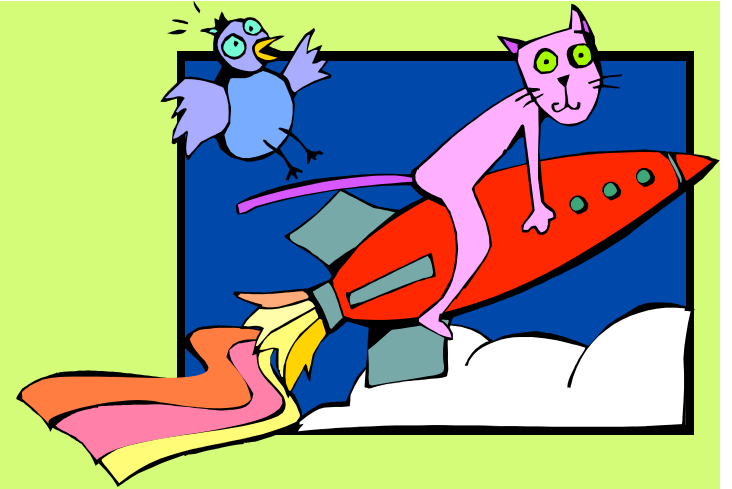


Differentiation Using Curriculum Compacting



The National Research Center on the Gifted and Talented

University of Connecticut

Yale University • The University of Virginia

<http://www.gifted.uconn.edu>

Differentiation by Content

- Depth
- Abstract v. Concrete
- Vocabulary Level



Ways to Differentiate Content

- Varied Texts
- Accelerated Coverage of Material
- Varied Supplementary Materials
- Varied Graphic Organizers
- Independent Study
- Tiered Assignments
- Interest Development Centers
- **Compacting**



Acceleration

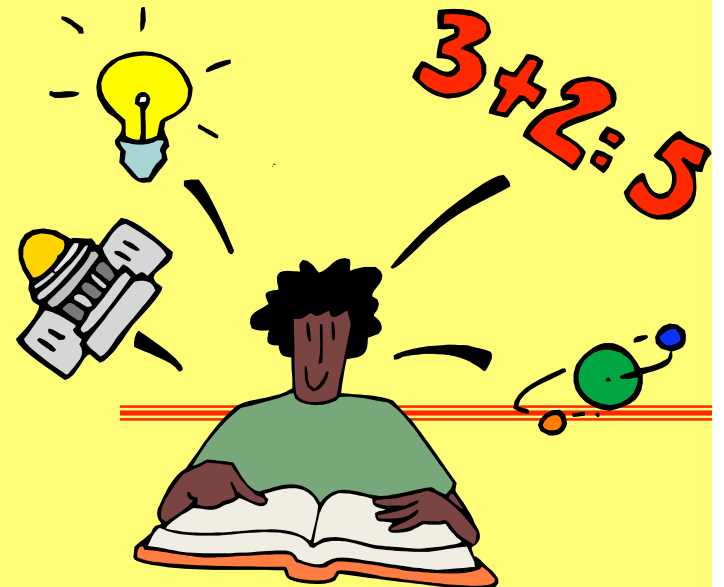
- Different books, same subject, different level of reading
- Math: odd problems only, to free up time for independent study of another facet of math that the student would not otherwise study
- Skip a grade
- Skip a grade in one subject



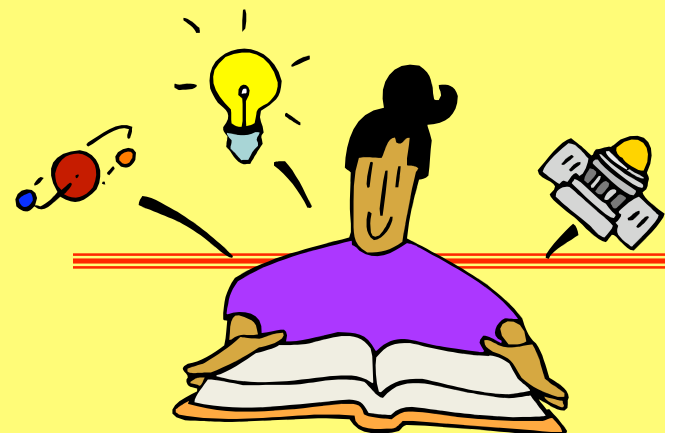
Student Behaviors Suggesting that Compacting May Be Necessary



-
- Consistently finishes tasks quickly
 - Finishes reading assignments first
 - Appears bored during instruction time
 - Brings in outside reading material
 - Creates own puzzles, games, or diversions in class
 - Consistently daydreams



-
-
- Has consistently high performance in one or more academic areas
 - Tests scores consistently excellent
 - Asks questions that indicate advanced familiarity with material
 - Is sought after by other students for assistance



-
- Uses vocabulary and verbal expression advance of grade level
 - Expresses interest in pursuing alternate or advanced topics.



INDIVIDUAL EDUCATIONAL PROGRAMMING GUIDE

The Compactor

Prepared by: Joseph S. Renzulli
Linda M. Smith

NAME _____ AGE _____ TEACHER(S) _____ Individual Conference Dates And Persons
Participating in Planning Of IEP _____

SCHOOL _____ GRADE _____ PARENT(S) _____

CURRICULUM AREAS TO BE CONSIDERED FOR COMPACTING Provide a brief description of basic material to be covered during this marking period and the assessment information or evidence that suggests the need for compacting.

