
Ohio State Univ., Columbus. National Center for Research in Vocational Education.

Office of Vocational and Adult Education (ED), Washington, DC.

114p.; For related documents, see CE 040 861 and CE 040 900.

National Center Publications, Box F, National Center for Research in Vocational Education, 1960 Kenny Road, Columbus, OH 43210-1090 (LT 69--$17.50; related videocassette, LT69VC--$75.00).

Guides - Classroom Use - Guides (For Teachers) (052)

Data Analysis; Data Collection; Guidelines; Lesson Plans; Postsecondary Education; Records (Forms); Research Design; *Research Methodology; Research Needs; *Research Utilization; Secondary Education; Teacher Education; Technical Education; *Time Factors (Learning); *Time Management; *Time on Task; *Vocational Education; Worksheets

This professional development guide is designed for vocational education practitioners to use with a separately available handbook on time-use analysis and an optional videotape on conducting workshops on time-use analysis. Examined first is the importance of analyzing time on task. After a discussion of the importance of planning, a six-point plan for designing a workshop is set forth. The remainder of the guide consists of outlines for workshop presentations on the following topics: understanding the importance of time on task, discussing workshop objectives, citing general education research, discovering time use in vocational and technical classes, planning time-use analyses, conducting observations, computing time use, displaying and interpreting results, enhancing time use, and summarizing and evaluating the workshop. Each presentation outline contains notes to the instructor, a list of overhead transparencies to be used in the presentation, and a presentation script. Appendixes to the guide contain reviews of the publications "A Nation at Risk: The Imperative for Education Reform" and "A Place Called School"-as well as a log of the optional videotape on time-use analysis. Concluding the guide are 42 overhead transparency masters and 13 handout duplication masters. (MN)
MANAGING LEARNING TIME: A PROFESSIONAL DEVELOPMENT GUIDE

Ida M. Halasz
Susan R. Raftery

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210-1090

1985
THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

For further information contact:

Program Information Office
National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210-1090

Telephone: (614) 486-3655 or (800) 848-4815
Cable: CTVOCEDOSU/Columbus, Ohio
Telex: 8104821894
**FUNDING INFORMATION**

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>National Center for Research in Vocational Education, Applied Research and Development Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Number:</td>
<td>300830016</td>
</tr>
<tr>
<td>Project Number:</td>
<td>051OC40060/051OC40061</td>
</tr>
<tr>
<td>Act under Which Funds Administered:</td>
<td>Education Amendments of 1976, P.L. 94-482</td>
</tr>
<tr>
<td>Contractor:</td>
<td>The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio 43210-1090</td>
</tr>
<tr>
<td>Executive Director:</td>
<td>Robert E. Taylor</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td>This publication was prepared pursuant to a contract with the Office of Vocational and Adult Education, U.S. Department of Education. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.</td>
</tr>
<tr>
<td>Discrimination Prohibited:</td>
<td>Title VI of the Civil Rights Act of 1964 states: &quot;No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.&quot; Title IX of the Education Amendments of 1972 states: &quot;No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.&quot; Therefore, the National Center for Research in Vocational Education Project, like every program or activity receiving financial assistance from the U.S. Department of Education, must be operated in compliance with these laws.</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

FOREWORD ........................................................................................................ iv

EXECUTIVE SUMMARY ..................................................................................... v

INTRODUCTION ................................................................................................... 1

   Why Time on Task? .......................................................................................... 1
   Purpose of the Professional Development Guide .......................................... 2
   Contents of the Professional Development Guide ........................................ 2

PART I: PLAN THE WORKSHOP ....................................................................... 3

   Importance of Planning .................................................................................. 3
   Six-Point Plan ................................................................................................. 3

PART II: CONDUCT THE WORKSHOP .............................................................. 10

   Overview ......................................................................................................... 10
   Presentation 1: Introduce Time on Task ........................................................ 12
   Presentation 2: Discuss Workshop Objectives ................................................. 14
   Presentation 3: Cite General Education Research .......................................... 15
   Presentation 4: Discover Time Use in Vocational Technical Classes .......... 17
   Presentation 5: Plan Time-Use Analyses ....................................................... 20
   Presentation 6: Conduct Observations .......................................................... 21
   Presentation 7: Compute Time Use ............................................................... 24
   Presentation 8: Display and Interpret Results ............................................... 26
   Presentation 9: Enhance Time Use ............................................................... 28
   Presentation 10: Summarize and Evaluate Workshop .................................... 31

APPENDICES ....................................................................................................... 33

   A. Review of A Nation at Risk: The Imperative for Educational Reform .......... 33
   B. Review of A Place Called School ............................................................. 35
   C. Videotape Log: Time-Use Analysis ......................................................... 37

REFERENCES ...................................................................................................... 38

OVERHEAD TRANSPARENCY MASTERS

HANDOUT DUPLICATION MASTERS
How students spend their time in school is a critical issue. Research shows that more time on task increases student achievement. While longer school days or longer school years have been proposed, no amount of additional time will help if that time is not managed wisely. Time on task is a key variable to learning, and one of the few variables teachers can change.

This professional development guide was designed to be used along with Managing Learning Time: A Vocational Educator’s Handbook and an optional videotape, entitled “Managing Learning Time.” These materials for practitioners are based on two research studies, conducted by the National Center for Research in Vocational Education at The Ohio State University about how vocational education students and teachers use classroom time. This guide and the videotape have been designed for use by teachers, administrators, supervisors, inservice coordinators, and teacher educators in conducting workshops on time-use analysis. They provide a step-by-step process for training in the observation and follow-up activities of time-use analysis.

