STRATENOTES

Basic Principles of Content Enhancement

We cannot teach everything there is to know about the world. In fact, we can probably teach only a very small proportion of what is known. As the amount of knowledge in the world increases, the proportion of knowledge that can be directly "taught" will continue to decrease.

As a result of this forecast, some teachers have begun to turn their instructional energies to teaching learning strategies. That is, they teach skills related to how to learn and use information independently. This approach to teaching and learning helps to turn teachers' and students' attention away from what must be *given* to students and helps students learn that their future depends on what they can learn about the world - on their own. While this approach to teaching and learning begins to address the problem of how to survive in a knowledge-rich world, the problem of deciding what set of knowledge to teach about the world and how to deliver the content that is targeted in conjunction with learning strategies remains.

What shall we teach about the world?

Content Enhancement is an approach to planning and teaching that offers a way of making decisions about what and how to teach content. This approach to teaching invites teachers to think deeply about what they want students to know, select the central concepts that make the set of details and facts hang together, enhance the meaningfulness of the content for students by using instructional devices that lead to higher rates of learning, and then enhance the content using integrated teaching routines implemented in various partnerships with students. When content is enhanced in this manner, its essence is highlighted so that it becomes greater in value, desirability, attractiveness, and usefulness.

The principles associated with Content Enhancement focus on how to teach students in academically diverse classes knowledge derived from our science and culture. This instructional approach has been field-tested in classes considered to be academically diverse. These diverse classes included high-achieving students, average-achieving students, and students judged as low-achieving, having learning disabilities, being at-risk for school failure, or having other disabilities. The goal of this approach has been to develop instructional methods sensitive to the needs of a range of ability and achievement levels in a class.

Specifically, Content Enhancement is defined as the process of teaching scientific or cultural knowledge to a heterogeneous group of students in which:

◎ Both group and individual needs are met;

◎ The integrity of the content is maintained;

◎ Critical features of the content are selected, reformed, and complemented in a manner that enables the student to organize, understand, remember, and believe in the information; and

◎ The content is delivered in a partnership with students that facilitates and enriches learning for all students.

Content Enhancement is achieved when teachers learn, develop, and regularly use specific teaching *routines* that are built on powerful instructional devices and teaching procedures.

How is a Teaching Routine constructed ?

A teaching routine consists of three components. **First,** a powerful **Teaching Device** is selected and used by a teacher to help students frame, understand, or remember information. For example, graphic organizers, rationales, study guides, or role plays can be thought of as instructional devices. **Second,** there is a set of **Linking Steps** that a teacher can follow to help guide student understanding and response to the device. **Third,** there is an overall **Sequencing Routine** that the teacher uses to push the device and its delivery into the lesson in order to draw attention to the presence of the device and how it can be used to enhance learning.

The Content Enhancement approach is based on several validated instructional principles. Specifically, research has shown that students learn more when they are actively involved in the learning process, when abstract, complex concepts are presented in concrete forms, when information is organized for them, when new information is tied to previously learned information, when important information is distinguished from unimportant information, when the relationships among pieces of information are made explicit, and when they are involved in an apprenticeship whereby they are shown how to learn specific types of content. All of these principles are adhered to in implementing the Content Enhancement approach.

Thus, the use of the Content Enhancement approach meets both group and individual needs while maintaining the integrity of the content. That is, through application of sound instructional principles, all students' learning is enriched without sacrificing large amounts of content. Instead, critical features of the content are selected and transformed in a manner that promotes student learning, and instruction is carried out in a partnership with students. In short, this instructional approach focuses on methods that teachers can use to "showcase" or enhance the information they consider to be the most important for students to learn within a course.

The Content Enhancement Series

In an attempt to address the challenges facing today's educators and to translate the theory behind the Content Enhancement approach into practice, researchers, teachers, and students collaborated on a long-term effort. The result of this joint work is the Content Enhancement Series, a set of guidebooks that teachers can be use to teach large amounts of content to academically diverse classes in "learner friendly" ways. Specifically, the guidebooks have been designed to help teachers enhance content and improve students' ability to organize, understand, and remember critical information.