PROCEDURES FOR COMPACTING BASIC MATERIAL Describe activities that will be used to guarantee proficiency in basic curricular areas.

ACCELERATION AND/OR ENRICHMENT ACTIVITIES Describe activities that will be used to provide advanced level learning experiences in each area of the regular curriculum.

Name it.

Prove it.

Change it.

What material needs to be covered?

Exactly what material is to be excluded?

What enrichment and/or acceleration activities will be included?

What evidence shows a need for compacting?

How will you prove mastery?

Independent Study Acceleration
Mini-courses Honors Courses
College Courses Mentorships

Small Group Investigations
Work Study

☐ Check here if additional information is recorded on the reverse side.

Compacting: “Quick and Dirty” Check

- Is the student in the top reading group or reading at an advanced level?
 - Does he or she finish tasks quickly?
 - Do you think he or she would benefit from more challenging work?
-





Goals of Compacting



- Create a challenging learning environment in the classroom and the enrichment program for all children!
- Define objectives and guarantee proficiency in basic curriculum.
- Find time for alternative learning activities based on advanced content **and** individual student interest.



Curriculum Compacting Rationale

- Textbooks have been dumbed down at the elementary level with repetitive practice and language.
- Students already know much of their texts' content before learning it.



Curriculum Compacting Rationale

- The needs of high ability students are often not met in classrooms
- The pace of instruction and practice time can be modified.
- Compacting guarantees educational accountability.



Compacting

- Assesses what a student knows and what the student still needs to master
- Eliminates content that is already known
- Plans time to be spent in enriched or accelerated study



Compacting

- Recognizes large reservoir of knowledge
- Satisfies hunger to learn more about self-selected topics
- Encourages independence
- Eliminates boredom resulting from unnecessary drill and practice

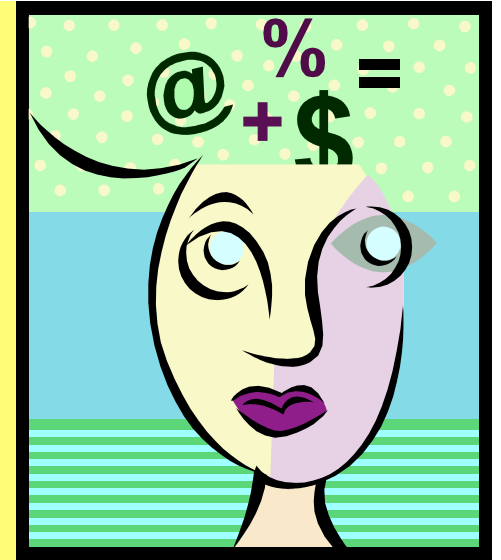


Compacting



- Explain the process and its benefits to students and parents
 - Document preassessment
 - Allow student much choice in use of time bought through previous mastery
 - Use written plans and timelines for accelerated or enrichment study
 - Try group compacting for several students
-

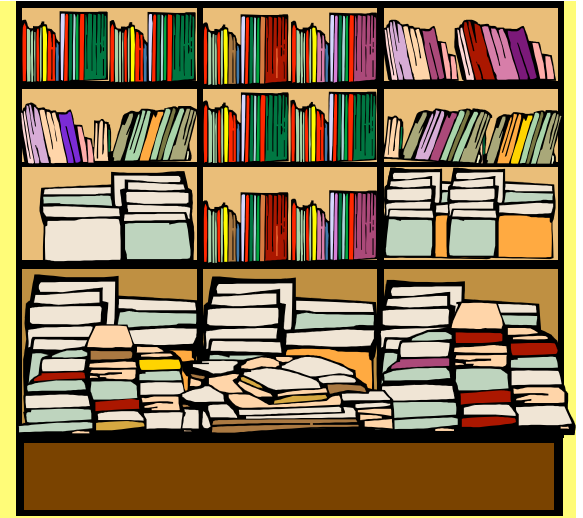
Types of Compacting



Basic Skills Compacting:

- Eliminates specific skills that students have already acquired.
 - Spelling, mathematics, or grammar.
 - Pre-testing is easier to accomplish.
 - Mastery can be documented more easily /objectively.
-

Types of Compacting



Content Compacting

- Social studies, science, and literature
 - Students may already know the objectives or may be able to read the material and master the objectives in a fraction of the time.
 - More flexible—students can absorb the material at their own speed.
 - Evaluation may be less formal— essays, interviews, or open ended tasks
-

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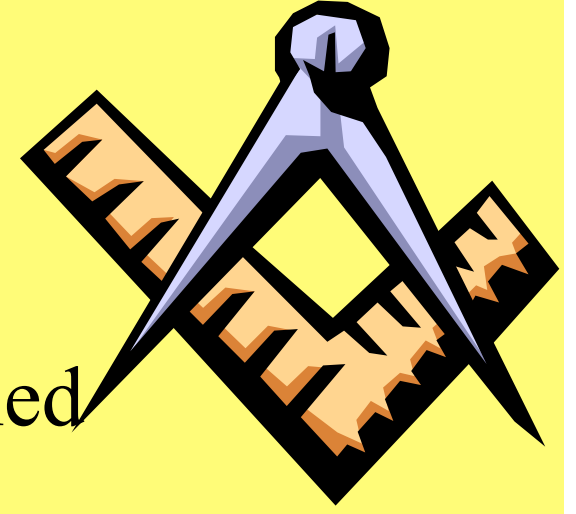
Independent Study Acceleration
Mini-courses Honors Courses
College Courses Mentorships

Small Group Investigations
Work Study

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Step One: Identify the objectives
in a given subject area.

