ROCUS ON BXCBPIONAL CHILDREN

BLUEPRINTS FOR CONSTRUCTION

Teacher-Made or Teacher-Adapted Materials

Joyce Kohfeldt¹

Individualizing instruction and moving ahead with the educational changes of the 1970s have presented major challenges to most teachers:

• demand for accountability

CREATIVE

TEACHER-MADE

• emphasis upon measurable student academic growth

• concern for the total individual

• importance of a healthy self-concept

• commitment to mainstreaming with its ever increasing demand that general educators assume more responsibility for the inclusion of mildly handicapped children in the regular classroom

• pinch felt in most school budgets

• pros and cons of various organizational structures and philosophies—open class-rooms, team teaching, self-contained graded classrooms, etc.

Teacher-made and teacher-adapted materials have become more popular as educators have attempted to cope with these issues. Such materials vary in many ways, yet appear to fall within three major categories as to the needs they satisfy.

1. They provide *curriculum assists* as they supplement or fill gaps in more comprehensive, commercially prepared courses of study.

2. Others are designed to help the teacher and students with various phases of environmental management.

3. Still others fall within the scope of record keeping, progress recording devices.

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The range and scope of commercially available materials have multiplied in the last decade. Various types of media singularly and in various combinations have sparked new interest, increased the number of concrete manipulative experiences, and facilitated different learning and teaching styles. This divergence has increased the demand for variety and more creativity in teacher-made and teacher-adapted materials as well.

The fifteen examples of curriculum assists described in this article include these categories:

- Flexibility and Multifunctional Usage (Blueprints 1 - 6)
- Motivation and High Interest (Blueprints 7, 8)
- Self-Correction (Blueprints 9 - 12)
- Low Cost Construction (Blueprints 13 - 15)

A blueprint for construction accompanies each example.

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FLEXIBILITY AND MULTIFUNCTIONAL USAGE

In any classroom-regardless of the number of students, the seating arrangement and grouping plan, or the size of the budget—the teacher needs materials that have flexibility and the potential for multifunctional uses. The worksheets, gameboards, task cards, and tapes proving most successful are those most capable of (1) being used with the same student more than once with slight adaptations to change the task, and (2) being altered sufficiently to represent different tasks to students performing at different levels within a minimum of teacher time.

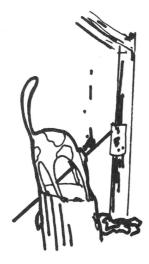
Blueprint #1. SKELETON STORIES



There once was a poor, homeless cat whose name
started with Now that unusual cat
named lived in
One day while looking through a
trash can in a dark alley, found
something which was to completely change the rest of
's life. There among all the garbage
and throwaways was
-
After finding the

Fill in	the	blanks.	Use	your	imagina	ation,	and	make
your s	tory	interes						

- ☐ Dictate your story onto tape.
- ☐ Draw a comic strip. Remember to keep your ideas in sequence.



- 1. Choose different letters of the alphabet around which to build the story.
- 2. Specify that the words chosen need to have 1, 2, or 3 syllables.
- Allow the student to select the letters of his or her choice.
- 4. Indicate which of the three response patterns the student is to use.
- 5. Allow students to select the response pattern of his or her choice for completing the assignment.
- 6. Invite students to create a "skeleton story" and have a fellow student fill in the blanks.

Blueprint #2. STORY REWRITES

Choose your favorite well-known story, and give it a new twist. With just one change in response from one of the characters, you will introduce many new possibilities for what will happen next and how the story will end.

Story chosen
Original author
Rewritten by
Character who will play a new part
Events which will happen in the story before the
change takes place
At what point will the change take place?
What is the change?
What will happen next?
How will the story end?
•

You may wish to write your version of the old favorite, or tape it, or use puppets or a live cast and present the revised story as a play.

Some teachers and students may need ideas as starters. These represent but a few of the story rewrites of 5th, 6th and 7th graders who enjoyed using their imaginations and hearing the delighted applause of their appreciative elementary audiences:

What if the glass slipper had fit on the foot of the ugly stepsister in *Cinderella*?



What if Goldilocks had simply sat up in bed and told the bears that she was planning to live in their house, and they would have to find another place to live?



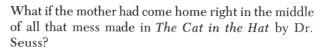
What if, upon returning to their house after Goldilock's visit, the bears had immediately called the police and reported a breaking and entering?



