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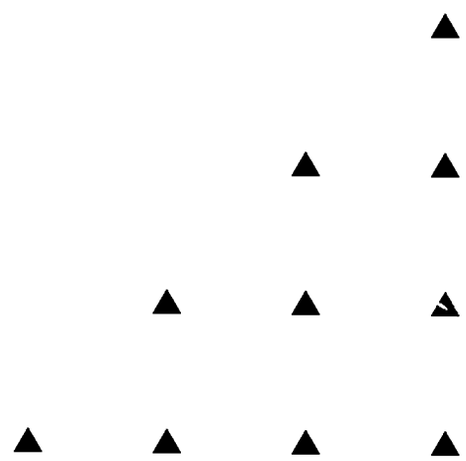
ABSTRACT

This handbook describes a high school dropout prevention program that integrates academic education, vocational education, and a support system in order to provide students with multiple options for their future careers and personal lives. The following information is provided: the program's philosophy; major components (vocational education, applied academics, counseling, employability skills training, life-coping skills, and physical education); guidelines for planning and implementation; and support elements. The following support elements are discussed: staff selection and training; student selection, recruitment, and orientation; flexible scheduling; instructional procedures, such as computer-assisted instruction, tutoring, cooperative learning, and on-the-job experiences; student management; monitoring the program; and administration. The appendices contain the following: addresses of two resource centers, a project profile, a student questionnaire, worksheets about information sources, program components and their use, site visit reports, an interview/observation schedule, an interview guide, and a classroom observation guide. Twenty references are provided. (CML)

The Lifelong Options Program

A Handbook for Implementing and Managing a Vocational Education Program for Youth At Risk



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The National Dropout Prevention Center is a partnership between an organization of concerned leaders—representing business, educational, and policy interests and Clemson University—created to reduce America's dropout rate and meet the needs of youth in at-risk situations by shaping school environments to ensure that all youth receive the quality education to which they are entitled. The Center collects, analyzes, and disseminates information about dropout prevention policies and practices; and provides technical assistance to develop, demonstrate, and maintain dropout prevention programs.

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The *LOP Handbook* is a joint effort of the National Dropout Prevention Center and the Center on Education and Training for Employment at The Ohio State University.

THE LIFELONG OPTIONS PROGRAM

A HANDBOOK FOR IMPLEMENTING AND MANAGING
A VOCATIONAL EDUCATION PROGRAM FOR YOUTH AT RISK

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PREFACE

By
Dr. John V. "Dick" Hamby

In August 1989, the National Dropout Prevention Center (NDPC) at Clemson University embarked on a bold educational experiment: integrating a proven dropout prevention program with vocational education as a way to help formerly unsuccessful students graduate from high school. Collaborating with the Center on Education and Training for Employment (CETE) at The Ohio State University, the NDPC implemented enhanced components of Project COFFEE (Cooperative Federation for Educational Experiences) in vocational-technical programs in three school districts—Anne Arundel County, MD; Broward County, FL; and Oconee County, SC. This endeavor was one of ten projects funded nationally for three years by the Cooperative Demonstration Program (Dropout Prevention) and administered by the Office of Vocational and Adult Education in the U.S. Department of Education.

The result is the Lifelong Options Program that provides a comprehensive curriculum and support system for a population of students who traditionally would not choose this career route. The title reflects the major goal of the program—providing students with multiple options for their future careers and personal lives. Potential and actual dropouts are actively recruited for the program that includes applied academics, vocational-technical training, and employability and life-coping skills instruction supported by intensive counseling, individualized, computer-assisted instruction, small classes, business and community involvement, and flexible scheduling. Lifelong Options has proved successful in different organizational arrangements—a regular vocational-technical center, a school-within-a-school, and an alternative school—as well as diverse school settings—rural, suburban, and urban.

Lifelong Options is a flexible, effective, and economical approach to meeting the educational and occupational needs of an increasingly diverse student population. Preliminary evaluation results from demonstration sites indicate that students enrolled in the program had increased attendance, more earned credits, higher grade point averages, improved behavior and attitudes, and higher graduation rates than a comparison group of students not in the program. This document provides a down-to-earth description of the Lifelong Options Program, along with many helpful suggestions and recommendations for policymakers and administrators who want to implement this new vision for vocational education in their districts.

Dr. Hamby is the former Assistant Director of the National Dropout Prevention Center and former Project Director of the Lifelong Options Program. Following his retirement from the NDPC, Dr. Hamby formed EduCare, an education consulting business, in Kingstree, SC.

FOREWORD

More than a decade ago, readers of *The Future of Vocational Education* were challenged by Gordon I. Swanson to look at the economic, political and social trends that would shape vocational education programs and how it would serve students to face numerous work force demands and careers during their lifetime. Among the concerns and the messages Swanson advocated was the need to create a framework for human resource development. That global need continues today and this publication addresses an important aspect of human resource development—the needs of youth in at-risk situations and how vocational education can prepare those youth to survive and flourish in today's world.

This document captures the essence of a three-year demonstration program designed to illustrate how a vocational education program can motivate students in at-risk situations to stay in school and to graduate with the social, academic, and vocational skills necessary to enter the work force. Sponsored by the U.S. Department of Education, Office of Vocational and Adult Education, this Lifelong Options Program operated successfully in three states in very diverse communities with varied administrative and organizational structures.

The results from this dropout prevention demonstration project were dramatically successful for the students and staff involved. The residual effects from the initial project efforts have made significant and lasting changes in subsequent programs and school structures. Hence, we feel honored to capture these experiences and to offer our learnings and recommendations to program planners, school staff, and community leaders seeking new ideas or confirmation for similar strategies already in place in schools.

We are grateful to the U.S. Department of Education for their initial confidence in the National Dropout Prevention Center to conduct this demonstration program. And we are proud of our relationship with our key collaborators including the Center on Education and Training for Employment at The Ohio State University, and each of our participating school districts—Oconee County (SC), Anne Arundel County (MD), and Broward County (FL).

Jay Smink
Executive Director
National Dropout Prevention Center

ACKNOWLEDGEMENTS

This book draws upon our different experiences in implementing a dropout prevention program, the Lifelong Options Program (LOP), in three demonstration sites. We have learned much from each other during the three-year project period. We want to share the knowledge, insights, perceptions, and opinions that we gained from this project with others who are as interested and committed to education as we are.

Special thanks go to a dedicated group of people who made this handbook a reality:

Jay Smink, Director of the National Dropout Prevention Center, and Project Director of LOP during the final fourteen months of implementation, whose leadership and vision made this document possible;

John V. "Dick" Hamby, former Assistant Director of the National Dropout Prevention Center, who served as Project Director for LOP during the first twenty-two months of the project, and whose wisdom and experience guided the development of this document;

Local program staff who worked daily in the trenches at each demonstration site— **Karl Behringer, Peggy Walters, Annette Zylinski, Neil Maas, Louis Holleman, Kathra Carter, and Gene Beaudoin;**

National Dropout Prevention Center staff who contributed to the publication by editing, typing, and proofreading the document— **Merry "Peg" Chrestman, Lib Crockett, Lorilei Swanson, and Shelly Smith.**

We also acknowledge the **U.S. Department of Education, Office of Vocational and Adult Education,** for their support in funding and Program Officer **Kate Holmberg** who provided guidance during the implementation of this project.

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EXECUTIVE SUMMARY

This document is a handbook for educators who are looking for a flexible, effective, and economical approach to meeting the educational and occupational needs of an increasingly diverse student population. This approach has been developed into a program titled "Lifelong Options Program (LOP)."

LOP is a comprehensive high school dropout prevention program that integrates academic and vocational education. It evolved as an outcome of a federally-funded demonstration project, "Prevention of High School Dropouts Through Vocational Education." The initial project received funding from the U. S. Department of Education, Office of Vocational and Adult Education, during the period of August 1989-July 1992, and was based upon an existing dropout prevention model, Project COFFEE, (Cooperative Federation for Educational Experiences). Originating in the late 1970s in North Oxford, MA, Project COFFEE was validated by the National Diffusion Network. It was adapted in different ways in order to meet the needs of three diverse school districts that served as demonstration sites. Its holistic approach has proven effective with youth who previously may have not chosen vocational education as a preferred area of emphasis in high school.

Combining the best aspects of vocational education with proven, compatible dropout prevention strategies, the major goal of LOP is to improve the academic, occupational, and personal skills of potential high school dropouts. The LOP curriculum is organized around six major components: vocational education, applied academics, counseling, preemployment training, life-coping skills, and physical education. In LOP each student receives support from all of the components on a regular basis and in a nurturing environment.

In addition to the major components of LOP, there are support elements that contribute to successful implementation. These include: staff selection and training; student selection, recruitment, and orientation; flexible scheduling; various instructional procedures; student management; program monitoring and evaluation; and administration.

LOP was managed by the National Dropout Prevention Center at Clemson University, in collaboration with the Center on Education and Training for Employment at The Ohio State University. Schools that participated as demonstration sites for LOP included: The Center of Applied Technology–South in Anne Arundel County, MD; McFatter Vocational/Technical Center in Broward County, FL; and O. A. S. I. S. in Oconee County, SC. A brief description of each follows:

National Dropout Prevention Center (NDPC)–The Center is located at Clemson University, Clemson, S C. The Center served as the prime contractor for this project and had major responsibility in program management. Center staff served as Project Director, Site Staff Coordinator, and Support Staff to the project.

Center on Education and Training for Employment (CETE)–This Center is in the College of Education at The Ohio State University, Columbus, OH. The Center was responsible for formative evaluation and provided a staff member to serve as the the Site Technical Coordinator for the three demonstration sites.

Anne Arundel County, Maryland–The Center of Applied Technology–South, Edgewater, MD, served as a demonstration site in this suburban school district. Local staff named their program Y. E. S. (Youth Experiencing Success). Students took their

vocational courses on site and their academic courses at their regular high school. The Y.E.S. program was offered both during school and after school hours. This site began their program with 28 students in the treatment group; 28 in the control group; and 28 in the gap-reduction group.

Broward County, Florida–McFatter Vocational Technical Center, Davie, FL, served as a demonstration site in this urban school district, the eighth largest accredited school district in the country. Local staff referred to their school-within-a-school approach as part of their C. H. O. P. S. (Changing How Our Pupils Succeed) Program. Students received academic and vocational subjects at this one site. This program started with 34 students in the treatment group; 37 in the control group; and 37 in the gap-reduction group.

Oconee County, South Carolina–The Oconee Alternative School, Seneca, SC, served as a demonstration site in this rural school district of 10,075 students. Local staff and students in the program named their school The O. A. S. I. S. (Oconee Alternative School Is Super). Students received their academic coursework on site and traveled by bus to Hamilton Career Center for their vocational courses. This program began with 24 students in the treatment group; 27 in the control group; and 27 in the gap-reduction group.

American Institute for Research, Palo Alto, California and the Research Triangle, Research Triangle Park, North Carolina–Selected staff served as third party evaluators of this project.

The intent of this handbook is to provide a description of LOP along with helpful suggestions and recommendations for policymakers and administrators who want to implement a new vision for vocational education in their districts. It is adaptable to most school and community settings and offers a variety of options for implementation. It is successful in helping at-risk students graduate from high school with technical and personal skills which enable them to become productive members of the work force and contributing citizens to the community.