This project was conducted in the Evaluation and Policy Division of the National Center under the direction of N. L. McCaslin, Associate Director. We wish to thank Ida Halasz, Project Director, and Sue Raftery, Graduate Research Associate, who developed these materials. We also wish to thank Jeanne Desy and Catherine C. King-Fitch for their editorial services, which were directed by Janet Kiplinger. The many hours of typing and manuscript preparation done by Marjorie Arnold and the graphic services of Dennis Mathias under the direction of Ernie Spaeth are greatly appreciated. We also appreciate the videotape production services provided under the direction of Tom Dearing and Bruce Wiland of Events Video, Inc., of Columbus, Ohio.

We would like to thank many individuals who have helped in the development of these materials through “focus groups,” workshops, and reviews. We are especially grateful to the faculty and staff of EHOVE Joint Vocational School in Milan, Ohio, for providing assistance in conducting a pilot workshop of this project and to the students, faculty, and staff of Northeast Career Center, Columbus Public Schools, for serving as the videotape site.

The funds for the studies that served as the research base for this project were provided by the Office of Vocational and Adult Education, U.S. Department of Education.

Robert E. Taylor
Executive Director
National Center for Research
in Vocational Education
EXECUTIVE SUMMARY

This professional development guide provides step-by-step procedures for training workshop participants to conduct time-use analyses. The process of time-use analysis is the culmination of 2 years of time-on-task research in secondary and postsecondary vocational-technical classes. The results of this research indicate that, although teachers have a great deal of control over students' use of time, they are not aware of how their students really use time. Often, for example, while secondary teachers are engrossed in one-to-one instruction, many of their students are off task, waiting their turn for the teacher's attention. By changing the ways they manage student time, teachers can improve student opportunities to learn and develop skills.

The importance of time use for learning in school has received much National attention, primarily because of A Nation at Risk, the report of the National Commission on Excellence in Education (1983). One of the Commission's recommendations was to increase time for learning, because when students spend more time on task, they achieve more.

This guide, the (optional) videotape, and accompanying overhead/handout masters are intended to be used in conjunction with the companion publication, Managing Learning Time: A Vocational Educator's Handbook. The intended users are those teachers, master teachers, evaluators, supervisors, administrators, or teacher educators at the State, regional, or local level who are charged with the responsibility for training others to conduct time-use analyses in vocational-technical classes.

Time-use analyses are useful for formative evaluation, inservice, and preservice activities intended to improve the management of learning time. The three stages of time-use analysis are as follows:

1. DISCOVER how students use time through observation in the classroom.
2. DECIDE if it is necessary to increase time on task.
3. CHANGE day-to-day practice in the classroom if increased time on task is desired.

This guide contains an introduction and two major sections: Part 1, Plan the Workshop, and Part 2, Conduct the Workshop. Along with detailed planning guidelines, Part 1 provides a comprehensive six-point planning checklist. In Part 2, a Workshop Overview facilitates the coordination of the various elements of the workshop. The workshop is divided into 10 presentations to allow flexibility in scheduling. Presentation 1 introduces time on task and presents the rationale for conducting time-use analyses. Presentation 2 discusses the workshop objectives. General time-on-task research in education is described in Presentation 3, while the research conducted in vocational-technical classes is examined in Presentation 4. Presentation 5 discusses planning procedures. The "heart" of the workshop is contained in Presentation 6, which introduces the use of the observation form. The (optional) videotape provides an overview of time-use analysis and discusses how the observation form is used to conduct these analyses in active vocational-technical classes.
conducting practice observations in real vocational-technical classes, participants learn to com-
pute time-use through Presentation 7 and to display and interpret the results through Presentation 8. The 10 recommended strategies for increasing time on task are explained in Presentation 9. Finally, Presentation 10 summarizes the workshop and provides an opportunity for participant evaluation.

Notes to aid the presenters and a list of the overheads and handouts are included with each presentation. The ten presentations are essentially scripts, although facilitators will probably not need to read them word for word or memorize them. Most facilitators can present the concepts simply by using the 42 overheads as a guide. Once they have read the presentations and the companion Handbook to gain a thorough understanding of the contents and the process of time-use analysis.

Brief reviews of two important works are included in the Appendices, A Nation at Risk by the National Commission on Excellence in Education (1983) and John Goodlad’s A Place Called School (1984). The former report has awakened the Nation to an awareness of time as a critical variable in learning. The emphasis of the latter book, which is based on Goodlad’s observation of numerous classes, is that time is a tremendous resource that must not be overlooked in the search for strategies to improve education.
INTRODUCTION

Why Time on Task?

Why is time now considered so important in education? Why, for example, did the National Commission on Excellence in Education (1983) recommend more time for learning as a critical ingredient in improving education in our Nation? One reason is that researchers such as John Goodlad, author of A Place Called School (1984), have evidence to support the commonsense belief that when more time is devoted to learning, more will be learned. (Synopses of both Goodlad's book and the Commission's report are included in the appendices A and B).

