
 - Schallenberger Elementary School
 - Willow Glen Education Park

- New York City Board of Education Public Schools
 - Churchill School
 - Parkside School
 - Stephen Gaynor School
 - Robert Louis Stevenson School
 - Winston Preparatory School

- Other schools in Metropolitan New York City area
 - Lorge School
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- Research Form

Purpose and Organization of the User Guide

This User Guide has been designed with the following purposes in mind:

1. To familiarize special education teachers and other educators with the meaning and importance of self-determination, with particular focus on the needs of students with disabilities
2. To present the AIR Self-Determination Scale and describe its purpose, what it measures, and what its results mean
3. To provide instructions for using and interpreting the AIR Self-Determination Scale and suggestions for using its results to increase students' capacities and opportunities for self-determination

For ease of use, this User Guide is divided into the sections described below.

I Self-Determination

This section defines self-determination and describes its importance for individuals with disabilities, within the context of the disability movement. It describes the process of self-determination and the key conditions—such as capacity and opportunity—required for students to develop self-determination.

II. The AIR Self-Determination Scale and What It Measures

This section describes the purpose of the AIR Self-Determination Scale, as well as what it measures.

III. Completion of the AIR Self-Determination Scale and Profile

This section describes the four forms of the AIR Self-Determination Scale (Educator, Student, Parent, and Research) and provides instructions for completing the Scales and developing student Profiles of Self-Determination.

IV. Ways to Use the Self-Determination Scale

This section provides a curriculum guide for identifying appropriate self-determination goals for students. Included are suggestions for using the AIR Self-Determination Scale with other educators, students, and parents to improve students' capacity and opportunity for self-determination.

V. Reliability and Validity of the Scale

This section reports on the validity, reliability, and utility of the AIR Self-Determination Scale, based on analyses of the field-test data of Educator forms completed on more than 450 students with and without disabilities.

Appendix

The Appendix includes four separate forms of the AIR Self-Determination Scale, which are described in section III:

- Educator form
- Student form
- Parent form
- Research form

For additional copies of the AIR Self-Determination Scale and User Guide

You may photocopy any part of this package—the AIR Self-Determination Scale (4 forms), Profile forms, and User Guide—to meet your students' needs. If you would like to order additional copies of the entire package (at a nominal cost), contact Dr. Dennis Mithaug, Department of Special Education, Teachers College, Columbia University, New York, NY 10027.

I. Self-Determination: What It Means and Why It's Important

Importance of Self-Determination

The purpose of this assessment is to help educators prepare for a vision in the year 2000 that “begins with images of children and youth with disabilities having access to supports and service that lead to self-actualization, self-determination, and independence.”¹ This vision, spelled out in the *National Agenda for Achieving Better Results for Children and Youth With Disabilities*, is an affirmation of what all people of the world have long believed to be a condition of life in every democratic society—that *all persons* have a right to self-determination. Indeed, Article 1 of the *International Covenant on Civil and Political Rights* (ICCPR), adopted by the General Assembly of the United Nations, states, “All peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social, and cultural development.”²

This vision is also a logical conclusion to the judicial precedent set by *Brown vs. Board of Education* in 1954, and the legislative precedents established by the Education for All Handicapped Children Act of 1975, the Individuals with Disabilities Education Act of 1990, and the Americans with Disabilities Act of 1991. These judicial and legal precedents in turn reflect an awareness that the right to self-determination imposes a moral and legal obligation on society

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- 1 US Department of Education, *The National Agenda for Achieving Better Results for Children and Youth with Disabilities* (Washington DC: Author, 1994).
 - 2 At the beginning of 1991, the covenants had been ratified by 92 of the 164 members of the United Nations. For reference, see Charles Humana, *World Human Rights Guide, Third Edition* (New York: Oxford University Press), 385.

to *promote the realization of that right* as specified by the ICCPR: “The States Parties to the present Covenant, including those having responsibility for the administration of the Non-Self-Governing and Trust Territories, shall promote the realization of the right of self-determination, and shall respect that right, in conformity with the provisions of the United Nations Charter.”³

Equal opportunity theory explains this obligation to promote the realization of the right to self-determination by showing how the discrepancy between the right and the experience of self-determination depends upon one’s *capacity* and *opportunity* to choose and enact choice in pursuit of one’s needs and interests. When either capacity or opportunity to self-determine is diminished or constrained, the experience of self-determination diminishes. When this diminished experience persists, the right to self-determination is abrogated.⁴

The AIR Self-Determination Scale provides information on students’ capacity and opportunities to self-determine. The Scale is based upon a theory of the self that explains how individuals interact with opportunities to improve their prospects of getting what they need and want in life.⁵ When opportunities are *just-right challenges*—when they offer the right amount of risk for the gain expected—they will be pursued. Individuals will think and act on those opportunities repeatedly as they learn what they need to learn and adjust what they need to adjust in order to reach the ends in life that are most valuable. In other words, students will regulate their

3 Charles Humana, *World Human Rights Guide, Third Edition* (New York: Oxford University Press), 385.

4 Dennis F. Mithaug, *Equal Opportunity Theory: Fairness in Liberty for All* (book manuscript submitted for publication, 1995).

5 Dennis F. Mithaug, *Self-Regulation Theory: How Optimal Adjustment Maximizes Gain* (Westport, CT: Praeger, 1993).

thoughts, feelings, and actions in pursuit of ends that define themselves as *self-determining persons*.

The problem this presents for educators is knowing how to offer students *just-right challenges* that engage their minds, hearts, and actions in constructive projects to help them define who they are and what they want to become as they grow and mature over their lifetime. The AIR Self-Determination Scale provides information on students' capacity and opportunity for experiencing these personal transformations that give access to full adult participation in community life.

The Self-Determined Person

Self-determined people know and can express their own needs, interests, and abilities. They set appropriate goals and expectations for themselves. They make choices and plans in pursuit of these goals. They follow through with actions, and if necessary, they change course or adjust to achieve their desired goals effectively. Self-determined people also act more independently and more freely in pursuit of their goals than others do. They are less influenced by other people and by their environments in choosing what goals to pursue and how to pursue them.

Capacities and Opportunities

Self-determination depends on students' capacities and opportunities. *Capacity* refers to students' knowledge, abilities, and perceptions that enable them to be self-determined and feel good about it. *Opportunity* refers to students' chances to use their knowledge and abilities. Capacity and opportunity and the conditions that underlie them—knowledge, ability, perceptions, and opportunity at school and at home—are the basis for the AIR Self-Determination Scale and the focus of this User Guide.

Ways to Facilitate Self-Determination

Students are the critical players in the development of self-determination, but their teachers and parents can help. Which teacher behaviors are most effective? Three types of teachers are described on the next page. The book report example is brief but suggests the differences that teachers can make in fostering self-determination.

Figure 1. Three Teachers' Responses to Student Not Exhibiting Self-Determination

THE STUDENT

Mark has been diagnosed with learning disabilities, and he has little self-confidence. His parents tend to be over-protective but are very interested in working with the school to ensure that Mark gets the assistance and attention he needs to overcome his disabilities. Mark shows little initiative at school.

Below are examples of his dialogue about a book report with three types of teachers.

THE EASY-GOER

This teacher is easy-going and likes to let students do their own thing and find their own way.