Program Philosophy

Introduction

It is estimated that appro nately 700,000 students leave our nation's public schools each year prior to graduation. ' .is serious situation has captured the attention of educators, business and community leaders, government officials, parents, and citizens-at-large. All agree that we must seek to implement effective programs which (1) encourage young people to stay in school until graduation, (2) stimulate students with knowledge and skills that demonstrate the relevance between school and the real world, and (3) are cost-effective.

Vocational education has many of the characteristics deemed important in exemplary dropout prevention programs. According to Weber (1988) ". . . . Vocational education classrooms are mostly student-centered, more activity-based, and more individualized than other classrooms, three characteristics deemed important when dealing with at-risk youth" (p 38). He contends that vocational education is a clear alternative for students who have difficulty in a traditional academic setting, and he believes that vocational education must be an importan. part of efforts to keep at-risk youth in school long enough to provide them with career entry skills that will prepare them for a productive future. Weber concludes, "The better the vocational program, the better schools can serve such youth" (p. 38).

Other research evidence supports the thesis that vocational education can be effective in dropout prevention when linked with components such as work experience, basic skills remediation/improvement, and greater integration into a holistic program (Hamilton, 1986; Rumberger, 1981; Wehlage, 1983). Part of the success of an integrated program is grounded in the use of a concrete applications approach to learning with students who have failed repeatedly when presented with an abstract approach. Differences in learning styles and teaching styles impact on students' success in acquiring basic skills. Although no one style is inherently "better" than another, educational practice has tended to favor an abstract approach in academic subjects and a more concrete approach in vocational programs.

An integrated program makes use of this concrete approach to teach students the academic basic skills that are embedded within vocational tasks. Students practice applying basic skills in realistic vocational tasks, and they are motivated by the obvious relevance of their learning. Because many at-risk students tend to identify more strongly with the workplace than with school, it stands to reason that vocational classroom environments that simulate work settings are relatively congenial for these students. Therefore, it becomes apparent that it is almost impossible to perform a vocational task without using academic basic skills which means that there is a rich mine of "teachable moments" to tap.

It is immensely helpful for this integrated program to be accomplished by teachers in tandem. In most instances, for example, math teachers have the training to document the basic math concepts, whereas vocational teachers are generally more experienced in how they are used in an occupational setting. Working together, they can pave the way to students' recognition of the connectedness of their learning experiences. Learning to know is connected to learning to do.

Overview of the Lifelong Options Program (LOP)

The Lifelong Options Program (LOP) is a comprehensive dropout prevention program at the high school level that integrates academic and vocational education. Its holistic approach has proven effective with youth who previously may not have chosen the option of vocational education as a preferred area of emphasis in high school.

LOP evolved as an outcome of a federally-funded demonstration project, "Prevention of High School Dropout Through Vocational Education." The initial project received funding from the Office of Vocational and Adult Education, U. S. Department of Education, during the period of August 1989-July 1992. The project was managed by the National Dropout Prevention Center at Clemson University, Clemson, SC, in collaboration with the Center on Education and Training for Employment at The Ohio State University, Columbus, OH. The project utilized diverse demonstration sites located in the school districts of Anne Arundel County, MD; Broward County, FL; and Oconee County, SC.

The project was based upon an existing model dropout prevention and reentry program, Project COFFEE, (Cooperative Federation for Educational Experiences). Project COFFEE originated in North Oxford, MA, in the late 1970s and was validated by the Joint Dissemination Review Panel of the U.S. Department of Education in 1982 and 1986. Project COFFEE is a developer/demonstrator member of the National Diffusion Network (NDN). The goal of the NDN is to promote the widespread dissemination nationally of exemplary education programs that have been previously approved by the Department's Program Effectiveness Panel. This approval led to its selection as a foundation program with components suitable for adaptation.

Project COFFEE was adapted in different ways in order to meet the various needs of the participating school districts located in urban, rural, and suburban settings. The basic model was fine-tuned, enhanced, and expanded into what is now called the Lifelong Options Program (LOP).

This handbook is a tool for educators and community leaders who wish to replicate the Lifelong Options Program. LOP is adaptable to most school and community settings, and it offers a variety of options for implementation. It is successful in helping at-risk students graduate from high school with technical and personal skills to become productive members of the work force and successful citizens in the community.

LOP combines the best aspects of vocational education with proven, compatible dropout prevention strategies, resulting in a comprehensive curriculum for potential dropouts in vocational and regular high schools. It broadens the scope of vocational education by expanding its offerings to a population of students who previously may not have chosen this career route. LOP also assumes a more active, aggressive stance in recruiting and enrolling these students. Finally, it adds to the array of instructional strategies available to vocational education by strengthening the relationship between academic and occupational skill training.

Goal and Objectives

The major goal of LOP is to improve the academic, occupational, and personal skills of potential high school dropouts to a degree that will permit them to stay in school and graduate with marketable skills for employment and/or postsecondary education. Students who participate in the program will demonstrate more personal responsibility and develop a more positive attitude as they accomplish the following objectives:

1. demonstrate gains in communication skills, math, and science;
2. attend school on a more regular basis than before entering the program;
3. earn sufficient credits for graduation with fewer failed courses in high school;
4. develop and/or improve employability skills; and
5. have fewer discipline-related referrals.

To assist leaders in using this handbook to adapt LOP to local settings, the authors have organized the remaining text around two broad categories: (1) major components of LOP, and (2) support elements of LOP. Each category is then subdivided into topical sections that explain and illustrate major points for consideration by local school staff.

LOP holds many possibilities for school districts that desire to be proactive and aggressive in offering options, services, and opportunities to students who have not been successful with traditional approaches to schooling. This handbook will guide others in turning possibilities into realities and will have an impact upon students, teachers, administrators, and the community-at-large.

2 Major Components of the Lifelong Options Program

The LOP curriculum is organized around six basic components that form the basis for a holistic approach that can be easily adapted to the local needs of diverse student populations, especially those most at risk of dropping out of school. In LOP *each* student receives support from *all* of the components on a *regular* basis in a nurturing atmosphere. These components are: vocational, applied academics, counseling, preemployment training, life-coping skills, and physical education.

Vocational Component

Considerable evidence indicates that occupational training, or vocational education, is helpful in keeping students in high school. Because many students at risk tend to identify more strongly with the workplace than with school, it stands to reason that classroom environments that simulate work settings are relatively congenial for these students. Essentially, such settings highlight the relevance of the school to the workplace.

Vocational programs provide valuable educational experiences for students in several key areas. They:

- teach employability and job-specific skills;
- highlight the relevance of school to the workplace;
- use instructional strategies centering on concrete application;
- individualize learning by tailoring programs to students' interests, abilities, and career aspirations;
- allow for "hands-on" learning in a cooperative context;
- have a distinct identity, relative autonomy, and an "esprit de corps."

Table 1 (page 2.2) summarizes the ways in which vocational education tends to parallel model dropout prevention programs.

The **vocational education** component is the cornerstone of LOP. It allows students to choose from the following traditional and nontraditional options:

- **vocational education curriculum**–Students receive three hours per day regular instruction in their chosen occupational classes at vocational/technical centers. This option is well suited for a split-day schedule with students traveling from the home high school or an alternative school to an area vocational school. When the program is situated in a school-within-a-school on a vocational school campus, students can simply walk from one class to another.
- **shadowing**–Students in the program may shadow a number of vocational programs for the first semester. For example, a student may spend two weeks in welding, two weeks in drafting, and two weeks in commerical photography during a six-week reporting period. This allows the student an opportunity to see the diversity of occupations available for study and assists them in their selection of a chosen field.
- **Community-Based Education (CBE)**–Students choose to be in jobs at local businesses that provide practical learning experiences, supervised by school and business personnel, and earn credit toward graduation.

Table 1

Summary–Results of Statistical Comparisons of VocationalNonvocational Programs on Characteristics in Common with Model Dropout Prevention Programs

Selected Model Dropout Prevention Program Characteristics	Results
• Teachers have authority for creating courses/experiences	• Vocational teachers felt they had more authority/control.
• Low teacher/pupil ratio in vocational classes.	• Teacher/Pupil ratio is significantly lower
• Must be willing/able to "stay on top of students' needs	• Vocational teachers appear to spend more time counseling their students on a personal basis, but spend less time working cooperatively with other staff to resolve students' problems.
• Emphasis is placed on basic skills remediation and resolving students' personal problems	• Vocational teachers place significantly less emphasis on students' personal growth and development as a teaching goal as well as less time on basic skills reinforcement and enhancement.
• Environment should be free from absenteeism, robbery, substance abuse, etc.	• Vocational teachers perceived fewer such problems than other teachers.
• Individualization	• Vocational classes were significantly more likely to be individualized.
• An active role for students	• In vocational classes the activities in which students engaged were more "active" than were the activities occurring in other classes.
• Recognition and providing special awards	• In vocational classes more students were reported as being recognized for their performance than occurred in nonvocational classes.

- **work experience**–Students completing 50% of the required vocational education objectives through traditional classwork can receive credit for completing the remaining objectives through a job in their vocational area, rather than having to attend additional classes.
- **school-based businesses**–Students are actively engaged in making and carrying out the decisions for the management and operation of a business enterprise.

These options allow the students to develop technical and business skills, as well as the kinds of attitudinal, decisionmaking, and interpersonal skills required for successful employment in a modern, high-tech, global economy.

Drafting, boat building/repair, and horticulture are among the many fields of vocational education available to students.

Applied Academics Component

Students must acquire basic skills so they can effectively communicate and calculate in their jobs and personal lives. Applied academics stress those basic skills that are integral to the vocational program.

The concept of applied academics rests on three assumptions that are widely held as valid (Crowe, Pritz, & Veach, 1987, p 6).

- Academic skills are embedded in vocational tasks.
- Vocational tasks provide for realistic use of academic basic skills; connecting academic learning with application will strengthen students' basic skills.
- Neither academic skills nor vocational skills should be taught in isolation from each other; teachers need to make students aware of the relationship between academic skills and vocational tasks.

LOP is designed so that students learn basic skills in ways that help them understand how relevant these skills are in the real world. For example, if a teacher introduces students to a theorem in geometry, then shows them how a carpenter uses that knowledge in constructing a cabinet, the students see the relevance and application of mathematics. The applied academics approach is particularly motivating for students who have previously struggled with abstract concepts.

One strategy used by vocational and academic teachers to identify exactly where academic concepts are used in vocational courses is *cross-correlation of vocational and academic curricula.* A typical vehicle for such identification is a matrix of vocational tasks and academic concepts, which can be coded at intersection points where a particular academic concept is needed to perform a particular vocational task. Various further judgments can be incorporated into the cells of the matrix, such as time spent in instruction and practice, or level of learning required. (See matrix, p. 2.5.)

It is immensely helpful for this cross-correlation of curricula to be designed by teachers working together. In most instances, for example, math teachers have the training to document the basic math concepts, whereas vocational teachers are generally more experienced in how they are used in an occupational setting. Furthermore, the cross-correlation activity can be the precursor of a variety of follow-up joint activities once a cooperative working relationship has been established. One of these additional activities is curriculum development or adaptation/ adoption of existing learning materials to use as the basis for more integrated instruction. Another is shared planning of who should teach what, when, and to whom in order to complement each other's efforts most effectively. A third is to provide documentation for the potential granting of academic credit for basic skills achieved in vocational coursework, insofar as it can be proven to be fairly earned.