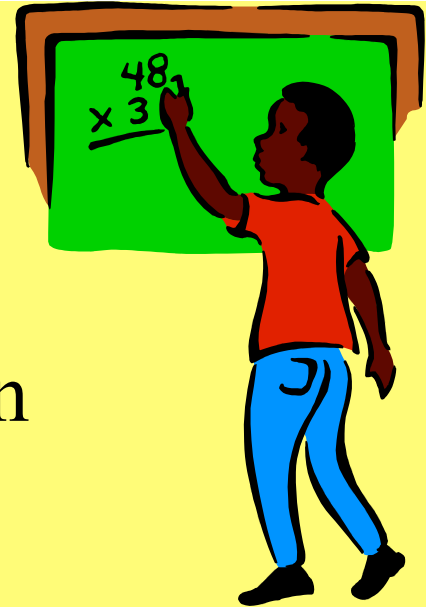




-
- Which objectives cannot be learned without formal or sustained instruction?
 - Which objectives reflect the priorities of the school district/state department of education?
-

Step Two: Find appropriate pretests.





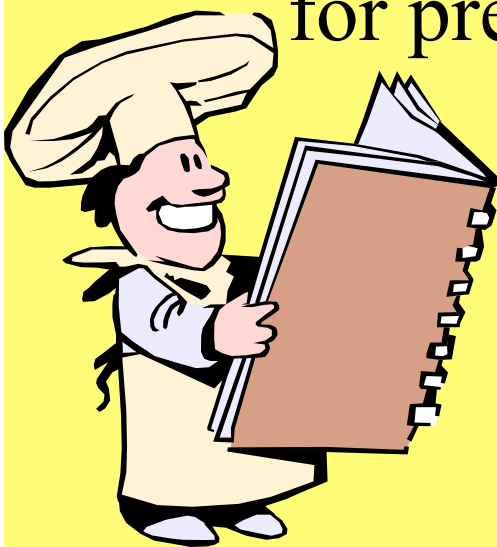
-
- Which objectives have already been mastered by the student?
 - Which objectives have not already been mastered by the student?
 - Which problems might be causing students to fall short of reaching any of the objectives?
-

Step Three: Identify students who should be pretested.





-
- Look at the individual strengths of students in your class.
 - Use academic records, class performance, and evaluations from former teachers to identify candidates for pre-testing.



Step Four: Pretest students to
determine their mastery level of the
chosen objectives.





- Point out that some students will already be familiar with the material.
- Ask if any students would like to demonstrate that they already know the objectives being taught



- Assure the students they they're not expected to be competent in all the objectives being tested.
- Tell the students that their curriculum may be streamlined if they can exhibit partial mastery of the objectives



- Help the students understand that they will not be labeled “poor learners” if they can’t pass one or more sections of the test.

Pretesting: sources of help

- Parent volunteers, aides, tutors
- Reading, math, and other curriculum specialists to help identify learning objectives
- District consultants and teachers of gifted children
- New computer technology to pretest, posttest, and provide individual instruction

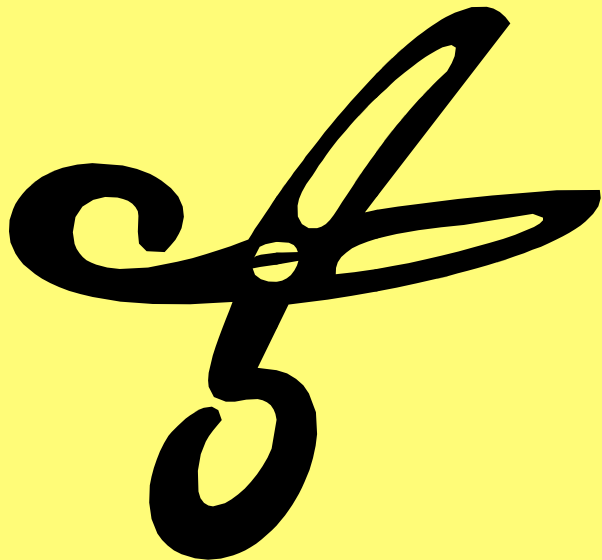


Examples of performance based pre- tests

- Students could write and submit a persuasive essay which teacher would read and analyze for content.
- Use student portfolios and work samples which show mastery of the learning objectives.
- Observe students taking notes, tracing thought patterns, and posing open ended questions.

Step Five: Eliminate instructional time for students who show mastery of the objectives.





- Students who have a thorough grasp of the learning objectives should be allowed to take part in enrichment or acceleration activities.
 - Some students may be excused from specific class sessions, while others may skip certain chapters or pages in the text or specific learning activities.
-



Step Six: Streamline instruction of those objectives students have not yet mastered but are capable of mastering more quickly than classmates.



