

Creating and Using Meaningful Alternate Assessments

- **How do we meet the responsibilities of assessing students with disabilities in programs aligned with “standards” and the assessment requirements of federal legislation?**
- **How do we ensure that all students with disabilities achieve in the general education curriculum to the extent possible?**
- **How do we decide which students need alternate assessments?**
- **How do we design effective alternate assessments?**

As these new responsibilities, along with the required paperwork and documentation, “filter down” to the classroom level, teachers are becoming increasingly burdened (Heward, 2000; “Special Educators Share,” 1999).

Educators must give careful thought to how schools will include each student in state or district educational assessments. Most students with disabilities will participate in a state or district general education assessment, with individualized modifications and accommodations, as needed. A smaller portion of students with disabilities (those students who cannot participate in the general assessment, even with appropriate modifications and accommodations) will participate in a state or district alternate assessment. As noted by Erickson, Ysseldyke, Thurlow, and Elliott (1998), students given alternate assessment typically have severe disabilities.

Teacher Surveys

As one example of the classroom effect of these new requirements, a statewide survey mailed to all teachers in

Harold Kleinert

Pamela Green

Mark Hurte

Jean Clayton

Carla Oetinger

Kentucky who had students in that state’s alternate assessment program (Kleinert, Kennedy, & Kearns, 1999) found that the amount of time required to complete the alternate assessment was the most frequently expressed concern. In the open-ended portion of the survey (in which teachers were invited to make comments about any aspect of the alternate assessment), 19 respondents (or 5.7% of the total) reported that completing portfolios for students with severe disabilities took time away from teaching. Yet many teachers with whom we have worked in this arena have noted that the issue is not so much one of finding the time to do this extra work, but of learning to integrate alternate assessment into the context of ongoing, daily instruction.

In a similar statewide survey, researchers found that the amount of time outside of class that teachers spent on student assessment portfolios was only minimally related to student scores (Kampfer, Horvath, Kleinert, & Kearns, 2001). A far more powerful predictor of student scores was the extent to which the alternate assessment was integrated into daily instruction, as well as the extent to which students were actively involved in the construction of their own assessment portfolios.

In fact, by emphasizing the role of the *student* in managing and evaluating his or her own learning, we can teach valuable skills that are integral to the broad outcome of self-determination (Browder & Bambara, 2000; Ezell, Klein, & Ezell-Powell, 1999). Student self-evaluation is also an effective generalization strategy (Heward, 2000), since students learn to monitor the critical elements of their own behavior across settings. This article will describe some helpful strategies for integrating alternate assessments into the context of ongoing instruction, and for enabling students to take a more active role in the construction and self-evaluation of their own assessments. These basic approaches hold not only the promise of relieving a portion of the burden from overworked teachers, but of also enhancing the learning process—and student outcomes.

Integrating Assessment into Ongoing Instruction: “All-of-One-Piece” Planning

Assessment should be an integral facet of all of our teaching, and the same is true of developing and integrating alternate assessments for students with severe disabilities into ongoing classroom routines. Though the specific requirements for alternate assessments vary from state to state, many states are developing performance-based alternate assessments that represent a collection of the student’s best work (National Center on Educational Outcomes, 2000). These collections of “best work” (or portfolios) are ideal vehicles for merging assessment and instruction (Kleinert & Thurlow, 2001).

Educators have developed strategies for embedding assessments into instruction (Clayton, Burdge, & Kleinert, 2001; Denham & Lahm, 2001; Kleinert & Kearns, 2001). The following guidelines have proven valuable in integrating alternate assessment and instruction:

1. **Relate student individualized education program (IEP) objectives to your state's learner standards for all students.** Standards-based IEPs can directly link your daily instruction to the learner standards that must be in evidence in both the general and alternate assessments. The U.S. Office of Special Education (2000) has clarified that state or district alternate assessments must be based on the same learner standards, or a subset of all those standards, that are developed for all students.

The IEP is the cornerstone of the program for every student with disabilities; standards-based IEPs allow teachers to more closely articulate how each student will participate in the general curriculum. Moreover, if your state's alternate assessment, or a portion of that assessment, is a collection or body of student work, then standards-based IEPs are a powerful way of linking ongoing student work to your state's alternate assessment requirements.