This component accommodates a variety of academic arrangements that allow students several options for taking courses required for graduation.

- **Home High School**–Students can take courses at their home high school with supplemental makeup and/or enrichment work in specially scheduled classes in the home school or vocational center;
- **Alternative School**–Students may be selected to attend classes at a school site away from their home school;
- **School-Within-A-School**–Students attend special classes either in the home school or a vocational/technical center;
- **Community-Based Education (CBE)**–Students are placed on jobs in the community with a mentor who has agreed to supervise the student. Articulation between school personnel and the employer regarding prescribed objectives and activities results in the design of a LEAP (Learning Experience Activity Packet) for each student participating in CBE. Upon successful completion and assessment of the CBE, the student receives high school credit for this work experience.

SAMPLE CROSS-CORRELATIONAL MATRIX DISPLAY

ELECTRONICS	Atomic Theory	Sources of Energy	Circuit Fundamentals	Fabrication	Scientific Calculation	Resistance (REI)	Study of Measurement	Ohm's Law	Series Circuits	Parallel Circuits	Series/Parallel Circuits	Magnetism	Nature of Alternating Current	Safety Devices	Network Theorems	AC Generation	Inductance	Inductive Reactance	Capacitance	RC Time Constants	Capacitive Reactance	Series RCL Circuits	Parallel RCL Circuits	Complex Numbers	Resonance	Vacuum Tubes	Servo Systems	Nature of NP Junction	Rectifiers	Filters	Special Semiconductive Diode	Bipolar Junction	Transistors	Transistor Circuits	Transistor Amplifiers	OP Amplifiers	Logic Devices	Computer Math	Boolean Algebra	Wave Shaping	Modulation	Transmission Lines	Antenna Theory	Computer Programming
Mathematical Skills	←										(BASIC ELECTRICITY)											→																						
Area					●	●	●					●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	
Volume		●		●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				●	●	●	
Basic Whole Number Skills	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Computers and Calculators	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Coordinate Geometry																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●
Decimals	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Directed Number (+, -)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Exponents, Powers, Roots	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Formulas and Equations	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Fractions	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Geometric Plane Figures			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Graphs and Tables			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Logarithms																																		●	●									●
Matrices																																												
Measurement, Lineal	●		●	●	●	●	●					●		●		●	●			●	●	●			●		●													●	●	●	●	
Measurement, Electrical		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	
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Base Number Systems																																				●	●	●						
Boolean Algebra																																				●	●	●						

COMMITTEE:

Bill Ford, Burlington High School
Bill Richards, Essex Junction Area Vocational Center
Richard Robinson, Rutland Area Vocational Center
Luther Tabor, Trade and Industry Consultant

Each dot represents 24 minutes or more of instruction

We recommend that Electronics full program completers be granted Math equivalency credit.

May 20, 1985

LOP attempts to improve academic achievement for students at risk through several approaches to individualization. For example, upon entry into the program, each student's academic transcript is reviewed and assessed by project staff to determine student needs for making progress toward graduation. The program counselor designs an individualized academic plan for each student, reviews that plan with the student and parents, and assists the student in the implementation of that plan.

Student success is maximized by providing smaller classes (a maximum teacher/pupil ratio of 1:15) and less traditional curriculum and instructional approaches which include small group work, computer aided instruction, tutoring, cooperative learning, and service learning projects.

Counseling Component

Most students in at-risk conditions have many problems in their lives and often feel helpless about how to handle them. A counseling component provides students with a consistent foundation of emotional, social, academic, and career-selection support. Students learn that certain people, processes, and behavior can help in dealing with problems.

Each demonstration site selects a counselor who is assigned to the program students. These counselors actively work with student behavior problems: they act as student advocates and mediators to other school staff or community agencies, and assist teachers in learning how to use effective interventions with students. Both individual and group counseling sessions are scheduled weekly by the program counselor to assist students in academic guidance, personal guidance, self-enhancement, social development, character development, and career options. In addition to the counseling for lifelong development, provisions are made in the program for crisis intervention counseling in spontaneous situations which arise.

The counseling component is not limited to only what the full-time program counselor is able to do, but is enhanced and expanded by classroom teachers who serve the role of "teacher/counselor." At one demonstration site selected teachers are released one period each day to advise and counsel students who have been assigned to the teacher. One teacher expressed, *"Although I may be strict in class, the students feel they can express themselves to me. I am like a father figure. I can talk to them as a father, counselor, or friend would."* A student commented about this type of unique relationship: *"I can get along with my teacher. She listens to you. She talks* ***with*** *you, not* ***at*** *you."*

Some sites use community volunteers as mentors. A referral network of community agency personnel can assist students with special needs and problems.

The counseling component is made more viable by small counselor/pupil ratio and regular meeting times for group counseling. The holistic philosophy of LOP is especially evidenced through counseling, which helps students become healthy, productive members of the community. Students are challenged to set goals, work toward those goals, and celebrate goal accomplishments.

Students are often engaged in cooperative and individualized learning experiences.

Classroom teachers and community volunteers often serve as counselors and mentors to young people.

A helpful tool in both the counseling and employability skills components has been *Connections: School and Work Transitions*, a career and social needs counseling resource developed by the National Center for Research in Vocational Education (now CETE) at The Ohio State University. *Connections* includes the "Vocational Evaluation Assessment," which examines student attitudes in vocational classes and also contains a "Learning Styles Inventory–Vocational Edition." Both are useful to identify and focus on problems students may be experiencing in class which could inhibit progress. Other counseling activities include viewing various videos concerning social problems, health concerns, job-related issues, and using the daily newspaper as a resource for discussing relevent issues and current events.

Employability Skills Training Component

In addition to the previously mentioned components, students are involved in special experiences to strengthen their employability skills. Activities to develop these skills occur in a variety of instructional settings. They can be integrated into the vocational courses; taught directly on the job site or through CBE; centered around the school-based, student-operated business; developed in group counseling sessions; shared in cooperative learning settings; taught in a Career Education class; or learned via computer aided instruction.

This component helps students develop and sharpen their skills in three major areas:

- **job-seeking skills**–Students receive instruction and practice in job entry skills such as finding a job, filling out job applications, completing a successful interview, getting promoted, and leaving a job for a new one. Students develop job-seeking skills through practice (actually completing job applications and simulating job interviews through role play with a classroom teacher, counselor, or guest interviewer from the business community).
- **job-maintenance skills**–To assist students in skills necessary to hold a job, instruction is focused upon work habits and attitudes. Classroom role playing, community guest lecturers, videotapes, and computer-aided instruction are vehicles for teaching these skills.
- **work ethics**–Students receive instruction in work ethics skills. They have opportunities to develop and enhance personal qualities such as responsibility, self-management, and integrity. Discussions, role playing, and demonstrations range from dressing appropriately to proper conduct on the job.

Life-Coping Skills Training Component

Students at risk of dropping out of school are often in great need of skills required for everyday living, sometimes called life-coping or survival skills. By acquiring life-coping skills, students are better able to respond to the challenges they face at home, school, and in the workplace. Thus, they have the tools needed for successful living. This component provides students with experiences to develop skills in goal setting, decision making, conflict resolution, self-awareness, communication, time management, and personal hygiene. Such activities can be integrated into the total curriculum through regular classroom instruction, specially designed group counseling sessions, individualized counseling sessions, or separately scheduled classes.

Faculty have commented on the benefit of this component:

- *As an educator with daily contact, I can observe attitude changes and can intervene. I can observe frustration levels and defuse. I encourage, motivate, and provide positive feedback. I listen and act as a safety valve, affirm, am nonjudgmental, provide a safe and trusting environment with structure.*
- *Students seem more willing to accept responsibility and have higher self-esteem. They needed someone to care.*
- *Learning to set goals has been a successful feature of the program for our students.*

Students engage in a variety of fun activities which build self-confidence, team spirit, and cooperation.

Students have also expressed their feelings about this component's instructional value:

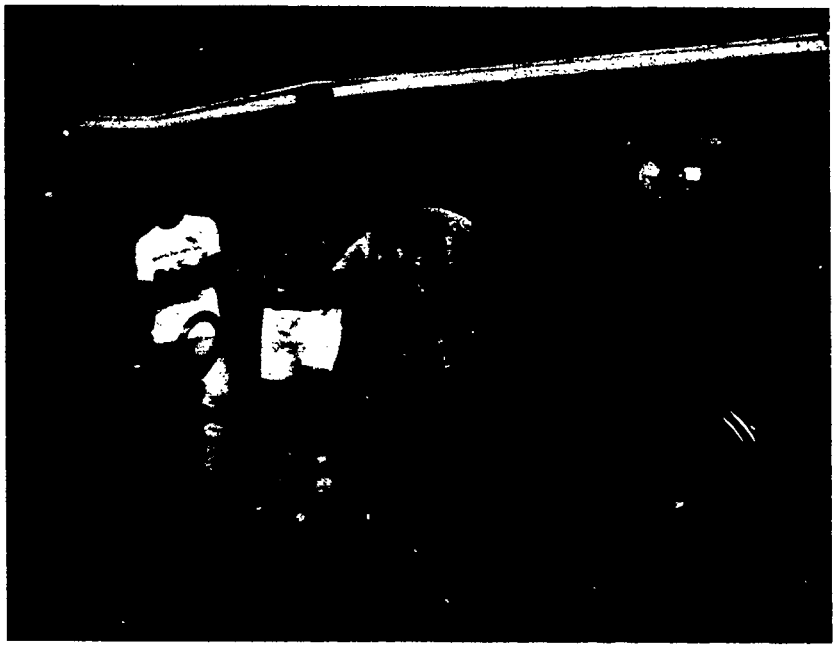
- *This program has taught me how to get along with others.*
- *I think this program helps to build self-confidence.*
- *This program has helped me learn more about myself.*
- *There are other students struggling out there like I am struggling, but we are willing to work at it at school.*

Physical Education Component

A component often overlooked in other youth programs is physical education. The holistic approach of LOP touches the physical well-being of each student and helps to foster wellness, both now and during later years.

Activities that encourage both team participation and individual achievement are included in this component. The rationale is that students need physical activity to operate at an optimal level of health and wellness. This health-building component allows students to work together as they enjoy themselves. Recreational activities are adapted to students' needs and desires. Hiking, softball, swimming, horseshoes, golf, and volleyball help to develop and enhance a sense of self-accomplishment, group cooperation and team spirit, and skills for leisure-time activities.

The Ropes Course is another activity that has been successfully used in the physical education component. The Ropes Course is a series of outdoor adventure/challenge experiences, progressing from simple exercises to complex problem-solving tasks. By participating in both high and low ropes activities, students, faculty, and staff are mentally and physically challenged to increase self-confidence and awareness, discover new abilities, build communication skills, and strengthen relationships within the group, and, ***they have fun doing it.***



Horseshoes provide students with an opportunity to enjoy themselves while sharpening individual skills.

Support Elements of the Lifelong Options Program

Successful implementation of the six major components of LOP is dependent upon additional support for the program in the form of staff selection and training; student selection, recruitment, and orientation; flexible scheduling; instructional procedures; student management; administration; and program monitoring. The combination of major components and support elements complement each other and strengthen LOP to maximize student success. This section of the handbook gives an overview of each of the support elements and examples from each demonstration site.