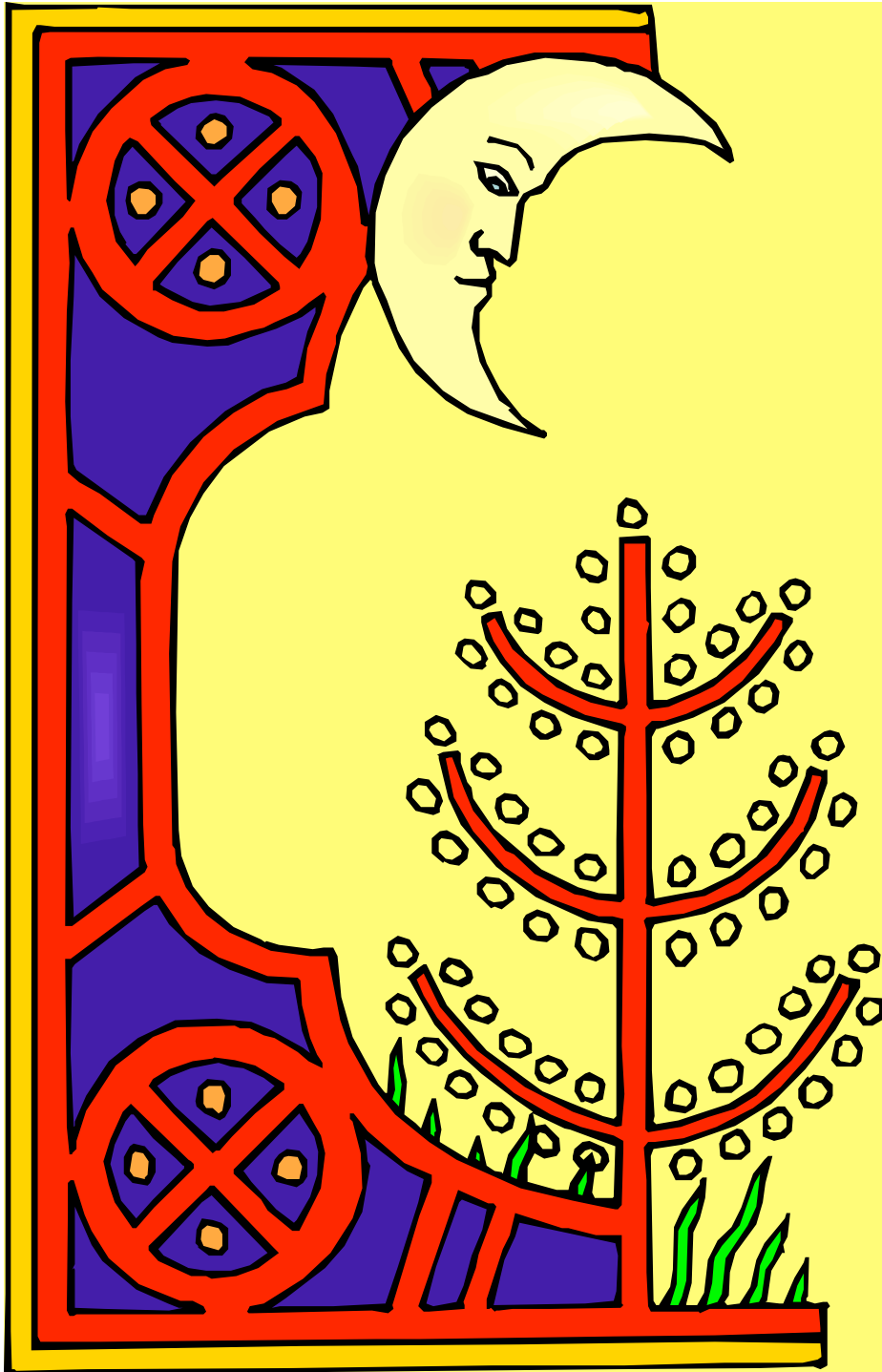


- Bright students frequently need less practice to master new objectives than their peers.
- Students may demonstrate mastery of some, but not ALL the target learning objectives

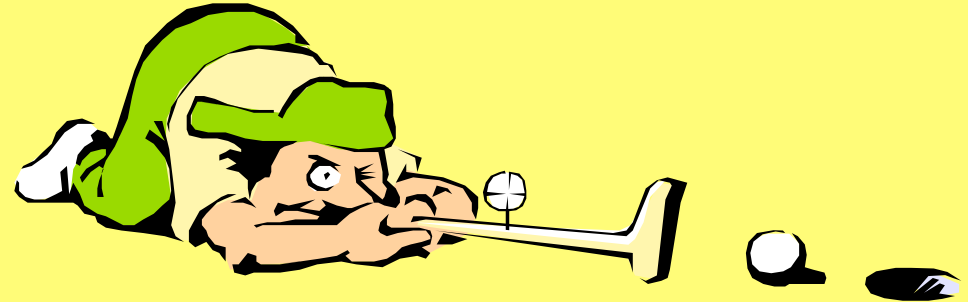



Four conditions to create effective individualized instruction

- ◆ Must be high quality
 - ◆ Must be appropriate to the students' levels
 - ◆ Students must be motivated to work on the tasks
 - ◆ Students must have adequate time to learn.
-