2. **Ensure that students are able to access standards in multiple ways.** As Kearns (2001) has noted, students with disabilities can participate in standards-based learning by providing evidence that they have met the standards.

- In the *same way* and content level as all other students (e.g., completing all the requirements for an ecology unit in earth sciences in the same way as everyone else).
- At the same level, but within an *alternative response* format (e.g., using American Sign Language to give a speech on a contemporary political topic in U.S. history).
- In a *modified form* or content level (e.g., learning the definitions of five, rather than 20, terms relating to land forms in geography class).
- Participating in a standards-based instructional activity, but with the individualized goal of learning a



Include students in the construction, monitoring, and evaluation of their own portfolio work.

basic or *access* skill (e.g., learning to initiate requests and to follow two-step directions in the context of participating in a cooperative group in social studies).

The point is that teachers can use these multiple ways of accessing standards to individualize instruction for each student.

3. **Plan for your state's alternate assessment requirements from the beginning of the school year, including building in the requirement of your state's alternate assessment into your ongoing data collection and IEP monitoring sheets.** For example, if one requirement of your state's alternate assessment is to document that students can perform targeted skills in *multiple environments*, perhaps include an "environments" column in your data sheet, documenting the environments in which the student has demonstrated the skill. If a requirement is that students *make choices* in the context of their learning, include choice-making opportunities and student responses as an integral aspect of the data that you collect.

4. **Use student planning, monitoring, and self-evaluation forms, so that students can take greater control of their own learning.** Self-monitoring is an important component skill

in the broader, essential outcome of self-determination; and you can best teach students this skill in the context of daily instruction. Structured student-reflection sheets enable students to focus on what they most need to learn, evaluate how they have done, and formulate their own plans for future learning.

Planning, monitoring, and self-evaluation forms are also a key strategy in enabling students to become more actively involved in their own alternate assessments. We provide examples of these forms in the examples that follow.

A Fourth-Grade Example: Integrating Assessment and

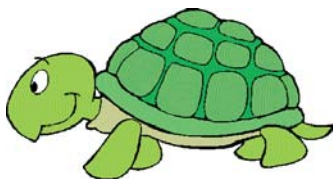
The way to ensure that alternate assessment provides a vehicle for learning new skills is to include students in the construction, monitoring, and evaluation of their own portfolio work.

Instruction into the World of Animal Adaptations

Amanda is in a fourth-grade general education classroom. She is verbal, reads at approximately a primer level, and is able to copy words from a printed model. Her IEP objectives include increasing her reading-sight-word vocabulary to 150 words, creating short phrases or sentences using reference and source materials, and capitalizing the beginning word of each sentence.

Her fourth-grade class is studying animal adaptations, as a part of a science unit. This unit specifically relates to the state learning standard: “Students understand how living and nonliving things change over time and the factors that influence the changes.” As a part of this unit, each student has to design an Animal Adaptations Booklet (see Figure 1). Students use the Internet to research

Figure 1: Class Assignment: Animal Adaptations Activity



Your task is to research a particular animal to learn about the various ways it adapts to its environment. The way an animal’s body is designed makes it perfect for the environment in which it lives. You must include information about adaptations of

- The way it gets food
- The way it gets water
- The way it protects itself
- The way it travels
- Any other special behaviors (such as migration, etc.)

You will create a small booklet with a cover that explains these adaptations in a neat, colorful, and interesting way. Then you will present your booklet to the class.

their assigned animal and to address specific questions about that animal. To address Amanda’s IEP objectives, and for Amanda to demonstrate the state learning standard, her teacher made the following adaptations for her participation:

- Amanda looks up information, using a teacher-created reference sheet designed for her approximate reading level.
- She dictates her sentences using the information from her reference sheet.
- The teacher scribes these sentences onto index cards (one word per card) and then rearranges the words cards; Amanda then puts the words into correct order to recreate the sentences and reads the sentences out loud.
- Amanda writes the sentences herself with the teacher model removed (her IEP objective), but with the use of the reference sheet and a picture-spelling guide.
- For her actual booklet, Amanda types the sentences onto separate pages to create the book. She illustrates each page by locating representative pictures and gluing them onto each page; she then practices reading the book in preparation for her class presentation.