Staff Selection and Training

For a dropout prevention program to be successful, staff must be trained to deal with students who are at risk. Otherwise, the program will not be implemented properly and staff will burn out quickly. Findings from demonstration sites revealed that the most effective staff members were those who are familiar with at-risk students' life-styles and needs. These teachers had a good understanding of and skills in subject matter knowledge, instructional processes, interpersonal relations, student motivation, and parent involvement. They also possessed the following personal characteristics identified in the reseach literature (Keller et al., 1991, p. 408-409) as effective in working with students at risk:

- acceptance of others;
- belief that *all* students *can* learn;
- self-confidence;
- openness to change;
- capacity to be flexible in routines;
- creativity to think and act nontraditionally; and
- willingness to work beyond the normal work day.

The Helping Process Booklet for Program Coordinators (Faddis & Pritz, 1988, pp. 11-12) lists qualities to consider when selecting faculty and staff. It recommends that administrators seek educators who express an interest in working on the program because "program effectiveness depends strongly on the willingness of participants to volunteer their efforts." In addition to willingness, look for those people who demonstrate:

- an attitude toward curriculum as a means to an end rather than an end in itself;
- openness to restructuring traditional curriculum concepts to include relevancy-based, applied learning activities;
- little or no concern about personal "turf" in the school or fear of innovations that require a redefinition of their role;
- flexibility and originality in instructional approaches and openness to new ideas;
- willingness to examine preferred teaching modality in relationship to students' needs;
- ability to work well with other faculty and staff as team members;
- ability to function as a positive role model;
- willingness to take on the added responsibility and commitment of occasional personal time needed in working effectively with at-risk students;
- acceptance of variety of student types and life-styles and resistance to judging students who adopt unusual modes of dress or speech that are common among many at-risk students; and
- a sense of humor.

Teachers at the three demonstration sites represent a combination of backgrounds and experiences—some are seasoned veterans who can draw upon years of related experience; others are new teachers who are dealing with the struggles that most new teachers face. Their one common bond, however, is that they chose to work with identified at-risk youth, a choice that reflected the kinds of attitudes teachers must have to be successful with these students. The following reasons were given by LOP teachers for wanting to work in a dropout prevention program:

> *"I chose to work with at-risk youth because I had a tough time in school myself. I want to feel needed by my students."*
>
> *"In a program with a smaller class size, I can really pay more attention to my students."*
>
> *"This year my role in the school's efforts to retain students has been more as a learning consultant. I see myself as an 'enabler' for students."*
>
> *"Because of the rigidity of the public school system, students don't always have enough options to be successful. I try to provide those options in this program so students will want to come back."*
>
> *"I am often in a counselor and mother role to my students."*
>
> *"I view my role as a supportive helper . . . a friend who works with the students to find out the answers together."*

Successful teachers at the demonstration sites are those who see themselves as more than content specialists. They assume the role of teacher/counselor. They often speak in terms that relate to a family unit, using terms such as "my" students instead of "those" students; "our" room, not "that" classroom; and "we" did this, not "they" did this. They are capable of and comfortable with relating to at-risk youth. Their instructional techniques, classroom management style, and personal interactions with students reflect a genuine commitment to keeping young people in school.

One of the easiest ways for administrators to ensure that programs are properly staffed is to select teachers who already possess adequate training and positive attitudes. It is more likely, however, that administrators must choose from a pool of staff members who lack training in working with students at risk. In such cases, it is extremely important to select staff with the personal qualities just described, provide them with adequate preprogram orientation, and involve them in intensive, ongoing staff development once they begin work. Keller et al. (1991) have concluded that "... effective, long-term dropout prevention will not occur without broad-based, in-depth, and ongoing staff development which changes educators' behavior toward at-risk students. This staff development must target the educator's relationship to at-risk students and promote instructional techniques and a curriculum which enhances the self-acceptance of all students" (p. 403).

It is important to note that school administrators and counselors must also possess the kinds of personal characteristics expected of teachers and must avail themselves of the opportunities for staff development activities. The following statements by administrators and counselors working in the Lifelong Options Program are examples of these characteristics and positive attitudes:

> *"My role initially was as a support system. As the program developed my role shifted to that of program advocate: reviewer of ideas and partial counselor."*
>
> *"As assistant principal I can't always stick to assigned duties. I need to be flexible according to what the students need. I try to guide the students so that they know they have to reach out and verbalize needs."*
>
> *"As an administrator I try to monitor the staff support that is needed to*

avoid potential burn-out, given the extra-stress nature of their (the teachers') placement."

Examples of Staff Development Activities for LOP

A number of staff development activities were requested by local program staff and implemented by staff of the two national centers. The activities varied in format, ranging from:

- workshops that targeted specialized teachers within the program;
- seminars that included the entire faculty of the school;
- district-wide teacher in-service; to
- one-on-one advising/consulting time.

The topics for staff development varied with needs identified at each local demonstration site. Each site, however, shared three common staff development needs—orientation to the new program, acquiring new skills for program maintenance, and "nurturing" time.

Staff development may be in the format of large group or one-on-one activities.

Orientation

In the initial implementation of any new program, program staff must be properly oriented to the program—its goals, objectives, the roles and responsibilities of key players, the evaluation plan, available resources, and other key elements. The orientation process for LOP can be adapted to other dropout prevention programs. Topics for consideration include:

- Profile of At-Risk Students,
- Overview of the Program,
- Components of the Program,
- Student Selection Criteria,
- Timelines for Program Implementation, and
- The Evaluation Process.

Acquiring New Skills

Once a program has been started, faculty and staff may feel the need to develop new skills and teaching techniques to accommodate the situations and challenges that arise. Topics for staff development that LOP faculty and staff found helpful and could be adapted elsewhere are:

- Curriculum Development,
- Instilling and Promoting Self-Esteem in Students,
- Classroom Management,
- Preparing for the World of Work,
- Strengthening Basic Skills,
- Learning Styles: Identification and Application,
- Stress Management for Faculty and Staff,

- Developing Critical Thinking Skills in Students,
- Classroom Materials That Are Appropriate for Youth At-Risk,
- Affective Education, and
- Team Building

Nurturing

A deceptively simple but powerful staff development activity is to allow faculty and staff time to network with each other on a regular basis. Wise administrators strive to make time for teachers, counselors, and administrators to gather informally to discuss concerns, problems, successes, future plans, progress, and needs. Finding time in an already full schedule is not easy, but the creative administrator will devise a plan for daily, weekly, monthly, quarterly, or annual times—whatever is needed for networking to occur. LOP demonstration sites employed one or more of these options which may be useful to others:

- a common daily planning period for teachers;
- one designated afternoon each week when program staff would meet;
- an early morning session one day each week before students arrived;
- an occasional breakfast or luncheon hosted by the school.

The rewards of networking will become evident in improved staff morale where faculty and staff feel like more of a team and less isolated from one another; gain a better understanding of each other, the students, and the program through more frequent communication; and are provided with opportunities to break down "molehills" before they become mountains.

Regularly scheduled meetings with project staff members helps to promote better communication and reduce the feeling of isolation.

Student Selection, Recruitment, and Orientation

Accurate identification of students who are likely to leave school early if they do not receive special assistance is a critical element in the operation and success of any dropout prevention program. If identification procedures are not systematic and judgments too subjective, it is possible to select and assign students who are not really at risk relative to others among their peers. Given that limited resources are available for addressing the dropout problem, this identification issue deserves careful consideration. It is crucial that students identified for a dropout prevention program be those who would most likely drop out if no intervention were provided.

In order to address this issue, the Lifelong Options Program used the *Dropout Prediction Scale* (Weber, 1988) as its basic at-risk student identification instrument. The *Dropout Prediction Scale* is a 13-item questionnaire that the student can complete in about fifteen minutes. The instrument includes a instructional manual and computer software which allows analysis of student responses and determines a student's at-risk status based on a weighted composite of factors. The *Dropout Prediction Scale* was developed through investigation of more than 100 dropout prevention programs and was pilot tested on nearly 30,000 students. It is cost-effective, both in time and money, to use this student questionnaire rather than compile information from student records. The potential bias of self-report has been accounted for in the construction of the questionnaire.

The scale can be administered to all students in a given grade to produce a list from which to select candidates for a program. Alternatively, districts can develop an initial screening checklist that teachers, counselors, and other staff may use to develop a pool of students who will complete the *Dropout Prediction Scale.*

The following list (Bhaerman & Kopp, 1988) includes the salient factors gathered from the research literature that can be helpful to districts in developing an initial referral screening checklist.

Academic Factors

- low achievement
- 1 or 2 years behind grade level
- unable to tolerate structured activities
- lack of definite educational goals
- enrolled in a general course of study rather than vocational education or college preparatory programs
- lower occupational aspirations than their peers
- difficulty in abstract reasoning, generalizing, and forming relationships
- reads below grade level
- experiences difficulty in mathematics

Behavioral Factors

- high rate of absenteeism and truancy
- exhibits discipline problems in school
- does not participate in extracurricular activities
- associates with friends who are outside of school, usually older dropouts
- frequent health problems
- inclined toward physical rather than mental activities
- impulsive decisionmaker
- works more hours per week on a job than do completers
- evidence of chemical use and abuse, delinquency, adolescent parenthood, and attempts of suicide or self-mutilation

Family Factors

- single-parent homes
- low-income homes
- little solidarity with their families

- more older siblings than friends
- other family members are dropouts
- family is more mobile than other students' families
- belongs to a minority group
- lacks cultural and economic experiences that often relate to success in traditional school programs

Psychological Factors

- feels rejected by the school
- has negative attitudes toward school
- does not identify with school life
- feels that courses are not relevant to their individual needs
- lacks incentive for achievement in traditional school activities
- is socially isolated or socially and emotionally disturbed
- is a loner who is unaccepted by peers
- has a poor self-concept and lacks a clear sense of identity
- has experienced some form of trauma, including abuse
- cannot relate to authority figures
- attracted to outside jobs, wages, and experiences

A word of caution is in order about the use of checklists for identification purposes. **Not all factors have equal weight in students' lives, nor do they have equal predictive power.** A checklist should be used for initial screening only and not for assigning students to programs. Moreover, the *Dropout Prediction Scale*, while it is much more accurate than a simple checklist, is not 100% accurate in identifying at-risk students. Therefore, it is recommended that a staff committee review the records of all students who are identified by the *Scale* using other pertinent information before a final decision is made to recruit a student for a dropout prevention program. In addition to the *Dropout Prediction Scale*, two other sources can be helpful to school personnel in developing a student identification process. These are *How to Identify At-Risk Students, Solutions and Strategies Number 2* (Wells, Bechard, & Hamby, 1989); and *At-Risk Youth: Identification, Programs, and Recommendations* (Wells, 1990).

Once students are identified, they should be recruited; they should **never** be assigned against their wills. They and their parents (when appropriate and possible) should be given a general description of the program and the reasons why school staff think this is the best option for the student. If all parties agree and students are assigned to the program, then they should go through a more involved orientation.

Placing students in a special program and orienting them to that program brings up the possibility of negative effects from labeling. Any identification process must be guided by care and sensitivity. A guiding principle of any dropout prevention effort is to raise the self-esteem of students. School staff should take care to place a student in an environment where he or she can develop a sense of belonging and camaraderie. It is also important to make efforts to establish pride in the uniqueness of the program and point out the contributions the program makes to the school as a whole. Then the student will feel connected to others in a useful endeavor that, in turn, will serve to raise the student's self-esteem.