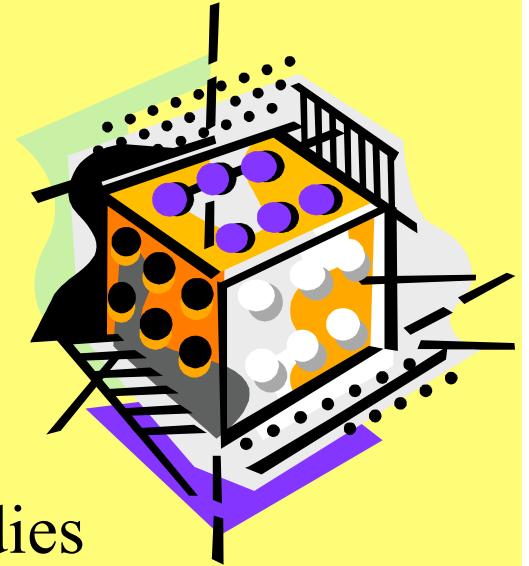


Step Seven:
Offer
challenging
alternatives for
time provided by
compacting



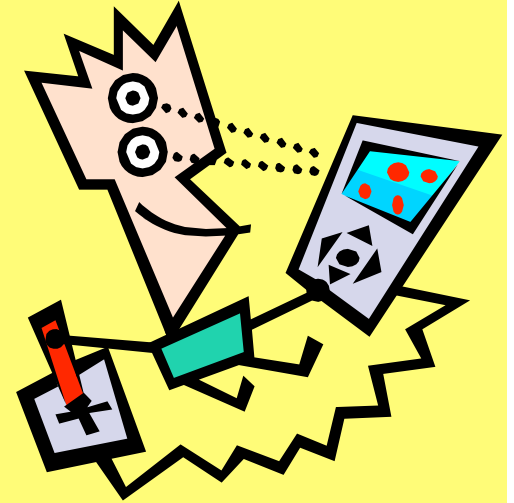
- Individual or small group projects using contracts or management plans
 - Interest or learning centers
 - Opportunities for self-directed learning or decision making
 - Mini-courses on research topics or other high interest areas
- 

Possibilities for replacement activities



- Small seminar groups for advanced studies
 - Mentors to guide in learning advanced content or pursuing independent studies
 - Units or assignments that are self-directed, such as creative writing, game creation, creative and critical thinking training
-

Possibilities for replacement activities



- Accelerated curriculum based on advanced concepts
 - More challenging content
 - Classwork adapted to curricular needs or learning styles
 - Interest or learning centers
 - Opportunities for self-directed learning or decision making
-

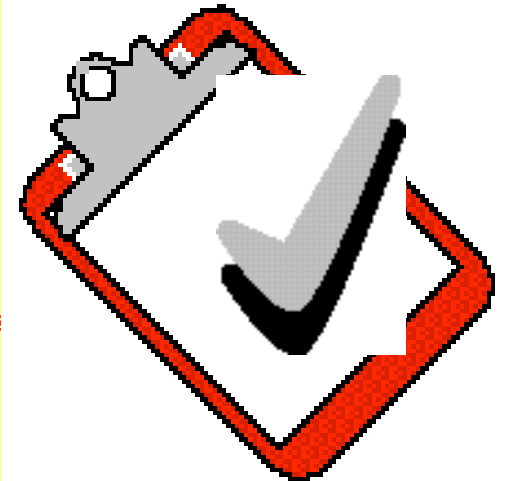
Base decisions about replacement activities on

- The needs of the students
- Time
- Space
- Resources
- School policy
- Support personnel