The guidebooks each focus on an important aspect of the teaching process. While the number of guidebooks to be included in the series has not yet been determined, seven guidebooks have been planned to launch the Content Enhancement Series:

- The Lesson Organizer Routine
- The Chapter Survey Routine
- The Unit Organizer Routine
- The Concept Mastery Routine
- The Concept Anchoring Routine
- The Concept Comparison Routine
- The Recall Enhancement Routine

Teachers have found the Content Enhancement methods to be most effective when used on a regular basis. Over time, the various methods can be woven together into a dynamic whole, taking into consideration the demands of the content to be taught and the needs of the members of the class. Thus, the Content Enhancement methods are seen as a "package" of procedures that are used explicitly, consistently, regularly, and in an integrated way by a teacher across time to enhance the learning of diverse groups of students.

Keys to Being Successful with Content Enhancement Routines

Experience with each of the teaching routines in the Content Enhancement Series has indicated that the following factors are important for improving the performance of students in academically diverse classes:

- The routine is explicitly introduced to the whole class, so students can understand how the teacher's use of the routine and their own

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participation in the routine can markedly improve their academic performance.

◎ The routine is used *regularly* so both the teacher and the students have ample opportunity to become comfortable with it as a learning tool;

◎ The routine is adapted to meet the unique needs of the students, the personality and teaching style of the teacher, and the content of the course;

◎ The use of the routine is varied to enhance student motivation;

◎ The routine is integrated, over time, with the other routines in the Content Enhancement Series to create a powerful synergy; and

◎ Students become actively involved in the routine as partners with the teacher for the purpose of improving learning for *all* students in the class.

Information about the Content Enhancement Series and the introduction of two published guidebooks will be a major part of the 1993 National SIM Trainer's Conference & Update Meeting & 15th Year Anniversary Celebration to be held July 8-10. A flyer that the CRL currently disseminates when people inquire about the Content Enhancement series is enclosed in this issue of strategenotes.

ATTEND AT LEAST ONE TRAINER'S UPDATE SESSION EVERY TWO YEARS

In order to be listed as an active trainer in good standing by the Center, an individual must attend at least **one** update meeting every **two** years. Attendance at regional, state or national trainer's update meetings that involve at least one of the core trainers from the Center will ensure that you are kept abreast of changes and additions to SIM.

SIM Trainer's Support Materials

In addition to the materials that we will provide to trainers through the mailings involved in STRATEWORKS (see description of STRATEWORKS elsewhere in this newsletter), STRATELINE will include many updates and the most current documents available from the CRL. Each time you attend a SIM Trainer's Update Session, you will be asked to pay a small fee to cover the cost of facilities and duplicating trainer's materials and training packets. An order form for the trainer's packets & notebooks currently available from the CRL is included

Please remember that the income received by the CRL from the dissemination of manuals and other trainer's support materials is used to cover publishing, printing, handling, and shipping costs, staff time to prepare materials, and other activities that directly support the dissemination and use of SIM.

1993-1994 CALENDAR OF EVENTS*

1993 Dates

JULY 6-10 in UNIVERSITY, MS: *Initial Training Workshop in Learning Strategies*

JULY 8-10 in LAWRENCE, KS: *National SIM Trainer's Conference & Update Meeting & 15th Year Anniversary Celebration*