What if the Queen in *Rumplestiltskin* gave the baby to the little old man and asked only that the child be brought back for a visit on her birthday!



What if the wolf in *The Three Little Pigs* had been able to blow down each of the houses and capture all the pigs?





Instructional Adaptations

- Select a sequence of events from history and alter one event or role of a historical figure. Ask the students to imagine and record how the outcomes as we know them would have been changed.
- 2. Utilize this technique in conjunction with bicentennial activities. The possibilities are limitless.
- 3. Adapt content from current events or newspaper articles in this manner.
- 4. Include tall tales, legends, and fairy tales; they are naturals for such plot and character surprises.
- 5. Select a television or radio show. What if Perry Mason learned in the middle of a trial that his client was guilty? What if Archie Bunker became a buddy to his "meathead" son-in-law? What if no one won any prizes on a guiz show?
- 6. Have each student change some of the words, alter the beat, or re-sequence the melody to his/her favorite song.
- 7. Choose various selections from literature for secondary students.



Gameboards provide a motivating way to present drill and practice. Commercial games that are well liked may be adapted to this purpose. A game may be created highlighting any theme being studied in one of the content areas, or a gameboard may be designed around a student's special interests.

Blueprint #3. CHECKER-FACTS

Labels with number facts or words to read may be placed on each playing space on the board. In order for the student to place his checker on that space or jump over an opponent's checker on that space, he or she must be able to correctly answer the problem or read the word.

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Instructional Adaptations

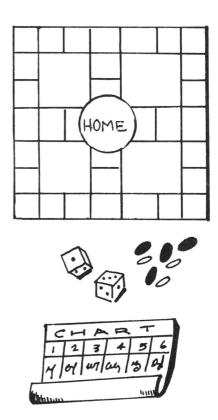
- Write half of a homonym pair on each label. The other half must be spelled correctly in order to move to that space or jump over it.
- 2. Write half of an antonym on each label. The opposite words must be said in order to move to or over that space.
- 3. Write "compound word," "suffix," "prefix," "contraction," "singular pronoun," "3-syllable word," etc., on the labels. The student would have to say an example of the type of word called for before moving to or over that space.
- 4. Write various letters of the alphabet on the labels. The student would have to tell what letter comes next, or what letter precedes that letter in the alphabet, or give a word that begins with that sound.

 As the variations multiply, substitute graph paper lined to match a checkerboard and buttons of two colors in sufficient quantity for the standard checkerboard and checkers.

Blueprint #4. PARCHESI-QUIZ

To the standard Parchesi rules and equipment, add a drill list containing six columns numbered 1-6. Each column will contain a list of words, number facts, or questions to be answered. Place the easiest ones in the "1" column and the most difficult in the "6" column.

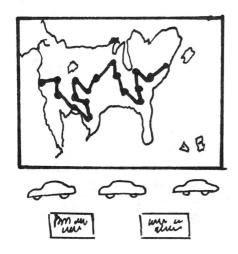
Each player rolls the die. For example, the number 3 on the die indicates that if the player can answer the top question or read the top word (or whatever) on list 3, that player may then proceed to move a marker 3 spaces. As the game continues, the players work their way down the "fact lists."



- Make different fact lists for each player. In this way, students with widely varying abilities can play together.
- 2. Make a copy of the same big list of facts or words for each player. In this version, columns marked with numbers 1-6 are not needed. The player will roll the die to determine how many spaces to move if he can correctly read that many words or correctly answer that many facts from the list. If the player rolls a 5 and is able to read only 4 words, then he is entitled to only 4 moves. This format provides much more practice on the desired information, since most turns come up with a number larger than 1.

Blueprint #5. TOUR THE U.S.A.

Start with a map of the United States, which is easily accessible from AAA, a variety or stationery store, or an airline. With a magic marker, plot out a game trail across the nation. Select the route to include famous landmarks or states where important events occurred. Colored dots or Xs can be placed along the trail to designate moves.



On 3×5 cards, record whatever questions are appropriate for the age and skill level of the students. Place all questions and answers on a master chart for checking purposes.



Use small colored cars, buttons, etc., for markers. To add the chance factor, include on some 3×5 cards a chance phrase as well as a question, such as "take an extra turn," "move ahead another space," "lose a turn," "this question is worth 3 spaces," etc.