Amanda includes her work on this project as her required alternate assess-

ment entry in science. Her entry includes her culminating performance (e.g., her completed animal book and an audiotape and photos of her class presentation). With a peer, Amanda evaluates her performance with the rubric her class has designed for this assignment, the “Awesome Animal Adaptation Rubric” (Figure 2).

Amanda also includes work samples from her daily instruction during this unit (examples of the sentences she constructed on her own, as evidence of her progress towards her IEP objective of writing short sentences and using proper capitalization), as well as her completed monitoring and self-evaluation forms (Figure 3). Her monitoring and evaluation form is completed daily to help her focus on the most important elements of her task, including her IEP objectives, and for her to identify those areas in which she needs to improve. This strategy enables Amanda to take greater ownership for her own learning, improves her skills at self-evaluation (an important building block to self-determination, see Browder & Bambara, 2000), and increases her own role in developing her alternate assessment.

As Kampfer et al. (2001) have noted, students’ active involvement in the construction of their own assessments is a strong predictor of alternate assessment

Figure 2: Class Rubric for “Awesome Animal Adaptations”

Our class is researching the awesome world of animal adaptations. It's really interesting to learn how animals have been uniquely designed to survive and thrive in their specific habitats. Here is the rubric we developed as a class to use as a guide for grading our work:

	4	3	2
Facts/Support	Facts are accurate Good supportive details Facts clearly show adaptations	Facts are accurate Some supportive details Facts are about adaptations	Facts mostly accurate Few supportive details Facts are not always about adaptations
Amount of Info	At least 1-7 good paragraphs for each category	At least 1 paragraph for each category	A couple sentences for each category
Creativity	Really grabs your attention Many colorful pictures	Grab your attention Some colorful pictures	Somewhat grabs your attention Few colorful pictures
Organization	Organized into logical categories	Organized pretty well	Organized, but it could be organized better
Neatness & C.U.P.S.	Very neat C.U.P.S. are great	Pretty neat C.U.P.S. are good	Somewhat neat C.U.P.S. okay, could be better

Note: C.U.P.S. = capitalization, usage, punctuation, and spelling.

Figure 3: Amanda's Self-Evaluation and Monitoring Sheet for This Unit

Animal Adaptation Checklist

When finished, check off each one you did.

Getting information

- Read words carefully
- Remember what the words tell about
- Find the answers to the questions

Write sentences

- Say your sentence first
- Put words written for you in correct order
- Write everything you say
- Use a spelling book to help write words

Make good choices

- Use describing words
- Draw or use good pictures
- Choose if you are going to write or type

Making it neat

- Write or type neatly
- Use capital letters to start a sentence
- End sentences with period
- Spell all words correctly

Working in class

- Listen to teacher
- Work quietly
- Work with friend or in group

Take a highlighter and highlight the things you did not do. Next time you start, be sure to work on those.

group to develop a menu for the meal that they will prepare on Friday. Paul uses the menu planning sheet (Figure 4) to record the group's choices. Paul is also an active participant in that discussion.

Figure 4: Menu Planner

Make a list of what you want to cook for your class meal.

Main Dish

Vegetable

Dessert

Drink

A peer assists Paul if he is unsure of the spelling of any of the words on his list. Paul then works with a peer to determine a grocery list for their meal (first, they check the kitchen to see what they already have before they write it on their list). Paul copies his grocery list onto an index card, for easy reference in the store. Each day in class,

By emphasizing the role of the student in managing and evaluating his or her own learning, we can teach valuable skills that are integral to the broad outcome of self-determination.

scores (much more so than teacher time). This example also illustrates how alternate assessment can be linked to ongoing class instruction—it does not have to be an add-on requirement that falls solely on the teacher, but can be embedded into the student's daily routine.

