Series I - Step-by-Step - Guide Part V

Part V-Adapting Curriculum for Students with Special Needs

One of the most important things to keep in mind when working with student with special needs is that they can learn. In many cases, it is not the lack of understanding or knowledge that causes problems but rather the manner of presentation, response requirements, and level of presentation. The need to learn how to adapt material is crucial when working with this population. These adaptations offer them a better chance of success and task completion.

A-What are Curriculum Adaptations?

There are several factors that you will need to consider in adapting the curriculum. Adaptive instructional programs are characterized by combined teaching strategies, flexible scheduling, individualized instruction, mastery learning, large and small group instruction, individualized tutorials and cooperative learning. Further, while we will need to adapt the form of instruction to meet the individual needs of children with special needs we will also need to adapt the delivery and response factors that will face the child in school.

B-Examples of Adapting the Curriculum for Students with Special Needs

Where a student with special needs is expected to achieve or surpass the learning outcomes set out in the science curriculum, regular grading practices and reporting procedures are followed. For students not expected to achieve the learning outcomes, adaptations and modifications must be noted in the Individual Education Plan. In this way, instructional and assessment methods may be adapted to meet the needs of all students.

The following are examples of adaptations that may assist students with special needs achieve success in science. The teacher could:

Adapt the environment
• Change where the student sits in the classroom.
• Make use of cooperative grouping

Adapt presentations
• Provide students with advance organizers of key scientific concepts.
• Demonstrate or model new concepts.

Adapt the pace of activities
• Allow the student more time to complete assignments
• Provide shorter but more frequent assignments

Alternate mode for materials
• Dictate to a scribe
• Tape record
• Draw pictures
• Cut pictures from magazines

• Build models
• Use the computer
• Enlarge/shrink materials
• Use overlays/acetate on text pages
• Cut and paste
• Use manipulatives
• Use a calculator

Adapt materials
• Use large print activity sheets.
• Use overlays on text pages to reduce the quantity of print that is visible.
• Highlight key points on the activity sheet.
• Line indicators
• Sections on paper (draw lines, fold)
• Different types of paper (e.g., graph, paper with mid-lines, raised line paper)
• Provide more white space to put answers
• Highlight or color code (directions, key words, topic sentences)
• Cover parts of worksheets
• Put less information on a page
• Use high contrast colors
Adapt assistance
• Use peers or volunteers to assist students with special needs.
• Use students with special needs to assist younger students in learning science.
• Use teacher assistants to work with small groups of students, as well as with an identified student with special needs.
• Use consultants and support teachers for problem solving and to assist in developing strategies for science instruction.

Adapt assessment
• Allow various ways for students to demonstrate their understanding of scientific concepts such as performing experiments, creating displays and models, and tape recording observations.
• Adapt assessment tools such as paper and pencil tests to include options such as oral tests, open-book tests, and tests with no time limit.
• Keep work samples on NCR paper.
• Use computer programs that provide opportunities for scientific practice and recording results.
• Provide opportunities for extension and practice
• Require small amounts of work to be completed at a given time.
• Simplify the way questions are worded to match the students' level of understanding.
• Provide functional everyday examples such as building structures to develop an understanding of forces. (Ministry of education, British Columbia 2006)

C-9 Ways to Adapt the Curriculum

Deschenes, Ebeling & Sprague (2000) offer 9 ways to adapt instruction which can be used for children with special needs:

Nine Ways to Adapt Instruction

Size	Time	Level of Support
Adapt the number of items that the learner is expected to learn or complete.	Adapt the time allotted and allowed for learning, task completion, or testing.	Increase the amount of personal assistance with a specific learner.
For example: If student is to know the fifty states, have students only be responsible for remembering a certain number at a time. This would be dependent on the student's level of disability	For example: Allow student additional time to complete timed assignments. However, if the total project is due by a particular time, have the student complete each portion of the project over various intervals with the required finished project due at a later time.	For example: Allow for peer teaching. Pair the slower students with the more advanced students in order to provide support. Offer some sort of incentive to the more advanced student for assisting others. Design some type of contract with students that they could show to their parents indicating completion of their work and the assistance they are giving to others. Offer this as a bonus to their grades.

Input	Difficulty	Output
Adapt the way instruction is delivered to the learner.	Adapt the skill level, problem type, or the rules on how the learner may approach the work.	Adapt how the student can respond to instruction.
For example: Provide students with a audio and/or video tape of the lesson. Allow for field trips, guest speakers, peer teaching, computer support, video productions performed by students, Incorporate lesson in other subjects areas	For example: Allow the student to be creative providing that task is completed according to instructor's specifications. For example the student may draw a picture of the assignment, do an interview, etc. depending on subject. Allow the student to come up with the idea. Accept any reasonable modifications.	For example: Allow students to draw pictures, write an essay, complete specific computer software program relating to lesson.