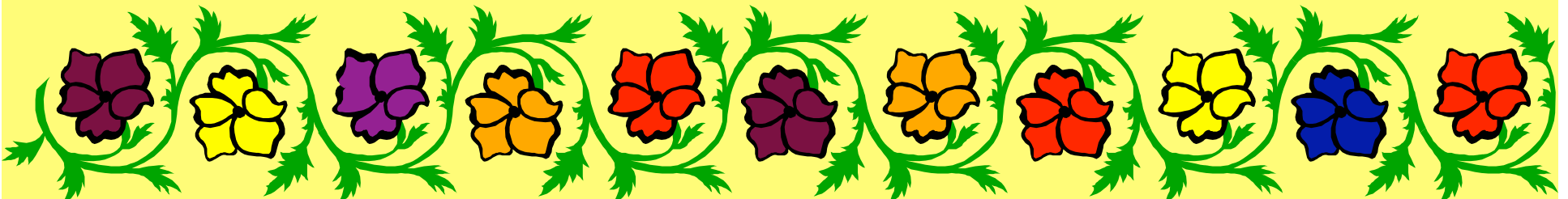
Set Criteria for Mastery

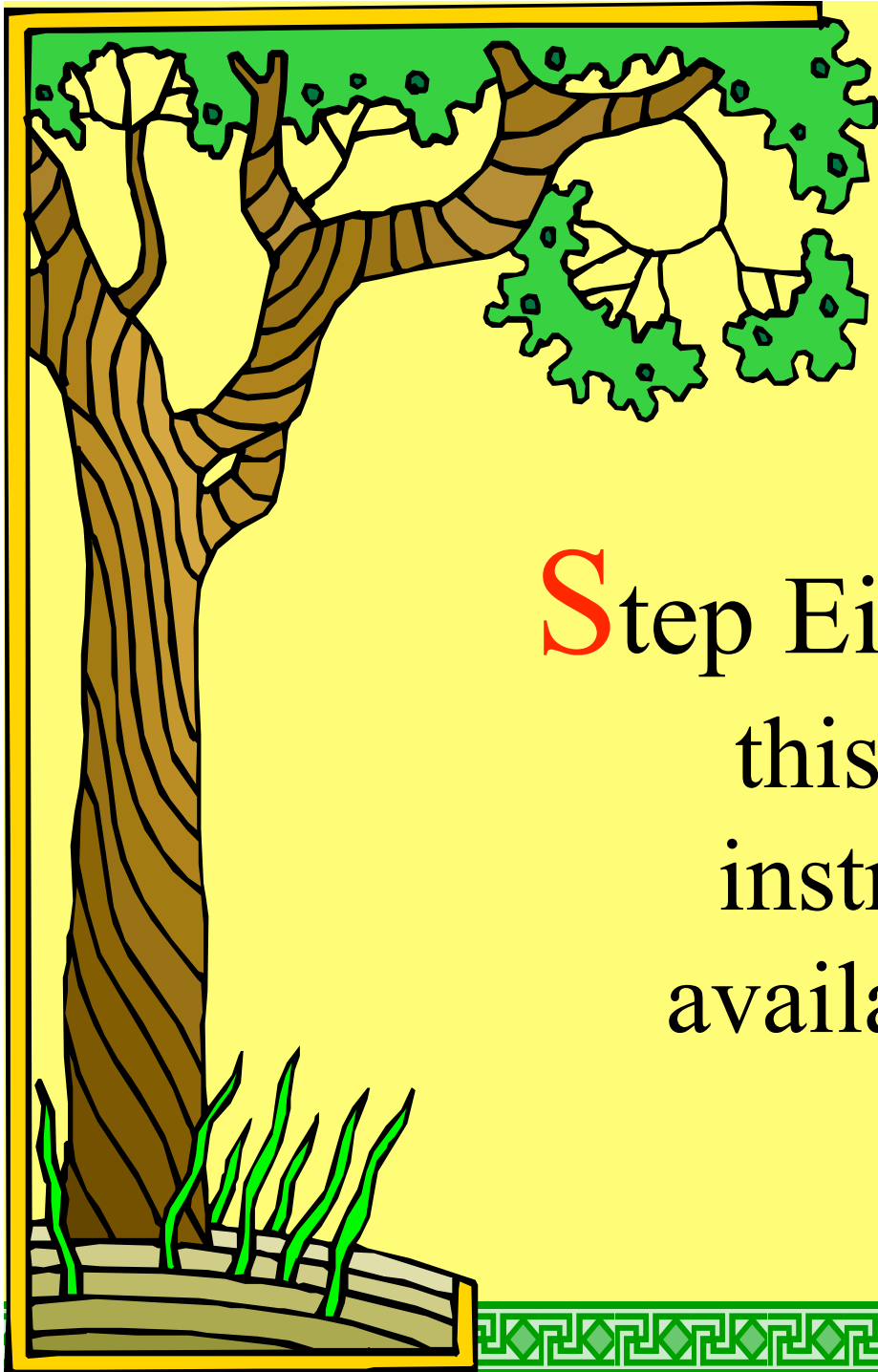
- Criteria for demonstrating mastery = 90% or higher on the pretest.
- Criteria for demonstrating partial mastery = 80% or higher on the pretest
- Students who demonstrate complete mastery will be compacted out of the entire unit.
- Students who demonstrate partial mastery will be compacted out of selected lessons / portions of the unit.