Teacher: How's it goin' today, Mark?

Mark: OK.

Teacher: How's the book report coming?

Mark: What book report?

Teacher: The one assigned two weeks ago, remember? Do you have a book?

Mark: Well no, but I may go to the library today.

Teacher: Great.

The teacher may not be providing the structure Mark needs, and Mark is no closer to accomplishing his work than he was before the conversation.

THE OVER DO-ER

This teacher is dedicated to helping students and works long hours to develop new ways to help them.

Teacher: How's your book report coming, Mark?

Mark: Well....

Teacher: Have you started reading a book yet?

Mark: Well....

Teacher: Let's take a look at some possibilities.

..Here is a book I think you'd like. Why don't we read the first chapter together? If you don't like it, I'll see if I can find one you like better.

The teacher is allowing Mark to be passive in this process. Mark may get the book read, but it will not necessarily be a book that meets his interests.

THE OPTIMAL CHALLENGER

This teacher wants to help students learn to help themselves and, within reasonable limits, is willing to let students squirm sometimes.

Teacher: May I see what you've done on your book report so far, Mark?

Mark: Well....I haven't had time to write anything yet but....

Teacher: Tell me about what you have read so far.

Mark: uh....I haven't been able to find a book yet.

Teacher: So. What are your plans?

The teacher waits for Mark to respond, and when he cannot answer immediately, is comfortable with the silence. The teacher recognizes that, whenever possible, Mark takes the easy way out, so applies a little pressure to force him to respond. The teacher will continue to follow up and to offer just-right challenges until Mark locates a book that interests him and completes his report on his own.

As suggested above, it's important to make the connection between *capacity* and *opportunity*. For example, Mark may know how to read a book and what should go into a book report—have the capacity to do the book report—but without access to a book, an assignment, some ideas, paper, and a pen—opportunity—he cannot demonstrate the knowledge and skills or improve his skills, and those skills begin to deteriorate. Students not only need to acquire the knowledge, abilities, and perceptions involved in self-determination, but they need opportunities to practice and hone those skills.

II. The AIR Self-Determination Scale and What It Measures

Purpose

The main purpose of the AIR Self-Determination Scale is to provide an easy-to-use tool to assess and develop strategies for improving a student's level of self-determination. Teachers like you, students, parents, counselors, and other professionals working with students with diverse disabilities can use the results of the Self-Determination Scale to

- assess and develop a profile of the student's level of self-determination
- identify areas of strength and areas needing improvement
- identify specific educational goals and objectives that can be incorporated into the student's Individual Education Program (IEP) or Individual Transition Program (ITP)
- develop strategies to build the student's capacities and opportunities to become more self-determined and better prepared for a maximally independent adult life

The Scale is designed to be used with *all* school-age students. Kindergartners must learn how to make kindergarten decisions—what to wear, which friends to make—so that they can make 21-year-old decisions—where to live, what career to seek—when they are 21.

Steps in the Self-Determination Process

The self-determination process can be broken down into three big components:

- **Thinking**
- **Doing**
- **Adjusting**

Thinking

Each of these components has two steps, as shown below.

Identify and express own needs, interests, and abilities.

Set expectations and goals to meet these needs and interests.

Doing

Make choices and plans to meet goals and expectations.

Take actions to complete plans.

Adjusting

Evaluate the results of actions.

Alter plans and actions, if necessary, to meet goals more effectively.

Each of these steps is a part of the AIR Self-Determination Scale. The figure below shows the framework of the Scale.

Figure 2. Framework for the AIR Self-Determination Scale

	CAPACITY			OPPORTUNITY	
	Ability	Knowledge	Perceptions	at School	at Home
THINKING					
Identify and express own interests, needs, abilities.	X	X	X	X	X
Set expectations and goals to meet needs, interests.	X	X	X	X	X
DOING					
Make choices and plans to meet goals, expectations.	X	X	X	X	X
Take actions to complete plans.	X	X	X	X	X
ADJUSTING					
Evaluate results of actions.	X	X	X	X	X
Alter plans and actions, if necessary, to meet goals more effectively.	X	X	X	X	X

As the framework indicates, the AIR Self-Determination Scale has three CAPACITY sections—*Ability*, *Knowledge*, and *Perceptions*—and two OPPORTUNITY sections—*Opportunity at School* and *Opportunity at Home*. Within each section are two items that focus on Thinking, two on Doing, and two on Adjusting, for a total of 30 items.

Each of the sections of the AIR Self-Determination Scale is described in detail below.

Capacity—Knowledge

Knowledge refers to the level of understanding a student has about self-determination and the behaviors it requires. It involves the cognitive process in which the student carefully considers all of the relevant information about his or her own needs, interests, abilities, limitations, and opportunities to choose and act in pursuit of these needs. More specifically, the student uses knowledge to

- understand his or her needs, interests, abilities, and limitations
- know how to set goals and make choices and plans to meet those goals
- know the importance of taking actions to reach those goals
- know how to evaluate the results of those actions and to alter course to reach those goals

Examples

Here are some examples of how *knowledge* contributes to self-determination.

Adam resists using a cane despite his diminishing vision, but one day he trips and nearly gets hit by a car in front of a large group of students. He realizes that by not using his cane, he is endangering his safety, and in fact he is looking more foolish without it than with it.

Petra, who has reading difficulties, is aware that to keep up with the rest of the class she needs to improve her reading skills. She thinks about the different ways she could do this, such as obtaining books on tape, finding a study partner, or getting a tutor.

Todd knows that he is missing out on some of the communication in the classroom, but he has not been diagnosed with a hearing problem. He thinks about how to handle it. He knows that he can move to the front of the classroom, continue to try to read lips, or tell his parents that he needs to have his hearing tested.

Alexandra knows that paying for college will be a hardship for her family. She begins to think about ways that she could earn some money as well as get a scholarship or financial assistance.

As you go through the *Knowledge* section of the Scale, think about your student in relationship to a particular goal or need—how much basic knowledge does the student have? Enough to allow him or her to move on to doing something about that goal? If not, how might you and others assist the student in gaining that knowledge?

Capacity—Ability

Just knowing one's interests and needs and understanding how to go about meeting them are usually not enough to make a student self-determined. The student must also be able to

- demonstrate that he or she can act upon that knowledge to set goals
- make choices, decisions, and plans
- follow up with actions designed to meet those goals

Thus ability is defined as those skills required to perform the specific self-determination steps necessary to identify the student's own interests and needs, and then to satisfy them effectively. Self-determined students tend to be independent-minded and hence want to perform steps themselves; however, they do not insist on doing everything independently. Rather, they recognize when they need assistance and are willing to seek it to pursue their goals.

Examples

Roberto wants to switch to a nearby middle school because he thinks the other school will meet his academic interests better. On his own initiative, he gets the necessary documents for his parents and the school administrators to sign so that he can change schools, he ensures that the documents are sent to the district office, and he persistently asks the school administrators about the status of his transfer.

Parisa is determined to go to a certain college because of its undergraduate law program. She conducts research to learn how much information is accessible at the school in Braille. She contacts the rehabilitation counselor to determine what special equipment is available for the visually impaired.

Natalie loves basketball. She is good at it and is frustrated because her sixth-grade class offers few opportunities to play. She decides to enlist other classmates to become part of a team. She obtains the necessary permission to play during morning recess, signs up daily for the court, and teaches interested students how to play better.