AUGUST 2-6 in LAWRENCE, KS: *Workshop for Potential SIM Trainers*

AUGUST 9-13 in LAWRENCE, KS: *Advanced Training Workshop in Learning Strategies*

OCTOBER 6-7 in BALTIMORE, MD: *National SIM Trainer's Update Meeting*

FALL in SAN DIEGO, CA: *National SIM Trainer's Update Meeting*

1994 Dates

MARCH 30 in DENVER, CO: CEC *National SIM Trainer's Update Meeting*

JULY 7-9 in Lawrence, KS: *National SIM Trainer's Conference & Update Meeting*

JULY 19-23 in LAWRENCE, KS: *Initial Training Workshop in Learning Strategies*

JULY 26-30 in LAWRENCE, KS: *Advanced Training Workshop in Learning Strategies*

AUGUST 2-6 in LAWRENCE, KS: *Workshop for Potential SIM Trainers*

* A preservice workshop designed for university/college teacher educators may be scheduled at a later date if the need arises. This workshop is usually scheduled the last week in May.

Name Update: What Is the CRL?
Formerly, we were simply known as the KU-IRLD. Now, we are the University of Kansas Center for Research on Learning (KU-CRL) and the KU-IRLD. The KU-CRL is a parent organization capable of having several institutes of projects operating under its umbrella. Thus, the KU-IRLD will be an organizational entity within the Center for Research on Learning. From now on, we will be using the CRL name to answer our phones and to identify ourselves. However,

should we slip and say "the Institute" we will probably argue that we were still right!!!

✓✓✓✓✓Library Check✓✓✓✓✓

Included in this STRATENOTES is a list of the chapters, articles that the staff and research associates of the KU-CRL published in the past twelve months:

If you have written articles related to strategies instruction and to SIM in particular, let us know and we can make them available to other trainers either through our publications list or through STRATELINE.

Update on STRATEWORKS

STRATEWORKS is the name for the trainer's support service provided by the CRL to keep trainer's informed and involved. For this service, active SIM Trainer's pay $35.00 each year and receive:
1. The trainer's newsletter, **Stratenotes**- published 9 times each year
2. A subscription to **Strategram** - published 6 times each year.
3. Full access to **Stratelline**, our computerized bulletin board service
4. Recent manuscripts/articles about CRL work, 3 each year
5. An annual **Stratedirectory** for contacting and learning about active SIM trainers.

Currently, over 400 trainers have subscribed to STRATEWORKS. If you have not subscribed, call us at 913-864-4780 or write us a note and we will get you enrolled. (Trainers who do not enroll in STRATEWORKS will be sent the June Stratenotes (this issue) to keep them informed of SIM Network activities.

How do you promote your own professional Development?

As a SIM trainer, you are expected to be able to sift through a lot of information to learn about new components of SIM. How do you get through it all and build your own support system to ensure that you are promoting your own professional development? How can you ensure that you adopt good teaching practices for either adults or students? Here are some ideas:

◎ Tell others what you are trying
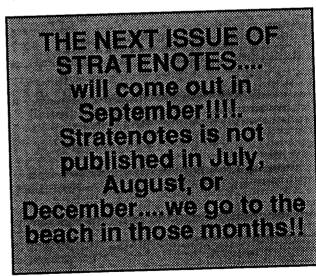◎ Create personal reminders.

◎ Invite observers.
◎ Enlist the help of students.
◎ Collaborate with a colleague.
◎ Take an independent study course.

Remember that as a SIM Trainer you are always involved in a personal study about your choices and your growth. You will find this study more helpful to you if you choose to commit yourself to:

◎ Selecting time to reflect and plan every single day.
◎ Monitoring your growth by regularly writing down your thoughts, ideas, and reactions.
◎ Trying out a few things right away.
◎ Building on success.
◎ Focusing on quality, not quantity.
◎ Reviewing your growth and congratulating yourself on success.
◎ Realizing that everyone has to face the challenge of change.

✓✓✓✓✓New Materials✓✓✓✓✓

A variety of new books and materials are currently being prepared for the July SIM Trainer's Conference and Update Meeting. A complete list of new materials will appear in the September Stratenotes.

THE NEXT ISSUE OF STRATENOTES.... will come out in September!!!! Stratenotes is not published in July, August, or December....we go to the beach in those months!!