Actually, although this premise is easy to understand, it is not always easy to act upon. Knowing that more time means more opportunity to learn, school systems and their teachers have several choices:

- Extend the school year
- Lengthen the school day
- Lengthen class periods
- Require more academic credit for graduation
- Improve student attendance
- Require more homework
- Maximize available class time

Most of these alternatives either are too costly, are out of the control of schools, or necessitate decreasing nonacademic educational activities. Consider, for instance, the first possibility—extending the school year—which has been seriously considered in many states. One reason for its popularity is that "in most of the industrialized countries, the school year is considerably longer than in the United States—often 240 days or longer" (Task Force on Education for Economic Growth 1984, p. 24). However, the cost of extending the school year can be phenomenal. If a school system spends $2,000 per student per year on instruction, exclusive of buildings and facilities, then a 25 percent increase in the school year means at least an additional $500 per student. For a school system with 6,000 students this amounts to a minimum of $3 million more per year!

Most other methods of increasing learning time entail similar costs or are extremely difficult to implement. The one option that does not require enormous additional costs of some kind is the last—maximizing available class time. Furthermore, this alternative is controllable by teachers, the persons who are ultimately responsible for educating students. When all possible ways to increase learning time are considered, it makes sense to find ways to maximize the class time that is already available.
Purpose of the Professional Development Guide

This is a guide for conducting workshops to train educators to determine how time is used in vocational-technical classes and how to change classroom management in order to maximize the available time. It is designed for individuals responsible for training teachers, instructors, future teachers, supervisors, administrators, or evaluators at the local, regional, or State level. The process shown here can be used in secondary or postsecondary institutions. Both the guide and the (optional) videotape, "Managing Learning Time," are designed to be easily used by individuals who have seldom or never planned, organized, and presented a training workshop for educators. Veteran workshop organizers will also find they contain much useful material for their presentations of time-use concepts.

The companion publication to this guide, Managing Learning Time: A Vocational Educator's Handbook, was developed for the use of workshop participants, the individuals who will be trained to conduct time-use analyses. The concepts given in the workshop are thoroughly explained and reinforced in that handbook. It is recommended that all participants in the training workshop have copies for use throughout the workshop and as a guide in their conduct of time-use analyses following the workshop.

Through participation in a time-use analysis workshop and use of the Managing Learning Time materials, teachers can determine how student time is used and how to make productive changes in their management of students' class time. When incorporated in preservice, time-use analysis can enable teacher educators to observe their students objectively during practice teaching and to use the results to encourage changes in the students' teaching techniques. Supervisors, evaluators, and administrators can conduct time-use analyses as part of the process evaluation of teachers. With the results of analysis, they can encourage teachers to consider specific changes that will maximize class time.

Contents of the Professional Development Guide

In the workshop guide, you will find a checklist for planning a model agenda for a 1 1/2-day workshop; step-by-step instructions; presentations; and a description of the videotape. Master copies of overhead transparencies, forms, and handouts also accompany this guide. Most of the detailed explanations of time-use analyses are given in the companion publication; only the workshop essentials are included here. The 17-minute videotape is recommended but not essential to conducting the workshop.

First, read this guide quickly and view the videotape. Be sure to read the companion publication (Managing Learning Time: A Vocational Educator's Handbook), which is included. It contains the information you need to lead the workshop participants through time-use analysis. When you are comfortable with the concepts in the materials, use the checklist and model agenda in Part 1 of this guide to plan and organize the workshop.

In conducting the workshop, use the workshop overview and the step-by-step procedures contained in Part 2. The master copies of the overhead transparencies and of the handouts are included with this guide in order to facilitate making the overheads and handouts.
PART I
PLAN THE WORKSHOP

Importance of Planning
Six-Point Plan
PART I: PLAN THE WORKSHOP

Importance of Planning

Would you think of taking a vacation without making plans? Or moving across the country without renting a truck or hiring a moving company? Probably not. You would attend to many details before you began. For a vacation, for instance, you would schedule the dates, make necessary reservations, and pack, considering a wide variety of possible needs, from camera and film to medications. A workshop is a similarly detailed undertaking. Yet, educators often do not take the time to plan the details of a professional development workshop. The reason is that most have taught many classes and equate giving workshops with teaching classes.

A professional training workshop differs from a class in many ways. One is that you are dealing with adults, in some cases colleagues, who respond to different instructional techniques than young people; adults, for instance, are more likely than young people to participate in discussions. Another way a training workshop differs from the classroom is that the concepts are probably not as familiar to you as those in the curricula you have taught.

Thus, especially when you are presenting a workshop with unfamiliar or new concepts, preparation is a critical factor in obtaining the desired outcomes. Most of you will find that time-use analysis is a new concept. Whether the educators in your workshop will use time-use analysis as a professional development activity, in a teacher education program, for research, or as a tool for teacher evaluation, you will achieve the desired outcomes only through organized planning.

A plan may be defined as a detailed scheme, program, or method worked out beforehand to accomplish an objective. But although a plan is detailed, planning does not have to be complex. For this workshop, you do not need a long, involved planning process; the planning has been done for you. This guide, along with the companion handbook, provides all the substantive information necessary to present a workshop on time-use analysis. However, some planning and organization are still necessary to ensure a successful workshop.

Six-Point Plan

The six major points to consider in planning each workshop are (1) schedules, (2) meeting site, (3) practice site, (4) materials, (5) teaching aids, and (6) refreshments. Use the Six-Point Plan Checklist, which follows, to plan the workshop. Fill in the "Date Due" column, and check the "Completed" column when the task is accomplished. Use the "Notes" space to keep track of all the details—who is responsible, when something will be delivered, and so forth. The more information you have clearly noted, the more confident you will feel as the workshop approaches.
### Six-Point Plan Checklist

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Completed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 1. SCHEDULES

- Set workshop date(s)
- Send announcements (participants, their supervisors)
- Finalize and duplicate agenda
- Send reminders (participants)
- Arrange for substitutes for teachers
- Prepare observation schedule for participants

#### 2. MEETING SITE

- Reserve room
- Check room (space, furnishings, parking facilities, etc.)