Seventh-Grade Consumer and Food Science

This middle school example illustrates how teachers can integrate alternate assessment activities into both general class and community-based instruction. Paul, a student with severe cognitive and physical disabilities, is in seventh-grade consumer and food science, where students are learning basic cooking skills. This unit addresses not only cooking, but also nutrition and how to shop for food. The targeted state learn-

ing standards include: "Students demonstrate the knowledge and skills they need to remain physically healthy" and "Students evaluate consumer products and services and make effective consumer decisions."

Paul's IEP objectives include the following:

- Preparing three basic meals independently.
- Using a calculator to budget his money while shopping.
- Making purchases with the "next-dollar" strategy (e.g., paying 6 dollars and "one more dollar for cents" for an item that costs \$6.62).
- Increasing functional sight-word vocabulary to 200 words.
- Working appropriately in small groups for up to 50 minutes.

At the beginning of each week, Paul meets with his assigned cooperative

he practices reading his words from the list, with assistance from a peer.

The collaborating special education teacher in this program takes responsibility for the community-based component of this unit. Each week, a group of three students purchase the items for the class's cooking activity. Because Paul has several IEP objectives that require systematic, direct instruction in community-based settings, his weekly schedule includes community-based instruction (CBI). The other students in the class rotate through this experience. While Paul is working directly on using a calculator to budget his money, making purchases with the next-dollar strategy, and reading his grocery words to find his items, other students are also learning some of these same practical life skills. The teacher also uses this activity as an opportunity to teach *all* of the students the importance of staying within budget and shopping comparatively (see Kleinert, Gultinan, & Sims, 1988, for a teaching strategy designed to enable students with severe cognitive disabilities to shop comparatively, as well).

As a part of this activity, Paul is learning to both plan his shopping (a critical survival skill) and to evaluate his performance after he completes his shopping. Figures 5 and 6 illustrate the forms he uses for planning and for evaluating his performance. The final portion of this unit is the cooking itself; and the students, who do this as a cooperative group, rate their overall performance together.

As a part of his Practical Living alternate-assessment entry, Paul includes his menu-planning forms; his shopping planning and evaluation forms; his group's weekly assessment of their own cooking; and the instructional data on calculator use, next-dollar strategy, and grocery sight-word reading vocabulary words collected by his teacher. Not only was this alternate assessment entry directly embedded into ongoing instruction in both school and community settings, but Paul was actively involved throughout in helping to choose the menu items for shopping and cooking and for planning and evaluating his daily performances. The evidence that he and

Figure 5: Grocery Shopping Planning Sheet

Name: _____ Date: _____

Where do you plan on shopping for your groceries?

Save-A-Lot	Foodworld	Durham's
------------	-----------	----------

Does your grocery store have a sales bill for an advertisement?

YES	NO
-----	----

Can you find your food items in the sales bill?

YES	NO
-----	----

Cut out the items that you can find in the sales bill and paste them on this sheet.

Make a shopping list for your choices that you have selected.

Do you have your \$\$money\$\$?

YES	NO
-----	----

How much is your budget? \$ _____

Do you have your calculator?

YES	NO
-----	----

Figure 6: Grocery Shopping Evaluation

Name: _____ Date: _____

Now that you went grocery shopping, how did you do (CIRCLE ONE):

Finding Your Items:

- I did great; I found everything on my list.
- I did OK; I needed to ask some questions.
- I had trouble with everything that I did.

Using Your Calculator:

- Perfect, no mistakes, and I had enough money.
- I made one mistake, but did OK.
- I messed up and didn't have enough money when I checked out.

Paying for Your Items:

- Perfect, I gave the right amount and waited for my change.
- The cashier helped me a little, but I had enough money.
- I did not have enough money to pay for everything.

Next Time I Need to Work On:

- Using my calculator
- Reading my list carefully and finding all of my items
- Paying for my items

his teacher have collected demonstrates how he has achieved both his IEP goals and the state learner standards for maintaining physical health and making effective economic decisions.