The Content Enhancement Model

OVERVIEW

What is Content Enhancement?

Content Enhancement is a way of teaching an academically diverse group of students in which:

☐ both group and individual needs are met;

☐ the integrity of the content is maintained;

☐ critical features of the content are selected and transformed in a manner that promotes student learning; and

☐ instruction is carried out in a partnership with students.

Why is Content Enhancement Important?

☐ Many students have difficulty organizing, understanding, and remembering information presented during group instruction. Content Enhancement helps students perform these tasks.

☐ Many students do not believe that they can learn or do not believe that learning the information selected by teachers is important. Content enhancement helps students see that they can learn and that information can influence their lives.

☐ Class enrollments are becoming more and more heterogeneous. The adoption of a Content Enhancement approach to instruction enables teachers to meet many of the learning needs of both individuals and the group.

Content Enhancement is an approach to planning and teaching that offers a way of making decisions about what and how to teach content. This approach to teaching invites teachers to think deeply about what they want students to know, select the central concepts that make the set of details and facts hang together, enhance the meaningfulness of the content for students by using powerful instructional devices that lead to higher rates of learning, and then ensure that content is learned by using integrated teaching routines in a partnership with students.

The principles associated with Content Enhancement focus on how to teach students in academically diverse classes. This instructional approach has been field-tested in classes considered to be academically diverse and that included students with disabilities.

Data collected in middle- and high-school content-area classrooms have documented an average of 10 to 20 percentage point gains in student test scores. Use of Content Enhancement Routines has bolstered the scores of students across varying achievement levels in a class.

Guidebooks currently included in the Content Enhancement Series

The Unit Organizer Routine
The Lesson Organizer Routine
The Chapter Survey Routine
The Course Lanching Routine

The Concept Mastery Routine
The Concept Anchoring Routine
The Concept Comparison Routine
The Recall Enhancement Routine

What Are the Components of Enhanced Content Instruction?

☐ ReflActive Planning Routines
☐ Powerful Teaching Devices
☐ Explicit Teaching Routines

For more information and assistance contact:
Keith Lenz, Janis Bulgren,
Donald Deshler, or Jean Schumaker
University of Kansas
Center for Research on Learning
3061 Dole Human Development Center,
Lawrence, Kansas, 66045
PHONE: (913) 864-4780 FAX (913) 864-4149

ReflActive Planning is used to capture two basic ideas about preparing to teach classes of academically diverse students. First, teachers must become more **reflective** in the ways they select, organize, and make decisions about how they promote content-area competence; this reflective practice should include considering how to meet the needs of individuals, subgroups and the entire group in specific ways. Second, teachers must be more **active** in preparing, using, and evaluating methods that are selected on behalf of diversity. Teachers are engaged in ReflActive Planning Routines when they ask questions about how all students are learning and identify what is really important for students to learn, and **then** take specific actions to transform and create a curriculum that will enhance learning for all students.

A *ReflActive Planning Routine* is created when a teacher begins...

Selecting the critical content outcomes

Mapping the organization of the critical content

Analyzing learning difficulty based on
☐ quantity   ☐ complexity
☐ interest   ☐ student background
☐ relevance   ☐ organization
☐ abstractness

Reaching enhancement decisions by selecting (*Powerful Teaching Device s*)

Teaching strategically with...
(*Explicit Teaching Routines*)

Evaluating mastery of the critical content and processes

Reevaluating learning outcomes

What is a Powerful *Teaching Device?*

A teaching device is an instructional tool that a teacher uses to enhance learning. It is powerful when it enables the teacher to: (1) focus on a specific point (2) make learning explicit, (3) prompt elaboration on a point, and (4) make ideas and relationships concrete. Graphics, manipulatives, stories, rationales, study guides, role play activities, etc. can become powerful Teaching Devices if the are well prepared and used with a specific teaching routine to meet the four criteria listed above.