Norman likes to cook. Although he is only in seventh grade, he can make dinner by himself. He plans a weekly menu with his parents every Sunday and starts dinner every day before they arrive home.

In completing the *Ability* section of the Scale, again think about your student in terms of a goal he or she has set. Once the student knows what goal to pursue, is the student able to take appropriate action to meet that goal?

Capacity—Perceptions

A student's behavioral and cognitive experience has a profound impact on his or her feelings or *perceptions* regarding self-determination. In turn, these perceptions impact future efforts to become more self-determined. Therefore, feeling confident in one's own knowledge and ability is critical to self-determination. The student must

- feel positively about his or her interests, needs, and abilities
- be motivated to set personal goals
- be optimistic about being able to achieve them
- be willing to take risks

All of these conditions enhance the student's sense of self. More specifically, *perceptions* include the student's motivation, confidence, self-esteem, and sense of freedom to meet interests and needs. The student must also feel that he or she can act without undue control or influence from others, including teachers, parents, and peers. These perceptions will increase as the student gets older, gains experience, and becomes less dependent on others.

Examples

Setting goals gives Teresa a sense of inner satisfaction. Despite her physical disability, she feels that it's important to set goals for herself that are both physically and academically challenging. She feels that her needs, interests, and abilities are unique and that, consequently, she's best at determining what her goals should be. She thinks it's important to participate in the development of her IEP.

Alex is willing to risk giving a wrong answer in class and rarely gets upset when he is corrected. He listens carefully to what's wrong, feeling confident that he will learn from the experience and eventually will be able to get the answer right.

Anna wants to be fully mainstreamed. She is aware of being separated from the regular education students, and she enjoys being mainstreamed for language arts and electives. Anna knows that she has improved her reading and math skills and believes that she is ready to exit special education.

Roger's parents have asked him what he wants as a reinforcement for a good report card. Although Roger can think of several things he would like to have, good grades are important to him. He feels that he would work hard even without a special reward.

When you go through the *Perceptions* section of the Scale, keep your student and a particular goal in mind. Is the student motivated and confident enough to move toward that goal? Does he or she feel free to do so, even when confronted with obstacles or disapproval from others?

Opportunities— at School

Regardless of a student's capacities related to knowledge, abilities, and perceptions, he or she cannot be self-determined if there are no opportunities to exercise that capacity.

A student, whether self-determined or not, does not live, learn, make and pursue goals, and develop a sense of self within a vacuum. Rather, the student is significantly influenced by the school environment and by the people with whom he or she interacts each day. *Peers, teachers like you, and other educators can play a critical role in providing an environment that promotes and supports the student's self-determination.* By providing opportunities and resources within a supportive environment, you (and others at school) can enable the student to become more self-determined. This is particularly important at times of transition in the student's life—for example, when the student is moving between elementary, middle, secondary, and postsecondary settings.

Opportunities *outside* school are also important and should be considered within the context of opportunities at school. These are particularly crucial in planning transitions to adult life. Schools can create links to communities through employment internships and placements, work with public agencies, connections with job training programs and community colleges, as well as countless other opportunities for promoting self-determination.

Examples

Michelle is always late and asks her fourth-grade teacher to help her. The teacher asks Michelle to think of three plans that might help her. The next day Michelle says that she will try laying her clothes out at night to save time in the morning, will set her clock radio so that loud music wakes her each morning, and will ask her older sister to double-check on her each morning. After a few days, the teacher notes that Michelle is getting to school on time and comments on how well her plan is working.

During her last year in high school, Leticia realizes that she needs to think about finding a job. She asks her resource teacher for help, and the teacher describes the Department of Rehabilitation as a source of information. Leticia learns to access its services to obtain the information she needs.

At Jose's high school, juniors and seniors are encouraged to attend the college fairs held in their community, and the school provides transportation. Jose's homeroom teacher makes sure this information is posted and encourages students to attend. Jose sees that it might be helpful to him, signs up for the bus, and attends the fair.

Victor's eighth-grade teacher tries to motivate her class to set some short- and long-term goals for high school by discussing her own personal goals. She asks students to make a list of academic and personal goals for high school. She then engages the class in a lively discussion of the goals each student has listed. Victor decides that the goals he has expressed are realistic and attainable.

Opportunity for self-determination at school is something you can influence almost daily. As you go through this section of the Scale, think of the opportunities your student has to demonstrate self-determination at school. If you decide that there are too few opportunities, you can begin to plan ways to incorporate more of them into the student's day, at least in your class.

Opportunities— at Home

Just as the school and community environments have a direct impact on the student's opportunities to demonstrate self-determination, the home environment strongly affects these opportunities. Parents, siblings, extended family members, and neighbors can all help the student use opportunities for self-determination.

Examples

Susan has been a quadriplegic since birth. From the time she could speak, her mother encouraged her to talk into a tape recorder and played it back for Susan to hear. Because Susan developed alternative ways to express herself, she is ready to suggest ways she can participate in classroom activities and can complete homework in oral form.

Thanh works on Saturdays at the market his parents own. He knows that his math and reading skills are weak so he has asked his father to help him. When the store is not busy, they sometimes work together, and as Thanh marks prices, his father asks him, "How much will two of these cost?" Then "How much for three?" When Thanh restocks shelves, his father also asks Thanh to read parts of the labels to him.

Jessica was diagnosed as educationally handicapped at a young age. As she grows up, her parents require her to contribute to the family by doing chores. She is having trouble remembering what she needs to do at home, and when, and she continually asks her mother for help. Her mother asks Jessica to suggest some strategies that would help her remember the chore schedule. Jessica comes up with the idea of a daily calendar. She develops it, listing each chore and the time she should complete it each day. At the end of the day, she checks the chores she has done and does any she has forgotten.

Martin's parents coach a soccer team for boys of his age, but Martin does not want to play on the team. He has emotional outbursts and finds playing too stressful. He tells his parents that he wants to be at the games and do something other than play on the team. When they ask him to suggest some possibilities, he thinks about it for a couple days. He then asks if he can keep score for the team. They ask him for ideas about how others could help until he has experience for this important job. Martin comes up with the idea of having an additional person keep score for the first few games. They can compare their records until Martin is confident enough to do it alone.

As you proceed through the last section of the Scale and think of your student's home environment, try to think of the opportunities it presents for self-determination.

III. Completion of the Self-Determination Scale and Profile

Forms of the Scale

The Educator form of the AIR Self-Determination Scale is for special education teachers to use with other IEP team members, other classroom teachers, rehabilitation counselors, or other educators. Other educators can also use it, either in groups or independently, as student needs require. Three other forms are also available:

- Student form, to use with students who have the requisite reading and comprehension skills, and
- Parent form, to use with parents who could benefit from considering the self-determination skills of their children
- Research form, to use for research purposes. It is the same as the Educator form but includes demographic information items that are useful for analysis purposes.

The validation and reliability studies, described in Section V, are based on the Educator form. Copies of all four forms are in the Appendix and may be photocopied as needed.

The directions in this chapter apply to the Educator Scale; however, you can apply the same basic procedures to the Student and Parent Scales.