#### 3. PRACTICE SITE

- Arrange for class observations
- Arrange transportation if needed

#### 4. MATERIALS

- Duplicate forms/worksheets
- Order copies of *Managing Learning Time: A Vocational Educator's Handbook*
- Acquire clipboards/stick-on digital clocks for participants
- Acquire participant folders
- Fill folders with forms/worksheets/Handbook
### Six Point Plan Checklist
(continued)

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Completed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

5. **TEACHING AIDS**

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Completed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>Reserve overhead projector</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Reserve videotape player and monitor</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Reserve portable screen if necessary</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Prepare overhead transparencies</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Acquire flip chart(s)/felt tip markers</td>
</tr>
</tbody>
</table>

6. **REFRESHMENTS**

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Completed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>Reserve two coffee pots</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Acquire coffee/tea/cream/sugar/sugar substitute</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Acquire cups, stirrers, napkins</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Make lunch arrangements</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Purchase or order beverages for break</td>
</tr>
<tr>
<td></td>
<td>□</td>
<td>Purchase or order rolls/donuts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Completed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>
1. Schedules

The first step in planning the workshop is determining how long it will be and setting the date or dates. Although the information can be covered in 1 day, a 2-day workshop is preferable, since it allows for maximum hands-on skill development in time-use analysis. But, given time constraints, a workshop of 1 1/2 days appears to be a good compromise. Alternatively, you may need to split the workshop into three 1/2 days or evenings.

Regardless of how long the workshop lasts, if it is targeted for teachers, scheduling may be somewhat problematic. Supervisors, administrators, and evaluators can participate without considering whether or not their classes are covered. However, if teachers are to take part in the workshop, you may have to be sure that substitutes are hired. Most professional development workshops for teachers are held on inservice days, but a time-use analysis workshop requires that vocational-technical classes be in session for practice observation, so inservice days are not feasible.

It is recommended that no more than 20 participants be included in a workshop. Invite between 10 and 20 participants, giving them as much advance notice as possible. In addition, send written announcements of the workshop to the participants' administrators or supervisors, since it will be necessary in some cases to obtain supervisor or administrator consent beforehand. It may also be wise to send the participants reminders a few days before the workshop, to prevent misunderstandings. You might want to include an agenda with each memo.

Develop the agenda early in the planning process; it is a great help in making other decisions. The following agenda for a 1 1/2 day workshop is a model that you may follow as is or modify as you like. This agenda is used as a model throughout this guide and is based on the workshop activities presented in Part 2. If you wish to follow this agenda, reproduce the copy included with the workshop handout masters. Notice that that copy does not have times listed. It is often wise not to indicate time in order to have more flexibility throughout the workshop.

2. Meeting Site

To avoid interruptions, schedule the workshop in a building away from the participants' home buildings or offices. Try to schedule it near or in a building in which vo-tech classes will be in session during the workshop. Make sure parking is available and, if necessary, tell participants where to park in your reminder memo.

The meeting room should be in a quiet, low-traffic area free of class bells and other noise. It should be well lighted, with room-darkening shades. It should be furnished with full-sized seats for adults that can be rearranged for whole-group and small-group activities, and with tables on which participants can take notes. There should be an extra table for coffee and refreshments. Make sure there is space for audiovisual equipment (overhead projector, videotape player and monitor) and a flip chart.

3. Practice Site(s)

You will need to secure permission to have workshop participants observe ongoing vo-tech classes. Practice observation in a real vo-tech classroom is essential in developing participants' confidence and skill. To provide this opportunity, arrange access to several classes in a nearby secondary or postsecondary institution. At least an hour should be scheduled for the practice observations.
## MODEL AGENDA
### TIME-USE ANALYSIS WORKSHOP

#### DAY 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 a.m.</td>
<td>Introductions</td>
</tr>
</tbody>
</table>
| 9:00 a.m. | Introduction to Time on Task  
Workshop Objectives |
| 10:00 a.m. | Break |
| 10:15 a.m. | General Education Research |
| 10:45 a.m. | Time Use in Vocational Technical Education |
| 11:45 a.m. | Lunch |
| 12:45 p.m. | Plan Time-Use Analysis |
| 1:15 p.m. | Conduct Observations |
| 3:15 p.m. | Recap Observations |
| 3:45 p.m. | Adjournment |

#### DAY 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 a.m.</td>
<td>Compute Time Use</td>
</tr>
<tr>
<td>9:30 a.m.</td>
<td>Display and Interpret Results</td>
</tr>
<tr>
<td>10:15 a.m.</td>
<td>Break</td>
</tr>
<tr>
<td>10:30 a.m.</td>
<td>Enhance Time Use</td>
</tr>
<tr>
<td>11:15 a.m.</td>
<td>Summary and Workshop Evaluation</td>
</tr>
<tr>
<td>11:45 a.m.</td>
<td>Adjournment</td>
</tr>
</tbody>
</table>
Plan for no more than four participants to observe any one classroom at the same time. Thus, if there will be 20 workshop participants, arrange to have access to 5 classes for observation. If transportation to and from the observation site will be needed, arrange for that. Often, participants are happy to carpool to a site. When you have scheduled sites, prepare a handout telling participants where to go, the teacher’s name, and the type of class they will be observing.