What is an Explicit *Teaching Routine?*

An explicit Teaching Routine is created when a teacher selects a powerful Teaching Device, explains to students how the Teaching Device will be used to enhance learning, and then regularly and creatively uses the Teaching Device as part of course-wide instruction. Each time the Teaching Device is used, the teacher uses the CUE-DO-REVIEW teaching procedure.

CUE: The teacher announces the Teaching Device and explains how it will be constructed.

DO: The teacher and class collaboratively use the Teaching Device to enhance learning using a specific set of procedures that link the learning task to the characteristics and goals of the student.

REVIEW: The teacher confirms that the Teaching Device enhanced learning and that the critical content was learned.

CONTENT ENHANCEMENT ROUTINES

Content Enhancement Routines are defined as an approach to planning and teaching that offers a way of making decisions about what and how to teach content. This approach to teaching invites teachers to think deeply about what they want students to know, select the central concepts that make the set of details and facts hang together, enhance the meaningfulness of the content for students by using powerful instructional devices that lead to higher rates of learning.

The Course Launching Routine
This routine is used by classroom teachers to effectively launch a course so that all students in an academically diverse class clearly understand the focus, scope, and purpose of the course as it relates to them personally. Major components of this routine are such things as the course metaphor, critical course questions, a course map, and course rituals (e.g., procedures and exceptions for cooperation, norms for behavior, procedures for establishing and learning community). The purpose of this routine is to position the course into a larger perspective for students so they have a clear sense of where the course is headed, what the expectations are, how learning will be accomplished, and how support will be provided.

The Unit Organizer Routine
This routine is used by classroom teachers for the purpose of introducing a new unit to students such that they see the "big picture," understand their assignment responsibilities, understand key relationships within the unit, and understand the upcoming sequence of instruction. This routine also focuses students' attention on critical unit questions through the use of a set of self-test questions for the unit.

The Concept Mastery Routine
This routine is used by classroom teachers for the purpose of helping students understand and master key concepts within a set of curriculum content (e.g., democracy, fiction, etc.). The Concept Mastery Routine facilitates student learning by clearly naming and defining the targeted concept, specifying salient characteristics, and presenting both examples and nonexamples of the concept. This routine also actively engages students in testing a set of information to determine if it fits a given concept or not.

The Comparison Routine
This routine is used by classroom teachers for the purpose of analyzing the similarities and differences between two items/concepts/ideas/events in a way that enhances student understanding and retention of information. This routine also enables students to paraphrase the information into an integrated summary statement.

The Anchoring Routine
This routine is used by classroom teachers for the purpose of connecting new information to previously learned information and to increase student understanding and retention of the new information. This routine enables students to clearly see the similarities of shared characteristics between two different sets of information.

The Remembering Routine
This routine is used by classroom teachers for the purpose of transforming information into arrangements that enable student to more readily remember the information. A broad array of memory strategies are employed within this routine including: keywords, first-letter mnemonics, visual imagery rhymes, etc.

The Lesson Organizer Routine
This routine is used by classroom teachers for the purpose of introducing and structuring a lesson for students. The routine helps students to frame a lesson with the larger unit and students' previous experiences. The routine also helps students focus on the types of content relationships that are important in the lesson and the types of learning strategies that are likely to be used. Self-check questions and learning related tasks are also identified so the students become oriented to the critical outcomes at the outset of the lesson. The Lesson Organizer Routine can be used for a daily lesson or for a lesson that lasts several days.

The Chapter Focusing Routine
This routine is used by classroom teachers to provide an overview of new chapter of a textbook that will be used as a resource in a unit of instruction. The teacher leads the students through a step-by-step-by-step process of analyzing the content of the new chapter. During this process, students are required to take notes on a specially constructed worksheet. On this worksheet students are prompted to paraphrase the title of the chapter, identify relationships between the unit and other textbook chapters, paraphrase the introduction and summaries of the chapter, and identify and organize the key sections and vocabulary of the chapter.