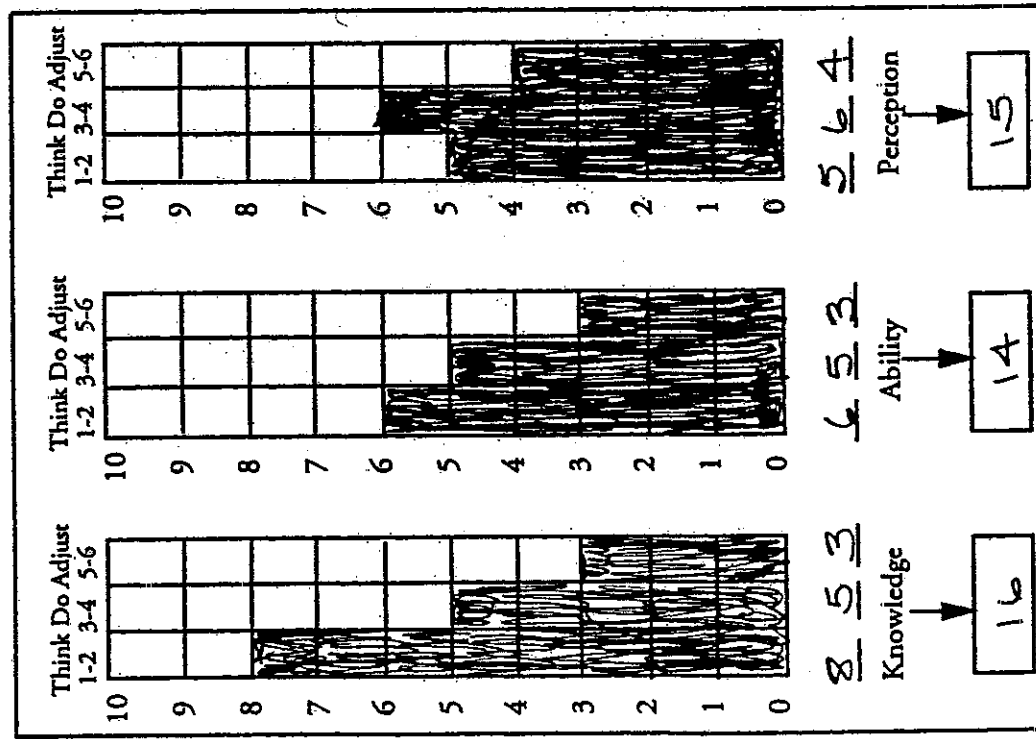
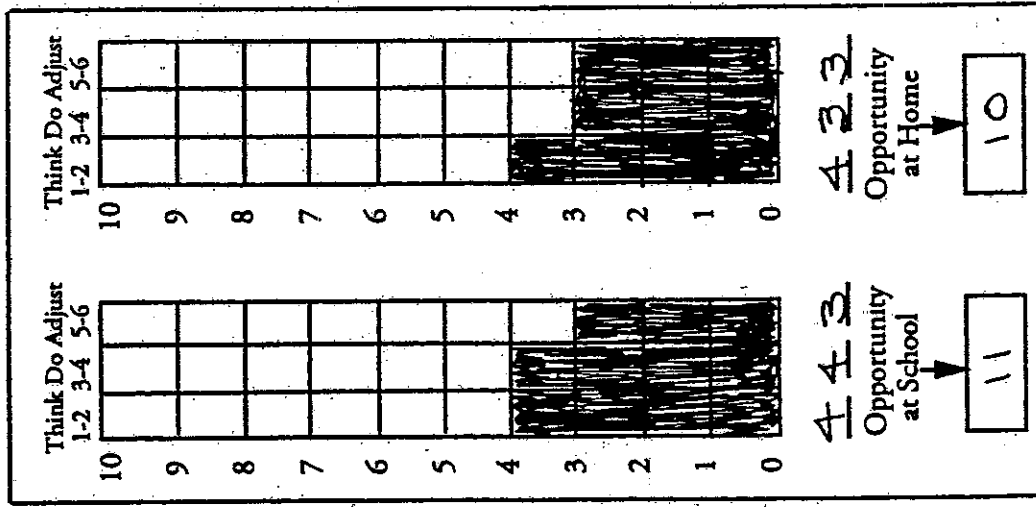
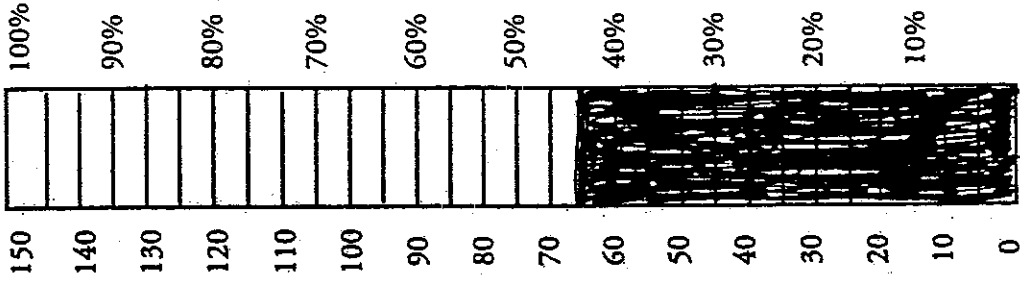
Organization and Completion of the Scale

The sections of the Educator form correspond to the five sections described earlier (*Knowledge, Ability, and Perception* which make up CAPACITY; and *School and Home*, which make up OPPORTUNITY). Each section has 6 items. The Student and Parent forms are shorter and the headings on them are slightly different. For example, the *Ability* section is called "What I Do" in the Student form and "Things My Child Does" in the Parent form. The Student and Parent forms include 6 items each for *Ability, Opportunity at School, and Opportunity at Home*. The Student form also includes 6 items for *Perception*.

To complete the Scale, think of the behavior described in the item and then indicate the frequency with which the student exhibits that behavior on a 5-point scale (Never, Almost Never, Sometimes, Almost Always, and Always). Answer all questions; get help from others if you need additional information. Add up the number for each set of 2 items and record it in the box in the right-hand margin of the Scale.

After completing each student's Scale, complete the corresponding Profile. On the next page is a filled-in example of the Profile sheet for the Educator's form of the scale. Look at this example Profile sheet for Pat Reed to see how to record scores. Note that the Profile sheet is divided into five sections, corresponding to *Knowledge, Ability, Perception*, which make up the CAPACITY score; and *Opportunity at School and Opportunity at Home*, which make up the OPPORTUNITY score. Each section has 6 items.

The AIR Self-Determination Profile Educator Form



$11 + 10 = 21$ Opportunity
 $21 + 45 = 66$ Level of Self Determination

$16 + 14 + 15 = 45$ Capacity

Date 1/19/95

Student name Pat Reed

(Write sum in box and mark in column.)