Consider inviting the teachers whose classes will be observed to join the workshop for the presentation on enhancing time use (see the model agenda). Workshop participants can give the teachers feedback on their management of class time, and teachers and participants can mutually determine changes that would enhance time use. It should be emphasized, however, that only an hour of class time will be observed, providing far less information than if whole class periods were observed, as is recommended for actual time-use analysis.

4. Materials

Most of the materials needed to conduct a time-use analysis workshop are provided with this guide. These include duplication masters of the necessary handouts. Each participant should receive 13 different handouts. The list of handout masters is included in appendix E. The number of copies required for each participant is indicated in the list. It is helpful to use a different color of paper for each type of handout.

You may decide to provide participants with a workshop packet. Use either a loose-leaf binder or a pocket folder to hold notepaper, pencils, and handouts. Include a copy of Managing Learning Time: A Vocational Educator’s Handbook, which participants will need throughout the workshop.

Each participant will need a clipboard to hold the observation forms during the practice observation session. Page 21 of Managing Learning Time: A Vocational Educator’s Handbook shows the use of the clipboard and small stick-on digital clock. These clocks are often available for under $3.00 and are very helpful, since classroom clocks do not always have second hands, and wristwatches are awkward to use when holding a clipboard. Participants will also need sharpened pencils with heavy-duty erasers.

It is wise to have a “survival kit” of supplies for your own use during the workshop. Masking tape, name tags, extra pencils, felt tip markers, overhead transparency markers, blank transparencies, an extra bulb for the projector, an extension cord, and other items may be needed to “save the day.”

5. Teaching Aids

Reserve an overhead transparency projector and a videotape player and monitor well in advance and make sure they work before beginning the workshop. When reserving the videotape player, be sure it matches the size of the videotape. The videotape may either be 1/2” VHS or 3/4” U-matic, depending upon the size ordered. Also, be sure to reserve a color (TV) monitor.

You will use numerous overheads during the presentations and skill-building activities. The list of the 42 overhead transparency masters is included in appendix C. Be sure to have the overheads made in time for the workshop. If possible, try to vary the colors used for the overheads to enhance your presentations.
You will also need a flip chart and felt tip markers, even if the workshop room has a chalkboard. Flip charts are more flexible than chalkboards. For example, flip chart sheets can be taped up at strategic places for small group activities. Various colors can be used to emphasize key points.

6. Refreshments

Research shows that refreshments help make work sessions more acceptable and that most people learn more when they have a positive mindset. Thus, refreshments have been built into this workshop. Provide coffee, tea, and rolls, donuts, or fruit in the morning, and at least coffee and cold drinks for the afternoon break. If there is an adequate budget, supply a lunch or take the participants to a nearby restaurant.

Plan to start the coffee early so that it is ready when participants arrive. Be sure to have two large-volume electric coffee pots, one for coffee and one for hot water for tea. Supply cream (or substitute), sugar (and sugar substitute), hot and cold cups, stirrers, napkins, ice, and soft drinks.

Once you have done this specific planning, you are ready to conduct the workshop by following Part 2 of this professional development guide. Using the information contained in the presentations, notes, and overheads/handouts, you will—

- introduce key concepts and definitions;
- present highlights from time-on-task research; and
- lead the participants through the three stages of time-use analysis.
PART II
CONDUCT THE WORKSHOP

Overview
Presentation 1: Introduce Time on Task
Presentation 2: Discuss Workshop Objectives
Presentation 3: Cite General Education Research
Presentation 4: Discover Time Use in Vocational Technical Classes
Presentation 5: Plan Time-Use Analyses
Presentation 6: Conduct Observations
Presentation 7: Compute Time Use
Presentation 8: Display and Interpret Results
Presentation 9: Enhance Time Use
Presentation 10: Summarize and Evaluate Workshop

APPENDICES

A. Review of A Nation at Risk: The Imperative for Education Reform
B. Review of A Place Called School
C. Videotape Log: Time-Use Analysis

REFERENCES
PART II: CONDUCT THE WORKSHOP

Overview

This part of the guide provides step-by-step instructions (Notes, left-hand column) and a script (Presentations, right-hand column) for a time-use analysis workshop. The key points in the presentations are cited on the overhead transparency masters, so that you do not need to memorize or read the presentations in order to cover the most important information. (It is best to avoid reading the presentations verbatim.) Once you have studied this section, you can base the workshop on the overheads if you like. The overheads and handouts accompanying each presentation are listed under "Overheads and Handouts" in a box on the lower left side of each page.

Use the following "Workshop Overview" to guide you throughout the workshop. It indicates the titles of the presentations, the overheads you will use, and the handouts you will refer to throughout the presentations.

As you present the workshop, read the "Notes" for instructions and hints, and use the presentations as guides in describing and discussing the information. Throughout the presentations you will find that the questions you should ask the participants are underlined. Also, the most critical instructions to you are all printed in capital letters.

Use the overheads at the appropriate points indicated by brackets, e.g., [OVERHEAD #1]. Each overhead is numbered to facilitate the quick changes of overheads. Remind the participants to refer to the relevant handouts in their folders or notebooks when indicated by brackets, e.g., [HANDOUT #1]. Each handout is also numbered.

