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ABSTRACT

This curriculum guide for vocational teacher education focuses on challenges for the teacher, and more specifically, on what should be done to help teachers accept change as a constant in curricula. Introductory materials include a project overview, mission and goals of the curriculum, belief statements, curriculum format, information on preparation and time issues, new basic skills defined, and a guide to lesson categories. This book contains three lessons: The Curriculum Challenge; School Culture; and Modeling Integration of Work and Family. Each lesson format is identical, and each category within a lesson has its own icon, for ease in locating the category in any lesson. Lesson categories are as follows: (1) perennial problem (for this curriculum, what should be done about integrating the new basic skills into vocational education?); (2) practical problem (action that can help address the perennial problem); (3) justification for lesson; (4) learner outcome; (5) instructor resources; (6) teaching strategy modeled; (7) lesson plan (content, new basic skills, process, application objectives); (8) teaching-learning interaction (introduction and steps to guide the teacher educator through the lesson); (9) debriefing strategies (options for summarizing the lesson); (10) evaluation options; and (11) individualized learning plan. Handouts are provided at the end of each lesson. An instructor resources section at the end of the book contains transparencies and handouts suitable for photocopying. (YLB)

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VOCATIONAL
TEACHER
EDUCATION

*Integrating
Basic Skills Into
Vocational Teacher
Education Curricula*

CHALLENGES FOR THE TEACHER



Funded by:
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Integrating Basic Skills into Vocational Teacher and Counselor Education Curricula

PROJECT OVERVIEW

The goal of this project was to develop, field test, and disseminate curricula that would help preservice vocational education teachers and school guidance counselors learn how to integrate basic skills instruction into their work. One curriculum was designed for use by vocational teacher educators, the other for school guidance counselor educators.

The project staff followed four steps in developing these curricula. First, the staff developed field test materials with the help of two Working Group teams of national experts. (The Working Groups assisted throughout the project, identifying competencies, suggesting field test sites, recommending and helping to locate potential curriculum materials, reviewing materials chosen for inclusion in the curricula, and guiding the dissemination of draft curricula to field test sites.) Second, the project staff compiled two reviews of literature, one in vocational teacher education and the other in school counselor education, to help identify decisionmakers' current views on the importance of teaching basic skills to secondary and postsecondary students preparing to enter the workforce. Third, the project staff conducted site visits at nine vocational teacher education and nine school counselor education institutions. The Working Groups had identified these institutions as sites in which some emphasis was being given to basic skills in preservice curricula. Finally, the project staff used Working Group comments, the literature reviews, and the results of their site visits to produce draft sets of the two new basic skills curricula.

The project staff then field tested the draft curricula at nine teacher education and nine school counselor education institutions. (None of these were the same institutions at which site visits had been made.) At each field test location, project staff members worked with a Site Liaison to integrate the draft curricula into existing vocational teacher or school counselor education instruction. The project staff used the resulting field test reports to improve the lessons, formats, and teacher instructions of the new basic skills curricula.

Final versions of the two curricula have been sent to all site visit and field test locations and to major curriculum clearinghouses and teaching-materials dissemination sites. Information about the curricula has been sent to vocational and industrial teacher education programs and school counselor education programs nationwide. The procedures used in developing the curricula will be reported to major journals in vocational, counselor, home economics, industrial, and technology education. These procedures will also be summarized at presentations to state, regional, and national conferences in the same professional areas.

ACKNOWLEDGEMENTS

A United States Department of Education Contract through the Office of Vocational and Adult Education provided the funding for the development and production of this Integrating Basic Skills curriculum. The staff in the Office of Vocational and Adult Education provided valuable input and support. Special thanks for the leadership provided by Jackie Friederich, Richard Di Cola, Bernice Anderson, Laura Johns, Gisela Harkin, and Susan Webster.

Faculty and staff at Colorado State University, and particularly in the College of Applied Human Sciences, have been willing to provide necessary technical skills and assistance whenever needed throughout the contract. The School of Occupational and Educational Studies and the Department of Industrial Sciences were particularly instrumental in the success of this curriculum effort.

The Integrating Basic Skills curriculum was developed and written with guidance from experts in the field who have shown commitment and dedication to integrating basic skills into vocational education. We sincerely thank the members of our Working Group for their contributions. The members of the Teacher Education Working Group were: Kay Clayton, A & I University, Kingsville, TX; George H. Copa, University of Minnesota, Minneapolis, MN; Thomas H. Crumbaker-Smith, Boltz Junior High School, Fort Collins, CO; Jim Hubbard, Colorado Alliance for Science; Michael W. Neden, Delta County Schools, Delta, CO; Leno S. Pedrotti, Center for Occupational Research and Development, Waco, TX; L. Allen Phelps, University of Wisconsin—Madison, Madison, WI; Jane Plihal, University of Minnesota, Minneapolis, MN; and Sally Yahnke, Colorado State University, Fort Collins, CO.

Vocational teacher education programs at universities across the country assisted as visitation and field test sites. The input provided by both groups expanded and improved the final product. We are indebted to faculty, teachers, and students at the following institutions for the insights they shared.

Teacher Education Sites: Bemidji State University, Corpus Christi State University, Idaho State University, Illinois State University, Indiana University of Pennsylvania, Michigan Consortium, North Carolina Central University, Northwest Regional Educational Laboratory, The Ohio State University, University of California—Long Beach, University of Georgia, University of Maryland, University of Minnesota, University of Missouri, University of Wyoming, and Virginia Polytechnic Institute and State University.

During our site visit to the University of Maryland, Dr. Francine Hultgren shared the Perennial and Practical Problem approach used in the Home Economics Curriculum in Maryland. This was a turning point for our curriculum effort. We hope our curriculum model reflects the impact of Dr. Hultgren's work.

Dr. Donald Cruickshank, Professor Emeritus from The Ohio State University, graciously permitted us to use two Reflective Teaching Lessons. We hope that this curriculum project helps teachers and teacher educators reflect on their teaching in the manner which Dr. Cruickshank modeled so well.

The School of Occupational and Educational Studies at Colorado State University has an integrated faculty of vocational and general educators. The vocational teacher educators on this contract want to recognize the contributions of our general education faculty member, Dr. Barbara Nelson. Barbara's expertise in teaching models and lesson planning enhanced the curriculum and increased our commitment to the integration of vocational and general teacher education.

The leadership, guidance, and support provided by Dr. R. Brian Cobb, Project Director, facilitated our work on the project. Dr. Nancy Hartley and Dr. Jaime Stefan, Project Coordinators, kept progress running smoothly as we traveled and wrote. Dr. Joseph Daly and Dr. Rich Feller provided insights into the counselor's role in integration as we worked as an integration team.

In the two years in which we have been working, many people have been an important part of this team effort. Staff, graduate students, and student workers have contributed time and energy. Special thanks to: Len Albright, Bart Beaudin, Betty Bloom, Sheila Bowman, Lynn Butler, Susan Cipolla, Barbara Cisneros, Terry Deniston, Jackie Friederich, Jody Gerst, Betty Grant, Stephen Jaouen, Nathalie Kees, Katy Koenen, Jean Lehmann, Jon Lewis, Jeff Lovejoy, Dawn Mallette, Carmen Manning, Laura McIntyre, Fawn Milliken, Laura Myers, Kathy Phifer, Laurie Pierce, Tracey Seltzer, Dee Spaulding, John Sutton, Janet Trever, and Ron Warren. We appreciate the efforts of each of you.

Cathleen T. Love and Gene W. Gloeckner

MISSION AND GOALS

Mission Statement



The mission of this vocational education curriculum is to empower preservice teachers with the skills necessary to model, plan, and facilitate the acquisition of the new basic skills necessary for learners to be successful family members, workers, and learners.

Goals



To develop understanding of the new basic skills.



To generate integrated efforts to assist learners in achieving new basic skills.



To develop understanding of the multiple roles learners play in their work, family, and educational lives.



To promote public school teachers as leaders in school reform.



To develop an appreciation of the forces affecting change in the public school system.



To model through the teacher education program the integration of basic skills into the curriculum.



Perennial Problem

What should be done about integrating the new basic skills into vocational education?

BELIEF STATEMENTS

The following beliefs guided the development of the curriculum.

We Believe:



The teacher is no longer a “walking encyclopedia.” The teaching-learning model no longer resembles an assembly line in which the student enters kindergarten and progresses through the system in a “linear” fashion with “parts” being added to create a complete product. Instead, the teaching-learning model focuses on integrating content and process so that the teacher is a facilitator of learning.



It is the responsibility of vocational teachers to assume a leadership role in the facilitation of the change process from the assembly line model to an integration model.



The vocational teacher educator is a role model for the preservice teacher in curriculum areas such as these: the teaching of basic skills, teaching methods and content, evaluation techniques, and the value placed on positive learner outcomes.



The preservice teacher is capable of developing the basic skills, teaching methods and content, and evaluation techniques necessary to facilitate positive learner outcomes in the vocational classroom.



The vocational teacher must have ownership of the new basic skills to model those skills.



Debriefing of each lesson is key to enabling the preservice teacher to internalize the concepts of the lesson.



Learning to know must never be separated from learning to do. Knowledge is derived from both content and process. The acquisition of knowledge requires the active participation of the learner. Knowledge is dynamic, it is continuously reconstructed by the learner, and it is affected by constant change.¹



The aim of education is to develop individuals who are active participants in the acquisition of knowledge and in the formation of healthy systems in a democratic society.

¹Adapted from Hultgren, F. (Project Director). (1989). A conceptual guide framework for home economics curriculum in Maryland. College Park, MD: University of Maryland.

CURRICULUM FORMAT

The curriculum has been organized into five books and a review of literature. The review of literature can be used as an instructor resource in preparing to teach this curriculum and/or as a reading for students.

Each lesson developed for the vocational teacher education Integrating Basic Skills curriculum was written to stand alone. No lesson requires that students have participated in a prior lesson in the curriculum to understand the lesson you choose to teach. However, Book One, The Initial Steps, offers a knowledge base for the integration of basic skills if your students are unfamiliar with the concept.

The chart which follows summarizes the five curriculum books. The titles of the lessons in each book are provided in the second column. The last column states the practical problem that each lesson addresses.

Teacher Education Curriculum

BOOK	LESSON	PRACTICAL PROBLEM
One: The Initial Steps	Conceptualizing Basic Skills	What should be done to help teachers own the new basic skills?
	Models of Integration	What should be done to help teachers own integration?
	Keys to Integration	What should be done to promote the integration process and help remove the natural competitive barriers within schools?
Two: Changing Attitudes	Affective Domain: Changing Attitudes	What should be done to help teachers better understand how to assess student attitudes?
	Lifelong Learning	What should be done to help motivate future teachers to maintain their quest for knowledge and to broaden their concept of education beyond classroom learning?
	Student/Teacher Expectations	What should be done to help teachers recognize how student and teacher expectations affect learning?

BOOK	LESSON	PRACTICAL PROBLEM
Three: Reality of Learners	Social Conditions of Youth	What should be done to help teachers understand how societal conditions and stereotyping affect youth in the public schools?
	Learning Styles	What should be done to help teachers respond to the learning style differences of their students?
	Special Populations	What should be done to help teachers facilitate the success of <i>all</i> students in their classrooms?
	Teaching the Adult Learner	What should be done to help teachers better understand the needs of the adult learner?
Four: Change in the Public School	School Reform	What should be done to help teachers understand the school reform movement?
	Rules, Roles, and Relationships in Schools	What should be done about "turf" issues between vocational and academic education?
	Dynamics of Change	What should be done about recognizing the impact of information age technology on the learner's preparation for work, family, and further education?
	Partnerships: Involving the Community	What should be done to help teachers build relationships with healthy boundaries for themselves and others?
Five: Challenges for the Teacher	The Curriculum Challenge	What should be done to help teachers accept change as a constant in curricula?
	School Culture	What should be done to facilitate integration of the new basic skills given the power structure that exists in the public schools?
	Modeling Integration of Work and Family	What should be done to help teachers recognize how making personal lifestyle choices requires similar skills as making professional choices?

A similar set of materials has been produced by Dr. Richard W. Feller and Dr. Joseph L. Daly in the area of School Counselor Education. All materials are available by writing to: School of Occupational and Educational Studies, Education Building, Room 209, Colorado State University, Fort Collins, CO 80523.

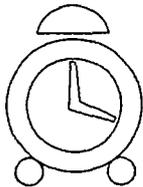
PREPARATION AND TIME ISSUES



Preparation Time

Faculty who field tested these materials recommend **at least one hour** of preparation for each lesson. Although you are acting only as a facilitator in these lessons, the content and teaching strategy may be new and/or different. Taking the time to prepare will foster delivery of both the content and process. It is particularly important to note that some lessons have an assignment that must be given to students the day prior to the lesson.

Each lesson contains a list of the materials needed to teach the lesson, and copies of any transparencies or handouts which are part of that lesson. Be sure to check for any additional teaching materials, e.g., audiovisual equipment, flipcharts, etc., which are needed to facilitate the lesson.



Time For Lesson Plan Delivery

In the field testing of the curriculum, these lessons were offered in classes which ranged in time from one to three hours. The students who were part of the field testing were adamant about the need to allow students time to discuss the topics in each lesson. Often the discussions were seen as critical to the lesson impact.

Lesson content and process throughout this curriculum are driven by the needs and interests of the students. You know the unique needs and interests of the students with whom you are working. As you review the lesson, think about the time your students will need to experience the lesson, and divide the steps in the Lesson Plan into time allotments which meet the needs of your students.

Transparencies and Handouts

Transparencies and handouts are duplicated at the end of each book, in the Instructor Resources section. The transparencies and handouts can easily be pulled out of this section and photocopied.

NEW BASIC SKILLS DEFINED

Basic skills are often defined as skills that were once referred to as the academic skills of reading, writing, and arithmetic. However, studies conducted during the last decade have focused on a broader definition of basic skills. The lack of these "new basic skills" has been associated with America's decline in productivity.