Flexible Scheduling

School schedules determine the manner in which students come in contact with the curriculum. When groups of students must be organized within limited time frames, scheduling becomes an important consideration. One thing that educators learn early in teaching is that students don't always learn by the clock or the calendar. Educators and community social workers who work with at-risk youth recognize that traditional school programs set within a rigid time frame of eight to three o'clock are not always appropriate for all students.

While the implementation of flexible scheduling may not be a simple process, the benefits are often worth the extra costs in time, energy, and money. Programs in which flexibility helps shape the philosophy of the program in meeting the individualized needs of students have generally proven successful. Students who are afforded the opportunity to further their education by way of an alternative to the traditional public school format are more likely to graduate and thus give back to the community by becoming productive, successful citizens. However, it sometimes seems that public schools revolve more around transportation schedules, state regulations, and the convenience of school administrators, teachers, and parents than for the benefit of students.

Students are often affected by a variety of personal circumstances that conflict with the traditional high school schedule. For example, students who must generate an income by working while still in school need flexible schedules to accommodate both school and work demands. Students who are parents and must consider child care responsibilities also may require flexible schedules. Students who have fallen behind in earning course credits may be encouraged to stick with school until graduation if they are given the opportunities to make up or earn additional credits—options that flexible scheduling offers. Many times, students who believe they have no other options but to drop out of school.

A key to the success of the Lifelong Options Program is individual scheduling which offers flexibility to students at risk. LOP project staff employ a variety of scheduling options for their at-risk students who typically have not done well in the traditional 50 minute class period from 8:00 a.m.-3:00 p.m., Monday through Friday. They do this by adding variability to the schedule to give students more choices about when they can come in contact with the curriculum and by reducing the amount of time it takes for a student to move through a certain unit of the curriculum—an accelerated learning approach.

In one demonstration site, the school district selected an alternative school for the program. Classes for students begin 50 minutes later and end 45 minutes earlier than their home schools, yet still meet the state's defined minimum program standards. This was accomplished when administrators, teachers, and students examined the traditional daily schedule, identified "downtimes," and eliminated those downtime minutes from the schedule routine. For example, transition time between classes was reduced from five minutes to two minutes because the alternative school is small enough to allow students to get to classes quickly; lunch period was reduced from 45 minutes to 20 minutes since the students have their lunches brought to the site and don't compete with other students to be served in the cafeteria; and finally class periods were reduced from 50 minutes to 40 minutes.

Opportunities for accelerating learning are also available for students at this site. Those students who complete 50% of the required vocational education objectives through traditional classwork can get credit for completing the remaining objectives through a job in their vocational area rather than attending additional classes.

Another demonstration site uses the school-within-a school approach at a vocational/ technical center. Classes begin two hours and fifteen minutes earlier than the regular public high schools, thus allowing the students to be dismissed early. This schedule accommodates those students who must work in the afternoons.

This demonstration site also utilizes computer-assisted instruction (CAI) for reading, English, math, and science courses. Credit toward graduation is awarded on the basis of the number of objectives and competencies completed rather than Carnegie Units of "seat time" earned. Some program students have earned as many as three credits in nine weeks using this accelerated, self-paced approach.

Students use CAI for initial or remedial instruction.

The third demonstration site also uses a technology center as host for the program. At this site, an Applied English course is offered both during the school day and immediately after school. Students also have an option of earning English and social studies credits after school through a work program called Community Based Education (CBE). In a CBE experience, students are assigned a business/professional person to work with each day after school. The students are given specific academic learning objectives to be accomplished under the direction of their mentor and under the supervision of a school staff member certified in the discipline in which a credit is earned. In addition, students also learn job skills and acquire interpersonal relationship skills.

These examples represent ways that staff in diverse communities and organizational arrangements in the Lifelong Options Program have tried to assign course content to blocks of time in nonroutine ways or find other innovative ways for students to earn credit so they can make up lost time on the road to graduation.

The experiences of these sites indicate that staff who seek to implement flexible scheduling should consider the following points:

- Flexible scheduling often begins with a change in staff attitude;
- Flexible scheduling is a means for offering more choices for students to come into contact with the curriculum by extending the school hours;
- Flexible scheduling is a creative way of accelerating learning so that course credit can be earned in a shorter amount of time;
- Flexible scheduling is a vehicle for allowing students to earn credit in different ways (i.e., community service projects, apprenticeship, etc.).

Instructional Procedures

The most effective instructional procedures are those built upon the philosophy that the curriculum must be related to student experience and that students must be actively involved in learning. Vocational education, because it meets both these criteria, is particularly suited for students at risk. Vocational education allows students to learn information in an applied context where they can handle materials, practice skills, and participate in real-life activities. Students who may have previously appeared unsuccessful in school often blossom and mature in the vocational setting. Such a setting allows for the adoption of several techniques found to be effective for students at risk—an Individualized Education Plan (IEP), mastery learning,

self-paced curriculum, teaching to different learning styles, and cross-age grouping.

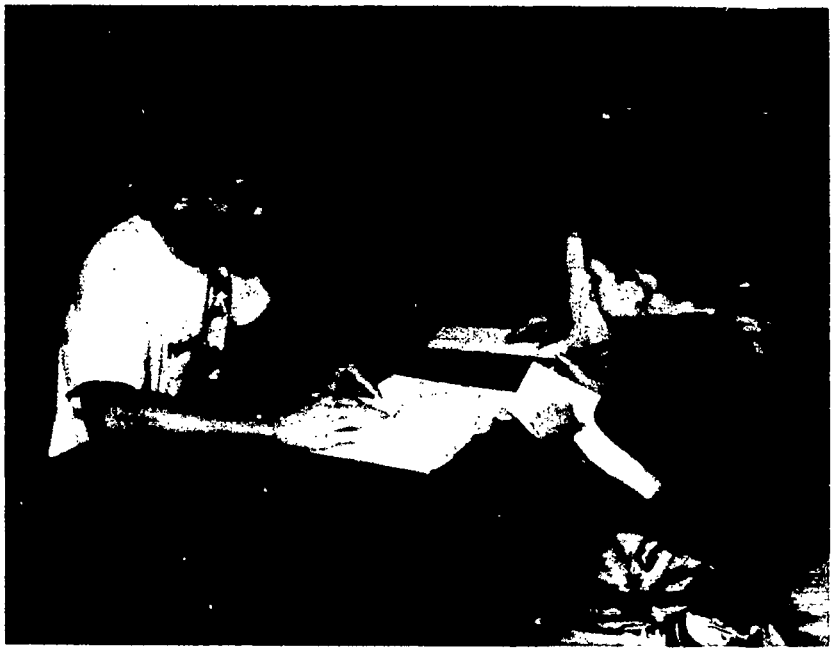
The vocational education component is the foundation of the Lifelong Options Program. A distinguishing mark of LOP derives from the variety of instructional strategies and the flexibility with which they are employed to accommodate the many differences in students' learning styles. The following are a few of the varied methods used by demonstration site staff that have been particularly effective with identified youth at risk who need remediation as well as acceleration.

Computer Assisted Instruction (CAI)

Computers are very successful in providing initial or remedial instruction in all areas of an enhanced curriculum. At one site, students are able to take English, mathematics, science, and social studies courses through the WICAT software program. A certified teacher in each of the academic subjects monitors each student's progress, assists when problems or questions arise, and supplements CAI with direct instruction when needed. CAI is also used to teach students how to apply what they learn. Using the Conover Company's software, *Math on the Job, Reasoning Skills on the Job*, and *English on the Job*, students are able to practice real-life situations at the computer. Exposure to and experience with the computer enables students to learn many computer-literacy and problem-solving skills that will enhance their success on the job or in postsecondary education.

Tutoring

Studies reveal that tutored students perform better academically than those not tutored and found that all tutored students they studied demonstrated more positive attitudes than those not receiving tutoring (Little, 1990, p. 1). LOP staff found that tutors also received benefit from this arrangement. Students participated in a **cross-age tutoring** program and volunteered to tutor younger students at a nearby elementary school. The tutors were able to review basic content and practice basic skills as they helped the younger students. They also had an opportunity to improve interpersonal skills and exhibit leadership skills in this new role.



Tutoring younger students benefited both the tutor and tutee.

The small class size allows vocational specialists to work individually with LOP students in the school's shops and labs on components of their lessons with which they are having difficulty. This **one-on-one** arrangement of teacher and pupil working together enables both teacher and student to become better acquainted as the student learns.

Peer tutoring is another instructional strategy incorporated into the LOP curriculum. Students experience success as they learn from one other, both in and out of the classroom.

Cooperative Learning

Students working together on projects, assignments, and classroom activities enhance the learning environment and simulate real life work settings. This instructional strategy enables students to build interpersonal skills as they are acquiring knowledge. In addition to learning subject matter, cooperative learning requires students to plan, set goals, communicate with one

other, manage time, meet deadlines, resolve conflicts, and become a team player—all essential skills to succeed in today's workplace.

On-the-job Experiences

One of the most effective ways to teach knowledge and skills is by relating them to a job setting. Students at each of the three sites have opportunities to relate what they are learning in the classroom to experiences in vocational education classes, community-based education courses, after-school jobs, and through a school-based, student-operated business.

LOP students in Oconee County were involved in the Career Development Program, which has several options for students: part-time employment in a field related to the student's career plans; a one-credit elective course in career education; and participation in a school business. Students who choose to work in the school business produce outdoor furniture. They experience firsthand:

- entrepreneurship activities;
- production design, planning, and construction;
- business management, sales, and marketing; and
- customized product design and manufacturing.

Proceeds from the sale of the outdoor furniture support student field trips, guest speakers, and an incentive program.

Student Management

Student management is a primary concern of educators working with at-risk students because their disruptive behavior interferes with the learning of everyone in the classroom. Inappropriate behaviors can range from talking in class and tardiness to smoking and cutting classes.

Many factors can cause students to behave inappropriately, including frustration from negative school experiences, academic failure, and poor self-image (Johnston, 1990, p. 27). Sometimes behavior deemed as inappropriate by school staff is simply a student's response to a school climate that is not meeting his/her needs (French, Gerstle & Nellhaus, 1991, p. 17).

Regardless of the cause, educators who work with students at risk must understand that these are young people with a distinctive set of problems for whom traditional school approaches to discipline have not worked; therefore, nontraditional strategies must be tried. These students need to learn the skills of self-control and discipline that will help them become successful in school. Unfortunately, traditional school responses to inappropriate behavior have been punitive rather than corrective or therapeutic. The focus has been on punishing the students rather than helping them learn appropriate behavior.

Research shows that some of the most common approaches, including out-of-school suspension, detention, and academic punishment have many problems associated with them. Evidence indicates that schools using suspension and detention have more discipline and truancy problems than schools that do not. Furthermore, students who are suspended from school are more likely to be retained in grade, have low academic achievement, express negative school attitudes, and ultimately drop out of school. The problem with academic punishment—the practice of failing a student or reducing a student's grade solely due to absence—is that it exacerbates the already low academic achievement and poor attendance of truant students.

Inasmuch as research clearly demonstrates that punitive discipline measures are not the most effective form of intervention, discipline policies will be much more effective if they are preventive in nature and emphasize responsibility and positive reinforcement. For many students, time spent at school is their best opportunity to develop and improve self-esteem. This can occur when students experience success at school both behaviorally and academically (McCarney & Bauer, 1990, p. 3).