A Middle School Math Example

Derek is 12 years old and in sixth grade. His teacher developed his alternate assessment entry in math as part of his participation in his state's comprehensive assessment program. The state learning standard that he addressed in his entry was taken from the Mathematics Framework in the area of Number Sense, involving the use of computation and estimation to solve real-life problems. Derek's goal was individualized for his learning and is stated as follows on his portfolio entry cover sheet: "Derek will independently identify the appropriate mathematical operation to perform (addition or subtraction) in 4 out of 5 math problems."

Derek works on this objective daily in class through a variety of activities, including worksheets adapted to his skill level and cooperative learning activities in which students are given high-interest problems to construct and solve. One recent problem was to conduct a survey of how each student in his middle school would have voted in the 2000 Presidential Election and to compare those results to the state and national results.

Derek's alternate-assessment entry includes completed worksheets, his performance data that he himself charted, his journal entry reflecting on his performance, and his self-evaluation and self-monitoring sheet. He also enclosed a video of himself actually solving the problems, in which he verbally described his reasoning in applying the correct operation and the steps he used in performing that operation. Figure 7 presents the step-by-step problem-solving chart in which Derek calculated the election results; he also rated how independently he performed each step according to the following key:

- *Independent*—I did it myself.
- *Verbal*—I was given a direction.
- *Gestural*—The teacher pointed to what I needed to do.

Figure 7: Derek's Monitoring and Self-Evaluation Sheet

Name		Derek	1/29/02
In the WMS election, Bush got 224 votes and Al Gore got 449 votes. How many votes combined? 3 <i>Classroom Survey Mrs. G</i>			
Step 1	Read the problem.	(I)	<input checked="" type="checkbox"/> finished
Step 2	<u>Underline</u> the important numbers and words.	(I)	<input checked="" type="checkbox"/> finished
Step 3	Highlight the problem.	(I)	<input checked="" type="checkbox"/> finished
Step 4	Do I need to ADD or SUBTRACT? <input checked="" type="checkbox"/> ADD <input type="checkbox"/> SUBTRACT	(I)	<input checked="" type="checkbox"/> finished
Step 5	Set up the problem. $\begin{array}{r} 224 \\ + 449 \\ \hline 673 \end{array}$	(I)	<input checked="" type="checkbox"/> finished
Step 6	Solve the problem.	(I)	<input checked="" type="checkbox"/> finished
Step 7	Does the answer make sense? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> You Are Finished Try Again! (Back to Step 4)	(I)	<input checked="" type="checkbox"/> finished

- *Model*—The teacher showed me how to do it.
- *Physical*—The teacher did it for me.

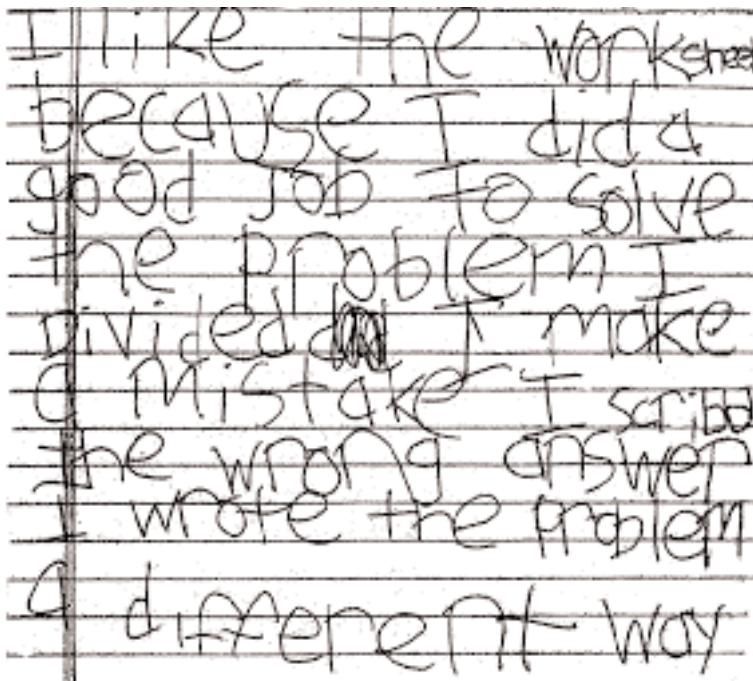
As Figure 7 shows, Derek performed each of the steps for this problem without assistance. In addition, his self-monitoring and evaluation sheet enabled him to graph his daily accuracy in solving problems (expressed as "percent correct"), and to identify any steps in which he was having difficulty. The problem on the elections (and many of the word problems that Derek has solved this year) was related to the content of his curriculum and was developed with his input by highlighting topics of interest to him. Derek has solved these math problems by generalizing his learning with the help of classmates and teachers in a variety of settings (cafeteria, community, office, classroom, etc.), each of which is noted on the top of a daily worksheet. Derek's performance of real-life problems across multiple set-