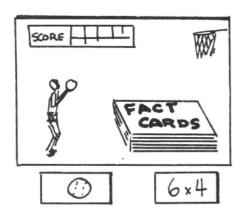
Instructional Adaptations

- 1. Change the questions on the 3 × 5 cards to include information about presidents, American inventors, etc.
- 2. Have each student make up his own set of questions and an answer guide.

Blueprint #6.

DRIBBLE, PASS AND SHOOT

A student who has a special interest in basketball may help to create a gameboard using a file folder or several 9 \times 12 pieces of colored poster board. The student may draw the player shooting the ball or use a magazine picture. Other cardboard pieces are cut into 3 \times 5 rectangles. On each card, one fact or word to be read, etc., is written. The deck of fact cards are placed on the gameboard. The learner has 1 minute to score as many points as possible. Each correctly answered "fact card" is worth a basket or 2 points.



- 1. Have students alternate turns with an opponent and race to get the best score.
- 2. Add different "fact cards" as skills increase.
- 3. Use student's name in the game title to further personalize that particular activity: "Tom's Basketball Battle."

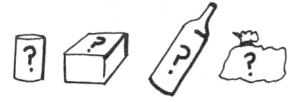
MOTIVATION AND HIGH INTEREST

All students and teachers need change-of-pace activities to spark interest, increase motivation, and provide a chuckle.

Blueprint #7.

PRODUCT CURE-ALLS

Create a product that does not now exist. Your product should make life easier for someone.



Both product and the name of the company that manufactures it need a name.





Your product container will need a list of ingredients, any special warnings or cautions, a suggested retail price, directions concerning storage, and its weight stated in metric terms.

You will need to write clear, short directions explaining how to use your product.

Prepare an advertisement to introduce your product to the public. Use pictures and words.

Instructional Adaptations

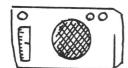
- 1. Look at various types of containers to learn where the pieces of information are usually placed.
- Use various metric measurement activities so that students know which units of measurement are appropriate for different types of materials.
- 3. Have students look at various lists of ingredients to get the idea of the types of things listed.
- 4. Practice writing instructions for simple everyday things like making scrambled eggs, starting a car, etc. The sequencing of the steps will be good practice.
- 5. Look at ads to see the techniques used for drumming up interest. Make a list of products that use celebrity endorsement, bargain pricing, appeal to the opposite sex, data to prove most economical brand, etc. This is particularly interesting to older students.
- 6. Prepare a radio or TV commercial instead of an advertisement. These may be taped or presented live.

Blueprint #8. RADIO REVISITED

"Who knows what evil lurks in the hearts of men? Only the Shadow knows."

"Henry . . . Henry Aldrich." "Coming, Mother."

"Heigh-ho, Silver"



All of these lead lines used to mean we were glued to the radio, ready for a half-hour of listening pleasure. Today's students have not been exposed to these stories. Your local record shop either has or can order 33-1/3 recordings of the best of the original broadcasts of lots of shows—"The Lone Ranger," "The Shadow," "George Burns and Gracie Allen," "Amos and Andy," to mention but a few.

Your listening center will come alive as these stories are featured. Consider the following assignments in conjunction with the records:

- Base comprehension questions upon the story content.
- 2. Have students listen to the first half of the story and then write or dictate what the ending may be like.
- 3. For a delightful change, have them listen to the end and attempt to recreate the beginning. Knowing the solution to a crime makes speculating what clues or evidence might have been helpful a great small group activity.

Instructional Adaptations

- 1. Use the records in a free time center where learners who finish assigned work may go.
- 2. Allow students with reading difficulties to listen and summarize the story in place of doing a book report.

3. Use listening to the tapes as "salary" for tutors from regular classes who may be working with special students. The base pay rate used in some schools has been one hour of tutoring earns a half hour of listening time at school, or two hours of tutoring earns an overnight rental of a tape recorder and a half-hour tape or an overnight rental of a record.

The biggest difficulty with using tapes is making sure students have access to them, since adults enjoy the nostalgia trip.

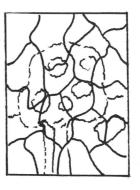
SELF-CORRECTION

Within any group of students, some require more teacher attention and encouragement. The student with his hand up, requesting the teacher to check his work step by step, may be helped by self-correction feedback built right into the activity. Step-by-step correction prevents students from practicing errors. It also allows more able learners to proceed at their own pace. Examples of three techniques for self-correction will be given here—cut cue as illustrated by a puzzle, color coding as illustrated by a slot board, and sorting and matching as illustrated by a bucket sorter.