A key component involves teaching students the difference between appropriate and inappropriate behavior, responsibility for their behavior, and the relationship of their behavior to consequences that follow. In order for this to occur, the students need to know explicitly the school's expectations and the consequences of inappropriate behavior. It is also very important that students are rewarded for improvements in behavior and achievement. Positive reinforcements should be used whenever students exhibit appropriate behavior. These rewards should be immediate when possible because adolescents respond better to immediate rewards than to delayed gratification.

Effective discipline policies require a systemic approach based upon school-wide changes in all areas. These systemic changes are necessary to improve school climate and develop innovative curricular and instructional practices that meet the diverse needs of all students. Schools can start by identifying the factors that contribute to poor behavior and replace them with more responsive policies and practices.

Collaboration among administrators, teachers, counselors, parents, and students is essential to create and implement school-wide discipline policies. When everyone is involved in decision making on school issues, the decisions have more meaning and are much more likely to be supported by everyone involved. This type of collaboration can greatly improve the quality of school climate.

Staff development can be used to improve teachers' classroom management skills. Training should include topics such as human development and motivation, teacher expectations, counseling skills for the classroom teacher, preventive discipline, learning styles, and the teacher's role in social and emotional growth of students. Planning and implementing staff development activities should be an ongoing process for long-range improvement of the school environment and climate.

Educators from each of the three demonstration sites recognize that the LOP program is designed to prevent dropouts and school failure. Therefore, extra care is taken before a student is removed from participation in the program due to behavior or academic problems. Although students are expected to meet high standards, staff give students with problems every opportunity to improve before they are terminated from the program (Hamby, 1992, chap. 2).

Incentives

Oconee County has implemented a discipline and reward system. The "levels" program is based on a point system that makes consequences of student behavior automatic. Accumulation of a certain number of points earns students free time, food, or special privileges. Even in the initial stage of implementation, teachers' comments were positive and enthusiastic. The incentives system appears to have finally freed the staff and student body from an excessive preoccupation with discipline so that each can concentrate on education.

In-School Suspension

In-school suspension has been implemented at the demonstration sites as an intermediate step before expulsion. The sites found that in-school suspension was *only* effective when professional monitoring, rigorous academic work, and limited isolation from peers were enforced.

Observations and experiences in the three demonstration sites suggest the following principles as guides for building a positive student management system:

- Involve staff, students, parents, and faculty in the development of clearly defined guidelines for student management and the consequences for noncompliance;
- Publish and disseminate these guidelines to all involved parties;
- Administer the guidelines in a fair, objective, and consistent manner; and
- Support positive alternatives whenever possible, such as in-school suspension, behavioral contracts, counseling techniques, incentives for appropriate behavior, and others.

Monitoring the Program

In a time of limited resources, program monitoring is usually not a high priority when dropout prevention programs are being developed and implemented. However, spending great time and money on a program without spending some time and money to monitor it is like driving a car with your eyes closed.

Program monitoring should be done to help school staff answer at least three questions about a dropout prevention program. First, are students in the program changing for the better? Second, if students are not improving, what is wrong with the program and how can it be changed? Third, if the program cannot be adapted to bring about the kinds of changes desired, should it be continued? If school staff and policymakers want "true" answers to these questions, then they must develop and implement a systematic, valid process that will provide accurate information in a timely and easy-to-understand manner.

As one of ten federally-funded projects using vocational education as a primary intervention strategy for dropout prevention, the Lifelong Options Program underwent extensive external formative and summative evaluation. Program and control groups were randomly selected and assigned, several student questionnaires were administered throughout the project, extensive data were collected from student records, and numerous site visits were conducted to observe projects firsthand and up close. During site visits, interviews were conducted with administrators, teachers, and students, using interview instruments developed to reflect each site's program objectives and activities. Classroom observations were conducted and documented on a structured form that focused on program components as they were implemented. (These instruments are included in the appendix.) While this level of sophistication in evaluation was necessary for a federally-funded demonstration project, less intensive monitoring may prove adequate for programs developed and implemented by school districts. It is mentioned here to establish a context for viewing the ideas presented below. What follows are ideas and practices learned from this extensive evaluation effort that can serve to guide program monitors in local school districts.

- **What kinds of information should be collected?**

  Evidence of student change and evidence of program implementation and operation are necessary for effective monitoring of a program. The first is closely related to the *outcome* goals and objectives of the program which often have to do with increased attendance, higher academic achievement, mastery of skills, improvement in attitudes, higher graduate rates, and the like. This kind of information answers the question, "Are students making progress toward the objectives?" The second is more closely related to *process* objectives that address such issues as curriculum development, staff selection and training, strategy implementation, scheduling, and so forth. Monitoring is done here to answer the question, "Was the program implemented as it was designed and is it operating according to plan?"

- **What are the sources of the information to be collected?**

  Most *outcome data* are routinely collected by schools and are available in students' records. However, in order to collect certain kinds of information such as student attitudes and career plans, it is necessary to administer surveys or questionnaires to students. Rarely is it necessary to involve students in massive and costly standardized testing to collect information solely for program monitoring. *Process information* comes mainly from observations about how the program is being implemented. Records of observations, minutes of meetings, or other printed materials will provide evidence that something was done, when and how it was done, who did it, etc.

- **Who collects the information?**

  Outcome data are usually reported on a regular basis by teachers or other school staff assigned to that task. *Process information* is done by school staff or by nonschool personnel employed for that purpose.

- **When should the information be collected?**

  Data should be collected often enough to provide relevant and useful feedback. For example, *outcome or summative data* can be collected as frequently as once a year or as often as twice a year. *Process or formative data* is collected on an ongoing basis if done by school staff or at least twice a year if done by an external observer.

- **How can the information be used?**

  Formative information from interviews and observations can be combined to reveal patterns and areas of strength and weakness in program implementation. These provide the basis for program improvement, not only through targeted feedback from an external perspective, but also through pinpointing needs for technical assistance. Summative data collection and analysis can also be used to improve the program, make reports to policy-makers, and provide information for public relations and dissemination activities, and for use in seeking external funding and support.

Administration

Successful dropout prevention programs start with support from the top. Perhaps the most important form of support is for administrators to convey, at every opportunity, the firm conviction that all students can be successful learners and, further, that the school staff is committed enough to that outcome to make changes to bring it about. Schools tend to be perceived by at-risk youth as unfriendly and bureaucratic. The building administrator is the single most powerful person in creating a supportive, student-centered atmosphere oriented toward achievement. The system superintendent is especially important in representing schools' needs to the public and eliciting the involvement of community groups, business and industry, and parents. That role is often delegated to a coordinator who is expected to be able to devote full time to it.

In addition to their desire as educators and human beings to see these young people succeed, administrators have strong incentives to spearhead the dropout prevention challenge. As discussed by Faddis and Pritz (1988) dropout prone students, frustrated and failing in school, burden the educational system as it is currently structured (pp. 1-4):

- At-risk students often express their human needs and low self-esteem as negative behavior and increased demand for attention. This results in disproportionate and relatively ineffective use of teacher and administrative time and resources.
- The sheer number of at-risk students with sporadic attendance often requires additional administrative staff to monitor attendance patterns and ensure state departments of education that the school is attempting to comply with compulsory attendance laws. Such monitoring, however, has little effect on the absenteeism.
- High dropout rates compromise schools' credibility with their boards of education and communities, particularly as most dropouts stay in the area and plague the community at large with their behavioral, unemployment, and other dependency problems.

An administrator/planner for a dropout prevention program has a number of specific responsibilities to fulfill. Here are the basic responsibilities:

- **Determine the scope of the dropout problem** in the school(s) by performing a needs assessment.
- **Assess the resources that will be needed** to address the dropout problem effectively.
- **Form a dropout prevention task force** composed of business leaders, members of social service agencies, community leaders, key school system representatives, parents, and other leaders from organizations whose cooperation will be needed to provide the critical resources for a comprehensive dropout prevention program.
- **Develop, with the task force, a comprehensive dropout prevention program** that includes program objectives, student intake criteria, and short- and long-term evaluation procedures that will meet the school and community needs.
- **Complete a written agreement** with all involved parties for the allocation and adminstration of all necessary resources, specifying which parties have responsibility for what activities and prescribing specific procedures for referral, cooperation, and funding.
- **Allocate staff and resources** needed to make the program work in the school(s). This means developing an appropriate program administrative structure to operate in the school(s), choosing a program coordinator for each site, selecting any other appropriately qualified faculty and staff for the program, and making provision for other necessary resources.
- **Reorganize or redesign school structures, policies, and curricula,** as appropriate. In particular, policies concerning discipline must be established with concern for the needs of at-risk students.
- **Develop and manage the program budget** for school, district, state, and community accountability.
- **Provide in-service** or other orientation for all faculty and staff that will be involved in the program (orientation may beneficially include staff and volunteers from resource organizations or the community whose efforts will be important in making the program work).

(l) Community leaders working with school personnel make an effective dropout prevention task force.

(r) Program coordinator and counselor meet regularly to discuss program's progress and needs.

- **Encourage flexibility, creativity, and commitment** to the program among all involved persons, and organizations, but especially among school faculty and staff. Support these qualities by modeling them and by providing appropriate recognition and reinforcement of others.

- **Evaluate the program** formatively (at frequent intervals to help refine and strengthen policies and practices) and summatively (at the end of each school year, including follow-up of program dropouts and completers, to provide data on program impact).

- **Review program evaluation findings with the task force** on at least an annual basis to refine, strengthen, and perhaps expand the model and alliances.

Beside these specific responsibilities, it is important for an administrator to **participate in the program personally.** That is, to do a good job, an administrator needs to get in touch with the microlevel of the dropout prevention program and develop a personal awareness of the problems and solutions that exist for the at-risk students, school faculty and staff, and other persons involved directly in making the program work.

Examples from LOP of Administrative Support

Since the federal grant heavily emphasized vocational education, all three LOP sites obtained district level support through a designated coordinator with expertise and experience in vocational education. Additionally, school building administration has come through with either a principal or a director. The following examples pinpoint ways in which adminstrators have helped.

- **Flexibility**–Where a program depended on innovative strategies such as an after-school course and community-based education for academic credit, flexibility of administration has been important as well as a willingness to seek exceptions to established policies for overriding educational goals in an experimental program.

- **Direct Contact**–When an administrator had an opportunity for direct contact with students and a heightened awareness from which to understand needs and to communicate with the teacher/coordinator, the administrator was able to take care of such nitty-gritty but essential items as transportation changes.

- **Timely Intervention**–When an aspect of the program was threatened, an administrator stepped in to deal with problems; for example, during installation of the job-context basic skills software on the school computers, it became apparent that there was inadequate hardware capacity. Through resourceful timing of purchase and sharing of equipment, the problem was resolved.

- **Commitment and Persistence**–An administrator with a strong sense of commitment, persistence, and willingness to risk and to invest whatever effort is needed to help students succeed is the lifeblood of such a program. One of the critical contributions is a demonstration to other educators and administrators of what is possible to achieve with youth that others may have "given up on." Likewise, it is a demonstration to these youth who were ready to give up on school and on themselves that school **can** be different—and so can they.

- **Knowledgeable and Accessible**–In a large urban district, it is especially helpful to have an adminstrator who is fully knowledgeable about the possibilities and procedures, and then to have that person stay in close touch with a program person at the school to make adjustments as necessary.