As part of the U.S. Department of Education project that funded the development of this curriculum, an extensive literature review was completed: Integrating Basic Skills into Vocational Teacher Education Curricula: Review of Literature, (Gloeckner, G., Cobb, B., Love, C., & Grant, B.).² One goal of the literature review was to provide an operational definition of the "new basic skills" for vocational teacher education. The authors sought to answer the question, *What knowledge and principles in liberal arts and occupational skill training help lead to success in work, family, and education?* The literature supported ten categories of new basic skills. In this curriculum, the new basic skills are defined as the knowledge and skills associated with these ten categories:

1. Learning to Learn
2. Reading, Writing, and Mathematics
3. Communication
4. Adaptability (creative and critical thinking and problem solving)
5. Personal Management (self-esteem, goal setting/motivation, and personal/career development)
6. Group Effectiveness (interpersonal skills, negotiation, and teamwork)
7. Influence (organizational effectiveness and leadership)
8. Technology
9. Science
10. Home/Family Management and Relationships

²Copies of the complete literature review are available from: School of Occupational and Educational Studies, Education Building, Room 209, Colorado State University, Fort Collins, CO 80523.

GUIDE TO LESSON CATEGORIES

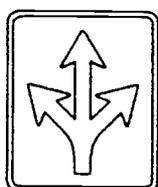
Each lesson format is identical, and each category within a lesson has its own icon, for ease in locating the category in any lesson. Lesson categories are described below.



Perennial Problem

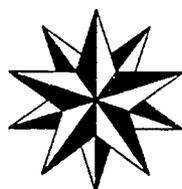
A Perennial Problem is one faced over and over by successive generations of teachers. Perennial Problems include enduring questions about how to improve the quality of education. Posing curriculum lessons as Perennial Problems avoids focusing on time-specific problems. Developers of this curriculum have used the Perennial Problem approach throughout the curriculum. This approach provides a convenient framework for addressing issues involved in integrating new basic skills into vocational education.

The Perennial Problem informing this curriculum is: **What should be done about integrating the new basic skills into vocational education?**



Practical Problem

A Practical Problem identifies an action that can help address the Perennial Problem. This action is born of reasoned thought and sound judgment. Posing a Practical Problem in a curriculum is a way of focusing on both affective and cognitive processes, on both knowledge and values, on life experiences, and on thought and action. The Practical Problem approach can be used to help analyze a teaching situation, identify and address an education dilemma, generate and critique alternatives, and make value judgments.



Justification for Lesson

To develop this curriculum, teachers integrating the new basic skills into vocational education were asked the question, "What would you have liked to have studied/discussed in your preservice education that would have prepared you to do a better job of integrating these skills into your work?" Their responses framed the lessons developed. The Justification for Lesson describes the contribution each lesson can make

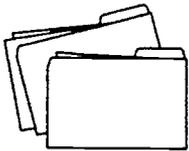
in preparing teachers for integrating the new basic skills into vocational education.

Learner Outcome



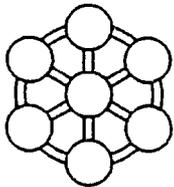
A Learner Outcome is a competency, level of knowledge, or quality that students should be able to demonstrate when they complete the lesson. Outcome-based education requires organizing the curriculum so that all students can reach the outcome. It demands a different approach to pedagogy, with emphasis on active modeling, expecting success, intensive engagement, diagnostic assessment, and frequent feedback to students.

Instructor Resources



This section lists all materials and supplies needed for the lesson, and gives guidelines for copying, adapting, and distributing necessary resources.

Teaching Strategy Modeled



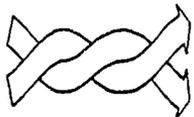
Because knowledge is derived from both content and process, the teaching strategy modeled in the delivery of each lesson is critical to the expected outcome. A short synopsis of the “what,” “why,” “when,” and “how” for each strategy is provided as a handout in each lesson. If you are unfamiliar with the teaching strategy, there is a source given on the handout for further exploration.

Lesson Plan



The Lesson Plan provides the content, new basic skills, process, and application objectives for each lesson. The step-by-step delivery of the lesson is given in the Teaching-Learning Interaction and the Debriefing. The final part of the Lesson Plan offers options for evaluation.

Teaching-Learning Interaction



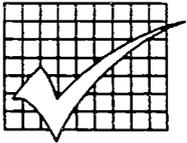
The Teaching-Learning Interaction is the heart of the Lesson Plan. It includes an introduction and a series of steps to help guide the teacher educator through the lesson.



Debriefing Strategies

Debriefing Strategies are options for summarizing the lesson. In teacher education classes, students need the opportunity to discuss the content learned and the process (teaching strategy) in which they learned it. In addition, students are given the opportunity through debriefing to analyze what new basic skills they were practicing while participating in the lesson.

Debriefing helps education students critically examine how this lesson applies to their role as vocational teachers. Debriefing is an important part of the Lesson Plan. Planning time for debriefing is essential.



Evaluation Options

Evaluation Options for each lesson are based on the lesson's content, process, and application objectives. These options are meant to be adapted to meet the needs of your students.



Individualized Learning Plan

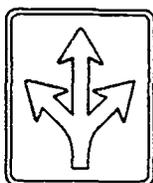
The plan for individualizing the lesson was provided by field test sites with individualized programs. The demonstration of competency required in the Individualized Learning Plan is the teaching of the lesson to a designated group.

THE CURRICULUM CHALLENGE



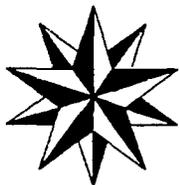
Perennial Problem

What should be done about integrating the new basic skills into vocational education?



Practical Problem

What should be done to help teachers accept change as a constant in curricula?



Justification for Lesson

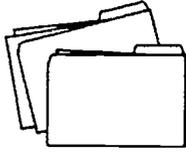
Teaching the new basic skills is one way schools can arm students with the practical abilities they will need to cope with change in the workplace, in the community, and at home. Reviewing curricula designed to integrate academic and vocational education can help teachers prepare to meet the present and future needs of their students.



Learner Outcomes

The learner will analyze curriculum materials.

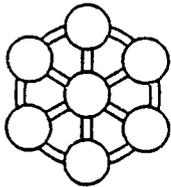
The learner will develop an awareness of the rate at which new curriculum materials are emerging to replace older, outdated materials.



Instructor Resources

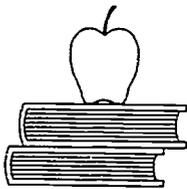
Handouts:

- Applied Academics: The Future of Education for Employment
(7 pages)
- Applied Academics Quizzes (2 pages)
- Applied Academics Quizzes Answer Key
- What is the National Network?
- Memory Teaching Strategies



Teaching Strategy Modeled

Memory Teaching Strategies



LESSON PLAN

Objectives:

Content:

The learner will prepare to teach at least one "applied academics" lesson.

The learner will reflect on the need to keep informed about curriculum changes in his or her educational area.

New Basic Skills:

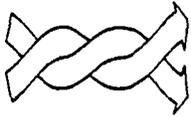
The learner will identify the new basic skills practiced in this lesson.

Process:

The learner will evaluate Memory Teaching Strategies.

Application:

The learner will know how to teach an "applied academics" lesson in the learner's educational area.



Teaching-Learning Interaction

Day Prior to Lesson:

Distribute the 7-page handout titled Applied Academics: The Future of Education for Employment. Distribute the handout titled Memory Teaching Strategies. Instruct the students to read the handouts before tomorrow's class.

Divide the class into four Applied Academics Expert Groups:

Group 1: Applied Physics (Principles of Technology)

Group 2: Applied Mathematics

Group 3: Applied Communication

Group 4: Applied Biology/Chemistry

Explain that each group member is expected to be prepared to teach a 10-15 minute lesson, using Memory Teaching Strategies, on the facts contained in his or her group's area of expertise. For example, if a student is in Group 3: Applied Communication, the student will be expected to teach on the Applied Communication section of the Applied Academics handout.

Day of Lesson:

Introduction:

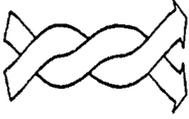
Ask the students to form the Expert Groups established the day before. All Applied Communication experts should be in one group, all Applied Mathematics experts in another, and so on. Assign one Teacher from each group to teach the group's lesson. (Possible method of assigning each Teacher: Choose the student whose birthday is closest to the day of the lesson.)

Regroup the students so that the new groups consist of at least one member of each original Applied Academics Expert Group. That is, each new group should have at least one member from Groups 1, 2, 3, and 4. Each group should also include only one of the four Teachers.

Learning Activities:

Step 1:

Instruct the Teachers to teach their lessons. Give them 10-15 minutes to complete this task.



Teaching-Learning Interaction, continued

Learning Activities, continued:

Step 2:

After the lessons, pass out a copy of the appropriate Applied Academics Quiz to each member of a group. For example, the Applied Communication Quiz should go to each member of the group which received instruction on Applied Communication. Allow five minutes to complete the quiz. Ask each Teacher to grade his or her group's quizzes and determine an average grade for the group.

Step 3:

Have each Teacher explain the Memory Teaching Strategy used to help his or her group memorize the lesson's material.

Ask the following questions:

1. How did you like the Memory Strategy used by the Teacher?
2. How could the lesson have been improved?
3. Did the quiz give you test anxiety?



Debriefing Strategies

Content:

Ask the following questions:

1. How do applied academics curriculum materials differ from traditional curriculum materials?
2. Have any of you used applied academics materials? If so, how did they work for you?
3. Would you have liked to have used applied academics materials when you were in high school?
4. What do you like most about applied academics materials?
5. What do you like least about applied academics materials?
6. How can teachers keep up with the curriculum changes that are occurring so rapidly?



Debriefing Strategies, continued

Content, continued:

7. Do you think it is better to write your own curriculum materials or to adapt/adopt materials already available?
8. What are some advantages and disadvantages of adopting curriculum materials?
9. Distribute the handout titled What Is the National Network? Explain the value of the Network to the class.

New Basic Skills:

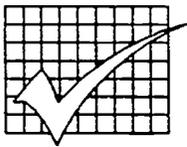
During the lesson today, what new basic skills did you practice?

- Technology
- Group effectiveness
- Influence
- Communications

Process:

Have students refer to the handout titled Memory Teaching Strategies and ask the following questions:

1. Give examples of instances in which students need to memorize content.
2. What are other ways, besides those in the handout, that teachers can help students memorize?
3. As a student, how do you memorize content? Do you have any memory tricks?

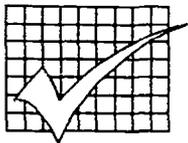


Evaluation Options

Content:

Ask each student to refer to the handout titled Applied Academics: The Future of Education for Employment. Have each student complete the three quizzes he or she has not yet taken.

Assign a one page evaluation of a student or teacher manual from one of the applied academics curriculum packages.



Evaluation Options, continued

Process:

Have each student develop a lesson in the student's content area that uses a Memory Teaching Strategy.

Application:

Have students visit a school that is using applied academics materials. Have them interview the teacher and at least two students from the applied academics class and write a one page summary of the interviews.



Individualized Learning Plan

If a student is learning this content in an individualized program, the student should be given the entire lesson. The student should read all materials. The college supervisor will designate which Evaluation Options will be required of the student. To demonstrate competency, the student should prepare to teach the lesson to a group designated by the college supervisor. Suggestions for such groups include: teacher groups, service organizations, youth groups, etc.

Applied Academics: The Future of Education for Employment

The benefits of "applied" curricula, which integrate academic and vocational instruction, have been discussed in journals and presentations for many years. In support of applied education, The Center for Occupational Research and Development (CORD) and the Agency for Instructional Technology (AIT) have developed a series of applied academics curricula. The curricula outlined in this article not only provide solid "stand alone" courses but also provide courses that are models for integrating academics into occupational education. Classroom teachers are the key to introducing these applied curricula into schools.

Consortium

States share a common problem: Their business and industry leaders continue to castigate secondary education for producing students who lack adequate academic skills when they enter the workforce. States have found that pooling funds to address this problem is more effective than are individual state efforts to address it. Each of the applied academics curriculum packages described below was developed by a consortium effort between states. In most cases, states pooled Carl Perkins funds to develop the packages. (For example, the Principles of Technology package used approximately \$3.5 million in pooled funds for its initial development.)

Principles of Technology

Principles of Technology was the first applied academics curriculum developed. Principles of Technology is a two year applied science curriculum designed to be used by sophomore through senior secondary students. Both CORD and AIT were involved in its development.

The 14 content areas in the Principles of Technology curriculum are:

First Year

Force
Work
Rate
Resistance
Energy
Power
Force Transformers

Second Year

Momentum
Waves and Vibrations
Energy Converters
Transducers
Radiation
Optical Systems
Time Constants

Applied Academics, continued

The power of Principles of Technology comes from the fact that each of these 14 content areas is studied in all of the following four systems: mechanical, fluid (pneumatics and hydraulics), electrical, and thermal. As an example, students studying resistance would learn that the formulas and concepts underlying the principles of resistance in electrical systems are similar to those in fluid systems, mechanical systems, and thermal systems. Due to the hierarchical nature of Principles of Technology, those who have researched and taught it recommend that it be taught as a comprehensive "stand alone" package. Principles of Technology is not designed to be integrated into existing vocational or technology courses, but is an important ingredient of most vocational programs.

In 1988, in the March/April issue of Science Books and Films, the American Association for the Advancement of Science gave Principles of Technology its top rating for "technical physics" instruction. Many schools across the country allow students science credit for taking the curriculum, and many universities accept the curriculum as a science credit toward admission.

Applied Mathematics

Applied Mathematics was developed by AIT, and consists of 33 units taught over two years.

APPLIED MATHEMATICS YEAR ONE		
<i>Optional Units for Review</i>		
A	Getting to Know Your Calculator	Revisiting Fractions, Decimals, and Percents with the Help of a Calculator
B	Naming Numbers in Different Ways	
C	Finding Answers with Your Calculator	

Applied Academics, continued

APPLIED MATHEMATICS YEAR ONE		
<i>Applied Math Units</i>		
1	Learning Problem Solving Techniques	Basic Math Skills that Everyone Needs
2	Estimating Answers	
3	Measuring in English and Metric Units	
4	Using Graphs, Charts, and Tables	
5	Dealing with Data	
6	Working with Lines and Angles	Geometry
7	Working with Shapes in Two Dimensions	
8	Working with Shapes in Three Dimensions	
9	Using Ratios and Proportions	Basic Skills in Algebra
10	Working with Scale Drawings	
11	Using Signed Numbers and Vectors	
12	Using Scientific Notation	
13	Precision, Accuracy, and Tolerance	
14	Solving Problems with Powers and Roots	
15	Using Formulas to Solve Problems	

Applied Academics, continued

Applied Mathematics II

Applied Mathematics II is in the formative stages. The goal is to develop a curriculum which will lead students to a mathematics achievement level that is equivalent to algebra.