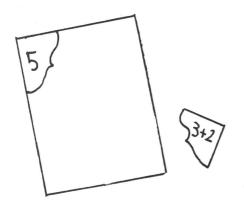
Blueprint #9.

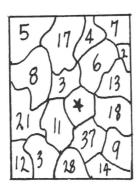
PUZZLE PRACTICE

Turn a puzzle into a question-and-answer board. Choose a puzzle with a cardboard frame.



Remove a puzzle piece. On the back of the puzzle piece (side without a picture), write the problem to be practiced, e.g., 3+2. On the puzzle frame where that piece fits, write the answer, e.g., 5. Continue this process until each puzzle piece has a problem and its corresponding answer has been written on the puzzle frame in the right place.





List the skill or learning goal on the back of the puzzle frame or the storage box for quick reference.

Give the students the puzzle with all the pieces removed. One at a time, the student(s) chooses a puzzle piece, matches the problem to its correct answer on the puzzle frame, and places the piece picture side up in the frame. Feedback for correct responses comes piece by piece as the picture of the puzzle makes sense.

When a piece is missing, place a star or a sticker on its place in the puzzle frame, indicating that it is a "free spot"—nothing has to fit there. In this way, puzzles with missing pieces can be used.

Instructional Adaptations

- 1. Use puzzles with varying numbers of pieces.
- 2. Since older students enjoy compound word drill, place half the compound word on the puzzle piece and the other half on the puzzle frame.
- 3. Consider the other skills that lend themselves to this form of correction:
 - matching number of objects to their numerals
 - matching numbers to number words
 - matching synonyms, homonyms, antonyms, contractions, abbreviations, etc.
 - matching number facts to their correct answers
 - matching fractions to their corresponding percentages and decimals
 - foreign language vocabulary drill.
- 4. Have students program puzzles of their own.

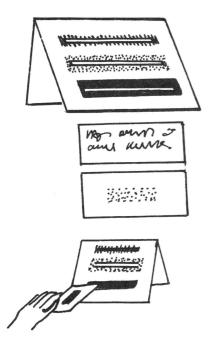
Blueprint #10.

SLOT BOARD

Fold a piece of heavy card board stock into an $8\frac{1}{2} \times 11$ slot board. The number of slots on the board will be determined by the number of categories into which the information can be subdivided. Slots should be at least $2^{\prime\prime}$ apart. Using a magic marker or colored tape, make a different colored border around each slot. Label each slot with the type of information that can correctly be dropped through its slot.

Set up the questions on 3×5 cards or other pieces of cardboard. State the questions in a way that allows the student to indicate the answer by placing each card in its appropriate slot. Color coding becomes the self-correcting factor when the color on the back of the question card is programmed to be the same as that found bordering its correct answer slot.

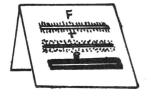
Example: Each slot on a board could be designated by a specific letter of the alphabet. The question cards could contain pictures of things beginning with the letters listed on the board. As the student looks at the picture on each card, he must decide the beginning sound.



Before dropping the card into the right slot, he turns it over to confirm the correctness of his response by seeing if the color bordering the slot and the color found on the back of the question card are identical.

Instructional Adaptations

- Set up true and false slot board and question cards containing statements that are either true or false. Before dropping the card in the appropriate slot, again the student would check to see if the colors confirmed the correctness of the answer.
- 2. Prepare boards for simple math facts. Give each slot numbers like 8, 9, 10, 11, etc. On the question cards, place addition or subtraction problems whose answers are 8, 9, 10, 11, etc. Before each card is dropped in its appropriate answer slot, the color code would be checked.



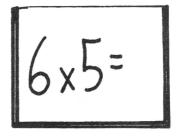


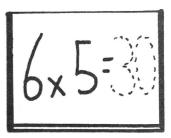
Blueprint #11.

HIDDEN ANSWER FOLDERS

Red acetate folders, commonly used as report covers and available in stationery or five-and-ten-cent stores, form the basis of another color-coded teaching aid. The size of the folder to be created can vary according to the needs of the situation— 3×5 or 5×8 sizes can be easily used in most situations. The acetate may be cut to the desired size, forming a pocket. Three sides of the pocket are taped shut, with the top large side remaining open.