Do not hesitate to customize the workshop to meet your participants' needs. Finally, remember to provide opportunities for questions and for discussions, especially when a question is underlined in the "presentations." Enjoy the workshop!
## WORKSHOP OVERVIEW

<table>
<thead>
<tr>
<th>Presentations</th>
<th>Overheads</th>
<th>Handouts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Introduce Time on Task</strong></td>
<td>#1: Managing Learning Time</td>
<td>#1: Agenda</td>
</tr>
<tr>
<td></td>
<td>#2: Time on Task in Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#3: Time on Task in Vo-Tech Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#4: Basic Premise of Time on Task</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#5: Finding Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#6: Ways to Increase Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#7: Alternatives 1 &amp; 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#8: Alternatives 3 &amp; 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#9: Alternatives 5 &amp; 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#10: Alternative 7</td>
<td></td>
</tr>
<tr>
<td><strong>2 Discuss Workshop Objectives</strong></td>
<td>#11: Objectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#12: Emphasis in Early Studies</td>
<td>#2: Review of Goodlad's Book</td>
</tr>
<tr>
<td></td>
<td>#13: Carroll's Theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#14: Bloom's Theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#15: Fisher's Findings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#16: Anderson &amp; Scott's Findings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#17: Bloom's &amp; Evertson's Findings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#18: Goodlad's Recommendation</td>
<td></td>
</tr>
<tr>
<td><strong>3 Cite General Education Research</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4 Discover Time Use in Classes</strong></td>
<td>#19: Objectives of Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#20: Student Time Use</td>
<td>#3: Student Time Use in Vo-tech Classes</td>
</tr>
<tr>
<td></td>
<td>#21: Time on Task/Curriculum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#22: Time on Task/Noncurricular</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#23: Time off Task</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#24: Show Your Students' Use of Time</td>
<td>#4: Show your Students' Use of Time</td>
</tr>
<tr>
<td></td>
<td>#25: Changes in Time on Task</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#26: Time Use in Secondary Vocational-Technical Classes</td>
<td>#5: Time Use in Secondary Vo-Tech Classes</td>
</tr>
<tr>
<td></td>
<td>#27: Time Use in Postsecondary Vocational-Technical Classes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#28: Important Findings/Teachers</td>
<td>#6: Time Use in Postsecondary Vo-Tech Classes</td>
</tr>
<tr>
<td></td>
<td>#29: Important Findings/Classes</td>
<td></td>
</tr>
<tr>
<td><strong>5 Plan Time-Use Analysis</strong></td>
<td>#30: Plan Time-Use Analyses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#31: Worksheet I</td>
<td>#7: Worksheet I</td>
</tr>
<tr>
<td></td>
<td>#32: Time-Use Analysis Rules</td>
<td></td>
</tr>
<tr>
<td><strong>6 Conduct Observations</strong></td>
<td>#33: Observation Form</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#34: Completed Observation Form</td>
<td>#8: Observation Form</td>
</tr>
<tr>
<td></td>
<td>#35: Observer's Rules of Conduct</td>
<td></td>
</tr>
<tr>
<td><strong>7 Compute Time Use</strong></td>
<td>#34: (Repeat)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#36: Worksheet II</td>
<td>#9: Worksheet II</td>
</tr>
<tr>
<td><strong>8 Display and Interpret Results</strong></td>
<td>#37: Worksheet III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#38: Worksheet IV</td>
<td>#10: Worksheet III</td>
</tr>
<tr>
<td><strong>9 Enhance Time Use</strong></td>
<td>#39: Strategies to Increase Time on Task</td>
<td>#11: Worksheet IV</td>
</tr>
<tr>
<td></td>
<td>#40: Worksheet V</td>
<td></td>
</tr>
<tr>
<td><strong>10 Summarize and Evaluate Workshop</strong></td>
<td>#41: Stages of Using Time Better</td>
<td>#12: Worksheet V</td>
</tr>
<tr>
<td></td>
<td>#42: Lost Learning Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#43: Evaluation Form</td>
<td></td>
</tr>
</tbody>
</table>
Presentation 1: Introduce Time on Task

Notes

- First, introduce yourself and any other presenters.
- Second, have participants introduce themselves and provide brief background information.
- Third, present Presentation 1. The questions you should ask the participants are underlined.
- Brainstorm how time for learning can be increased: pose the question and go around to each participant for a response. Go around a second time. List all the responses on the board or on a flip chart, whether or not they appear to be good ideas.

AS YOU WAIT FOR PARTICIPANTS TO ARRIVE, SEAT THEMSELVES, AND INTRODUCE THEMSELVES, DISPLAY OVERHEAD #1.

[OVERHEAD #1]

The purpose of this workshop is to learn to analyze time on task in vocational-technical classes in order to improve students' use of time. What is time on task? 

PAUSE FOR RESPONSES

The general definition of time on task is the time when students are actively engaged in learning activities.

[OVERHEAD #2]

The next overhead shows the more specific meaning of time on task in vo-tech education.

[OVERHEAD #3]

We'll discuss the specific activities considered to be time on task in a while. Why is time on task important?

PAUSE FOR RESPONSES

[OVERHEAD #4]

Another reason time on task is considered so important is that increased time on task is one of the recommendations in the report of the National Commission on Excellence in Education, A Nation at Risk. That report, released in 1983, convinced the public that education must be improved in the United States. Although the report stressed that time must be increased for learning, it did not specify exactly how students could have more opportunities to learn. How can time be increased?