- **Resourceful**–Administrators have spearheaded the effort to attract additional resources to continue and expand their programs.

Administrators at all levels are in a position to exert leadership that helps determine the success of at-risk students. Ultimately, where changes are made that result in holding more students in school and helping them learn more successfully, these changes become institutionalized only through administrative support and initiative.

4 Planning and Implementation Guidelines

Planning is the initial step toward the success of any program. The process of planning should be facilitated by a vision-oriented leader who involves a group of competent people committed to a comprehensive, site-based management approach. This group may be composed of a cross-section of persons involved and interested in education: teachers, counselors, administrators, students, parents, community-based leaders, and board members.

The first task of this planning group is to make a decision by answering a simple question—***Do we want to improve what we are doing now?*** If the group answers no, it can disband and school can proceed as usual. If the group answers yes, then the real work begins.

In order to develop a comprehensive plan for a school district, several more questions must be asked, answers must be found, and an analysis made of the findings. A good place to begin is with the following questions which build a framework for a comprehensive planning process:

- Where have we been?
- Where are we now?
- Where are we going?
- How are we going to get there?
- How will we know when we get there?

Needs Assessment

In answering the questions—Where have we been? Where are we now? Where are we going?—the planning group will have completed the initial stage in a comprehensive planning approach. This stage is called needs assessment. As its name implies, it provides information that demonstrates a need for a program. "In addition to justification, a needs assessment allows planners to target appropriate populations, identify sources of administrative and programmatic support, develop appropriate activities, as well as obtain sources of funding" (Crockett & Smink, 1991, p. 13).

The planning group, or task force, should ideally involve both school and community participants. The school's role in the dropout problem is complex and multifaceted. Schools are held accountable in large part for the dropout problem, regardless of the fact that many factors outside of school contribute to the dropout rate, such as a student's problems with family, the legal system, work, peer group, community, or social service agencies. Therefore, many institutions have a role to play in keeping students in school. The school is in a unique position to help students simply because it is the only place where all youth gather together for a solid block of time. For this reason, the main focus of dropout prevention interventions will be in the school, but many individuals outside the school walls should be involved.

One of the objectives of the task force will be to sensitize the school board and the community to the needs of students at risk and make them aware of the nature and extent of the dropout problem. The chances of securing their complete cooperation are greatest if the time and care has been taken to define the problem as it exists in that particular school and community.

Planners may obtain answers to "Where have we been and where are we now?" through a variety of data sources: public records, public reports, mail or telephone surveys, key informants, or community forums. Generally, they need to assess the characteristics of the community, the local students who drop out, the school-related factors of the dropout problem, and the consequences to the community of dropping out.

Planners must be able to locate or develop a mission statement for the school district to answer the question, "Where are we going?" Planners will then develop program goals and student outcome objectives that complement the overall mission statement of the district. The mission statement, program goals, and objectives should be written in clear, concise language and disseminated throughout the district via print, television, and radio media.

Implementation

While comprehensive planning is the foundation of any successful program, a well-managed, efficient plan of operation is equally essential. This plan of operation must include a solid infrastructure of *people* (sufficient, competent staff with defined and mutually understood roles and responsibilities) and *resources* (adequate funding to support personnel, equipment, materials/supplies, and facility needs of the program).

A *Program Coordinator or Project Director* bears the major responsibility for the program. This person is a participant in program planning; oversees daily operation and management of program staff and students; serves as a liaison between program staff and district staff; completes the administrative and budgetary tasks of the program, and prepares program reports.

A *Task Committee* composed of local community leaders, educators, agency representatives, students, and parents can serve in an advisory and/or resource capacity for the program. Through regularly scheduled meetings and frequent communications, this committee can provide advice, insights, and recommendations. The committee can also be a link into the community for mentors, job placement, guest lecturers, field trips, and other miscellaneous program needs.

Faculty certified in academic and vocational education areas and committed to youth are the backbone of any good program. Because they operate in the "trenches" everyday providing instruction for students, their input and expertise is invaluable in maintaining and/or modifying the program. Faculty may also play a role in student selection for the program.

Counselors provide direct services to students as they carry out their primary responsibility of academic, personal, and crisis counseling. They serve as liaisons between students and community services not provided by school personnel. Counselors may also play a major role in student selection and recruitment.

School Administrators (principals, assistant principals, and board members) through their support and knowledge of the program and its progress are key to program institution, maintenance, and continuation. Administrators often hold the power to waive regulations and policies that inhibit program implementation.

Students, the heart and recipients of the program, must be given special attention by program staff in selection and services provided to them. To maximize program resources, students should be selected on the basis of need for, interest in, and developed commitment to the program and the opportunities it affords. Students must be properly oriented to the program so that they have a clear understanding of the goals, objectives, policies, and expectations.

Parents of participating students can play a crucial role in program support. They, too, must be properly oriented to the program and kept informed of student progress. A program benefits parents if they become actively involved in program activities.

Evaluation

In order to assess program impact, a process for program evaluation must be planned and implemented. "A good evaluation process will provide information that can be used to: modify program operations; justify program continuation and/or expansion, generate reports that may be used for public relation purposes, and justify program termination" (Smink & Stank, 1992, p. 1).

Program evaluation is typically of two types: *formative* and *summative*. Formative or process evaluation is the ongoing evaluation stage that helps program planners determine how well the program is operating. Formative evaluation is an excellent tool for refining and retooling a program while it is operating. For example, formative evaluation seeks answers to questions such as:

- Have staff members been hired in a timely manner?
- Have students been recruited and selected?
- Are the facilities adequate for program implementation?
- Are there any problems that need immediate attention?
- What kinds of staff development activities are needed?

An excellent reference to guide program planners in developing other key questions useful in the evaluation process is *The Evaluation Handbook*, published in 1991 by the National Dropout Prevention Center. The authors, Smink and Stank, provide more detailed information regarding the evaluation process as well as specific forms to use.

Summative or outcome evaluation is designed to collect outcome data for analysis and interpretation at the close of a project year or upon project termination. Summative evaluation answers the question—What effect did the program have on the participants? Using the program goals and objectives, needs assessment data, and formative evaluation data, evaluators can determine what changes occurred as a result of program implementation. Evaluation data provide documentation for program planners to use in program refinement, program expansion, program marketing, and program continuation.

5 Summary

Demonstration of the Lifelong Options Program in three diverse settings over a three-year project period has confirmed what educators have known for a long time, but have not always been able to apply in the traditional school setting. That is, ***we must expand schooling to prepare students to make a living and to live full lives.*** Students need experiences in school that reinforce the belief that a holistic education is its own reward and has value beyond learning specific skills.

As a result of our experiences, we have developed recommendations that other educators will want to consider before implementing LOP or any other new program. Although these recommendations are "common sense" practices, it has become apparent that common sense seems to be uncommon when public schools start to make changes.

- **Assess Needs and Determine Vision**–Analyze where you are now, determine where you want to be in the immediate and long-term future, and begin to fill in the gaps with steps to take you to your destination.

- **Collaborate**–Involve key players early in the planning and development stages of any new program so that initial ownership is felt by all.

- **Market the Program**–Before the program begins, allow adequate time to develop an appropriate public relations campaign and to properly market the program to faculty, staff, parents, students, and the community-at-large.

- **Communicate Frequently and Effectively**–Communicate program goals, objectives, policies, procedures, and expectations in a variety of creative ways and at frequent intervals to targeted audiences.

- **Choose Competent Staff**–Select program staff members from a pool of people who adapt well to change, have an understanding and appreciation for cultural diversity, and demonstrate a willingness to be team players.

- **Nurture Staff and Students**–Provide a nurturing environment and caring climate for both program faculty/staff and students to work, learn, and grow.

- **Demonstrate Innovation**–Be open-minded about new teaching methodologies, curricula, strategies, and approaches that fit the needs of your students, especially those that show how knowledge is applied in the real world.

- **Share Experiences**–Exhibit a willingness to share your knowledge, expertise, and experience with others who seek help as well as a willingness to seek help when you need it.

- **Seek Improvement**–Resolve to always strive for improvement; never be completely satisfied with status quo in this changing world.

If school districts desire to become proactive in offering effective services, options and opportunities to at-risk youth, then the Lifelong Options Program offers them promise. A comprehensive curriculum is what our young people need to succeed in today's world and workplace. LOP combines vocational education and dropout prevention practices to deliver what our youth require.

APPENDICES

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National Dropout Prevention Center

The National Dropout Prevention Center (NDPC) is a partnership of concerned leaders—representing business, educational, and policy interests, and Clemson University—created to significantly reduce America's dropout rate. The Center has three major functions that lend support to practitioners concerned with youth in at-risk situtations:

Information Services–FOCUS is a nationally accessible computerized database containing five files: Program Profiles, Calendar of Events, Resource Materials Library, Organizations, and Consultants and Speakers. The Center also disseminates a quarterly newsletter, periodic research-based monographs, numerous other publications, and videotapes.

Action Research–LOP is one example of the variety of action research projects that the Center has become involved in since 1989. In addition to managing these projects, Center staff also serve as outside evaluators for dropout prevention programs.

Technical Assistance–Center staff provide technical assistance in developing and submitting proposals, planning and implementing staff development activities, program planning and evaluation, establishing mentoring programs, and broadening collaborative networks.

For more information about the National Dropout Prevention Center, call 803-656-2599.

The Center on Education and Training for Employment (CETE)

The Center on Education and Training for Employment (CETE) at The Ohio State University has directed attention over the last decade to research and practice to help educators plan extended school programs that will attract and retain students through high school graduation. These programs are characterized by applied or "real world" learning, often job-related. A sampling of CETE published resources in a *Dropout Prevention Series* includes:

- *It's Your Life—Take Charge*, a student motivational video and workbook;
- *The Helping Process*, a series of role guides for implementing team assistance to students; and
- *The Dropout Prediction Scale*, an easy-to-use research-based procedure for identifying potential dropouts which includes student questionnaires and scoring software.

CETE offers technical assistance for both short-term targeted objectives or for long-term programmatic goals. These include consultation, in-service workshops and presentations, development of curriculum and evaluation instruments, classroom observation, and data analysis and interpretation on the following dropout prevention topics:

- task force formation;
- needs assessment;
- indentification of a target student population;
- parental and community involvement;
- business and industry involvement;
- school-based program design which includes academic-vocational integration;
- program implementation; and
- formative and summative program evaluation.

Direct calls to the Program Office at 1-800-848-4815.

NATIONAL DROPOUT PREVENTION CENTER

PROJECT PROFILE

PREVENTING HIGH SCHOOL DROPOUTS THROUGH VOCATIONAL EDUCATION

THE NEED

The failure of approximately 30% of high school students to graduate each year has far-reaching negative social and economic consequences in America. Many types of programs have been developed to keep students in school. Research suggests that vocational education, when coupled with other critical components of tested dropout prevention programs, can be an effective choice for students from among other school programs.

THE PROJECT

The project, administered by the National Dropout Prevention Center at Clemson University (NDPC), will test the efficacy of integrating the best aspects of vocational education with a proven, compatible dropout reduction program. It will produce a more powerful, comprehensive curriculum for potential dropouts by integrating components of Project COFFEE which have already proved successful in other settings.

These components range from acquiring basic educational skills to gaining occupational skills through job-training and work internships. Students will also receive counseling to address emotional, life-coping, and social needs, as well as physical education training for improving health and self-esteem. The project will demonstrate the viability and effectiveness of replicating Project COFFEE, a model dropout prevention and reentry program, by customizing these components to the unique needs of vocational education students.