Now 3×5 or 5×8 cards can be programmed. The question portion can be written on the card with a black magic marker. The correct answer is written right on the card in its appropriate place with a yellow or orange magic marker. When the cards are placed in the red acetate folder, only the information written in black shows through. The yellow and orange are screened out by the red color of the acetate. Several cards may be placed in the folder at any one time.





The student sees the question portion of the top card and either verbally or in writing indicates the correct answer. As a check, the card is removed from the pocket and the correct answer (written in orange or yellow) is visible. The choice of magic markers is crucial. Water base, Hi-liter markers colored orange and yellow must be used. Permanent markers contain an ingredient which causes them to be visible through red acetate.



This particular technique allows the teacher to control the quantity of work presented to different students. It also provides a psychological advantage for the student in that tasks are presented one at a time. This minimizes the overwhelming impact of many workbook pages showing 30 to 40 problems all at once.

Instructional Adaptations

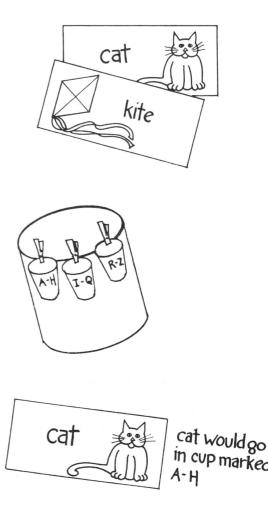
- Set up those pages of questions found at the end of chapters in most text books by writing in the correct answers in yellow or orange. Place a red acetate sheet on top of the question page. Students, at their own rate, then complete the questions and check their accuracy.
- 2. For students in work study programs who need practice filling in applications and other work related forms, fill in the form in yellow or orange. Place the red acetate on top, and have the student then attempt to supply the required information.
- Let some students make their own acetate pockets or work folders and program the data to be used with them.

Blueprint #12.

SORT 'N' MATCH BUCKET

A fried chicken or unused paint bucket may become the basis for a sorting and matching task. Add a dozen clothespins, a dozen paper drinking cups, and strips of cardboard, and you have a variety of tasks possible.

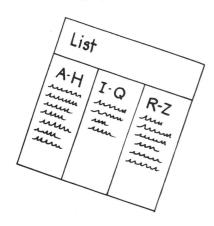
The paper cups are coded and clipped around the outside of the bucket using the clothespins. The number of cups used at any one time will be determined by the activity. The cups become the sorting bins into which the programmed strips of cardboard are dropped. The bucket may be used as storage for all the materials when not in use.



Example: For a dictionary activity, code the cups for the sections of the alphabet into which the words will be grouped. Place a word or picture on each cardboard strip.

After the cups are placed in order around the bucket, the student places each word strip in the cup showing where it would be found in the alphabetical groupings.

Self-correction can easily be built in by having a list of which words or pictures should appear in each cup. After placing all the strips in the cups, the student would check the contents of each cup against the master list.



Instructional Adaptations

- Code the cups with fractional values reduced to lowest terms. Each strip would contain a problem whose answer is one of those fractions.
- 2. On each cup, place an amount of money. Use coin pictures or numbers to represent various amounts of money. Have the students total the amount on a strip, and drop it into the appropriate answer cup.

LOW COST CONSTRUCTION

Some teacher-made materials require many materials and a great deal of time investment. The following blue-prints involve a low cost factor and a minimum of teacher time. Student involvement in the production of these items may be the key factor of their success and popularity in many settings.

Blueprint #13. PRODUCE YOUR OWN FILMSTRIPS

Turn report writing and term papers into a novel way to show what you know for students who have been turned off by such assignments.

Illustrations in technicolor, printing, or typing are all possibilities. Colored pencils or the type markers used on overhead transparencies work fine on this milky colored surface. A regular typewriter may be used as well.



Colored filmstrip cans like those used in commercially produced filmstrips add the finishing touch.

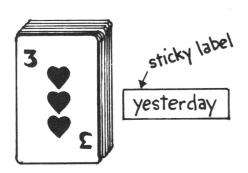
U-Film is now inexpensively available from many school supply catalogs or AV companies (approximately 25¢ for 10 feet of film and a colored can). Books are available for both teachers and students interested in this technique.

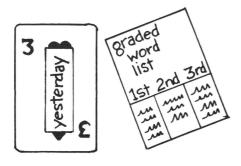


- 1. Use a cassette tape to add the audio portion to a student's report. This may be coordinated with each frame on the filmstrip with a beep or signal indicating when to turn to the next frame.
- 2. Display student-made filmstrips with or without tapes at the media center. Like any other piece of instructional material, permit student to check out their filmstrip projects.
- 3. Recycle old commercially produced filmstrips. The process is not complicated, expensive, or dangerous. The process may be found in any of the books describing the making of filmstrips.