APPLIED MATHEMATICS YEAR TWO		
16	Solving Problems that Involve Linear Equations	Basic Skills in Algebra
17	Graphing Data	
18	Solving Problems that Involve Nonlinear Equations	
19	Working with Statistics	Quality Control
20	Working with Probabilities	
21	Using Right-Triangle Relationships	Introduction to Trigonometry
22	Using Trigonometric Functions	
23	Factoring	Higher Skills in Algebra
24	Patterns and Functions	
25	Quadratics	
26	Systems of Equations	
27	Inequalities	
28	Geometry in the Workplace 1	Applications of Geometry in the World of Work
29	Geometry in the Workplace 2	
30	Solving Problems with Computer Spreadsheets	Using Computers to Solve Problems
31	Solving Problems with Computer Graphics	
32	Quality Assurance and Process Control 1	Practice and Applications of QA/QC in the Workplace
33	Quality Assurance and Process Control 2	

Applied Academics, continued

Applied Mathematics may be taught as a "stand alone" course, or each unit may be taught individually and used to reinforce mathematical concepts taught in other courses. For example, if students in an automotive technology program are having difficulty understanding the concept of tolerance, the teacher could use Unit 13, "Precision, Accuracy, and Tolerance." Employing the unit's laboratory activities, student manuals, and videotape could help enhance student understanding of the concepts of precision, accuracy, and tolerance while integrating mathematics into the course.

Applied Communication

Applied Communication is a comprehensive set of learning materials designed by AIT and pilot tested in the 1988-1989 academic year. Its purpose is to help high school and other students develop and refine career related communication skills. The instructional materials are divided into 15 modules with a total of 150 lessons. The modules may be used alone, in any order, to enhance existing communications/language arts/English or vocational courses, or all 15 modules may be used as the basis for a year long course. The student materials are designed for use by individuals who have at least an eighth grade level of reading ability. Applied Communication is not a remedial course. The 15 modules in the Applied Communication curriculum are:

1. Communicating in the Workplace
2. Gathering and Using Information in the Workplace
3. Using Problem Solving Strategies
4. Starting a New Job
5. Communicating with Coworkers
6. Participating in Groups
7. Following and Giving Directions
8. Communicating with Supervisors
9. Presenting Your Point of View
10. Communicating with Clients and Customers
11. Making and Responding to Requests
12. Communicating to Solve Interpersonal Conflicts
13. Evaluating Performance
14. Upgrading, Retraining, and Changing Jobs
15. Improving the Quality of Communication

Applied Biology/Chemistry

Applied Biology/Chemistry is being developed by CORD and is funded by a consortium of 38 states. The proposed materials include 12 instructional units each containing video segments, laboratory activities, and printed text. They will be infusable into existing curricula or can be taught together as a "stand alone" course.

Applied Academics, continued

The units are each designed for 15 to 30 hours of student activity. The twelve units in the Applied Biology/Chemistry curriculum are:

1. Natural Resources: provides an introduction to natural resources, and their uses and problems. This unit was the prototype for the course, and has been pilot tested and revised. It has been field tested in its revised form.
2. Water: covers properties and uses of water, water quality, and water cycles. This unit is currently being reviewed, and will be revised and printed for field testing during the 1991-1992 school year.
3. Air and Other Gases: covers properties and behavior of gases as related to life processes and commercial applications. This unit has been reviewed, and is under revision for field testing during the 1991-1992 school year.
4. Continuity of Life: includes cells, DNA, protein synthesis, genetics, reproduction, evolutionary processes, and genetic engineering and related biotechnologies. This unit is complete, and was field tested during the 1990-1991 school year.
5. Nutrition: covers the food and feed requirements of humans and other animals at different life stages and in disease states. It also covers digestion, absorption, and food technology. This unit is complete, but field testing will continue in the 1991-1992 school year.
6. Disease and Wellness: addresses categories of disease, pathogens, the immune system, transmission of diseases, major health threats, chemical addiction, and wellness. This unit is complete, and was field tested during the 1990-1991 school year.
7. Plant Growth and Reproduction: includes photosynthesis, sexual and asexual reproduction, requirements for plant growth and production, and characteristics of plants that make them suitable for food, fiber, and other applications.
8. Life Processes: addresses the processes and behaviors humans and other animals use to maintain a constant internal state in varying environmental conditions.
9. Synthetic Materials: covers inorganic compounds, simple organic compounds, polymers, composites, and their production and uses.
10. Waste and Waste Management: addresses issues related to the control of municipal solid wastes, sewage and wastewater, farm and ranch wastes, industrial wastes classified as hazardous, and trends in waste disposal for the future.
11. Microorganisms: includes types of microorganisms, their roles in natural systems, and their industrial and biotechnology applications.
12. Community of Life: discusses ecological principles by comparing natural ecosystems to a variety of human-managed environments.

Applied Academics, continued

Workplace Readiness: Education for Employment

Another curriculum being developed through the consortium approach is Workplace Readiness: Education for Employment. This program is being developed by AIT. The following table summarizes the content and materials available.

	UNIT: Problem Solving in the Workplace	UNIT: Teamwork	UNIT: Self-Management	UNIT: About the Project
	Modules 1. Changing workplace 2. Defining the situation 3. Stating the goals 4. Generating ideas 5. Preparing a plan 6. Taking action (30 class periods)	Modules 1. Changing workplace 2. Interpersonal skills 3. Negotiation in work situations 4. Job-related teamwork 5. Leadership at work (25 class periods)	Modules 1. Changing workplace 2. Personal development 3. Dependability 4. Quality and quantity of work (20 class periods)	
Student Video Programs	<ul style="list-style-type: none"> • 15-min. video for overview module • Five 15-min. videos for skill-building modules 	<ul style="list-style-type: none"> • 15-min. video for overview module • Four 15-min. videos for skill-building modules 	<ul style="list-style-type: none"> • 15-min. video for overview module 	
Computer Software	<ul style="list-style-type: none"> • Application software for skill-building modules 2 through 6 			
Videodisc			<ul style="list-style-type: none"> • 60-min. videodisc for skill-building modules 2 through 6 	
Instructor Video Programs	<ul style="list-style-type: none"> • 15-min. introduction to instructional video and computer technology 	<ul style="list-style-type: none"> • 15-min. introduction to instructional video technology 	<ul style="list-style-type: none"> • 15-min. introduction to instructional video and videodisc technology 	
Informational Video Programs				<ul style="list-style-type: none"> • 15-min. info. video • 3-min. recruitment video
Printed Materials	<ul style="list-style-type: none"> • Instructor's guide • Student learning pkt* • User's manual 	<ul style="list-style-type: none"> • Instructor's guide • Student learning pkt* 	<ul style="list-style-type: none"> • Instructor's guide • Student learning pkt* 	<ul style="list-style-type: none"> • Implementation hand-book

* Optional

Applied Academics Quizzes

Principles of Technology Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Principles of Technology?
4. How much money was used to develop Principles of Technology?
5. True or False: Principles of Technology is a two year applied science curriculum designed to be used by sophomore through senior secondary students.
6. There are 14 content areas in the Principles of Technology curriculum. What are the seven content areas taught in the first year?
7. What are the four systems studied in each of the 14 content areas?
8. Why should Principles of Technology be taught as a comprehensive "stand alone" package?

(cut here)

Applied Mathematics Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Applied Mathematics?
4. What organization was responsible for the development of Applied Mathematics?
5. What are the three Optional Units (A, B, and C) in the Applied Mathematics Curriculum?
6. Applied Mathematics consists of 33 units and is taught over how many years?
7. What are the three areas the Applied Mathematics curriculum addresses in the 15 math units covered in Year One?
8. Can individual units be taken out of the Applied Mathematics package and taught as separate units to reinforce concepts in other courses?

Applied Academics Quizzes

Applied Communication Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Applied Communication?
4. What organization was responsible for the development of Applied Communication?
5. How many modules are included in the curriculum's instructional materials?
6. How long does it take to teach this entire course using all the modules?
7. Can the modules be used singly and in any order?
8. What is the minimum reading level needed for completion of this curriculum?

(cut here)

Applied Biology/Chemistry Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Applied Biology/Chemistry?
4. What organization was responsible for the development of Applied Biology/Chemistry?
5. How many instructional units will make up the curriculum?
6. The units are designed for how many hours of student activity?
7. True or False: Applied Biology/Chemistry must be taught as a "stand alone" course.
8. How many states make up the consortium developing Applied Biology/Chemistry?

Applied Academics Quizzes

Answer Key

Principles of Technology Quiz

1. Center for Occupational Research and Development
 2. Agency for Instructional Technology
 3. Carl Perkins funds
 4. 3.5 million dollars
 5. True
 6. Force, Work, Rate, Resistance, Energy, Power, Force Transformers
 7. Mechanical, Fluid, Electrical, Thermal
 8. Because it is hierarchical in nature
-

Applied Mathematics Quiz

1. Center for Occupational Research and Development
2. Agency for Instructional Technology
3. Carl Perkins funds
4. AIT
5. A: Getting to Know Your Calculator; B: Naming Numbers in Different Ways; C: Finding Answers with Your Calculator
6. 2 years
7. (1) Basic Math Skills that Everyone Needs; (2) Geometry, (3) Basic Skills in Algebra
8. Yes

Applied Communication Quiz

1. Center for Occupational Research and Development
 2. Agency for Instructional Technology
 3. Carl Perkins funds
 4. AIT
 5. 15 modules
 6. One year
 7. Yes
 8. Eighth grade reading level
-

Applied Biology/Chemistry Quiz

1. Center for Occupational Research and Development
2. Agency for Instructional Technology
3. Carl Perkins funds
4. CORD
5. 12 units
6. 15-30 hours
7. False
8. 38 states

What is the National Network?

The National Network for Curriculum Coordination in Vocational and Technical Education is referred to as the National Network or the NNCCVTE. Founded in 1972, the National Network is made up of six regional Curriculum Coordination Centers and a network of State Liaison Representatives. The State Liaison Representatives, one in each state and trust territory, provide educators with curriculum materials from the Curriculum Coordination Centers and can assist in the development of curriculum and instructional materials. The six regional Curriculum Coordination Centers serve the states and trust territories in their regions. Get to know your State Liaison Representative and learn more about the National Network by contacting the nearest Curriculum Coordinating Center.

The National Network has:

- Six regional centers full of resources.
- A representative in every state.
- State of the art technical assistance.
- Access to the highest quality vocational education materials.
- A computerized database.
- Free, quick, personalized service.

Materials Cover these Topics:

- Administration
- Agriculture
- Basic Skills
- Bilingual Education
- Business Education
- Education (General)
- Employability
- Equity
- Health Occupations
- Home Economics Education
- Legislation
- RFPs

The National Network Provides Technical Assistance with:

- DACUM Occupational Analysis
- Task List Verification
- Microcomputers
- Library Computerization
- State Technical Computers

National Network Resources Include:

- Curriculum Products
- Textbooks
- Reports
- Task List Clearinghouse
- Curriculum Consortium
- Electronic Messages
- Databases
- Software
- State Plans
- Meetings
- Newsletters
- Business & Industry Linkages
- Task List Verification

Services Include Assistance with:

- Curriculum
- Textbooks
- State Plans
- Microcomputer Software
- Research Reports
- Technical Assistance
- Annual Meetings
- Newsletters
- Linkages
- Searches
- Workshops

What is the National Network?, continued

NNCCVTE Curriculum Coordination Centers

Northeast Curriculum Coordination Center
Martha Pocsi, Director
New Jersey State Dept. of Education
Division of Vocational Education
Aberdeen, NJ 07747
201/290-1900

Southeast Curriculum Coordination Center
Rebecca Love-Wilkes, Director
Mississippi State University
P.O. Drawer DX
Mississippi State, MS 39762
601/325-2510

East Central Curriculum Coordination Center
Rebecca S. Douglass, Director
Sangamon State University, F-2
Springfield, IL 62794-9243
217/786-6375

Midwest Curriculum Coordination Center
Richard Makin, Director
1500 W. 7th Ave.
Stillwater, OK 74074
405/377-2000

Northwest Curriculum Coordination Center
Bill Daniels, Director
Old Main, Room 478
St. Martin's College
Lacy, WA 98503
206/438-4456

Western Curriculum Coordination Center
Lawrence F. H. Zane, Director
College of Education
University of Hawaii
1776 University Ave.
Wist Hall 216
Honolulu, HI 96822-0001
808/956-7834

(based on a brochure describing the NNCCVTE)

Memory Teaching Strategies

What are Memory Teaching Strategies?

Memory Teaching Strategies (mnemonic devices) are teaching techniques that help students learn unfamiliar material by increasing their capacity to store and retrieve information.

Why Should You Use Memory Teaching Strategies?

Throughout our lives, we need to be able to memorize well. Improving memorization skills increases learning power, saves time, and gives us a better storehouse of information. In addition, awareness of how to learn and how to enhance learning results in a sense of mastery and control over our future.

When Should You Use Memory Teaching Strategies?

These strategies are effective when students are attempting to master lists of unstructured material or when material needs to be memorized. The method is successful when teacher-led, but it is most beneficial when the student masters the technique well enough to employ it whenever material must be memorized.

How to Use Memory Teaching Strategies

Memory Teaching Strategies lead the student through four phases. These phases require attention and employ techniques that enhance recall.

1. Phase One: Attending to the Material (use underlining, listing, and reflecting)
 - underlining — underlining items that need to be remembered
 - listing — recording ideas separately and rephrasing them in one's own words
 - reflecting — comparing and determining relationships among ideas

Memory Teaching Strategies, continued

2. Phase Two: Developing Connections (use techniques that help make material familiar; develop connections using key words, substitute words, and link words)
 - key word — selecting one word to represent a longer thought or several connected thoughts
 - substitute word — connecting an abstract word or phrase with something that sounds like, reminds, or can be pictured in a way that allows an association with the abstract word or phrase (examples: "I'll ask her" with Alaska, "dark wind" with Darwin)
 - link word — connecting two ideas, with the second connecting to a third, and so on; the student can imagine an unusual picture that connects all the words in the list

3. Phase Three: Expanding Sensory Images (use techniques of association, ridiculous association and exaggeration, and repetition)
 - association — associating new information with something already known (example: learning the music staff, EGBDF, by associating it with Every Good Boy Does Fine)
 - ridiculous association — forming associations, as above, but enhancing them with vivid, ridiculous, impossible, or illogical items
 - repetition — repeating items in a list over and over until they are embedded in memory

4. Phase Four: Practicing Recall (practice recalling the material until it is completely learned)

Reference

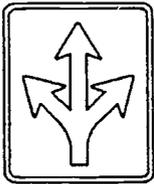
Joyce, B. & Weil, M. (1986). Models of teaching. Englewood Cliffs, NJ: Prentice-Hall, Inc.