The project will attempt to increase attendance, achievement, employability, and appropriate social behavior in the target population through small classes, individual instruction, flexible scheduling, counseling, tutoring, mentoring, parental involvement, school-business collaboration, and life-coping skills training.

DEMONSTRATION SITES

Three southeastern school districts will serve as demonstration sites for this project: Anne Arundel County, Maryland; Broward County, Florida; and Oconee County, South Carolina. These sites were selected because they each represent a unique challenge, as well as varied geographical locales—urban, suburban, and rural—in the southeast, an area with a high regional dropout rate. Each site has a higher than average dropout rate and has already implemented dropout prevention efforts in its district. Collectively, these sites provide opportunities to target diverse student populations and the special problems inherent to each.

FOR MORE INFORMATION, CONTACT:
THE NATIONAL DROPOUT PREVENTION CENTER
CLEMSON UNIVERSITY, CLEMSON, SC 29634-5111
TELEPHONE (803) 656-2599

IMPLEMENTATION

The project will be implemented by a task force at each demonstration site directed by a site liaison with the assistance of the project staff and a federal evaluation team. They will conduct the following: (1) analysis of the site vocational education program by matching it with the Project COFFEE model; (2) adoption of Project COFFEE components not present, adaption of others where appropriate, and development of additional enrichment activities; (3) screening and selection of student participants. Throughout the project, staff from the NDPC will monitor activities and provide technical assistance as needed.

Project staff also include personnel from the Center on Education and Training for Employment (CETE) at The Ohio State University. Using their expertise in dropout prevention and vocational education, as well as previously developed materials for at-risk students, CETE staff will provide technical assistance and formative evaluation for this project.

EXPECTED OUTCOMES AND PUBLICATIONS

- Reducing the number of students who drop out of school.
- Broadening the scope of vocational education by expanding its offerings to a population of students who previously may not have chosen this career route.
- Allowing vocational education to assume a more active, aggressive stance in recruiting and enrolling students.
- Adding to the array of instructional strategies available to vocational education by strengthening the relationship between academic and occupational skill training.
- Results of the project will be distributed in a variety of ways, including information briefs, newsletters, electronic databases, conference presentations, journal articles, a videotape, and a slide presentation.

EVALUATION

This project will undergo intensive formative and summative evaluation by a project evaluator and a federally-sponsored evaluation team. A treatment-control design will be used to test attainment of objectives.

FUNDING AGENCY

This project is funded under the Cooperative Demonstration-Dropout Prevention Program in the Office of Vocational and Adult Education, United States Department of Education.

CONTACT INFORMATION

For more information on this project, contact Dr. John V. "Dick" Hamby at the National Dropout Prevention Center, Clemson University, Clemson, SC 29634-5111, (803) 656-2599.

Student Questionnaire

Name:_____

Directions

Read the 13 items carefully. Answer each item by placing a check (✓) in the blank next to the best answer for you. (Mark one answer for each question.)

1. What grade are you in?

____ 7th ____ 8th ____ 9th ____ 10th ____ 11th ____ 12th

2. How old are you?

____ 12 or less ____ 13 ____ 14 ____ 15 ____ 16 ____ 17 ____ 18 ____ 19 or more

3. How much time do you spend on homework a week?

____ No homework is ever assigned.
____ I have homework, but don't do it.
____ Less than 1 hour a week.
____ Between 1 and 3 hours a week.
____ More than 3 hours, less than 5 hours a week.
____ Between 5 and 10 hours a week.
____ More than 10 hours a week.

4. Between the beginning of school last fall and Christmas vacation, how many days were you absent from school?
(Don't count illness)

____ None
____ 1 or 2 days
____ 3 or 4 days
____ 5 to 10 days
____ 11 to 15 days
____ 16 to 20 days
____ 21 or more days

5. At what age do you expect to . . . . . (a) get married? . . . . . (b) have first child? . . . (c) finish your full-time education?

	(a)	(b)	(c)
Don't expect to do this	____	____	____
Have already done this	____	____	____
18 or less	____	____	____
19	____	____	____
20	____	____	____
20 or more	____	____	____

6. Which of the following describes your grades? (mark one)

____ Mostly As or an average of 90 to 100
____ About half As and half Bs or 85 to 89
____ Mostly Bs or 80 to 84
____ About half Bs and half Cs or 75 to 79
____ Mostly Cs or 70 to 74
____ About half Cs and half Ds or 65 to 69
____ Mostly Ds or 60 to 64
____ Mostly below D or below 60

7. Since you started the 5th grade, how many times have you changed schools because you or your family moved?

____ Never ____Once ____Twice ____Three times ____Over three times

8. Are the following statements about you true or false?

	TRUE	*FALSE*
a. I have had disciplinary problems in school during the last year.	____	____
b. I have been suspended or put on probation in school.	____	____
c. I have been in serious trouble with the law.	____	____
d. I am satisfied with the way my education is going.	____	____
e. I am interested in school.	____	____
f. I like to work hard in school.	____	____

9. Between the beginning of school last fall and Christmas vacation, about how many days were you late to school?

____ None
____ 1 or 2 days
____ 3 or 4 days
____ 5 to 10 days
____ 11 to 15 days
____ 16 to 20 days
____ 21 or more days

10. Do you plan to go to college at some time in the future?

____ Yes, right after high school.
____ Yes, after staying out 1 year.
____ Yes, after a longer period out of school.
____ Don't know.
____ No.

11. Do you expect to graduate from high school?

____ Yes
____ Probably
____ Probably not
____ No

12. Have any of your close friends dropped out of high school?

____ No
____ Yes, 1 of them
____ Yes, several of them
____ Yes, many of them

13. How often do you spend time on the following activities outside of school?

	Rarely or never	*Less than once a week*	*Once or twice a week*	*Every day or almost every day*
a. Visiting with friends at a local gathering place	____	____	____	____
b. Going out on dates	____	____	____	____
c. Talking with friends on the telephone	____	____	____	____

For Office Use Only

Name _____ School _____

(Student Number: _____) City _____

a.3

Program Instrument 1

INFORMATION SOURCES FOR DROPOUT PREVENTION COMPONENTS

Site: _____ Date/Period: _____

Beside each component, supply the name of the individual that can best describe that component.

COMPONENTS	INFORMATION SOURCES
1. Occupational	_____
	_____
2. Academic	_____
	_____
3. Counseling	_____
	_____
4. Preemployment	_____
	_____
5. Life-coping skills	_____
	_____
6. Other key elements	_____
	_____

Program Instrument 2

PROJECT-RELATED PROGRAM COMPONENTS AND DESCRIPTIONS OF USE AND IMPLEMENTATION

Site: _____ Date/Period: _____

Visitor: _____

Please provide details of the following dropout prevention components being used at your school:

1. Occupational component _____

2. Academic component _____

3. Counseling component _____

4. Preemployment component _____

5. Life-coping skills component _____

Program Instrument 3

PREVENTION OF HIGH SCHOOL DROPOUTS THROUGH VOCATIONAL EDUCATION

SITE VISIT REPORT

Name: _____ Date of visit: _____

Site visited: _____

1. Reason(s) for visit _____

2. Action taken and outcome of action _____

3. Additional action needed/recommended _____

4. People involved in visit _____

5. Comments, suggestions, concerns, etc. _____

Program Instrument 4

INTERVIEW/OBSERVATION SCHEDULE

School _____ Visit Period _____

NDPC/CETE Interviewer _____

Personnel	Date	Time	Room
Principal			
Coordinator			
Counselor			
Teacher #1			
(Class)			
Teacher #2			
(Class)			
Teacher #3			
(Class)			
Other			
Other			

Teacher Selection Process:

1. Identify list of teachers who teach at least one class containing targeted students.
2. Count them and divide the total by 3.
3. Use that answer (drop the remainder) to select the 3 teachers.

Example:
List of teachers is 20;
20/3 = 6, remainder 2.
The 3 teachers selected will occupy positions 6, 12, and 18 on the list.

Program Instrument 5

INTERVIEW GUIDE

School _____ Date/Period _____

NDPC/CETE Interviewer _____

Name _____ Date _____

Role (check one): __ Principal __ Coordinator __ Counselor
__ Teacher __ Other

What is your role in the school's efforts to retain students? _____

What features of the program have been the most successful? Why? _____

What features have been most difficult to implement? Why? _____

What do you view as the obstacles, if any, that impede your school's progress toward retaining students in school?

What changes/initiatives, if any, are you planning for the future? _____

Program Instrument 6

CLASSROOM OBSERVATION RECORD

School _____ Date/Period _____

Teacher _____ Room _____

Class/Program _____ Period _____

Observer _____

(1) Number of students enrolled in class
_____(males) _____(females)

(2) Number of students targeted and/or identified as potential dropouts _____

(3) Number of students who are in:
_____7th or 8th grade
_____9th grade
_____10th grade
_____11th grade
_____12th grade

(4) Number of students who are:
_____White/not of Hispanic origin
_____Black/not of Hispanic origin
_____Hispanic
_____Other Minorities

(5) Number of students who are:
_____Mentally handicapped
_____Physically handicapped
_____Both mentally and physically handicapped
_____Disadvantaged

(6) Overall, which of the following best describes the predominant format of the class during the observation period?

_____Teacher presentation of academic (theoretical materials, etc.) to whole class.

_____Teacher presentation of procedural (hands-on tasks) to whole class.

_____Teacher working with small group, while the remainder of the class works independently on the same task (as the group).

_____Teacher working with small group, while the rest of the class works independently on more than one task but in the same subject area.

_____Teacher working with small group, while rest of class works independently on different task in different subject areas.

_____Each student is working individually, while the teacher circulates through the room; all students working on same task.

_____Each student is working individually, while the teacher circulates through the room; students are working on a variety of tasks.

_____Students are working in small groups, while the teacher circulates from group to group.

_____Other (Describe) _____

(7) Did the teacher back up and clarify required basic skills on which students had problems or make arrangements to remediate those problems? No Somewhat Yes

(8) Were deliberate attempts made to help students transfer knowledge by projecting backward/forward to old/new experiences & scenarios? No Somewhat Yes

(9) Were students involved in job-task related activities focused on applications of academic concepts, principles, or skills? No Somewhat Yes

(10) Were discussions or other strategies used to link students' experiences (personal/familial) to the instructional content? No Somewhat Yes

(11) Did students exhibit control over their learning through active participation in "hands on" type activities? No Somewhat Yes

(12) On the average, how many seconds were students given to answer verbal questions by the teacher?
_____Up to 5 seconds _____5 to 10 seconds _____Over 10 seconds

(13) How would you rate this class on the following dimensions of effective teaching?

	Very High			Very Low
(a) Time on task	_____	_____	_____	_____
(b) Presentation of new material	_____	_____	_____	_____
(c) Independent practice	_____	_____	_____	_____
(d) High expectations	_____	_____	_____	_____
(e) Positive reinforcement	_____	_____	_____	_____
(f) Interruptions minimal	_____	_____	_____	_____
(g) Discipline	_____	_____	_____	_____
(h) Friendly ambiance	_____	_____	_____	_____
(i) Student work displayed	_____	_____	_____	_____
(j) Appearance of room	_____	_____	_____	_____

(14) Summary notes and interpretive comments. _____

_____

_____

_____

_____