Blueprint #14. FOUR SUITE VOCABULARY DRILL

A standard deck of playing cards and a set of sticky labels are the only materials necessary for this activity.





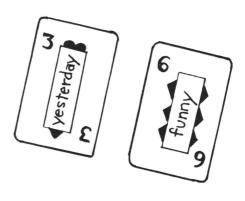
Place one label on the number side of each card. Write one word on each label. Words may be selected from any graded list or from the reading series being used. Various levels of sight word vocabulary may be used in this way.

The cards are shuffled and dealt out to two players. The cards are held stacked with the word sides hidden.

On the count of 3, each player turns over the top card. The value of the cards are compared to see which is greater. Whichever player has the highest card has earned the right to read the two cards. If the words are read correctly, that player keeps those cards. Play resumes with two new cards turned up on the count of 3.

If a word is read incorrectly and the other player can read the word, that player may claim that card. If neither player can read the word, it is placed in a separate pile.

The winner is the player with the most cards when time is called, or the player who has all the cards in his or her possession.



Instructional Adaptations

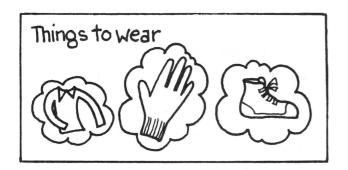
- 1. Obtain playing cards from airlines or other commercial firms which use them as advertising. Decks with missing cards are just as usable for this purpose.
- 2. Select from other content areas like social studies or science.
- 3. Type definitions onto the labels. The player must be able to tell the word which fits that definition in order to claim the card. Players may use a master list of words and their definitions during play to check responses.

Blueprint #15. ADVERTISEMENT MATH

Advertisements may form the basis for a variety of math experiences. Discount stores and major department stores frequently advertise specials and sales in ads that appear in the newspaper or are distributed to all mail-boxes. They usually contain pictures and prices.

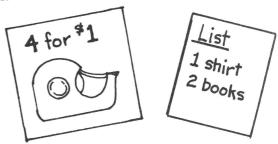


Young students may be instructed to cut out pictures of things to wear, things to eat, furniture, things that need electricity to work, etc. These pictures may be grouped and pasted down on sheets of newsprint or butcher paper. A variety of advertisements will provide practice in categorizing as well as cutting and pasting.



Advertisements often have a section featuring a special price for multiple copies of an item, e.g., four rolls of tape for \$1. Students may be asked to determine the price of one roll of tape, etc.

Some advertisements list a regular price and a sale price. Determining the savings provides practice in subtraction. Choosing any page of sale prices to determine the item with the greatest savings also involves comparing skills.



A shopping list of items which can be found in the advertisement will lead to the scanning of pages, reading to match the items on the list to those in the ad, and adding the prices to determine the total price of the items on the list. Sales tax may be added depending upon the skill level of the students.

Instructional Adaptations

- 1. Capitalize upon special interests of students by selecting catalogs of sporting goods or toys.
- 2. Direct older students to compare both the food ads and prices of the various local stores.
- 3. Have students select products not on sale and write their own sale ads. Determining savings, listing the percentage of savings, and writing up the product to make it appealing and eye catching will combine art, math, and language arts activities.

CONCLUSION

Teacher-made and teacher-adapted materials provide curriculum assists to instruction. The examples presented in this article illustrate the following advantages of these materials

- Flexibility and the multiusage quality which may be built in
- Motivation and interest grabbers
- Built-in means of self-correction
- Low cost factor in the production

ALERT

October 13-16, 1976

American Association for Education of Severely/Profoundly Handicapped Radisson Meuhlbach Hotel Kansas City, Missouri

October 20-30, 1976

Canadian Congress of The Council for Exceptional Children Saskatoon, Saskatchewan

November 4-6, 1976

Illinois CEC Federation Hyatt Regency Hotel Rosemont, Illinois

November 11-13, 1976

California CEC Federation Hyatt Regency Hotel San Francisco, California

November 11-14, 1976

National Association for Education of Young Children Anaheim, California

February 1-4, 1977

Council for Exceptional Children Early Childhood Institutes Phoenix, Arizona

CLASSROOM FORUM

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In many years of teaching fifth grade, I have never solved the problem of capable students not completing assignments. Lowered grades for incomplete assignments, assignments done incorrectly, and wrong assignments plague my grade book. What can I do to rid my grade book of this disease?