Participation	Alternate	Substitute Curriculum
Adapt the extent to which a learner is actively involved in the task.	Adapt the goals or outcome expectations while using the same materials.	Provide different instruction and materials to meet a student's individual goals.
For example: Tailor the student's participation in a task to his or her abilities, whether intellectual or physical.	For example: In a writing assignment, alter the expectations for a disabled student who takes longer to write a paragraph.	For example: Instead of discussing the reasons for the civil war, have the disabled student work on a puzzle showing the Union and Confederate states.

From Adapting Curriculum and Instruction in Inclusive Classrooms: A Teacher's Desk Reference, by Deschenes, C., Ebeling, D., and Sprague, J., 2000.

D-Checklist of Suggestions

ORCLISH, a statewide federally funded project under the direction of the Ohio Department of Education Division of Special Education, put together a checklist of suggestions for adapting instruction. This checklist offers specific areas to focus on when you work with your students with special needs:

What to Adapt?

• Curriculum Materials (textbook assignments, workbook, tests)
• Instruction (grouping strategies, learning centers, audio visuals)
• Classroom Organization and Behavior Management (daily schedules and
• routines, classroom rules, seating arrangements, and individualized
• behavior plans).
• Consider these areas, as well as others, and consider adaptations in several areas at one time to maximize results.

Alternate Goals

• Change the expected outcome or goal for the student using the same materials or curriculum as other students. For example: The student will only copy the spelling words, while others will spell from memory, the student will match state names to the map while others will locate state capitals, the student will participate in science by building the DNA model while others build the model, label, and answer questions.

Substitute Curriculum

• Provide different instruction, materials and goals for a student. For example:

A student may learn computer/keyboarding skills while others are taking a language test, a student may cut out food items from a magazine and create a picture book of favorite foods while others are writing a creative story, a student will create his personal schedule for the day while others are doing group circle or calendar time.

Staying On Task

• Break assignments down into small units
• Provide frequent teacher feedback and redirection
• Provide time in resource room for completion of classwork
• Use a buddy system to remind child to stay on task
• Lessen homework expectations (if necessary)

Homework

• Individualize
• Shorten
• Allow more time
• Provide more help

Presentation of Material

• Present visually written demonstration pictured
• objects computers video maps
• charts calendars audiotapes
• Use consistent expectations
• Divide instruction into small steps
• Provide opportunities to teach and practice skills needed
• Provide needed prompts and cues

Assessment and Assignments

• Shorten
• Modify difficulty
• Alter activity
• Highlight text
• Provide a choice (when appropriate)
• Teach format ahead of time
• Modify question format
• Allow extra time
• Link learning to real situations

Communicating to the Student

• Be concrete and specific
• Avoid using terms like “later”, “maybe”, and sarcasm
• Slow down the pace, allow student to process (3-6 sec)
• If necessary, break tasks into smaller steps
• Use gestures, modeling, and demonstrations with verbalizations

• Provide warnings about change
• Provide information about expectations

Encouraging Communication with the Student

• Pause listen and wait
• Watch and listen to attempts to respond
• Respond positively to attempts
• Model correct format without corrections
• Encourage input and choice when possible

Social Supports

• Create cooperative learning situations where student may share proficiencies
• Establish a buddy system
• Practice specific skills through natural activities with one or more peers
• Structure activities with set interaction patterns and roles when appropriate
• Praise classmates when they treat student properly, discourage teasing
• Focus on social process rather than end product
• Develop social stories
• Teach, rehearse, practice, model and reinforce the following skills:
• turn-taking responding waiting greeting joining others
• taking the lead joking and teasing complimenting
• Environment and Routine
• Provide a predictable and safe environment
• Minimize transitions
• Offer a consistent daily routine
• Avoid surprises, prepare student in advance
• Recognize distractions and sensory overloads (noise, vision, smell, tactile)
• Allow modifications to sensory problems when necessary

Self Management/Behavior

• Teach use of visual schedule, cues, and timer
• Provide reinforcement that is individualized, immediate, and concrete
• Incorporate strengths and interests into daily activities
• Encourage choices when appropriate
• Determine why behavior is occurring and develop behavior plan
• Avoid punitive measures, use positive and natural consequences
• Avoid disciplinary actions for behaviors which may be part of their disability

Strategies for Adapting Tests and Quizzes

A-Preparing for Tests and Quizzes

• Teach students strategies to prepare for a test or quiz
• Teach students what to look for in test questions; how to read a test
• Use a variety of formats to thoroughly review for several days before tests or quizzes including quiz bowls, small group review, question and answer periods and study buddies.
• Provide students with examples of test content and format.