SCHOOL CULTURE



Perennial Problem

What should be done about integrating the new basic skills into vocational education?



Practical Problem

What should be done to facilitate integration of the new basic skills given the power structure that exists in the public schools?



Justification for Lesson

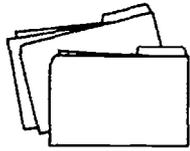
Every school system has a culture. Teachers need to understand the beliefs, values, and norms composing the culture in which they teach. With this understanding, they can assess support — among administrators, guidance counselors, faculty, and staff — for integrating the new basic skills into education.



Learner Outcomes

The learner will understand the influence of school culture on school practices.

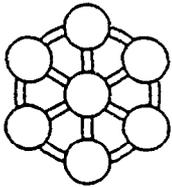
The learner will develop strategies for integrating the new basic skills into education, given an existing school culture.



Instructor Resources

Handouts:

Case Studies 1 through 4
Case Study Strategy



Teaching Strategy Modeled

Case Study Strategy



LESSON PLAN

Objectives:

Content:

The learner will study how a school's culture affects its procedures.

The learner will develop techniques for integrating the new basic skills into a variety of school cultures.

New Basic Skills:

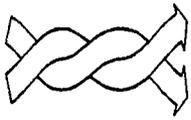
The learner will identify the new basic skills practiced in this lesson.

Process:

The learner will evaluate the Case Study Strategy.

Application:

The learner will know how to assess the culture of a school.



Teaching—Learning Interaction

Introduction:

Have students brainstorm what “culture” means to them in the context of “organizational culture.”

Explain that today, through case studies, they will explore the impact of school culture on their ability as teachers to integrate the new basic skills.

Learning Activities:

Step 1:

Assign students to small groups. Assign each of the groups one of the handouts titled Case Study (1 through 4).

Ask each group to read its case study and address the questions printed below the case study.

Step 2:

Have a spokesperson from each group summarize the group’s case study, discussing the problem, key people, and issues in it. Have the spokesperson explain the group’s solution to the problem presented in the case study. Ask each group to explain their solution.



Debriefing Strategies

Content:

Ask the following questions:

1. What are some strategies promoting change that could be used in each of the case studies presented?
2. In what ways can a teacher use the power issues in a school to help implement change?
3. How can you recognize when you are being used as a pawn in a power struggle?

New Basic Skills:

During the lesson today, what new basic skills did you practice?

- Communication
- Adaptability
- Group effectiveness

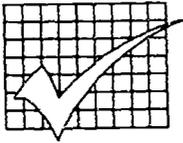


Debriefing Strategies, continued

Process:

Distribute the handout titled Case Study Strategy and ask the following questions:

1. What are the advantages and disadvantages of the Case Study Strategy?
2. Do you think case studies can be used as an effective teaching tool in high schools?



Evaluation Options

Content:

Ask the students to think about the case study they reviewed in the lesson. Ask them to write a two page paper on their perceptions of the school culture in the case study. Have them include in the paper strategies they would use to integrate the new basic skills into curricula within **that** school culture.

Process:

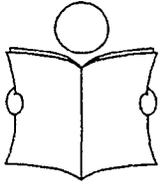
Have the students develop a lesson plan for a vocational class that uses case studies as a teaching tool.

Application:

Have the students visit a local school and ask a vocational teacher the following questions:

- Who are the most powerful people in this school?
- How do you get the support of those people?
- What advice would you give a teacher who is new to this school regarding power issues?
- How is the school board influenced in this school system?
- What are the roles of secretaries, janitors, and other support personnel in the power structure or culture of this school?

Ask the students to write a one page description of the school's culture, based on the answers given to these questions.



Individualized Learning Plan

If a student is learning this content in an individualized program, the student should be given the entire lesson. The student should read all materials. The college supervisor will designate which Evaluation Options will be required of the student. To demonstrate competency, the student should prepare to teach the lesson to a group designated by the college supervisor. Suggestions for such groups include: teacher groups, service organizations, youth groups, etc.

Case Study 1

This is a very progressive school. The principal has the support of the teachers. She has changed the school from being very traditional to being a model for the integration of (1) basic skills into vocational education and (2) academic and vocational education. Leaders in the school's integration efforts come from the science, technology, mathematics, and vocational departments.

Every student is required to develop and follow a program leading to competencies in areas such as:

1. algebra
2. basic understanding of the physical world
3. basic understanding of the chemical world
4. basic understanding of technology
5. problem solving
6. communications

Students must sign a program which requires them to take courses which lead to competencies in each of these areas.

The guidance department has not been supportive of this move toward integration. The guidance counselors believe it will be more difficult to demonstrate that students have met university entrance requirements. The guidance counselors have recently approached the school board, which has agreed to look at the new integration model to insure that students are meeting university entrance requirements.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study 2

This is a very small school of 200 high school students. There are 15 teachers, one principal, one assistant principal, and one counselor. The vocational teacher, science teacher, and English teacher have outlined an integrated curriculum model to assist in teaching the new basic skills. They have approached the principal with the model. The principal, however, believes that the school must "stick with the basics." She believes that there is a strong need for every student to have home economics and woodworking skills, and sees no room in the curriculum for changes.

The school board consists primarily of farmers and ranchers. The guidance counselor is a proponent of the integration plan. The assistant principal is in total agreement with the principal's view. The custodian is the "gate keeper." She knows everything about everybody in the school.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study 3

The principal calls a meeting to discuss the integration of the new basic skills into vocational education. At that meeting, battle lines are drawn. One vocational teacher is excited about and supportive of the changes; the second vocational teacher believes the changes would be a waste of time, and thinks integration is a trend like "career education" which will go away in a few years.

The science teacher believes deeply that integration is a key to making science a part of daily life. However, the mathematics teacher strongly believes that integration activities will reduce the focus on mathematics and reduce students' abilities to solve math problems. The mathematics teacher is concerned that she cannot complete the items on her syllabus now, and that integration efforts would simply produce a watered down or "dummied down" mathematics class.

Even the secretaries, both of whom have children attending the school, are divided on this issue. John, the principal's secretary, agrees with integration. The other secretary, whose father is a school board member, believes the integration efforts will destroy the school.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study 4

The superintendent of schools has just sent a memo to the three high schools within the district. The memo reads: "I am very concerned about the national reports indicating a lack of basic skills among our students. I am requiring that each high school develop a plan to integrate the new basic skills into the curriculum. This plan should be submitted to me within six months of the date on this memo. There will be \$20,000 available per school to implement these changes. We must provide an education that will permit our students to compete in the next century. Let's work together toward a program of which we can all be proud."

Several teachers have formed a secret group to formulate an action plan *against* the superintendent's plan. You have been asked to attend a meeting of this secret group.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study Strategy

What Is the Case Study Strategy?

The Case Study Strategy is a teaching technique that uses stories or scenarios (case studies) to involve students in solving problems similar to their own real life problems.

Why Use the Case Study Strategy?

This strategy can be used to:

1. imbed the details of the case study in the student's memory;
2. expand the student's search for solutions;
3. provide a test of assumptions;
4. allow systematic problem solving;
5. reveal successful and unsuccessful real life practices;
6. merge theory with practice;
7. encourage use of higher level thinking.

When Should You Use the Case Study Strategy?

Teachers can use this strategy when they want students to consider real life problems. Reviewing case studies allows students to concentrate on attempted solutions to real life problems and to reflect on why these attempted solutions did or did not work.

How to Use the Case Study Strategy

The written format of a case study should include a Title, a Nature of the Problem section, and either a Description of the real life solution or a Question leading students to formulate possible solutions.

1. Choose a case study.
2. Share the case study's content and context with students.
3. Describe possible causes of the way the problem in the case study arose and was addressed by those involved.
4. Describe possible alternative ways of addressing the problem.

Case Study Strategy, continued

Debriefing the Case Study Strategy

To debrief use of the Case Study Strategy, teachers should help students reflect on the "what," "why," and "how" of what they do compared to the "what," "why," and "how" of what others do. This will allow students to analyze how inquiry, information gathering, and personal values affect real life decisionmaking.

Things to Remember

1. Ask, "What if?"
2. Be sure students consider the consequences of their hypothetical solutions.
3. Analyze and evaluate the outcomes of their hypothetical solutions.

Reference

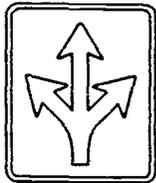
Achelles, C. M. (1989, October). Challenging Narcissus, or reflecting on reflecting. Paper presented at the Annual Meeting of the University Council on Educational Administration. Scottsdale, AZ. (ERIC Document ED 313 774)

MODELING INTEGRATION OF WORK AND FAMILY



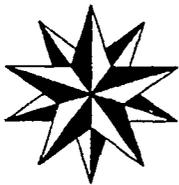
Perennial Problem

What should be done about integrating the new basic skills into vocational education?



Practical Problem

What should be done to help teachers recognize that making personal lifestyle choices requires some of the same skills needed to make professional choices?



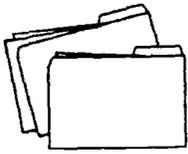
Justification for Lesson

Living a balanced, healthy life requires making conscious choices supporting wellness. Some of these positive choices are the same ones that should be modeled by teachers integrating new basic skills instruction into curriculum.



Learner Outcome

The learner will recognize how decisionmaking skills used to maintain a healthy lifestyle mimic the skills necessary to model the new basic skills and integrate them into curriculum.



Instructor Resources

Handouts:

Wellness and Self-Care: Suggestions for Counselors and Other Role Models (seven-page article)

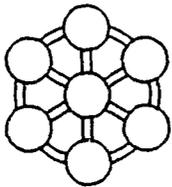
Circle of Knowledge Strategy

Transparency:

Six Suggestions for Choosing Wellness

Supplies:

Board, chalk, markers, blank newsprint paper



Teaching Strategy Modeled

Circle of Knowledge Strategy



LESSON PLAN

Objectives:

Content:

The learner will study how to make choices that promote a healthy lifestyle.

The learner will study how the framework for making healthy lifestyle choices can be applied to integrating the new basic skills into education.

New Basic Skills:

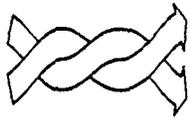
The learner will identify the new basic skills practiced in this lesson.

Process:

The learner will evaluate the Circle of Knowledge Strategy.

Application:

The learner will be better equipped to use personal life management skills when integrating the new basic skills into curriculum.



Teaching—Learning Interaction

Day Prior to Lesson:

Have the students read the seven-page handout titled "Wellness and Self-Care: Suggestions for Counselors and Other Role Models."

Day of Lesson:

Introduction:

Focus discussion on wellness and self-care. Ask the students to discuss what "maintaining balance for a healthy lifestyle" means to them.

Write their ideas on the board or on blank newsprint paper. Ask questions which draw upon the student dialogue, such as the following:

1. If leisure time is important to you, what do you do to make sure you have time for leisure?
2. What choices do you make which facilitate physical activity?
3. What do you give up when you take on new responsibility?
4. What impact does it have on your family when you take on new responsibility?

Six Suggestions for Choosing Wellness

1. Develop an awareness of the choices you are now making.
2. Create a support system which encourages wellness.
3. Evaluate your current criteria for making choices, and develop a belief structure which supports wellness.
4. Develop and nurture your internal guidance system.
5. Simplify.
6. Practice choosing consciously. Practice daily.

Transparency 1

Learning Activities:

Step 1:

Focus the students' attention on how choice is involved in each idea on the board or paper. Show the transparency titled Six Suggestions for Choosing Wellness. Have students discuss how these suggestions might help them consciously choose a healthy balance in life.

Step 2:

Ask the students to describe ways their thinking has changed as a result of having discussed the importance of choice in maintaining a healthy, balanced life.



Debriefing Strategies

Content:

Ask the following questions:

1. Maintaining and modeling a healthy, balanced life depends on daily choices. How does integrating the new basic skills depend on choices you make as a teacher?
2. How do each of the six suggestions on the transparency apply to integrating the new basic skills into education?

New Basic Skills:

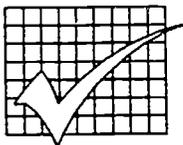
During the lesson today, what new basic skills did you practice?

- Communication
- Group effectiveness
- Personal management
- Learning to learn
- Adaptability
- Home/family management and relationships

Process:

Distribute the handout titled Circle of Knowledge Strategy. Tell the students that this strategy was used in today's lesson to focus discussion and encourage dialogue. Ask the following questions:

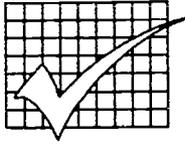
1. Was this strategy effective in teaching today's lesson?
2. What are the advantages and disadvantages of the Circle of Knowledge Strategy?
3. What did you like and dislike about the strategy?



Evaluation Options

Content:

1. Have the students list, for one week, the decisions they make regarding how they spend time. Have the students develop a personal plan for improving time use that will help them foster a healthier life balance.
2. Have each student interview a teacher who is integrating the new basic skills into curriculum. Have the student ask the teacher how the six suggestions on the transparency in today's lesson could help these integration efforts. Have each student write a brief written report of the interview with the teacher.



Evaluation Options, continued

Process:

Have each student create a lesson using the Circle of Knowledge Strategy.

Application:

Have the students interview three teachers, asking the following questions:

1. How do you balance your home life and work life?
2. What suggestions would you give teachers related to balancing work and family?
3. How do you model balancing personal and professional life for your students?
4. Is there a balance of liberal arts and vocational preparation in your curriculum?

Have the students interview an administrator, asking the following questions:

1. What do you do to help your faculty focus on the importance of "getting away" from school?
2. How do you model balancing work and family?
3. How do you model broadening your knowledge base?
4. Do you foster a healthy balance between work and home among your faculty, staff, and students?
5. Do you empower others to work on balancing work and family?
6. Do you empower teachers and students to balance vocational education courses and liberal arts courses?

Have students write a four page summary of their findings.



Individualized Learning Plan

If a student is learning this content in an individualized program, the student should be given the entire lesson. The student should read all materials. The college supervisor will designate which Evaluation Options will be required of the student. To demonstrate competency, the student should prepare to teach the lesson to a group designated by the college supervisor. Suggestions for such groups include: teacher groups, service organizations, youth groups, etc.