LIST RESPONSES ON CHALKBOARD OR CHART PAPER
Notes

- Discuss the alternatives and the problems associated with implementing them.

There's an old adage that seems to be appropriate here:

[OVERHEAD #5]

Now let's examine the alternatives to increased learning time listed on this overhead.

[OVERHEAD #6]

Most of these alternatives pose serious logistical and financial problems.

[OVERHEAD #7]
[OVERHEAD #8]
[OVERHEAD #9]

Although a number of school systems have implemented some of these suggestions, many consider alternative number 7 as their only option for increasing learning time.

[OVERHEAD #10]

Teachers can learn to manage time better in their classrooms. Research shows there are proven ways to increase student time on task. And, it doesn't cost the school system additional dollars to maximize time that is already available.
Presentation 2: Discuss Workshop Objectives

Notes

- Be sure each participant has a copy of the *Handbook* or will have access to a copy in order to conduct time-use analyses.

Rather than lengthen the school day or school year, which would be cost prohibitive, teachers can learn to manage students' existing time more efficiently. The use of time is one of the few variables related to student achievement that teachers can control in the classroom. Such factors as student ability or aptitude are obviously critical but can't be controlled by teachers.

[HANDOUT #1]

Therefore, this workshop has three objectives. As you see, your agenda closely follows these three objectives.

[OVERHEAD #11]

The first is to discover how students use time. You'll determine how students used time in the vo-tech classes observed in research studies. You'll also conduct your own observation of classes and discover how students use time in the class you observe for practice.

The second objective is to examine the results of your time-use analysis and decide if it is necessary to increase time on task.

And third, you'll learn ways to change day-to-day practice, recognizing that no matter how startling or interesting the results of your time-use analysis, the only one who can make the changes is the teacher. You will consider 10 recommendations for increasing time on task in vo-tech classes. By the end of the workshop, you will have the tools to help teachers increase the amount of time their students spend learning curriculum-related skills.

This workshop uses the information in *Managing Learning Time: A Vocational Educator's Handbook*. I'll cover the highlights of that book during the workshop, but you'll need to read it when you prepare to do time-use analyses in your schools.

Are there any questions?

**PAUSE FOR DISCUSSION IF THERE ARE QUESTIONS.**

---

**Overheads & Handouts**

OVERHEAD #11: Objectives of This Workshop

... ...

HANDOUT #1: Agenda
Time has been important in measuring education for over a century. Early studies emphasized the amount of time spent in school and in classes as a rough measure of learning.

[OVERHEAD #12]

The early studies resulted in the Carnegie Units which are used today to indicate the amount of time spent in classes required for graduation from high school.

The focus changed by the 1960s. Researchers began to place the emphasis on the amount of time spent on specific tasks.

[OVERHEAD #13]

John Carroll believed that the amount learned is a result of the amount of time spent on learning tasks. Other researchers found this theory very useful. Time can not only be measured, it can also be managed. Although teachers have little control over students' ability, class size, and other factors associated with learning, they can control the amount of time allocated to learning tasks in the classroom.

Another researcher, Benjamin Bloom, coined the phrase “time on task” in 1974. Bloom also developed a model for mastery learning.

[OVERHEAD #14]

He believed that if students are given enough time to learn and the motivation to learn, they will master their subject matter.

Numerous other researchers have built upon Carroll's and Bloom's theories.

[OVERHEAD #15]

Fisher and his colleagues (1978) found that teachers can increase time on task by simply allotting more time for learning activities. This makes the teacher's role crucial.
### Teaching methods affect individual students' time on task a great deal.

**[OVERHEAD #16]**

Anderson and Scott (1978) found that students respond differently to different methods. For instance, students with high aptitude and high confidence spent more time on task when they worked alone than they did when working in a group.

The amount of time needed to learn also varies.

**[OVERHEAD #17]**

Bloom (1974) found that low achievers need more time to learn than high achievers. Yet, as Evertson (1980) later found, low achievers were only on task 40 percent of the time, while high achievers were on task twice as much—85 percent of the time. This leads to the conclusion that low achievers need different teaching methods to motivate them to stay on task.

In his book *A Place Called School*, John Goodlad also emphasizes the importance of time.

**[OVERHEAD #18]**

[OPTIONAL HANDOUT #2]

(Optional: Goodlad's recommendations are summarized in Handout #2. After the workshop, you can find and read that handout in your packets/notebooks.)
Presentation 4: Discover Time Use in Vo-Tech Classes

Notes

- The companion Handbook provides information about research in post-secondary classes.
- Discuss the definitions, especially if participants do not agree with the meanings. Remind them that the definitions are not "carved in stone" but allow others to understand what the researchers had in mind.

Overheads & Handouts

OVERHEAD #19 Objectives of the Research in Vo-Tech Classes
OVERHEAD #20 Student Time Use in Vo-Tech Classes
OVERHEAD #21 Time on Task/Curriculum-related Activities
OVERHEAD #22 Time on Task/Other Noncurricular Activities

HANDOUT #3 Student Time Use in Vo-Tech Classes

This workshop and the handbook you're using (Managing Learning Time: A Vocational Educator's Handbook) are based on research conducted in secondary (and postsecondary) vo-tech classes. The research was done in 1982 and 1983 in 19 secondary classes that were selected because they were "typical" and met other research criteria. Because the classes weren't selected randomly, the results couldn't be considered generalizable to all vo-tech classes across the Nation.