For example, the *Knowledge* section has six items. Assume that when you completed the first part of the Self-Determination Scale for Pat Reed, whose Profile is on the previous page, and you marked the six *Knowledge* items like this:

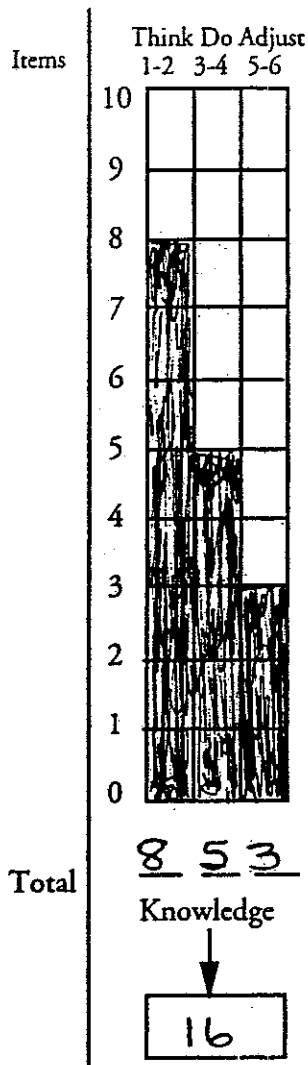
Item	1	2	3	4	5
	Never	Almost Never	Sometimes	Almost Always	Always
1.	1	2	3	4	5
2.	1	2	3	4	5
Knowledge Total: Items 1-2					8
3.	1	2	3	4	5
4.	1	2	3	4	5
Knowledge Total: Items 3-4					5
5.	1	2	3	4	5
6.	1	2	3	4	5
Knowledge Total: Items 5-6					3

To record your responses to Items 1-6 of the *Knowledge* section ("Think"):

- Add up the responses for "Think," Items 1-2 (two Almost Always = 4 + 4 = 8).
- Write the total in the box below Item 2.

Follow the same procedure for Items 3-4 "Do," adding one Almost Never (= 2) and one Sometimes (= 3), for a total of 5. Enter a 5 in the box that appears below Item 4.

For Items 5-6 "Adjust," add one Almost Never (= 2) and one Never (= 1), for a total of 3. Enter a 3 in the box that appears below Item 6. Then turn to the Profile sheet and record these responses.



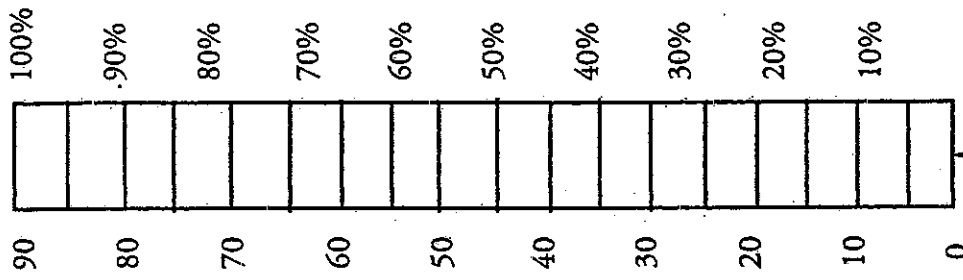
To record these responses to Items 1-6 of the *Knowledge* section, mark the Profile this way:

- Write the total (8) on the line below Items 1-2 (Think) and fill in the squares (from 8 down to 0).
- Write the total (5) on the line below Items 3-4 (Do) and fill in the squares (from 5 down to 0).
- Write the total (3) on the line below Items 5-6 (Adjust) and fill in the squares (from 3 down to 0).
- Add the three numbers (8 + 5 + 3) and write the sum (16) in the box under *Knowledge*.

(To check your understanding, look back at the example Profile for Pat Reed.) In similar fashion, add and record your responses for the item sets for *Ability* and *Perception* and fill in the appropriate columns on the Profile sheet. Add the totals for *Knowledge*, *Ability*, and *Perception* together and fill in the total in the CAPACITY box.

Fill in the two sets of columns for *Opportunity at School* and *Opportunity at Home*, add the totals of those 6 columns, and fill in the total in the OPPORTUNITY box. Finally, add the numbers for CAPACITY and OPPORTUNITY and then fill in the number in the Levels of Self-Determination column.

Follow the same basic procedures when you use the other forms of the Self-Determination Scale. Blank score sheets for each form—the Educator, Student, and Parent forms—are on the next pages. Make copies as needed.



90
80
70
60
50
40
30
20
10
0

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%

Items

Think Do Adjust
1-2 3-4 5-6

10										
9										
8										
7										
6										
5										
4										
3										
2										
1										
0										

Think Do Adjust
1-2 3-4 5-6

10										
9										
8										
7										
6										
5										
4										
3										
2										
1										
0										

Think Do Adjust
1-2 3-4 5-6

10										
9										
8										
7										
6										
5										
4										
3										
2										
1										
0										

Total

Things My Child
Does

→

+

What Happens
at Home

→

+

What Happens
at School

→

=

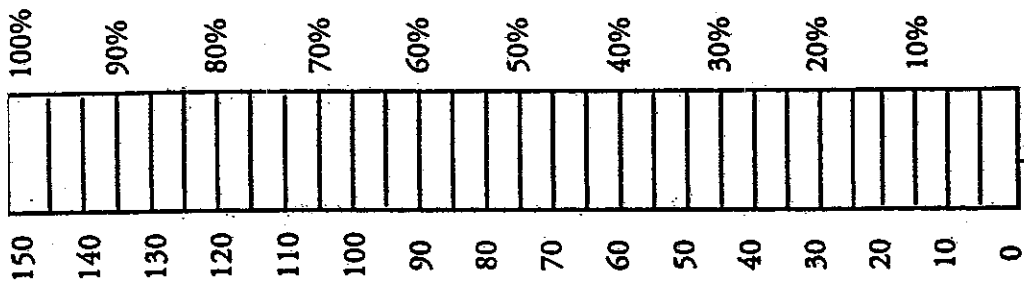
→

Level of Self-Determination

Child's name _____

Date _____

(Write sum in box and mark in column.)



Think Do Adjust 1-2 3-4 5-6	10																			
Think Do Adjust 1-2 3-4 5-6	9																			
Think Do Adjust 1-2 3-4 5-6	8																			
Think Do Adjust 1-2 3-4 5-6	7																			
Think Do Adjust 1-2 3-4 5-6	6																			
Think Do Adjust 1-2 3-4 5-6	5																			
Think Do Adjust 1-2 3-4 5-6	4																			
Think Do Adjust 1-2 3-4 5-6	3																			
Think Do Adjust 1-2 3-4 5-6	2																			
Think Do Adjust 1-2 3-4 5-6	1																			
Think Do Adjust 1-2 3-4 5-6	0																			

Opportunity at School

Opportunity at Home

Opportunity = Level of Self Determination

Think Do Adjust 1-2 3-4 5-6	10																			
Think Do Adjust 1-2 3-4 5-6	9																			
Think Do Adjust 1-2 3-4 5-6	8																			
Think Do Adjust 1-2 3-4 5-6	7																			
Think Do Adjust 1-2 3-4 5-6	6																			
Think Do Adjust 1-2 3-4 5-6	5																			
Think Do Adjust 1-2 3-4 5-6	4																			
Think Do Adjust 1-2 3-4 5-6	3																			
Think Do Adjust 1-2 3-4 5-6	2																			
Think Do Adjust 1-2 3-4 5-6	1																			
Think Do Adjust 1-2 3-4 5-6	0																			

Knowledge

Ability

Perception

Capacity +

Items

Total

(Write sum in box and mark in column.)