Wellness and Self-Care: Suggestions for Counselors and Other Role Models¹

Abstract

Helping professionals are often looked upon as role models by those they serve. Because of the demands on their time and talents, it is often difficult to model the type of healthy lifestyle prescribed to others. This article provides suggestions for developing wellness in one's life as well as a framework for making healthy choices.

Introduction

During a recent meeting of people in the helping professions, the topic of self-care was discussed. Many of those present acknowledged that they were not leading a healthy lifestyle nor modeling the wellness theme they were expounding in their presentations, classes, and counseling sessions. Several acknowledged working incredibly long hours. One admitted to working the past twenty-one days in a row without a break. Students and staff added that they felt a great deal of pressure to perform as superstars in their jobs and faced negative evaluation from peers and supervisors if they didn't conform to the "driven" pattern established as the norm.

Nearly every moment of every day one is faced with opportunities to make choices concerning wellness; a client calls, a student or co-worker asks for help, the answering machine holds ten to twenty messages. The arrival of the daily mail alone can require one to make a myriad of choices. How are these choices made? Oftentimes it is the framework for making choices that is faulty or perhaps non-existent. The purpose of this article is to provide a suggested framework for choosing and creating a healthier lifestyle so that those

in the helping professions can become true models for others.

Background

Wellness has been defined as "a conscious and deliberate approach to an advanced state of physical and psychological/spiritual health" (Ardell, 1983, p.3). It is an approach to living that is characterized as balanced, positive, and fun, and which provides a systematic framework for choosing and accomplishing goals (Ardell, 1983). Although developing and maintaining this balanced and conscious approach to life is a goal desired by many, it is a difficult one to attain and becoming more difficult as the pace of living increases (Gibbs, 1989).

A traditional and important role of helping professionals has been that of modeling the types of desirable and healthy behaviors expected of clients, students, and helpees (Berretta, 1988; Godenne, 1982; Kaufmann, 1986; Schmidt & Wolfe, 1980). Role modeling can be a very powerful tool in helping others make desired changes (Berretta, 1988). Developing a framework for choosing wellness is essential for helping professionals who wish to be congruent role models. The following are six suggestions for creating a healthier and more balanced life.

Six Suggestions for Choosing Wellness

Suggestion #1—Develop an awareness of the choices you are now making.

The first step in this process is the acknowledgement that we do have choices; that we always have a choice. Corey (1989)

¹Kees, N., & Trever, J. (1990, Spring). Wellness and self-care: Suggestions for counselors and other role models. *Journal of the Colorado Association for Counseling and Development*, pp. 23-26.

Wellness and Self-Care, continued

suggested that one of the major stumbling blocks toward making change is ignorance and/or denial of the fact that we do have a choice. In actuality we make hundreds of choices daily, hourly, and almost every minute. If we can become aware of how we are making those choices we can begin to make the conscious choices needed for creating wellness.

Becoming aware of the choices we are now making is essential. One way to do this is to take some time at the end of each day and reflect upon the choices you made. Logging choices periodically throughout the day may help. As you analyze your choices, you may ask if they were out of habit, ritual, or compulsion, or based on forethought?

It will also be helpful to determine whether the choices made are leading toward or away from wellness. Fromm (1973) categorized all choices as either biophilic, leading toward life, or necrophilic, leading toward death. In the initial stage of developing a wellness lifestyle, it will be helpful to group the choices made each day into one of those two categories. It can also be helpful to get input from others concerning the choices they see you making.

Suggestion #2—Create a support system which encourages wellness.

It is human nature to be influenced by the people around us. Therefore, it is important to make an honest evaluation of the people, environs, and systems with which you have the most contact by employing the following steps. One, without criticizing or making any changes, observe the support system you now have. Two, evaluate your work, home, and social environment, the people you have contact with in these environments, and the systems in which you are involved. Three, determine whether they encourage or discourage wellness by utilizing the following questions:

Work, Home, and Social Environments:

- Do you have a quiet, uncluttered place at home to be alone when needed?
- Is your work environment conducive to accomplishing what you want to accomplish?
- Do your social environments promote or inhibit wellness?

Family, Friends, and Colleagues:

- Which people in your life support your ability to choose what you need and which undermine your efforts, perhaps even encouraging you away from wellness?
- Which people in your life demonstrate through words and actions that they believe you have a right to choose what you need or want?
- Which people in your life are able to acknowledge that you may sometimes need to put your needs before theirs?
- Do you encourage and accept feedback from others concerning the choices you are making now?

Work, Home, and Social Systems:

- What is the work ethic promoted in your work environment?
 - How does your work environment help or hinder your productivity?
 - What are the unspoken rules that guide behavior at work, in your family, and with your friends?
 - How well do your family members communicate, trust, and show caring for each other?
 - What relationship do you have with your family members and friends? Is it one of dependence where they expect you to take care of them and fulfill their needs, or do you have a healthy level of interdependence?
- Once you have taken stock of your current support system, you can add or change

Wellness and Self-Care, continued

whatever you feel necessary in order to provide yourself with people and an atmosphere that will encourage your move toward wellness. Healthy choices are easier to make when we surround ourselves with people who believe in and model wellness in an atmosphere that supports the same.

Suggestion #3—Evaluate your current criteria for making choices and develop a belief structure which supports wellness.

Although it is not within the scope of this article to describe all of the belief structures we use to make choices, it will be helpful to discuss a few of the major beliefs which promote or inhibit wellness.

Often, choices are made based on irrational beliefs such as believing we are indispensable, believing something catastrophic will occur if we don't do everything that is asked of us, or believing that we do not have a choice. Making choices because we believe we must or should or have no other choice will often cause a feeling of being trapped which in turn creates stress.

We may also believe others will think less of us or not like us or that we will ruin our reputation as being capable of doing anything and everything. The part that is reinforcing in this is that there may be some negative consequences involved with the choices that we make. In actuality, we need to accept the fact that there will always be consequences of our choices. The important decision-making step is determining which consequences we are willing to accept. Too often we are willing to accept the negative consequences of being tired, unhealthy, rushed, panicked, irritable, overbooked, and overworked as inevitable in order to avoid facing the possibility of other negative consequences such as: disapproval, missed promotions, or not feeling needed or important.

At the core of your belief structure

you will need to determine whether or not you believe you deserve wellness and have the right to choose how you want to live your life. Another helpful strategy in developing an awareness of your belief system is to take a walk by yourself in the middle of the afternoon on a work day and observe your thoughts and feelings. Do you begin to hear an inner voice saying things like, "This isn't the way it's suppose to be," "I should be working." If you do, begin to challenge this inner voice by asking, "Where is it written that taking a walk is wasting time?"

Many of our unhealthy belief structures center around our concept of time. There is a major misconception in our society that we are able to save time. Although there are numerous appliances and devices which allow us to do activities more quickly, how many of us actually feel like we have more time? This is because time is a set commodity and we cannot save it. Our task is to choose to spend it wisely and consciously.

The phenomenon of the appointment book is a good example of this. A colleague recently mentioned that he had spent over \$100.00 on his appointment book system this year. As an organizational tool, an appointment and record keeping system is essential. However, often we misuse this tool as a basis for making daily choices. We create misconceptions about what an appointment book is and what it can do. A filled appointment book can easily become a measure of our self-worth. In reality it is not even a good measure of our productivity. We begin to make commitments based on the amount of blank space in the appointment book rather than questioning whether we want to commit or not. We may also allow the appointment book to provide us with a false sense of control—that keeping track of and being able to cope with all of our responsibilities is the same thing. It is important to remember that all an appointment

Wellness and Self-Care, continued

book can do is provide us with a diagram of the weeks, days, hours, and minutes we have to spend. A helpful strategy is to look through your appointment book for the last few weeks and examine the choices you've recently made. How many of those choices were made out of feelings of responsibility or guilt? How many were made with little forethought or simply because your appointment book had an empty space? Try thinking about what you consider to be the top three priorities or values in your life and ask yourself, "How many of your choices are congruent with those values?" (Dornan, 1989).

After determining more clearly what your belief structure is, you can begin the process of disputing the truth of your beliefs, discarding old beliefs that are no longer useful, and creating a new set of beliefs that enable you to choose wellness. Some examples of beliefs which can promote wellness are:

- I have a right to choose and create my life.
- I deserve a life that promotes wellness.
- There are no shoulds, only choices.
- I can take care of myself so that I may be able to continue to help others.
- I can choose to say yes or no without feeling guilty or resentful.

Suggestion #4—Develop and nurture your internal guidance system.

Often it is difficult to maintain choices that promote wellness because we are using an external basis for decision making. Choices based on external expectations and established norms rather than internal values, beliefs, and needs will lead toward a feeling of incongruence. This feeling of incongruence causes additional stress and may inhibit your efforts to seek wellness. Sinetar (1988) described the internal guidance system in this way:

There is, in us, a part-that-knows what we should do...The separation from self is what causes us to act against our best interests. When disconnected, fear dominates, and self-doubt, self-flagellations and untruthfulness abound. It is then that we betray ourselves, go against the part-that-knows, because we are acting from a point of self-betrayal. While fragmented, our deficits control us. We cannot be counted upon to think or act rightly (p. 18-19).

We are able to come into contact with our internal guidance system by giving ourselves time alone each day to think, to process the events of the day, and to evaluate the choices we made. We need to give ourselves time to answer important questions such as: "How do I feel about the choices I made today?" "How congruent do I feel?" "How well did my choices match up with my beliefs and values?" "What do I want to do with tomorrow?" One question asked regularly of the senior author by her mentor during her doctoral work was, "Are you having fun?" This constant reminder to assess how I was spending my time, helped me to connect with my internal guidance system and reminded me to either enjoy what I was doing or to choose differently. Once we are able to recognize this internal guidance system, accessing it on a regular and more immediate basis will become easier.

Suggestion #5—Simplify.

Although "having it all" became the slogan of the 80's, it has also become a prescription for an unhealthy way of life. Choosing less can lead to having more—more enjoyment, more appreciation for people, things, and activities already in your life, more balance and peace of mind, and better health and well-being. Every choice must be made

Wellness and Self-Care, continued

with the awareness that if we take something else into our lives, we will have less time for what we already have. Choosing less in order to obtain balance is the most difficult and important choice of all.

Suggestion #6—Practice choosing consciously. Practice daily.

Developing a wellness lifestyle requires that one consistently make conscious choices. The following is a model for choosing more consciously.

Step 1: Whenever possible (and it is almost always possible) stop to think before you choose. Habitual rather than conscious choices may often maintain unhealthy patterns. When making a major choice or one that will require a great time commitment, allow yourself at least twenty-four hours before giving an answer.

Step 2: If another party is involved, be willing to ask the questions and gather the information you'll need in order to make a conscious and well-informed choice.

Step 3: Take the time to ask and honestly answer questions of yourself. A few suggestions might include:

- Why am I choosing this?
- What are the short-term benefits and consequences?
- What are the long-term benefits and consequences?
- If I don't choose this, what will I give up?
- What am I willing to give up?
- What effect will this choice have on others in my life?
- How does this choice fit with my internal guidance system?
- Is there a creative alternative that I am overlooking which may accomplish the task and also provide for wellness?

Step 4: Be willing to decide and then

move on. Whatever your choice is, give it from a place of strength rather than guilt or obligation. In the long run, no one will be very happy with your choice if you are not happy with it. Be sure you have made your choice willingly, whatever that choice may be. Even if you made that choice because you felt it was in the best interest of someone other than yourself, accept your decision and give it willingly, as a gift. It is important to remember, however, that we also deserve gifts at times, and that if we always put ourselves last, we will very quickly deplete ourselves of anything worth giving to others. Perhaps the greatest discipline in making healthy choices is the willingness to say no to ourselves and to others and to do so without prolonged regret or guilt.

Step 5: Evaluate the implementation of your choice. Often times we forget to monitor the implementation of our choices and then find ourselves wondering, "What happened? It seemed like a good idea at the time." To do this requires a continued connection with our internal guidance system. We need to be able to continue asking ourselves questions such as:

- How healthy is my implementation of this choice?
- How am I feeling as a result of this choice?
- If it's not working, why not? What went wrong?

Many people make what seem to be choices toward wellness and then do not experience the positive results they were expecting. An example of this is choosing to join a health club and then using this as another opportunity to feel guilty for not going, or, to "work hard" and compulsively at one more thing. So that what began as a movement toward health can very easily add to the original stressful lifestyle. The reasons for

Wellness and Self-Care, continued

this are often the same faulty thinking that caused the original pattern of unhealthy-irrational beliefs such as: "I must be perfect," "I must be responsible for others," "There is only one right way of doing things," "My self worth is measured by what we do or produce." Again, a constant connection with one's internal guidance system during implementation of choices is crucial.

Step 6: Be willing to redecide if necessary. Many of us were raised with the belief that once you make a decision you must stick to it and follow through at all costs. This type of thinking can cause as much difficulty as not making wise choices originally. It is rare that we are going to be able to know beforehand all of the consequences of the choices that we make. Therefore, it is essential to give ourselves permission to redecide if necessary without the guilt that we often take on. Beliefs statements such as: "I should have known better," "It's my fault," "I made my bed, now I better sleep in it," "I can't go back on my word," and "Others will think less of me or not trust me if I don't do this" will cause anger, resentment, and feelings of being trapped. These beliefs will also cause a never-ending cycle of choices which lead away from wellness. We need to allow ourselves options and opportunities for finding other creative solutions. Our opportunities for making choices are truly endless.

Step 7: Practice often. Each day and nearly every minute we are faced with choices to make. Practicing on the daily and hourly choices we are given is a way to increase readiness for the more important choices that will present themselves. It is the innumerable, everyday choices that we make which provide a moment-to-moment practice field for choosing wellness and self-care.

Sineta (1988) asked an important question:

"Which way are we headed? Toward

health and wholeness or toward self-pity, withdrawal, neuroticism, and malfunction?... What heals us, what begins our self-renewal—thus, I believe, promoting actualization—can be just some tiny act. Even the right thought can help if we're too discouraged, too exhausted, to act. The mere flick of an eye in the elegant (conscious) direction, coupled with our intent to bring our more whole self into being, begins our gradual move into more productive ways of choosing" (p. 18).

Summary

M. Scott Peck (1978) stated that "life is difficult" and that when we accept that fact, life becomes easier. Choosing a lifestyle which provides for wellness and self-care is also difficult, and perhaps the ultimate challenge for those in the helping professions. Once we accept this fact, it too becomes easier.