• Provide study guides in advance of the test.
• Provide review time during or outside of the class, emphasizing key points to study.

B-Writing Tests or Quizzes

• Write clear, concise directions.
• Vary the test format (e.g., written, oral, short answer, essay, multiple choice, matching, yes/no, demonstration testing, open book/notes, take home, cooperative group testing).
• Underline or highlight important words in the test directions or on test items.
• Give more objective than subjective items.
• Increase allowable time for test completion.
• Review orally to ensure comprehension of essay questions.
• Give shorter tests, covering less information, more frequently.
• Avoid penalizing for grammar, handwriting, or spelling.
• Reduce the test items by starring those that are the most important concepts.
• Give the same test to all students, but score some students on the priority items only, giving extra credit for any additional questions answered correctly.

C-Administering and Scoring Tests and Quizzes

• Provide students with the opportunity to have tests read orally.
• Read test instructions aloud to any student who would prefer them read aloud.
• Allow students to take the test in the classroom during the scheduled time, then give opportunities to have it read to them orally and average the two scores.
• Tape record tests, using assistants, tutors, parent volunteers and others.
• Allow students to tape record answers.
• Allow students to use charts, calculators, or manipulatives that they have used on assignments for the exam.
• Create a modified grading scale or consider a pass/fail, satisfactory/ unsatisfactory grade on the test.
• Grade student effort and individual ability in addition to test scores.
• Allow students to retake the test and give credit for improvement.
• Provide feedback to students via teacher/student conferences.
• Encourage students to chart their progress.
• Take time to review corrected tests and allow students to make corrections on their test or a clean copy of the test.
• Provide partial credit for various correct steps in a problem-solving process.
• Correct tests immediately and reteach in skill groups.
• Give students opportunity to critique their own work based on your criteria before they hand it in.
• Allow students to grade their own tests immediately upon completion in a designated area; the teacher does the final scoring.
• Allow students to take the test in small groups; students may use a group answer or their own.

D -Providing Alternatives to Tests and Quizzes

• Provide a menu of options for students to demonstrate knowledge other than or in addition to tests:
• Design collages, posters, timelines of events, story boards
• Conduct interviews of individuals who have something to say about the unit of study

• Find a guest speaker
• Develop and conduct a survey
• Create maps, graphs, diagrams
• Design and play simulation game activities
• Write and perform skits
• Provide a packet of activities that students complete throughout the unit
• Keep a journal
• Participate in discussions
• Point to a picture cue system for test/quiz responses
• Allow students to design their own project/demonstration
• Provide information on the standard report card indicating adaptations have been made.
• Vary the grading system; grade on items other than the tests (e.g., homework, special projects).
• Offer extra credit activities throughout the grading period.
• Use a grading contract, detailing the basis for grades.
• In secondary programs, consider an audit system to allow students to take classes that provide knowledge but do not result in a credit or grade.

E- Allow test partners

• Offer it as a student option
• Each student has his own set of notes and his own copy of the test
• Student partners are allowed to read and discuss questions, then each student writes her own answer
• Each student has her own test so that if there is disagreement each can write her own answer
• Both partners must be present on the day of the test or the test is taken alone

F-Adapting response mode

Another very important factor in adapting the curriculum is to consider the use of a variety of response modes for the child with a learning disability. Providing many different options will increase the likelihood of success. Some options for changing response mode include:

animated movie	game board	commentary	poster	book
speech	display	mobile	scavenger hunt	tape
panel discussion	tour	interview	charades	portrait
television show	pantomime	invention	play	radio
model	radio commercial	skit	puppet show	song
slide presentation	report	bulletin board	poem	cookbook
puzzle	telephone talk	map	maze	cartoon

show case	magazine	banner	comic strip	visual art form
diorama	script	brochure	brainteasers	collage
diary	newspaper	time capsule	blueprint	video tape recording
survey	mural	sculpture	timeline	

In conclusion, there are numerous ways to present, record, and ask children to respond to curriculum material. It is our job as educators to ensure that we have done everything possible to help children succeed and gain a sense of accomplishment in school. Since there are so many options in adapting the curriculum available to us, it is crucial that we explore and try these options. You never know what works.