Date _____

Student name _____

The AIR Self-Determination Profile Student Form

	Think Do Adjust 1-2 3-4 5-6		Think Do Adjust 1-2 3-4 5-6	
Items	10 9 8 7 6 5 4 3 2 1 0		10 9 8 7 6 5 4 3 2 1 0	
		Things I Do		How I Feel
		[]		[]
Total				

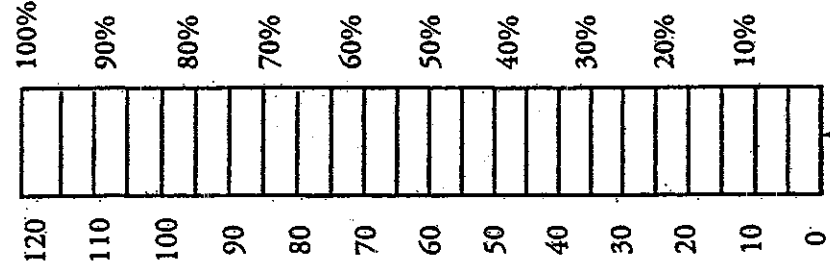
[] Capacity

	Think Do Adjust 1-2 3-4 5-6		Think Do Adjust 1-2 3-4 5-6	
	10 9 8 7 6 5 4 3 2 1 0		10 9 8 7 6 5 4 3 2 1 0	
		What Happens at School		What Happens at Home
		[]		[]

[] Opportunity

=

[] Level of Self-Determination



Name _____ Date _____

(Write sum in box and mark column.)

How to Interpret the Profile

Note that in the example Profile, the student has a score of 66 or about 45%. The 66 is not a magic number, but the 45% gives the teacher a basis of comparison. For example, when Pat Reed completes the Self-Determination Scale, the score may be at about 60%. When Pat's parents complete a Scale, they may give a score at about 30%. Clearly the three scores differ significantly, and the Profile could be a useful springboard for discussion.

The Profile can also be useful as a checkpoint over time. If Pat Reed's teacher completes Self-Determination Scales at the beginning and end of the year, he or she may find that Pat's score has increased to 52%, an indication that the student developed some self-determination skills during the academic year. The teacher might want to review it in discussions with Pat and with the teacher who will have Pat in class the next year.

Think-Do-Adjust Comparisons

The teacher may also find it useful to compare his or her scores for Pat within the subcategories of CAPACITY and OPPORTUNITY. Note, for example, that Pat has relatively low scores for Adjusting in all three CAPACITY sections (*Knowledge, Ability, and Perception*). The teacher and Pat—and Pat's parents, and other teachers perhaps—can then focus on Adjusting skills, and Pat can begin to work on those skills.

**Capacity-Opportunity
Comparisons**

The teacher in the example may also want to compare the totals for CAPACITY and OPPORTUNITY. Note that Pat's OPPORTUNITY scores are consistently lower than the CAPACITY scores. The teacher might want to compare his or her scores to those of Pat, Pat's parents, and/or another teacher. If the teacher concludes that his or her scores are fairly accurate, they indicate that Pat has the *capacity* to be more self-determining than *opportunities* are allowing this student to be. Granted, Pat's CAPACITY scores need to increase also, but the disparity should be considered.

In the next section, ways to use the Scale and its results are discussed in greater detail.

IV. Ways to Use the AIR Self-Determination Scale and Its Results

Curriculum Guide

The AIR Self-Determination Scale is designed to provide an easy-to-use tool for assessing the skills and behaviors that will enable students to become more in charge of their own destinies, achieve maximum independence, and plan and fulfill their desired goals in life. Once you have assessed the student's self-determination, you will use your professional knowledge and resources, and the unique characteristics of the student and his or her situation, to plan strategies.

To help you translate the results of the Self-Determination Scale into a plan to increase—indeed maximize—the student's level of self-determination, educational goals that correspond with the Profile are presented on the next two pages. From these goals you can develop specific objectives for an IEP or ITP or other use.

For example, for the first goal, "To increase student's knowledge of own interests, needs, abilities, and limitations," you might develop measurable objectives like the following:

- Choose two activities from a list of _____ (number) that reflect personal goals, interests, needs or abilities.
- Participate in one or two of these selected activities for a minimum of _____ (time).
- Evaluate by _____ (action, e.g., rating on a scale, answering Yes/No questions) whether activities met expectations.
- Continue or change activities as appropriate.

Curriculum Guide

Overall Goal: To increase student's CAPACITY for self-determination.

To increase student's knowledge of self-determination behaviors.

1. To increase student's knowledge of own interests, needs, abilities, and limitations
2. To increase student's knowledge of how to set expectations and goals that satisfy interests and needs
3. To increase student's knowledge of how to make choices, decisions, and plans to meet his or her own goals and expectations
4. To increase student's knowledge of how to take actions to complete plans successfully
5. To increase student's knowledge of how to evaluate the effectiveness of plans and actions
6. To increase student's knowledge of how to change actions or plans to meet goals and satisfy needs and wants

To increase student's ability to perform self-determination behaviors.

1. To increase student's ability to express his or her own interests, needs, abilities and limitations, without undue influence from others
2. To increase student's ability to set expectations and goals that satisfy interests and needs, without undue influence from others
3. To increase student's ability to make choices, decisions, and plans to meet his or her own goals and expectations, without undue influence from others
4. To increase student's ability to take actions to complete plans effectively
5. To increase student's ability to evaluate the effectiveness of plans and actions
6. To increase student's ability to change actions or plans to meet goals and satisfy needs and wants

To improve student's perception of own knowledge and ability to perform self-determination behaviors.

1. To increase student's confidence and sense of freedom in expressing own interests, needs, abilities and limitations
2. To increase student's confidence and sense of freedom in setting expectations and goals that satisfy interests, needs, and abilities
3. To increase student's confidence and sense of freedom in making choices, decisions, and plans to meet own goals and expectations

Curriculum Guide

To increase student's perception of own knowledge and ability (continued)

4. To increase student's confidence in taking actions to complete plans successfully
5. To increase student's motivation to evaluate the effectiveness of own actions
6. To increase student's willingness to change actions or plans to meet goals and satisfy needs and wants

Overall Goal: To increase student's OPPORTUNITIES to develop self-determination behaviors

To increase student's opportunity to perform self-determination behaviors at school ..

1. To increase student's opportunities at school to express his or her own interests, needs, and abilities
2. To increase student's opportunities at school to identify expectations and goals that satisfy interests, needs, and abilities
3. To increase student's opportunities at school to make choices, decisions, and plans to meet own goals and expectations
4. To increase student's opportunities at school to take actions based on his or her plans
5. To increase student's opportunities at school to evaluate the effectiveness of own actions
6. To increase student's opportunities at school to change actions and plans to meet goals and satisfy needs and wants

To increase student's opportunity to perform self-determination behaviors at home..

1. To increase student's opportunities at home to express his or her own interests, needs and abilities
2. To increase student's opportunities at home to identify expectations and goals that satisfy interests, needs, and abilities
3. To increase student's opportunities at home to make choices, decisions, and plans to meet his or her own goals and expectations
4. To increase student's opportunities at home to initiate actions based on own plans
5. To increase student's opportunities at home to evaluate the effectiveness of own actions
6. To increase student's opportunities at home to change actions and plans to meet goals and satisfy needs and wants

In addition to using the AIR Self-Determination Scale as a preliminary step to specifying objectives for a student's IEP or ITP, you can use it for a number of other purposes:

- To broaden your perspective and knowledge about a student
- To facilitate collaboration with other educators
- To serve as a catalyst for self-assessment by students
- To be a vehicle for communication with parents

Each of these purposes is described below.