References

- Ardell, D.B. (1983). The history and future of the wellness movement. A paper presented during the summer of 1983 at the National Wellness Conference in Stevens Point, WI.
- Berretta, S. (1988). Leonardo: The teacher as an instrument of change. Journal of Humanistic Education and Development, 27, 4-6.
- Corey, G. (1989). I never knew I had a choice (4th ed.). Monterey, CA: Brooks/Cole.
- Dornan, D. (1989). TIMEdesign: Self-directed time mastery. Ft. Collins, CO: L.T.G. Printing.
- Fromm, E. (1973). The anatomy of human destructiveness. New York, NY: Fawcett Crest Books.
- Gibbs, N. (1989, April 24). How America has

Wellness and Self-Care, continued

- run out of time. Time, pp. 58-67.
- Godenne, G.D. (1982). The adolescent girl and her female therapist. Adolescence, 17, 225-42.
- Kaufmann, F.A. (1986). The nature, role, and influence of mentors in the lives of gifted adults. Journal of Counseling and Development, 64, 576-78.
- Peck, M.S. (1978). The road less traveled: A new psychology of love, traditional values and spiritual growth. New York, NY: Simon & Schuster.
- Schmidt, J.A., & Wolfe, J.S. (1980). The mentor partnership: Discovery of professionalism. NASPA Journal, 17, 45-51.
- Sinetar, M. (1988). Elegant choices, healing choices. Mahwah, NJ: Paulist Press.

Circle of Knowledge Strategy

What is the Circle of Knowledge Strategy?

The Circle of Knowledge Strategy is a teaching technique used to focus discussion on a broad topic, elicit discussion of personal experiences, promote dialogue, and encourage reflection on changes in thinking.

Why Use the Circle of Knowledge Strategy?

The Circle of Knowledge Strategy is used to promote full class participation in a focused discussion. This strategy permits students to articulate how new information can change their thinking.

When Should You Use the Circle of Knowledge Strategy?

Teachers use this strategy when they want students to focus their discussion, clarify their ideas, and study how new information can affect their decisionmaking.

How to Use the Circle of Knowledge Strategy

Using this strategy involves three steps.

1. To focus class discussion, the teacher presents a broad topic, then elicits student comments by asking more specific questions based on student experiences.
2. The teacher records the class discussion. Students are encouraged to state, restate, or react to the ideas being presented and recorded.
3. The teacher asks questions which encourage students to explain how their thinking has changed in the course of the discussion.

Things to Remember

1. Focus the discussion on a broad topic which will elicit student comments.
2. Ask specific questions which relate to student experiences.
3. Visually record discussion ideas.
4. Encourage students to reflect upon changes in thinking resulting from the discussion.

Reference

Association for Supervision and Curriculum Development. (1987). Teaching strategies library: Research-based strategies for teachers. Alexandria, VA: Author.

INSTRUCTOR RESOURCES

LESSON: THE CURRICULUM CHALLENGE

Applied Academics: The Future of Education for Employment

The benefits of "applied" curricula, which integrate academic and vocational instruction, have been discussed in journals and presentations for many years. In support of applied education, The Center for Occupational Research and Development (CORD) and the Agency for Instructional Technology (AIT) have developed a series of applied academics curricula. The curricula outlined in this article not only provide solid "stand alone" courses but also provide courses that are models for integrating academics into occupational education. Classroom teachers are the key to introducing these applied curricula into schools.

Consortium

States share a common problem: Their business and industry leaders continue to castigate secondary education for producing students who lack adequate academic skills when they enter the workforce. States have found that pooling funds to address this problem is more effective than are individual state efforts to address it. Each of the applied academics curriculum packages described below was developed by a consortium effort between states. In most cases, states pooled Carl Perkins funds to develop the packages. (For example, the Principles of Technology package used approximately \$3.5 million in pooled funds for its initial development.)

Principles of Technology

Principles of Technology was the first applied academics curriculum developed. Principles of Technology is a two year applied science curriculum designed to be used by sophomore through senior secondary students. Both CORD and AIT were involved in its development.

The 14 content areas in the Principles of Technology curriculum are:

First Year

Force
Work
Rate
Resistance
Energy
Power
Force Transformers

Second Year

Momentum
Waves and Vibrations
Energy Converters
Transducers
Radiation
Optical Systems
Time Constants

Applied Academics, continued

The power of Principles of Technology comes from the fact that each of these 14 content areas is studied in all of the following four systems: mechanical, fluid (pneumatics and hydraulics), electrical, and thermal. As an example, students studying resistance would learn that the formulas and concepts underlying the principles of resistance in electrical systems are similar to those in fluid systems, mechanical systems, and thermal systems. Due to the hierarchical nature of Principles of Technology, those who have researched and taught it recommend that it be taught as a comprehensive "stand alone" package. Principles of Technology is not designed to be integrated into existing vocational or technology courses, but is an important ingredient of most vocational programs.

In 1988, in the March/April issue of *Science Books and Films*, the American Association for the Advancement of Science gave Principles of Technology its top rating for "technical physics" instruction. Many schools across the country allow students science credit for taking the curriculum, and many universities accept the curriculum as a science credit toward admission.

Applied Mathematics

Applied Mathematics was developed by AIT, and consists of 33 units taught over two years.

APPLIED MATHEMATICS YEAR ONE		
<i>Optional Units for Review</i>		
A	Getting to Know Your Calculator	Revisiting Fractions, Decimals, and Percents with the Help of a Calculator
B	Naming Numbers in Different Ways	
C	Finding Answers with Your Calculator	

Applied Academics, continued

APPLIED MATHEMATICS YEAR ONE		
<i>Applied Math Units</i>		
1	Learning Problem Solving Techniques	Basic Math Skills that Everyone Needs
2	Estimating Answers	
3	Measuring in English and Metric Units	
4	Using Graphs, Charts, and Tables	
5	Dealing with Data	
6	Working with Lines and Angles	Geometry
7	Working with Shapes in Two Dimensions	
8	Working with Shapes in Three Dimensions	
9	Using Ratios and Proportions	Basic Skills in Algebra
10	Working with Scale Drawings	
11	Using Signed Numbers and Vectors	
12	Using Scientific Notation	
13	Precision, Accuracy, and Tolerance	
14	Solving Problems with Powers and Roots	
15	Using Formulas to Solve Problems	

Applied Academics, continued

Applied Mathematics II

Applied Mathematics II is in the formative stages. The goal is to develop a curriculum which will lead students to a mathematics achievement level that is equivalent to algebra.

APPLIED MATHEMATICS YEAR TWO		
16	Solving Problems that Involve Linear Equations	Basic Skills in Algebra
17	Graphing Data	
18	Solving Problems that Involve Nonlinear Equations	
19	Working with Statistics	Quality Control
20	Working with Probabilities	
21	Using Right-Triangle Relationships	Introduction to Trigonometry
22	Using Trigonometric Functions	
23	Factoring	Higher Skills in Algebra
24	Patterns and Functions	
25	Quadratics	
26	Systems of Equations	
27	Inequalities	
28	Geometry in the Workplace 1	Applications of Geometry in the World of Work
29	Geometry in the Workplace 2	
30	Solving Problems with Computer Spreadsheets	Using Computers to Solve Problems
31	Solving Problems with Computer Graphics	
32	Quality Assurance and Process Control 1	Practice and Applications of QA/QC in the Workplace
33	Quality Assurance and Process Control 2	

Applied Academics, continued

Applied Mathematics may be taught as a "stand alone" course, or each unit may be taught individually and used to reinforce mathematical concepts taught in other courses. For example, if students in an automotive technology program are having difficulty understanding the concept of tolerance, the teacher could use Unit 13, "Precision, Accuracy, and Tolerance." Employing the unit's laboratory activities, student manuals, and videotape could help enhance student understanding of the concepts of precision, accuracy, and tolerance while integrating mathematics into the course.

Applied Communication

Applied Communication is a comprehensive set of learning materials designed by AIT and pilot tested in the 1988-1989 academic year. Its purpose is to help high school and other students develop and refine career related communication skills. The instructional materials are divided into 15 modules with a total of 150 lessons. The modules may be used alone, in any order, to enhance existing communications/language arts/English or vocational courses, or all 15 modules may be used as the basis for a year long course. The student materials are designed for use by individuals who have at least an eighth grade level of reading ability. Applied Communication is not a remedial course. The 15 modules in the Applied Communication curriculum are:

1. Communicating in the Workplace
2. Gathering and Using Information in the Workplace
3. Using Problem Solving Strategies
4. Starting a New Job
5. Communicating with Coworkers
6. Participating in Groups
7. Following and Giving Directions
8. Communicating with Supervisors
9. Presenting Your Point of View
10. Communicating with Clients and Customers
11. Making and Responding to Requests
12. Communicating to Solve Interpersonal Conflicts
13. Evaluating Performance
14. Upgrading, Retraining, and Changing Jobs
15. Improving the Quality of Communication

Applied Biology/Chemistry

Applied Biology/Chemistry is being developed by CORD and is funded by a consortium of 38 states. The proposed materials include 12 instructional units each containing video segments, laboratory activities, and printed text. They will be infusible into existing curricula or can be taught together as a "stand alone" course.

Applied Academics, continued

The units are each designed for 15 to 30 hours of student activity. The twelve units in the Applied Biology/Chemistry curriculum are:

1. Natural Resources: provides an introduction to natural resources, and their uses and problems. This unit was the prototype for the course, and has been pilot tested and revised. It has been field tested in its revised form.
2. Water: covers properties and uses of water, water quality, and water cycles. This unit is currently being reviewed, and will be revised and printed for field testing during the 1991-1992 school year.
3. Air and Other Gases: covers properties and behavior of gases as related to life processes and commercial applications. This unit has been reviewed, and is under revision for field testing during the 1991-1992 school year.
4. Continuity of Life: includes cells, DNA, protein synthesis, genetics, reproduction, evolutionary processes, and genetic engineering and related biotechnologies. This unit is complete, and was field tested during the 1990-1991 school year.
5. Nutrition: covers the food and feed requirements of humans and other animals at different life stages and in disease states. It also covers digestion, absorption, and food technology. This unit is complete, but field testing will continue in the 1991-1992 school year.
6. Disease and Wellness: addresses categories of disease, pathogens, the immune system, transmission of diseases, major health threats, chemical addiction, and wellness. This unit is complete, and was field tested during the 1990-1991 school year.
7. Plant Growth and Reproduction: includes photosynthesis, sexual and asexual reproduction, requirements for plant growth and production, and characteristics of plants that make them suitable for food, fiber, and other applications.
8. Life Processes: addresses the processes and behaviors humans and other animals use to maintain a constant internal state in varying environmental conditions.
9. Synthetic Materials: covers inorganic compounds, simple organic compounds, polymers, composites, and their production and uses.
10. Waste and Waste Management: addresses issues related to the control of municipal solid wastes, sewage and wastewater, farm and ranch wastes, industrial wastes classified as hazardous, and trends in waste disposal for the future.
11. Microorganisms: includes types of microorganisms, their roles in natural systems, and their industrial and biotechnology applications.
12. Community of Life: discusses ecological principles by comparing natural ecosystems to a variety of human-managed environments.

Applied Academics, continued

Workplace Readiness: Education for Employment

Another curriculum being developed through the consortium approach is Workplace Readiness: Education for Employment. This program is being developed by AIT. The following table summarizes the content and materials available.

	UNIT: Problem Solving in the Workplace	UNIT: Teamwork	UNIT: Self-Management	UNIT: About the Project
	Modules 1. Changing workplace 2. Defining the situation 3. Stating the goals 4. Generating ideas 5. Preparing a plan 6. Taking action (30 class periods)	Modules 1. Changing workplace 2. Interpersonal skills 3. Negotiation in work situations 4. Job-related teamwork 5. Leadership at work (25 class periods)	Modules 1. Changing workplace 2. Personal development 3. Dependability 4. Quality and quantity of work (20 class periods)	
Student Video Programs	<ul style="list-style-type: none"> • 15-min. video for overview module • Five 15-min. videos for skill-building modules 	<ul style="list-style-type: none"> • 15-min. video for overview module • Four 15-min. videos for skill-building modules 	<ul style="list-style-type: none"> • 15-min. video for overview module 	
Computer Software	<ul style="list-style-type: none"> • Application software for skill-building modules 2 through 6 			
Videodisc			<ul style="list-style-type: none"> • 60-min. videodisc for skill-building modules 2 through 6 	
Instructor Video Programs	<ul style="list-style-type: none"> • 15-min. introduction to instructional video and computer technology 	<ul style="list-style-type: none"> • 15-min. introduction to instructional video technology 	<ul style="list-style-type: none"> • 15-min. introduction to instructional video and videodisc technology 	
Informational Video Programs				<ul style="list-style-type: none"> • 15-min. info. video • 3-min. recruitment video
Printed Materials	<ul style="list-style-type: none"> • Instructor's guide • Student learning pkt* • User's manual 	<ul style="list-style-type: none"> • Instructor's guide • Student learning pkt* 	<ul style="list-style-type: none"> • Instructor's guide • Student learning pkt* 	<ul style="list-style-type: none"> • Implementation hand-book

* Optional

Applied Academics Quizzes

Principles of Technology Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Principles of Technology?
4. How much money was used to develop Principles of Technology?
5. True or False: Principles of Technology is a two year applied science curriculum designed to be used by sophomore through senior secondary students.
6. There are 14 content areas in the Principles of Technology curriculum. What are the seven content areas taught in the first year?
7. What are the four systems studied in each of the 14 content areas?
8. Why should Principles of Technology be taught as a comprehensive "stand alone" package?

(cut here)

Applied Mathematics Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Applied Mathematics?
4. What organization was responsible for the development of Applied Mathematics?
5. What are the three Optional Units (A, B, and C) in the Applied Mathematics Curriculum?
6. Applied Mathematics consists of 33 units and is taught over how many years?
7. What are the three areas the Applied Mathematics curriculum addresses in the 15 math units covered in Year One?
8. Can individual units be taken out of the Applied Mathematics package and taught as separate units to reinforce concepts in other courses?

Applied Academics Quizzes

Applied Communication Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Applied Communication?
4. What organization was responsible for the development of Applied Communication?
5. How many modules are included in the curriculum's instructional materials?
6. How long does it take to teach this entire course using all the modules?
7. Can the modules be used singly and in any order?
8. What is the minimum reading level needed for completion of this curriculum?