The problem you describe is certainly not unique to your grade book or to your grade. Many children have difficulty completing correctly the right assignment for many reasons. Sometimes the cause may be inattention to the task, confusion about the response, insufficient time to complete the task, or even boredom.

Contracts between the teacher and the student have proven to be very useful in many of the above situations. Consider the following steps for setting up contracts with these students.

Writing Contracts

- 1. Decide on the assignment. The teacher and the student should decide on the assignment to be completed. Requirements should be stated specifically. The form in which the assignment is to be returned to the teacher should be spelled out.
- 2. Determine the minimum accuracy acceptable. The acccuracy expected should be written into the contract. Usually a minimum of 85% correct is acceptable to the teacher and the student as an initial requirement.
- 3. Set a time limit. A time parameter should be imposed and agreed upon by both parties. Initially, it is best if the time limit as well as the assignment is short.

4. Decide on the consequences. Consequences for completion of the task are very important. The consequences should be positive. Time to read magazines in the library, permission to bring collections to school, time to work on an art project, helping the principal, physical education coach, or janitor, freedom from assignments for a short period, and time to work at the manipulative-exploratory table are ideas that have worked well as reinforcers.

Students are also an excellent source of suggestions for positive reinforcers. Their suggestions are invaluable because they represent reinforcers for which each individual will work.

- 5. Sign the contract. Both the student and the teacher should sign the agreed-upon contract. This signifies a commitment by the student as well as the teacher. It is also often helpful if witnesses are asked to sign. The principal and a fellow student are usually good witnesses. The principal's signature adds authority and the peer's signature provides motivation as well as advertisement of the system.
- 6. Student works toward completion of the contract. During this time directed teaching should not be withheld. Contracts are not usually written for completely individual study. At times, the contract motivates the reluctant student to ask for help; otherwise, he might become frustrated, ignore the task, and find something more interesting, but inappropriate, to do. The teacher should not hesitate to help the student complete his contract. Later, if the teacher feels the student is asking for assistance too often, the amount of completely independent study required as well as the number of teacher contacts allowed can be specifically stated in the contract.
- 7. Student receives the reinforcer. After the contract has been completed, the student should receive the reinforcer immediately, if possible. If the parents are responsible for producing the reinforcer, they should be made aware of the importance of immediately reinforcing the student.
- 8. Student and teacher evaluate uncompleted contracts. If the contract is not fulfilled, both the student and the teacher should attempt to determine the causes. Some of the following questions may be asked:
 - Does the student begin the contract within a reasonable period of time? The teacher may keep a record of the amount of time spent before be-

- ginning the task and relate it to the student. A graph may be kept to demonstrate a reduction in the amount of time required.
- Does the student organize his materials in such a way as to enhance his study time? A different seating arrangement—a table rather than a chair, or a desk away from distractions—or some other changes may help a student organize his materials better and use his time more wisely.
- Does the student organize his time wisely? As suggested above, a record may be kept of how a student's time is spent. The student may even wish to do this himself.
- Did the teacher give posititive reinforcement as the student worked to fulfill the terms of the contract? Frequent praise and encouragement assist students in continuing to work at a task.
- Was the time allotted too short for completion of the contract? The teacher may wish to give shorter assignments of allow more time to complete the contract. Often the student will be able to evaluate the organization of his time and will propose changes for the next contract.
- Would self-checking have helped? Selfcorrectable exercises or programmed material give the student an immediate evaluation of his work and may serve as encouragement to continue working.
- 9. Student and teacher evaluate completed contracts and begin new ones. Both the student and the teacher should point out the parts of the contract that seemed to help the student. Those successful portions should be repeated or may even be made more rigorous in successive contracts.
- 10. Student displays completed contract to witnesses. To a student who has had a history of not completing work, showing his work to his witnesses could be an additional reinforcer.

Contracting is a very versatile system. Contracts may be used in any academic area as well as in the behavioralsocial areas. Initially, some structure should be given to most children as they begin working on contracts. Class time to complete the contract, a period for reexplanation of the contract, and a check on the progress of each student working on a contract are usually helpful. Later, the student may wish to fulfill his contract completely independently, using the teacher only as a resource.