Teacher Perspective and Knowledge

One of the greatest values of the AIR Self-Determination Scale is to help focus attention on a particular student, not just for developing an IEP or ITP, but for helping you meet that student's unique needs. If you are like many other teachers, you have few opportunities to think of only one student. During class, so many students clamor for your attention that you can think of each student only in terms of the work you assign for him or her to do.

Developing a Profile of that student's knowledge, abilities, perceptions, and opportunities related to self-determination should lead you to a better understanding of the student's strengths and weaknesses and enable you to work more effectively with her or him. This could also be a useful exercise for a student—in special education or not—who seems to be having problems with self-determination. For example, if a mathematics teacher determines that a student lacks opportunities to make choices and plans to meet goals, the teacher could structure some of the math activities to offer the student those opportunities.

Collaboration with Other Educators

A group planning session for a student, whether it's for the development of an IEP/ITP or other purpose, can also be a good opportunity to take a close look at the student and to share perceptions. Ask each member of the team to complete the Educator's form of the AIR Self-Determination Scale for the student, and compare your findings. Discuss the areas on which you agree and disagree. Ask the student and his or her parents to provide information that will confirm or refute your collective understandings of the student. Once all of you are clear about the student's needs and strengths, you can plan an IEP, areas of need for transition planning, or objectives for reaching other desired goals.

Another possibility: ask a classroom aide or former teacher who knows a student well to complete the AIR Self-Determination Scale and then share the results with you. This could be particularly useful when a student transfers into your class in mid-year.

Student Self-Assessment

Use the Student form of the AIR Self-Determination Scale to help students assess themselves. The way you use the Student form will depend on the ages and ability levels of your students. For students with good reading skills, administer the Student form of the Scale as it is, asking the student or group of students to fill it out independently after you have gone over the directions. After they have completed the AIR Self-Determination Scale, have the students prepare their Profiles and discuss what they mean. For example, if a student's Profile on *Knowledge* of Self-Determination is low, discuss ways that students might learn about their own interests and needs. Emphasize that there are no "right" or "wrong" answers to the Scale. It is a way to take stock and help students prepare for the future.

For students with reading problems or students for whom the Student form seems too sophisticated, use the Scale as a springboard. First hold a group discussion about what self-determination is and how it might relate to their age group.

Examples of activities for use with elementary students

With elementary school students, you might use prompts like these to promote a discussion:

Imagine a fourth grader named Christina who wants to help out at home. She wants to take over one chore that she will do regularly and that everyone can count on her to do. She especially likes to work outside. What chore might Christina choose?

[Elicit ideas. Probe to see how each idea might fit the girl's interests. Select one and continue discussion in terms of that task.]

How often do you think Christina should do this chore? How would she need to prepare? Would she need any special supplies? How often would she need to do it? How would she carry it out? How would she know when she had done it well? If problems arose, how might she solve them?
[at end of discussion] *Do you think you could choose a chore like this and carry it out? Why or why not?*

[Suppose students suggest that Christina might keep the area around the front door clean. Have them think about how often she might need to sweep and pick up items, what she could use to put the items in, where she would discard them, what the standards for "clean" might be, what she could do if she had lots of homework one day and not enough time to clean the area at the regular time, or what she might do if she

decided that the front door area wasn't the problem—the dirt tracked in from the street was.]

After you have talked about self-determination, read the items to the students and ask them to rate themselves. If they have trouble understanding an item, include an example from the Educator form or provide one based on your knowledge of students that age.

Examples of activities for use with middle and high school students

With older students (middle school or high school), you might use a prompt like this for discussion:

Suppose that a student named Tony wants to show his parents that he can handle spending money responsibly. What might he do? Can you suggest a plan?

[Have students brainstorm some ideas such as having Tony get a part-time job or having Tony's parents give him an allowance. Choose one and follow up with questions.]

Tony really wants to buy a CD player. How might he get the money to buy one? How long will it take before he can get it? What if an unexpected expense comes up [e.g., his work hours are reduced; parents cannot pay allowance one week]?

[at end of discussion] *Do you think you could do something like this? Why or why not?*

When you have finished your discussion, ask your students to complete the Student form of the Self-Determination Scale. Monitor their progress, and if they seem to have trouble understanding items, ask them to provide examples, share examples from the Educator form or provide one that you think will have meaning for your students.

Adaptations for students with special needs

If your class includes some students who cannot read and understand the Student form of the AIR Self-Determination Scale as printed, read it aloud to them, including examples as needed to make it clear. Some learning disabled students with spatial perception challenges may want to use another sheet of paper as a marker to make sure they are circling the correct response for the line they are on.

If your class includes students with limited vision, ask them to suggest strategies for recording their responses: they could respond into a tape recorder, or you, an aide, or another student could serve as recorder. This strategy could also be used for students with physical disabilities or learning disabilities that limit their ability to write.

Communication with Parents

Use the Parent form of the AIR Self-Determination Scale to help parents think about their child in a particular way. Ask parents to complete it for use in an IEP or ITP conference or at a special event. For example, if you hold an Open House or other parents' meeting, distribute the Parent form of the Scale and have parents complete it for their child. Discuss how they might use the results, for example, in a parent conference with you later. (Be sensitive to the possibility that some parents may not be able to complete it during an allotted time at Open House because of their own reading or language problems.)

Another idea is to distribute Parent and Student forms in a packet of materials to be shared at home. Provide instructions that describe how parents and students can complete AIR Self-Determination Scales and compare their responses. Emphasize that the Scales should be a basis for discussing ways to help the student develop self-determination skills, not to provide a judgment about what the student cannot do.

Regardless of how you use the Scale, keep in mind that you are not going to reach a magic point one day when you can say, "This student is self-determined." The process of developing self-determination will continue for years. Together, with the parents and the student, you can plan strategies to help the student grow in self-determination.

Resources to Use with This User Guide

In developing strategies to enhance your students' capacities and opportunities for self-determination, use your experience, expertise, and accumulated resources. If you need additional materials, check the resources and curriculum materials already available in your school district or obtain additional items through educational catalogues and book stores. Books that include stories or illustrations of people—especially those with disabilities—who have overcome obstacles or are role models for others are especially valuable resources. Make sure that any materials you choose are appropriate to the developmental level or age of your students.

All of the topics listed below are related to the development of self-determination. You might consider educational resources related to these topics:

- Goal setting
- Choicemaking and decisionmaking
- Problem solving
- Critical thinking skills
- Creativity
- Self-reliance and responsibility
- Self-determination
- Self-advocacy and assertiveness
- Self-management skills (e.g., study skills, time management, self help)
- Self-esteem and self-confidence
- Risk-taking
- Daily living skills

- Transition planning (from school to adulthood)
- Career/vocational development (e.g., career awareness, exploration, futures planning)
- Independence, autonomy, control
- Empowerment

Conclusion

The AIR Self-Determination Scale is a tool for planning and goal-setting. Anyone who knows about a student's particular needs, interests, goals, and abilities is a potentially useful source of information; the Scale provides a means for gathering that information. Use it with anyone—student, teacher, resource person, administrator, parent—that you think can inform plans to help the student become a strong, independent, and confident adult.