(cut here)

Applied Biology/Chemistry Quiz

1. What does CORD stand for?
2. What does AIT stand for?
3. What funds were used to develop the applied academics packages such as Applied Biology/Chemistry?
4. What organization was responsible for the development of Applied Biology/Chemistry?
5. How many instructional units will make up the curriculum?
6. The units are designed for how many hours of student activity?
7. True or False: Applied Biology/Chemistry must be taught as a "stand alone" course.
8. How many states make up the consortium developing Applied Biology/Chemistry?

Applied Academics Quizzes

Answer Key

Principles of Technology Quiz

1. Center for Occupational Research and Development
2. Agency for Instructional Technology
3. Carl Perkins funds
4. 3.5 million dollars
5. True
6. Force, Work, Rate, Resistance, Energy, Power, Force Transformers
7. Mechanical, Fluid, Electrical, Thermal
8. Because it is hierarchical in nature

Applied Communication Quiz

1. Center for Occupational Research and Development
2. Agency for Instructional Technology
3. Carl Perkins funds
4. AIT
5. 15 modules
6. One year
7. Yes
8. Eighth grade reading level

Applied Mathematics Quiz

1. Center for Occupational Research and Development
2. Agency for Instructional Technology
3. Carl Perkins funds
4. AIT
5. A: Getting to Know Your Calculator; B: Naming Numbers in Different Ways; C: Finding Answers with Your Calculator
6. 2 years
7. (1) Basic Math Skills that Everyone Needs; (2) Geometry, (3) Basic Skills in Algebra
8. Yes

Applied Biology/Chemistry Quiz

1. Center for Occupational Research and Development
2. Agency for Instructional Technology
3. Carl Perkins funds
4. CORD
5. 12 units
6. 15-30 hours
7. False
8. 38 states

What is the National Network?

The National Network for Curriculum Coordination in Vocational and Technical Education is referred to as the National Network or the NNCCVTE. Founded in 1972, the National Network is made up of six regional Curriculum Coordination Centers and a network of State Liaison Representatives. The State Liaison Representatives, one in each state and trust territory, provide educators with curriculum materials from the Curriculum Coordination Centers and can assist in the development of curriculum and instructional materials. The six regional Curriculum Coordination Centers serve the states and trust territories in their regions. Get to know your State Liaison Representative and learn more about the National Network by contacting the nearest Curriculum Coordinating Center.

The National Network has:

Six regional centers full of resources.
A representative in every state.
State of the art technical assistance.
Access to the highest quality vocational education materials.
A computerized database.
Free, quick, personalized service.

Materials Cover these Topics:

Administration
Agriculture
Basic Skills
Bilingual Education
Business Education
Education (General)
Employability
Equity
Health Occupations
Home Economics Education
Legislation
RFPs

The National Network Provides Technical Assistance with:

DACUM Occupational Analysis
Task List Verification
Microcomputers
Library Computerization
State Technical Computers

National Network Resources Include:

Curriculum Products
Textbooks
Reports
Task List Clearinghouse
Curriculum Consortium
Electronic Messages
Databases
Software
State Plans
Meetings
Newsletters
Business & Industry Linkages
Task List Verification

Services Include Assistance with:

Curriculum
Textbooks
State Plans
Microcomputer Software
Research Reports
Technical Assistance
Annual Meetings
Newsletters
Linkages
Searches
Workshops

What is the National Network?, continued

NNCCVTE Curriculum Coordination Centers

Northeast Curriculum Coordination Center
Martha Pocsi, Director
New Jersey State Dept. of Education
Division of Vocational Education
Aberdeen, NJ 07747
201/290-1900

Southeast Curriculum Coordination Center
Rebecca Love-Wilkes, Director
Mississippi State University
P.O. Drawer DX
Mississippi State, MS 39762
601/325-2510

East Central Curriculum Coordination Center
Rebecca S. Douglass, Director
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Springfield, IL 62794-9243
217/786-6375

Midwest Curriculum Coordination Center
Richard Makin, Director
1500 W. 7th Ave.
Stillwater, OK 74074
405/377-2000

Northwest Curriculum Coordination Center
Bill Daniels, Director
Old Main, Room 478
St. Martin's College
Lacy, WA 98503
206/438-4456

Western Curriculum Coordination Center
Lawrence F. H. Zane, Director
College of Education
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1776 University Ave.
Wist Hall 216
Honolulu, HI 96822-0001
808/956-7834

(based on a brochure describing the NNCCVTE)

Memory Teaching Strategies

What are Memory Teaching Strategies?

Memory Teaching Strategies (mnemonic devices) are teaching techniques that help students learn unfamiliar material by increasing their capacity to store and retrieve information.

Why Should You Use Memory Teaching Strategies?

Throughout our lives, we need to be able to memorize well. Improving memorization skills increases learning power, saves time, and gives us a better storehouse of information. In addition, awareness of how to learn and how to enhance learning results in a sense of mastery and control over our future.

When Should You Use Memory Teaching Strategies?

These strategies are effective when students are attempting to master lists of unstructured material or when material needs to be memorized. The method is successful when teacher-led, but it is most beneficial when the student masters the technique well enough to employ it whenever material must be memorized.

How to Use Memory Teaching Strategies

Memory Teaching Strategies lead the student through four phases. These phases require attention and employ techniques that enhance recall.

1. Phase One: Attending to the Material (use underlining, listing, and reflecting)
 - underlining — underlining items that need to be remembered
 - listing — recording ideas separately and rephrasing them in one's own words
 - reflecting — comparing and determining relationships among ideas

Memory Teaching Strategies, continued

2. Phase Two: Developing Connections (use techniques that help make material familiar; develop connections using key words, substitute words, and link words)
 - key word — selecting one word to represent a longer thought or several connected thoughts
 - substitute word — connecting an abstract word or phrase with something that sounds like, reminds, or can be pictured in a way that allows an association with the abstract word or phrase (examples: "I'll ask her" with Alaska, "dark wind" with Darwin)
 - link word — connecting two ideas, with the second connecting to a third, and so on; the student can imagine an unusual picture that connects all the words in the list

3. Phase Three: Expanding Sensory Images (use techniques of association, ridiculous association and exaggeration, and repetition)
 - association — associating new information with something already known (example: learning the music staff, EGBDF, by associating it with Every Good Boy Does Fine)
 - ridiculous association — forming associations, as above, but enhancing them with vivid, ridiculous, impossible, or illogical items
 - repetition — repeating items in a list over and over until they are embedded in memory

4. Phase Four: Practicing Recall (practice recalling the material until it is completely learned)

Reference

Joyce, B. & Weil, M. (1986). Models of teaching. Englewood Cliffs, NJ: Prentice-Hall, Inc.

INSTRUCTOR RESOURCES

LESSON: SCHOOL CULTURE

5

Case Study 1

This is a very progressive school. The principal has the support of the teachers. She has changed the school from being very traditional to being a model for the integration of (1) basic skills into vocational education and (2) academic and vocational education. Leaders in the school's integration efforts come from the science, technology, mathematics, and vocational departments.

Every student is required to develop and follow a program leading to competencies in areas such as:

1. algebra
2. basic understanding of the physical world
3. basic understanding of the chemical world
4. basic understanding of technology
5. problem solving
6. communications

Students must sign a program which requires them to take courses which lead to competencies in each of these areas.

The guidance department has not been supportive of this move toward integration. The guidance counselors believe it will be more difficult to demonstrate that students have met university entrance requirements. The guidance counselors have recently approached the school board, which has agreed to look at the new integration model to insure that students are meeting university entrance requirements.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study 2

This is a very small school of 200 high school students. There are 15 teachers, one principal, one assistant principal, and one counselor. The vocational teacher, science teacher, and English teacher have outlined an integrated curriculum model to assist in teaching the new basic skills. They have approached the principal with the model. The principal, however, believes that the school must "stick with the basics." She believes that there is a strong need for every student to have home economics and woodworking skills, and sees no room in the curriculum for changes.

The school board consists primarily of farmers and ranchers. The guidance counselor is a proponent of the integration plan. The assistant principal is in total agreement with the principal's view. The custodian is the "gate keeper." She knows everything about everybody in the school.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study 3

The principal calls a meeting to discuss the integration of the new basic skills into vocational education. At that meeting, battle lines are drawn. One vocational teacher is excited about and supportive of the changes; the second vocational teacher believes the changes would be a waste of time, and thinks integration is a trend like "career education" which will go away in a few years.

The science teacher believes deeply that integration is a key to making science a part of daily life. However, the mathematics teacher strongly believes that integration activities will reduce the focus on mathematics and reduce students' abilities to solve math problems. The mathematics teacher is concerned that she cannot complete the items on her syllabus now, and that integration efforts would simply produce a watered down or "dummied down" mathematics class.

Even the secretaries, both of whom have children attending the school, are divided on this issue. John, the principal's secretary, agrees with integration. The other secretary, whose father is a school board member, believes the integration efforts will destroy the school.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study 4

The superintendent of schools has just sent a memo to the three high schools within the district. The memo reads: "I am very concerned about the national reports indicating a lack of basic skills among our students. I am requiring that each high school develop a plan to integrate the new basic skills into the curriculum. This plan should be submitted to me within six months of the date on this memo. There will be \$20,000 available per school to implement these changes. We must provide an education that will permit our students to compete in the next century. Let's work together toward a program of which we can all be proud."

Several teachers have formed a secret group to formulate an action plan *against* the superintendent's plan. You have been asked to attend a meeting of this secret group.

Questions to Focus Your Discussion

1. What is the problem?
2. Who are the key players?
3. Who do you perceive to have the power?
4. What are some alternative solutions?
5. What are the possible consequences of these solutions?
6. What role would you play?

Case Study Strategy

What Is the Case Study Strategy?

The Case Study Strategy is a teaching technique that uses stories or scenarios (case studies) to involve students in solving problems similar to their own real life problems.

Why Use the Case Study Strategy?

This strategy can be used to:

1. imbed the details of the case study in the student's memory;
2. expand the student's search for solutions;
3. provide a test of assumptions;
4. allow systematic problem solving;
5. reveal successful and unsuccessful real life practices;
6. merge theory with practice;
7. encourage use of higher level thinking.

When Should You Use the Case Study Strategy?

Teachers can use this strategy when they want students to consider real life problems. Reviewing case studies allows students to concentrate on attempted solutions to real life problems and to reflect on why these attempted solutions did or did not work.

How to Use the Case Study Strategy

The written format of a case study should include a Title, a Nature of the Problem section, and either a Description of the real life solution or a Question leading students to formulate possible solutions.

1. Choose a case study.
2. Share the case study's content and context with students.
3. Describe possible causes of the way the problem in the case study arose and was addressed by those involved.
4. Describe possible alternative ways of addressing the problem.

Case Study Strategy, continued

Debriefing the Case Study Strategy

To debrief use of the Case Study Strategy, teachers should help students reflect on the "what," "why," and "how" of what they do compared to the "what," "why," and "how" of what others do. This will allow students to analyze how inquiry, information gathering, and personal values affect real life decisionmaking.

Things to Remember

1. Ask, "What if?"
2. Be sure students consider the consequences of their hypothetical solutions.
3. Analyze and evaluate the outcomes of their hypothetical solutions.

Reference

Achelles, C. M. (1989, October). Challenging Narcissus, or reflecting on reflecting. Paper presented at the Annual Meeting of the University Council on Educational Administration. Scottsdale, AZ. (ERIC Document ED 313 774)

INSTRUCTOR RESOURCES

LESSON: MODELING INTEGRATION OF WORK AND FAMILY

Wellness and Self-Care: Suggestions for Counselors and Other Role Models¹

Abstract

Helping professionals are often looked upon as role models by those they serve. Because of the demands on their time and talents, it is often difficult to model the type of healthy lifestyle prescribed to others. This article provides suggestions for developing wellness in one's life as well as a framework for making healthy choices.

Introduction

During a recent meeting of people in the helping professions, the topic of self-care was discussed. Many of those present acknowledged that they were not leading a healthy lifestyle nor modeling the wellness theme they were expounding in their presentations, classes, and counseling sessions. Several acknowledged working incredibly long hours. One admitted to working the past twenty-one days in a row without a break. Students and staff added that they felt a great deal of pressure to perform as superstars in their jobs and faced negative evaluation from peers and supervisors if they didn't conform to the "driven" pattern established as the norm.

Nearly every moment of every day one is faced with opportunities to make choices concerning wellness; a client calls, a student or co-worker asks for help, the answering machine holds ten to twenty messages. The arrival of the daily mail alone can require one to make a myriad of choices. How are these choices made? Oftentimes it is the framework for making choices that is faulty or perhaps non-existent. The purpose of this article is to provide a suggested framework for choosing and creating a healthier lifestyle so that those in the helping professions can become true

models for others.

Background

Wellness has been defined as "a conscious and deliberate approach to an advanced state of physical and psychological/spiritual health" (Ardell, 1983, p.3). It is an approach to living that is characterized as balanced, positive, and fun, and which provides a systematic framework for choosing and accomplishing goals (Ardell, 1983). Although developing and maintaining this balanced and conscious approach to life is a goal desired by many, it is a difficult one to attain and becoming more difficult as the pace of living increases (Gibbs, 1989).

A traditional and important role of helping professionals has been that of modeling the types of desirable and healthy behaviors expected of clients, students, and helpees (Berretta, 1988; Godenne, 1982; Kaufmann, 1986; Schmidt & Wolfe, 1980). Role modeling can be a very powerful tool in helping others make desired changes (Berretta, 1988). Developing a framework for choosing wellness is essential for helping professionals who wish to be congruent role models. The following are six suggestions for creating a healthier and more balanced life.

Six Suggestions for Choosing Wellness

Suggestion #1—Develop an awareness of the choices you are now making.

The first step in this process is the acknowledgement that we do have choices; that we always have a choice. Corey (1989) suggested that one of the major stumbling blocks toward making change is ignorance

¹Kees, N., & Trever, J. (1990, Spring). Wellness and self-care: Suggestions for counselors and other role models. *Journal of the Colorado Association for Counseling and Development*, pp. 23-26.

Wellness and Self-Care, continued

and/or denial of the fact that we do have a choice. In actuality we make hundreds of choices daily, hourly, and almost every minute. If we can become aware of how we are making those choices we can begin to make the conscious choices needed for creating wellness.

Becoming aware of the choices we are now making is essential. One way to do this is to take some time at the end of each day and reflect upon the choices you made. Logging choices periodically throughout the day may help. As you analyze your choices, you may ask if they were out of habit, ritual, or compulsion, or based on forethought?