Replacement activity ideas

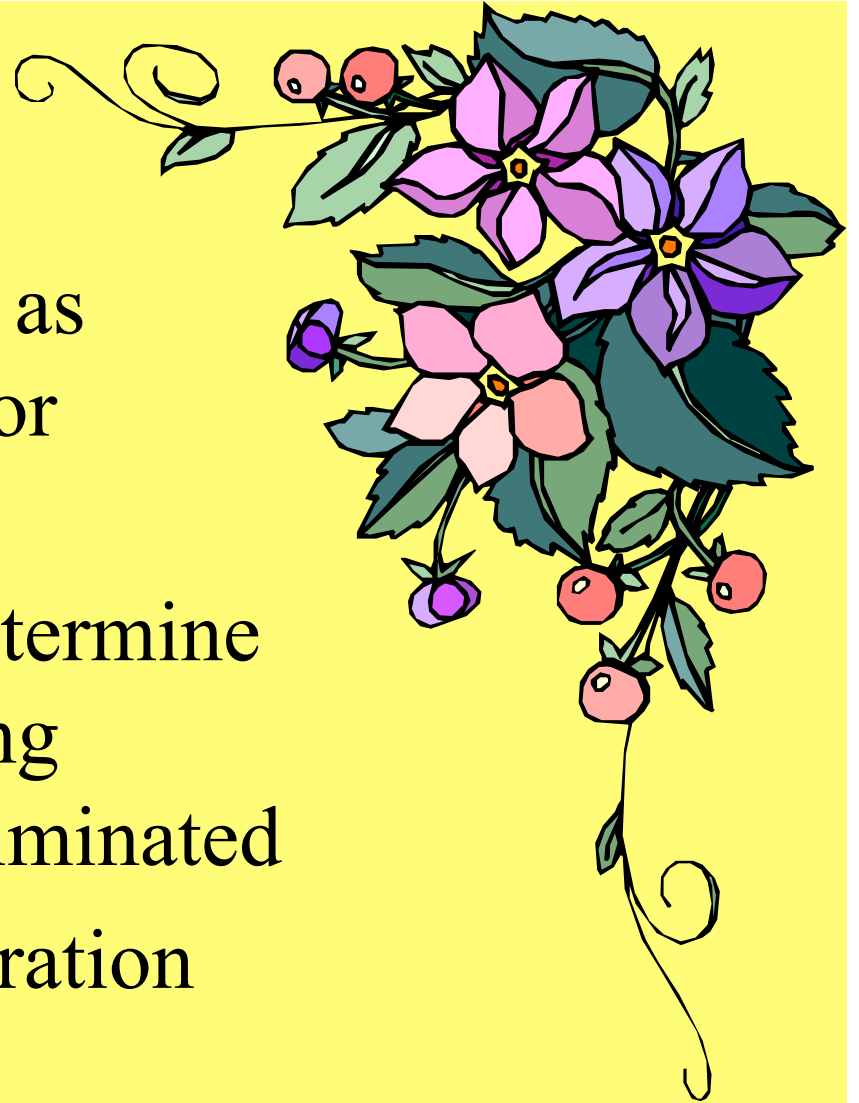
- Move to more advanced grammatical unit: adjective clauses, etc.
- Enrichment activity in an area of student interest
- Learning contract for another appropriate topic of student selected interest.
- Literature circle (Especially effective if a small group of students compact out of the same unit)





Step Eight: Keep records of
this process and the
instructional options
available to compacted
students

-
- Student strength areas, as verified by test scores or performance
 - The pretests used to determine mastery and the learning objectives that were eliminated
 - Enrichment and acceleration activities





Recommendations for Implementation



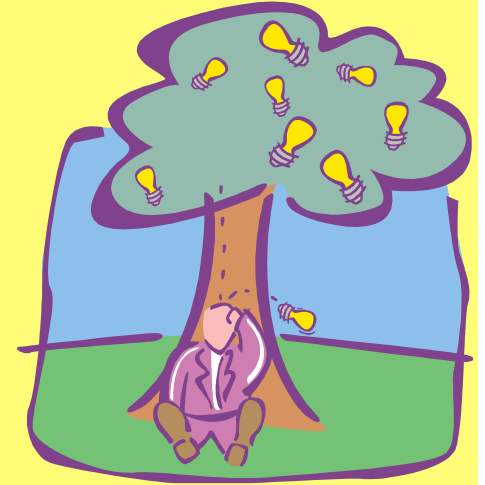
Start Small



Start the compacting process by targeting a small group of students for whom compacting seems especially appropriate.



Select One Content Area

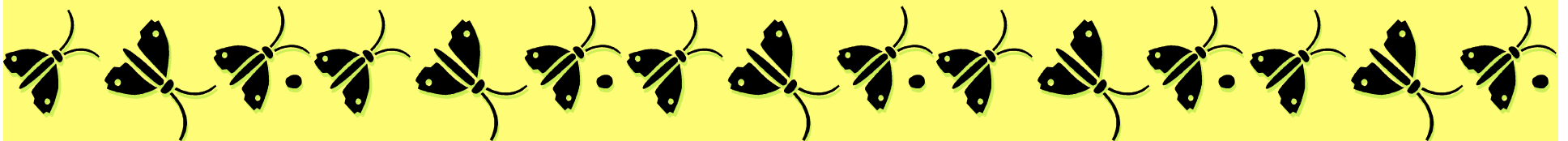


- The targeted student has demonstrated previous mastery or curriculum strengths
 - Teachers have the most resources available to pretest for prior mastery and to enrich and accelerate the content.
-



Experiment with Pretesting or Preassessment

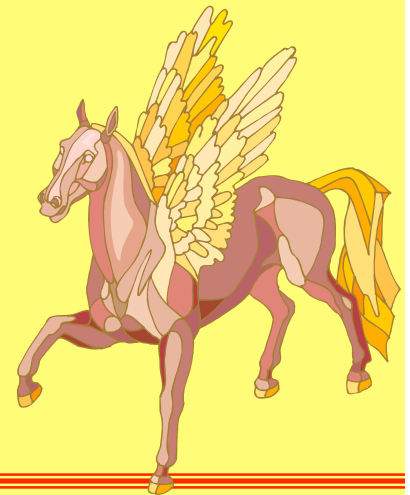
- Try different methods of pretesting or assessment.
 - Be flexible in accomplishing this by experimenting with different systems
 - Ask for assistance from other faculty members, aides, or volunteers.
 - Decide in advance what score constitutes a pass.
-