V. Reliability and Validity of the Scale

A preliminary version of the AIR Self-Determination Scale was field tested in approximately 70 schools and programs in San Jose, California, and New York City, New York, in Spring 1994. Educators, including special education teachers and resource specialists as well as regular classroom teachers, assessed more than 450 students with and without disabilities. This section describes the student population represented in the field test and reports on the validity, reliability, and utility of the AIR Self-Determination Scale, based on analyses of Educator forms completed during the field test.

The results described in this section are intended primarily for persons with technical expertise, including familiarity with statistical terms and analyses and with research and assessment techniques.

Field Test Population

The age distribution of the students in the field test was as follows:

- 12 percent were between 6 and 9 years of age
- 17 percent were from 10 to 12 years
- 12 percent were from 13 to 15 years
- 15 percent were 16 or 17
- 23 percent were 18 or 19
- 20 percent were between 20 and 25 years

The gender distribution was 39 percent females and 61 percent males. The racial-ethnic distribution was 33 percent African-American, 22 percent White; 39 percent Hispanic, 3 percent Asian or Pacific Islander, and 3 percent other groups. Of the students in the sample, 72 percent were economically disadvantaged (as indicated by their enrollment in free-lunch programs at their schools), and 82 percent were enrolled in special education.

Of those students enrolled in special education, 79 percent had mild to moderate disabilities and were identified by the following conditions: mental retardation, learning disabilities, speech impairment, visual impairment, hearing impairment, and orthopedic impairment. The remaining 21 percent of the special education population had moderate to severe disabilities as described by the following conditions: moderate, severe, or profound mental retardation; deaf-blindness; autism; traumatic brain injury; and multiple handicaps.

Reliability

Reliability tests conducted on the self-determination instrument included an *alternative-item* correlation for item consistency, a *split-half test* for the internal consistency of the instrument, and a *test-retest* measure of stability of results over time.

The field test instrument included duplicate question items for each of the six self-determination variables comprising a student's *capacity* to self-determine. These included:

1. knowing and expressing one's needs, interests, and abilities
2. setting expectations and goals
3. making choices and plans
4. acting on plans
5. evaluating results of actions
6. altering plans and actions to meet goals more effectively

For the *alternative-item* test, scores on the duplicate items were correlated to yield an alternative-item (similar to an alternative form) test of consistency. The results yielded correlations ranging from .91 to .98. The *split-half* test for internal consistency compared the odd-numbered items of the instrument with the even-numbered items and yielded a correlation of .95. And the test-retest measure of consistency over an elapsed period of three months separating the first and second test administrations of the instrument yielded a correlation of .74.

The second analysis examined relationships between gender, ethnicity, socioeconomic status (economically disadvantaged students were identified by enrollment in free-lunch programs), enrollment in special education, and presence of disability on students' levels of self-determination. The results indicated:

- Male and female students did not have significantly different scores on self-determination.
- Students who were African American, Hispanic, and White did not have significantly different scores on self-determination.
- Economically disadvantaged students (i.e., those enrolled in free-lunch programs) had significantly lower scores on self-determination than other students.
- Students enrolled in special education programs had significantly lower scores on self-determination than students not enrolled in special education.

- Students with mild disabilities had significantly higher scores on self-determination than students with moderate to severe disabilities.

Validity

The AIR Self-Determination Scale was intended to assess three constructs: *capacity-opportunity*, *home-school*, and *knowledge-ability-perception*. The validity of the Scale was assessed by examining relationships between these constructs and item scores of the instrument.

A factor analysis of scores on the 30 items of the AIR Self-Determination Scale yielded results that were consistent with the conceptual structure of the Scale, which included two principal components:

- a *capacity*-to-self-determine component consisting of Item 1-18
- an *opportunity*-to-self-determine component consisting of Items 19-30

Moreover, the analysis yielded factor substructures consistent with capacity which included students'

- *knowledge* about self-determination (Items 1-6)
- *ability* to self-determine (Items 7-12)
- *perception* about self-determined results (Items 13-18)

The same result occurred for the factor substructures that emerged from the *opportunity* construct which included components of *school* (Items 19-24) and *home* (Items 25-30). The factor analysis reflected these components as well.

The results of the factor analysis indicated the presence of four factors which explained 74 percent of the variance in the 30-item instrument.

- Factor one, the *capacity* to self-determine factor, explained 42.4 percent of the variance.
- Factor two, the *home-school* factor, explained 17.2 percent of the variance.
- Factor three, the *opportunity* factor, explained 10.3 percent of the variance.
- Factor four, the *knowledge-ability-perception* factor, explained 4.1 percent of the variance.

There were strong positive correlations for Items 1-18 (.68 to .82) on Factor one, the *capacity* factor; positive correlations (.59 to .66) for Items 19-24 and negative correlations (.65 to -.68) for Items 25-30 on Factor two, the *home-school* factor; modest positive correlations (.40 to .54) for Items 19-30 on Factor three, the *opportunity* factor; and weak positive correlations (.22 to .29) for *knowledge* Items 1-5) and weak negative correlations (-.25 to -.34) for *ability* Items 7-9 and (-.39) for *perception* Items 13-15 on Factor four, the *knowledge-ability-perception* construct.

Overall the four factors explained most of the variance in the item scores, as indicated in Table 1. The four factors explained more than 80 percent of the variance for six items, between 70 and 79 percent of the variance for 16 items, between 60 and 68 percent of the variance for 5 items, and between 50 and 58 percent of the variance for 3 items—which is another way of describing the overall explanatory power of the four factors to be 74 percent. This means there is a robust relationship between the underlying factors revealed in the data, the scores for each item in the instrument, and the conceptual constructs upon which the instrument was developed.

Table 1. Summary of Item Score Variance Explained by Self-Determination Constructs

AIR Self-Determination Scale Items 1-30	Proportion of Variance in Self-Determination Item Scores Explained by All Four Factors: Capacity, School-Home, Opportunity, and Knowledge-Ability-Perception
Items 25, 26, 27, 28, 29, 30	.82-.89
Items 2, 3, 4, 5, 6, 8, 9, 10, 14, 15, 19, 20, 21, 22, 23, 24	.70-.79
Items 1, 7, 11, 13, 16	.60-.68
Items 12, 17, 18	.50-.58

Utility

The utility analyses included

1. an evaluation of the discriminative power of items that assessed students' awareness of their needs and interests, and their goal setting, planning, acting, evaluating, and adjusting
2. an evaluation of the instrument's sensitivity to possible differences in student characteristics like gender, ethnicity, socioeconomic status, enrollment in special education, and presence of absence or different levels of disabling conditions.

The first analysis looked for significant variation in subscore means across the capacity domains we would expect to yield differences in students' profiles: self-awareness, goal setting, choosing, acting, self-evaluation, and self-adjustment. The findings showed significant differences (two-tailed test) in mean scores comparing subscale means:

- for self-awareness and for goal setting, planning, acting, and self-evaluation, adjustment
- for goal setting and for self-evaluation and self-adjustment
- for planning and for self-evaluation and self-adjustment
- for acting and for self-evaluation and self-adjustment