It will also be helpful to determine whether the choices made are leading toward or away from wellness. Fromm (1973) categorized all choices as either biophilic, leading toward life, or necrophilic, leading toward death. In the initial stage of developing a wellness lifestyle, it will be helpful to group the choices made each day into one of those two categories. It can also be helpful to get input from others concerning the choices they see you making.

Suggestion #2—Create a support system which encourages wellness.

It is human nature to be influenced by the people around us. Therefore, it is important to make an honest evaluation of the people, environs, and systems with which you have the most contact by employing the following steps. One, without criticizing or making any changes, observe the support system you now have. Two, evaluate your work, home, and social environment, the people you have contact with in these environments, and the systems in which you are involved. Three, determine whether they encourage or discourage wellness by utilizing the following questions:

Work, Home, and Social Environments:

- Do you have a quiet, uncluttered place at home to be alone when needed?
- Is your work environment conducive to accomplishing what you want to accomplish?
- Do your social environments promote or inhibit wellness?

Family, Friends, and Colleagues:

- Which people in your life support your ability to choose what you need and which undermine your efforts, perhaps even encouraging you away from wellness?
- Which people in your life demonstrate through words and actions that they believe you have a right to choose what you need or want?
- Which people in your life are able to acknowledge that you may sometimes need to put your needs before theirs?
- Do you encourage and accept feedback from others concerning the choices you are making now?

Work, Home, and Social Systems:

- What is the work ethic promoted in your work environment?
- How does your work environment help or hinder your productivity?
- What are the unspoken rules that guide behavior at work, in your family, and with your friends?
- How well do your family members communicate, trust, and show caring for each other?
- What relationship do you have with your family members and friends? Is it one of dependence where they expect you to take care of them and fulfill their needs, or do you have a healthy level of interdependence?

Once you have taken stock of your current support system, you can add or change whatever you feel necessary in order to

Wellness and Self-Care, continued

provide yourself with people and an atmosphere that will encourage your move toward wellness. Healthy choices are easier to make when we surround ourselves with people who believe in and model wellness in an atmosphere that supports the same.

Suggestion #3—Evaluate your current criteria for making choices and develop a belief structure which supports wellness.

Although it is not within the scope of this article to describe all of the belief structures we use to make choices, it will be helpful to discuss a few of the major beliefs which promote or inhibit wellness.

Often, choices are made based on irrational beliefs such as believing we are indispensable, believing something catastrophic will occur if we don't do everything that is asked of us, or believing that we do not have a choice. Making choices because we believe we must or should or have no other choice will often cause a feeling of being trapped which in turn creates stress.

We may also believe others will think less of us or not like us or that we will ruin our reputation as being capable of doing anything and everything. The part that is reinforcing in this is that there may be some negative consequences involved with the choices that we make. In actuality, we need to accept the fact that there will always be consequences of our choices. The important decision-making step is determining which consequences we are willing to accept. Too often we are willing to accept the negative consequences of being tired, unhealthy, rushed, panicked, irritable, overbooked, and overworked as inevitable in order to avoid facing the possibility of other negative consequences such as: disapproval, missed promotions, or not feeling needed or important.

At the core of your belief structure you will need to determine whether or not you

believe you deserve wellness and have the right to choose how you want to live your life. Another helpful strategy in developing an awareness of your belief system is to take a walk by yourself in the middle of the afternoon on a work day and observe your thoughts and feelings. Do you begin to hear an inner voice saying things like, "This isn't the way it's suppose to be," "I should be working." If you do, begin to challenge this inner voice by asking, "Where is it written that taking a walk is wasting time?"

Many of our unhealthy belief structures center around our concept of time. There is a major misconception in our society that we are able to save time. Although there are numerous appliances and devices which allow us to do activities more quickly, how many of us actually feel like we have more time? This is because time is a set commodity and we cannot save it. Our task is to choose to spend it wisely and consciously.

The phenomenon of the appointment book is a good example of this. A colleague recently mentioned that he had spent over \$100.00 on his appointment book system this year. As an organizational tool, an appointment and record keeping system is essential. However, often we misuse this tool as a basis for making daily choices. We create misconceptions about what an appointment book is and what it can do. A filled appointment book can easily become a measure of our self-worth. In reality it is not even a good measure of our productivity. We begin to make commitments based on the amount of blank space in the appointment book rather than questioning whether we want to commit or not. We may also allow the appointment book to provide us with a false sense of control—that keeping track of and being able to cope with all of our responsibilities is the same thing. It is important to remember that all an appointment book can do is provide us with a diagram of

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the weeks, days, hours, and minutes we have to spend. A helpful strategy is to look through your appointment book for the last few weeks and examine the choices you've recently made. How many of those choices were made out of feelings of responsibility or guilt? How many were made with little forethought or simply because your appointment book had an empty space? Try thinking about what you consider to be the top three priorities or values in your life and ask yourself, "How many of your choices are congruent with those values?" (Dornan, 1989).

After determining more clearly what your belief structure is, you can begin the process of disputing the truth of your beliefs, discarding old beliefs that are no longer useful, and creating a new set of beliefs that enable you to choose wellness. Some examples of beliefs which can promote wellness are:

- I have a right to choose and create my life.
- I deserve a life that promotes wellness.
- There are no shoulds, only choices.
- I can take care of myself so that I may be able to continue to help others.
- I can choose to say yes or no without feeling guilty or resentful.

Suggestion #4—Develop and nurture your internal guidance system.

Often it is difficult to maintain choices that promote wellness because we are using an external basis for decision making. Choices based on external expectations and established norms rather than internal values, beliefs, and needs will lead toward a feeling of incongruence. This feeling of incongruence causes additional stress and may inhibit your efforts to seek wellness. Sinetar (1988) described the internal guidance system in this way:

There is, in us, a part-that-knows what

we should do...The separation from self is what causes us to act against our best interests. When disconnected, fear dominates, and self-doubt, self-flagellations and untruthfulness abound. It is then that we betray ourselves, go against the part-that-knows, because we are acting from a point of self-betrayal. While fragmented, our deficits control us. We cannot be counted upon to think or act rightly (p. 18-19).

We are able to come into contact with our internal guidance system by giving ourselves time alone each day to think, to process the events of the day, and to evaluate the choices we made. We need to give ourselves time to answer important questions such as: "How do I feel about the choices I made today?" "How congruent do I feel?" "How well did my choices match up with my beliefs and values?" "What do I want to do with tomorrow?" One question asked regularly of the senior author by her mentor during her doctoral work was, "Are you having fun?" This constant reminder to assess how I was spending my time, helped me to connect with my internal guidance system and reminded me to either enjoy what I was doing or to choose differently. Once we are able to recognize this internal guidance system, accessing it on a regular and more immediate basis will become easier.

Suggestion #5—Simplify.

Although "having it all" became the slogan of the 80's, it has also become a prescription for an unhealthy way of life. Choosing less can lead to having more—more enjoyment, more appreciation for people, things, and activities already in your life, more balance and peace of mind, and better health and well-being. Every choice must be made with the awareness that if we take something

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else into our lives, we will have less time for what we already have. Choosing less in order to obtain balance is the most difficult and important choice of all.

Suggestion #6—Practice choosing consciously. Practice daily.

Developing a wellness lifestyle requires that one consistently make conscious choices. The following is a model for choosing more consciously.

Step 1: Whenever possible (and it is almost always possible) stop to think before you choose. Habitual rather than conscious choices may often maintain unhealthy patterns. When making a major choice or one that will require a great time commitment, allow yourself at least twenty-four hours before giving an answer.

Step 2: If another party is involved, be willing to ask the questions and gather the information you'll need in order to make a conscious and well-informed choice.

Step 3: Take the time to ask and honestly answer questions of yourself. A few suggestions might include:

- Why am I choosing this?
- What are the short-term benefits and consequences?
- What are the long-term benefits and consequences?
- If I don't choose this, what will I give up?
- What am I willing to give up?
- What effect will this choice have on others in my life?
- How does this choice fit with my internal guidance system?
- Is there a creative alternative that I am overlooking which may accomplish the task and also provide for wellness?

Step 4: Be willing to decide and then move on. Whatever your choice is, give it

from a place of strength rather than guilt or obligation. In the long run, no one will be very happy with your choice if you are not happy with it. Be sure you have made your choice willingly, whatever that choice may be. Even if you made that choice because you felt it was in the best interest of someone other than yourself, accept your decision and give it willingly, as a gift. It is important to remember, however, that we also deserve gifts at times, and that if we always put ourselves last, we will very quickly deplete ourselves of anything worth giving to others. Perhaps the greatest discipline in making healthy choices is the willingness to say no to ourselves and to others and to do so without prolonged regret or guilt.

Step 5: Evaluate the implementation of your choice. Often times we forget to monitor the implementation of our choices and then find ourselves wondering, "What happened? It seemed like a good idea at the time." To do this requires a continued connection with our internal guidance system. We need to be able to continue asking ourselves questions such as:

- How healthy is my implementation of this choice?
- How am I feeling as a result of this choice?
- If it's not working, why not? What went wrong?

Many people make what seem to be choices toward wellness and then do not experience the positive results they were expecting. An example of this is choosing to join a health club and then using this as another opportunity to feel guilty for not going, or, to "work hard" and compulsively at one more thing. So that what began as a movement toward health can very easily add to the original stressful lifestyle. The reasons for this are often the same faulty thinking that

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caused the original pattern of unhealthy-irrational beliefs such as: "I must be perfect," "I must be responsible for others," "There is only one right way of doing things," "My self worth is measured by what we do or produce." Again, a constant connection with one's internal guidance system during implementation of choices is crucial.

Step 6: Be willing to redecide if necessary. Many of us were raised with the belief that once you make a decision you must stick to it and follow through at all costs. This type of thinking can cause as much difficulty as not making wise choices originally. It is rare that we are going to be able to know beforehand all of the consequences of the choices that we make. Therefore, it is essential to give ourselves permission to redecide if necessary without the guilt that we often take on. Beliefs statements such as: "I should have known better," "It's my fault," "I made my bed, now I better sleep in it," "I can't go back on my word," and "Others will think less of me or not trust me if I don't do this" will cause anger, resentment, and feelings of being trapped. These beliefs will also cause a never-ending cycle of choices which lead away from wellness. We need to allow ourselves options and opportunities for finding other creative solutions. Our opportunities for making choices are truly endless.

Step 7: Practice often. Each day and nearly every minute we are faced with choices to make. Practicing on the daily and hourly choices we are given is a way to increase readiness for the more important choices that will present themselves. It is the innumerable, everyday choices that we make which provide a moment-to-moment practice field for choosing wellness and self-care.

Sinetar (1988) asked an important question:

"Which way are we headed? Toward health and wholeness or toward self-

pity, withdrawal, neuroticism, and malfunction?... What heals us, what begins our self-renewal—thus, I believe, promoting actualization—can be just some tiny act. Even the right thought can help if we're too discouraged, too exhausted, to act. The mere flick of an eye in the elegant (conscious) direction, coupled with our intent to bring our more whole self into being, begins our gradual move into more productive ways of choosing" (p. 18).

Summary

M. Scott Peck (1978) stated that "life is difficult" and that when we accept that fact, life becomes easier. Choosing a lifestyle which provides for wellness and self-care is also difficult, and perhaps the ultimate challenge for those in the helping professions. Once we accept this fact, it too becomes easier.

References

- Ardell, D.B. (1983). The history and future of the wellness movement. A paper presented during the summer of 1983 at the National Wellness Conference in Stevens Point, WI.
- Berretta, S. (1988). Leonardo: The teacher as an instrument of change. Journal of Humanistic Education and Development, 27, 4-6.
- Corey, G. (1989). I never knew I had a choice (4th ed.). Monterey, CA: Brooks/Cole.
- Dornan, D. (1989). TIMEdesign: Self-directed time mastery. Ft. Collins, CO: L.T.G. Printing.
- Fromm, E. (1973). The anatomy of human destructiveness. New York, NY: Fawcett Crest Books.
- Gibbs, N. (1989, April 24). How America has run out of time. Time, pp. 58-67.

Wellness and Self-Care, continued

- Godenne, G.D. (1982). The adolescent girl and her female therapist. Adolescence, 17, 225-42.
- Kaufmann, F.A. (1986). The nature, role, and influence of mentors in the lives of gifted adults. Journal of Counseling and Development, 64, 576-78.
- Peck, M.S. (1978). The road less traveled: A new psychology of love, traditional values and spiritual growth. New York, NY: Simon & Schuster.
- Schmidt, J.A., & Wolfe, J.S. (1980). The mentor partnership: Discovery of professionalism. NASPA Journal, 17, 45-51.
- Sinetar, M. (1988). Elegant choices, healing choices. Mahwah, NJ: Paulist Press.

Circle of Knowledge Strategy

What is the Circle of Knowledge Strategy?

The Circle of Knowledge Strategy is a teaching technique used to focus discussion on a broad topic, elicit discussion of personal experiences, promote dialogue, and encourage reflection on changes in thinking.

Why Use the Circle of Knowledge Strategy?

The Circle of Knowledge Strategy is used to promote full class participation in a focused discussion. This strategy permits students to articulate how new information can change their thinking.

When Should You Use the Circle of Knowledge Strategy?

Teachers use this strategy when they want students to focus their discussion, clarify their ideas, and study how new information can affect their decisionmaking.

How to Use the Circle of Knowledge Strategy

Using this strategy involves three steps.

1. To focus class discussion, the teacher presents a broad topic, then elicits student comments by asking more specific questions based on student experiences.
2. The teacher records the class discussion. Students are encouraged to state, restate, or react to the ideas being presented and recorded.
3. The teacher asks questions which encourage students to explain how their thinking has changed in the course of the discussion.

Things to Remember

1. Focus the discussion on a broad topic which will elicit student comments.
2. Ask specific questions which relate to student experiences.
3. Visually record discussion ideas.
4. Encourage students to reflect upon changes in thinking resulting from the discussion.

Reference

Association for Supervision and Curriculum Development. (1987). Teaching strategies library: Research-based strategies for teachers. Alexandria, VA: Author.

Six Suggestions for Choosing Wellness²

- 1. Develop an awareness of the choices you are now making.**
- 2. Create a support system which encourages wellness.**
- 3. Evaluate your current criteria for making choices, and develop a belief structure which supports wellness.**
- 4. Develop and nurture your internal guidance system.**
- 5. Simplify.**
- 6. Practice choosing consciously. Practice daily.**

²Kees, N., & Trever, J. (1990, Spring). Wellness and self-care: Suggestions for counselors and other role models. Journal of the Colorado Association for Counseling and Development, pp. 23-26.