tings provides documentation of the "Generalized Performance" requirement of his state's alternate assessment.

Figure 8 presents Derek's own journal reflection on his math performance. Derek initiated both the math activity and the reflection of his own performance, completing his own data sheets independently. In fact, Derek's depend-

Students' active involvement in the construction of their own assessments is a strong predictor of alternate assessment scores (much more so than teacher time).

Figure 8: Derek's Journal Entry



I like the worksheet because I did a good job to solve the problem I divided ~~it~~ I make a mistake I scribbled the wrong answer I wrote the problem a different way

ency on prompts has decreased significantly since the implementation of the alternate assessment. His teacher has noted that Derek's math portfolio entry is but one example highlighting his achievement in school, his connection to his own learning, and the important educational opportunity that alternate assessment has given him. Finally, though Derek attended a self-contained classroom for math, his increasing independence and motivation have enabled him to participate in other general education classes as the year has progressed. Like the previous examples for Amanda and Paul, Derek's portfolio entry documented his progress on both his individualized learning goal and the state standard identified for all students.

Although Derek's entry included hard (paper) copies of each product, as well as a videotape of his performance, many districts (and even whole states)

are experimenting with the use of multimedia, electronic portfolios. In such multimedia products, students can fully integrate all worksheets, instructional program data, and student-generated graphs, student reflections, and audio and video clips. [See Denham, Bennett, Edyburn, Lahm, & Kleinert (2001) for a description of this emerging technology that enables students to take even greater control and responsibility for documenting their own learning.] Moreover, the use of electronic portfolios in alternate assessment has the further benefit of directly increasing student skills in the important area of computer applications. As Denham et al. discussed, this technology can enhance computer and literacy skills for even students with severe disabilities.

Final Thoughts

IDEA '97 has created both significant promises and challenges for educators and students. We have found that the key to enabling students to do well on alternate assessments is to address your state or district assessment requirements, as much as possible, in the context of daily routines and instruction. We have also found that the way to ensure that alternate assessment provides a vehicle

for learning new skills is to include students in the construction, monitoring, and evaluation of their own portfolio work. Not only will this process reduce the burden on teachers, but students will have greater ownership of their own learning, as they develop important component skills to the essential, long-term outcome of self-determination.