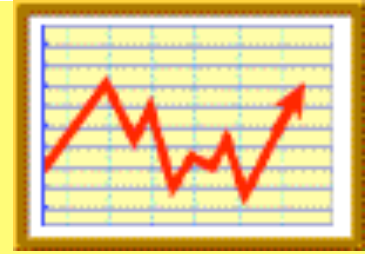
Compact by Topic



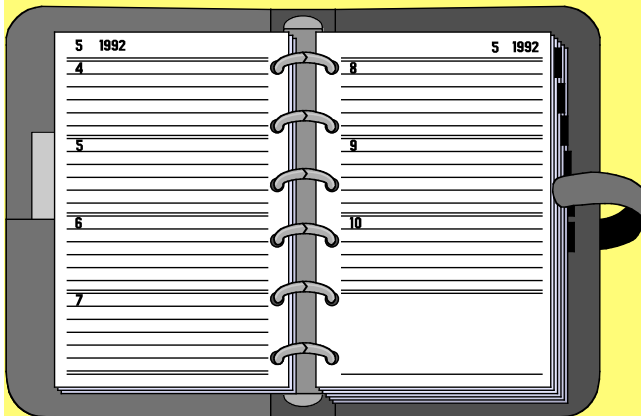
Compact by unit, chapter, or topic
rather than by time (marking period
or quarter)



Decide How to Document

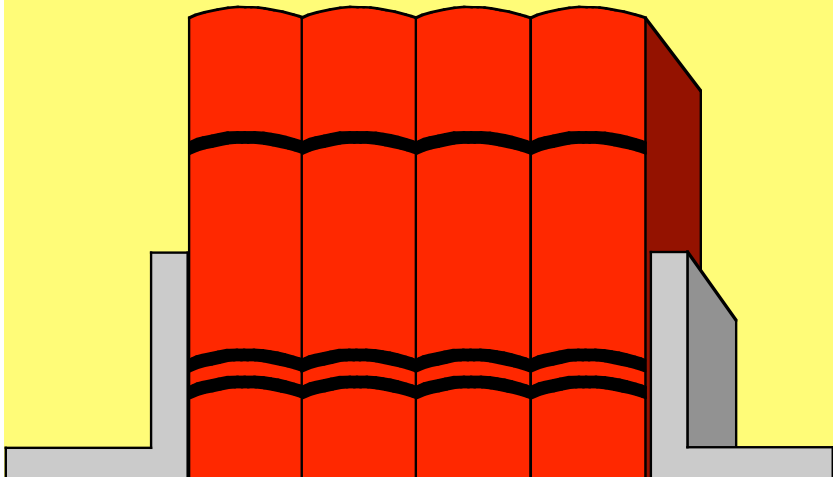


Decide how to document compacted material and define proficiency based on staff consensus and district policy.



Find a Variety of Alternatives

Request help from all available resources in order to create a wide range of opportunities and alternatives to replace content that has been eliminated through compacting.



Web sites

Book Lists

<http://www.ala.org/yalsa>

The WhyFiles? Science Behind the News

<http://whyfiles.news.wisc.edu/>

Summer Reading Lists

<http://www.fcps.k12.va.us/readlist/>

Ologies

<Http://ology.amnh.org>

Outstanding Books for the College Bound

<http://www.org/news/archives/v4n15/obcblist.html>

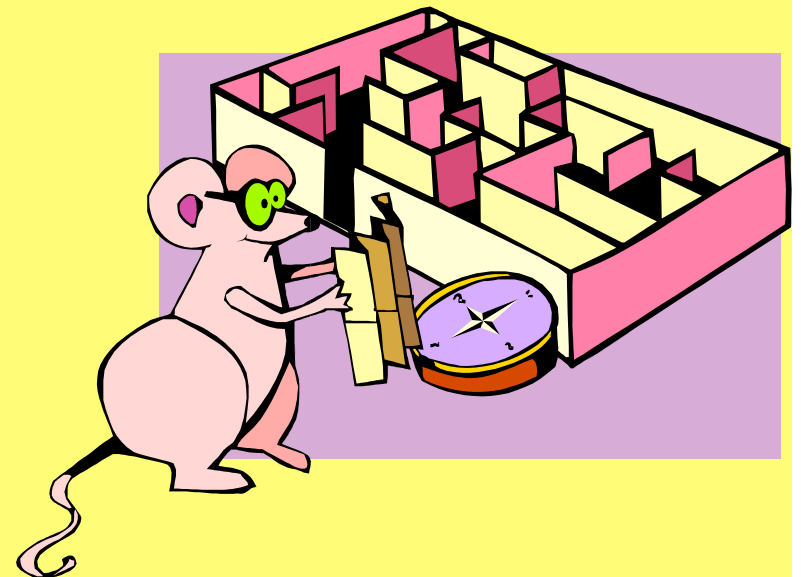
Think Quest

<http://www.thinkquest.org/tqic/index.html>



Experiment

Keep trying, reflecting on what has worked,
and field testing new ideas.



Reis, S. M., Burns, D. E., & Renzulli, J. S. (1992). Curriculum
Compacting: The complete guide to modifying the regular
curriculum for high ability students. Mansfield Center, CT:
Creative Learning Press.