References

- Browder, D., & Bambara, L. (2000). *Home and community*. In M. Snell & F. Brown (Eds.), *Instruction of students with severe disabilities* (5th ed., pp. 543-589). Columbus, OH: Merrill.*
- Clayton, J., Burdge, M., & Kleinert, H. (2001). *Integrating alternate assessment with ongoing instruction*. In H. Kleinert & J. Kearns (Eds.), *Alternate assessment: Measuring outcomes and supports for students with disabilities* (pp. 77-91). Baltimore: Paul H. Brookes.*
- Denham, A., Bennett, D., Edyburn, D., Lahm, E., & Kleinert, H. (2001). *Implementing technology to demonstrate higher levels of learning*. In H. Kleinert & J. Kearns (Eds.), *Alternate assessment: Measuring outcomes and supports for students with disabilities* (pp. 135-166). Baltimore, MD: Paul H. Brookes.
- Denham, A., & Lahm, L. (2001). Using technology to construct alternate portfolios of students with moderate and severe disabilities. *TEACHING Exceptional Children*, 33(5), 10-17.
- Erickson, R., Ysseldyke, J., Thurlow, M., & Elliott, J. (1998). Inclusive assessments and accountability systems: Tools of the trade in educational reform. *TEACHING Exceptional Children*, 31(2), 4-9.
- Ezell, D., Klein, C., & Ezell-Powell, S. (1999). Empowering students with mental retardation through portfolio assessment: A tool for fostering self-determination skills. *Education and Training in Mental Retardation and Developmental Disabilities*, 34, 453-463.
- Heward, W. (2000). *Exceptional children: An introduction to special education* (6th ed.). Columbus, OH: Merrill Prentice-Hall.*
- Kampfer, S., Horvath, L., Kleinert, H., & Kearns, J. (2001). Teachers' perceptions of one state's alternate assessment portfolio program: Implications for practice and preparation. *Exceptional Children*, 67, 361-374.
- Kearns, J. (2001). *Helping students with significant disabilities gain access to general curriculum standards*. In H. Kleinert & J. Kearns (Eds.), *Alternate assessment: Measuring outcomes and supports for students with disabilities* (pp. 29-48). Baltimore: Paul H. Brookes.*
- Kleinert, H., Guiltinan, S., & Sims, L. (1988). *Teaching students with moderate and*

With IDEA '97 has come a focus on outcomes and learning results for all students with disabilities.

severe handicaps to select lower-priced items in shopping activities. *TEACHING Exceptional Children*, 20(3), 18-21.

Kleinert, H., & Kearns, J. (2001). *Alternate assessment: Measuring outcomes and supports for students with disabilities*. Baltimore: Paul H. Brookes.

Kleinert, H., Kennedy, S., & Kearns, J. (1999). Impact of alternate assessments: A statewide teacher survey. *Journal of Special Education*, 33(2), 93-102.

Kleinert, H., & Thurlow, M. (2001). *An introduction to alternate assessment*. In H. Kleinert & J. Kearns (Eds.), *Alternate assessment: Measuring outcomes and supports for students with disabilities* (pp. 1-15). Baltimore: Paul H. Brookes.*

National Center on Educational Outcomes. (2000). *On-line alternate assessment survey*. Available: <http://www.coled.umn.edu/nceo/survey.htm>.

Special educators share their thoughts on special education teaching conditions. (1999). *CEC Today*, 5(9), pp. 1, 5, 15.

U.S. Office of Special Education Programs (OSEP). (2000). *OSEP memorandum to*

state directors of special education (OSEP 00-24). Washington, DC: U.S. Department of Education.*

Books Now

To order the books marked by an asterisk (), please call 24 hrs/365 days: 1-800-BOOKS-NOW (266-5766) or (732) 728-1040; or visit them on the Web at <http://www.clicksmart.com/teaching/>. Use VISA, M/C, AMEX, or Discover or send check or money order + \$4.95 S&H (\$2.50 each add'l item) to: Clicksmart, 400 Morris Avenue, Long Branch, NJ 07740; (732) 728-1040 or FAX (732) 728-7080.

Harold Kleinert (CEC Chapter #180), Director, Interdisciplinary Human Development Institute, University of Kentucky, Lexington. Pamela Green (CEC Chapter #118), Professional Development Specialist, MCAS Alternate Assessment, Massachusetts Department of Education, Malden. Mark

Hurte (CEC Chapter #723), Teacher, Lincoln County Public Schools, Stanford, Kentucky. Jean Clayton, Teacher; and Carla Oetinger, Teacher, Kenton County Public Schools, Independence, Kentucky.

This article was supported, in part, by the U.S. Department of Education, Office of Special Education and Rehabilitation Services (Grant No. H023F70004). The opinions expressed, however, do not necessarily reflect the position or policy of the U.S. Department of Education, and no official endorsement should be inferred.

Address correspondence to Harold Kleinert, Interdisciplinary Human Development Institute, University of Kentucky, 126 Mineral Ind. Bldg., Lexington, KY 40506-0051 (e-mail: hklein@uky.edu).

TEACHING Exceptional Children, Vol. 34, No. 4, pp. 40-47

Copyright 2002 CEC.