However, these results are the largest database available today about how students and their teachers use time in secondary vo-tech classes. Over 280 hours of class time were observed, recorded, and analyzed on a minute-by-minute basis!

This 2-year research study was conducted at the National Center for Research in Vocational Education at The Ohio State University. It had three objectives.

[OVERHEAD #19]

The first challenge the researchers faced was to define the ways students spend time in the classroom. Because no one doing time-on-task research had looked so closely at vocational-technical classes, student time uses had to be defined.

[OVERHEAD #20]

[HANDOUT #3]

As you see, they divided student time into two basic categories—time on task and time off task. Time on task includes six major curriculum-related activities.

[OVERHEAD #21]

DISCUSS EACH DEFINITION

Time on task also includes three important activities that are not curriculum related.

[OVERHEAD #22]

DISCUSS EACH DEFINITION
Now we'll discuss time off task.

[OVERHEAD #23]

DISCUSS EACH DEFINITION

Before learning the results of the research, let's have a little fun.

[OVERHEAD #24]

[HANDOUT #4]

Think about how your students (or students in your teachers' classes) use time during a typical class period. Create a pie chart on Handout #4, which is exactly like this overhead.

PAUSE FOR SEVERAL MINUTES UNTIL ALL PARTICIPANTS ARE FINISHED.

Please save your pie charts to compare with the results of research in vo-tech classes.

Now we'll continue to discuss the time-on-task research in vo-tech classes. Once the definitions were established, an observation form was designed to record every minute of time in a class.

The classes that were selected for the study were observed for 2 weeks the first year and a week the second year, because the researchers discovered that the average of a week's observation was statistically the same as the average of 2 weeks.

They also found, however, that time on task varies with the days of the week; there seems to be a rhythm of highs and lows for time on task in every class.

[OVERHEAD #25]

This overhead also shows that there was a lot of variation of time on and off task during each class period. Thus, it's important to observe a class on more than 1 day and to observe entire class periods. Three observations on 3 different days are the recommended minimum for time-use analyses.
The time use shown in this pie chart is an average of ALL the classes observed in the secondary classes.

How do these results compare with the pie charts you drew?

**DISCUSS THE RESULTS**

[OPTIONAL OVERHEAD #27]

[OPTIONAL HANDOUT #6]

[USE IF PARTICIPANTS ARE INVOLVED IN POST-SECONDARY EDUCATION]

In addition to finding out how students used time, the results showed how their teachers used the class time.

There were also important findings about class size and length. The smaller classes and the larger classes had higher proportions of time on task.

**PAUSE FOR DISCUSSION**

As a result of the 2 years of observation, the researchers recommended several strategies for teachers who want to increase their students' time on task. We'll discuss those strategies after you've observed in a classroom later (today or tomorrow).
Presentation 5: Plan Time-Use Analyses

Notes

Planning is essential for conducting time-use analyses. Several related factors are involved in planning.

[OVERHEAD #30]

There could be several purposes for conducting time-use analyses. What are some purposes?

PAUSE FOR RESPONSES

Regardless of the purpose for the time-use analyses—whether teacher inservice, research, or evaluation—you’re probably aware of how frightening they can be to the teachers being observed. What are some ways their fears can be lessened?

LIST RESPONSES ON THE FLIP CHART

If you’re planning for many time-use analyses in your school or school system, use Worksheet I to schedule the observations.

[OVERHEAD #31]

[HANDOUT #7]

You’ll find Worksheet I in the Handbook, as well as in your packet.

To increase the accuracy and believability of the results of time-use analyses, keep two rules in mind.

[OVERHEAD #32]

As I mentioned before, it’s very important to observe entire classes at least three times. If, for example, you observe only 1 hour of a 2 1/2-hour class, you’ll have a partial picture of what happens in that classroom. There will not be enough information or specific details to convince the teacher to change his or her current classroom management style.
Presentation 6: Conduct Observations

Notes

- If you show the optional videotape during this presentation, be sure to preview it beforehand. The videotape is 17 minutes long, with an opportunity to pause while you explain the parts of the observation form.

- It is very important that all participants understand every part of the observation form and how to fill in the time, the number of students involved in any activity, and the number of students present.

Overheads & Handouts

OVERHEAD #33 Observation Form
OVERHEAD #34: Example of Completed Observation Form
OVERHEAD #35 Observer's Rules of Conduct

HANDOUT #8 Observation Form

During this part of the workshop, you'll learn how to use the observation form and then practice using it in a real classroom. First, let's look at a videotape that reviews time-use analysis and shows two vocational-technical classes.

SHOW THE VIDEOTAPE NOW. PAUSE WHEN INDICATED IN THE VIDEOTAPE.

The observation form has the same categories for student use of time that we discussed earlier.

[OVERHEAD #33]

[HANDOUT #8]

As you can see, those categories are written across the top of the form, with columns for the numbers of students underneath. Notice the column for time—that's where you write the exact number of minutes you're observing.

To make observation less hectic, record every 2 MINUTES, rather than every minute of time. If the class starts at 8:00 a.m., what is the starting time on the observation form?

(The correct answer is 8:02—you must observe the first 2 minutes before you can record them.)

Now look at the LAST column; that's where you record the EXACT number of students present during the 2 minutes of observation. Look at this example.

[OVERHEAD #34]

DISCUSS EACH COLUMN ON THE FORM

Each copy of the observation form holds information for a half hour of class time (if recorded every 2 minutes). How many copies do you need for a 2 1/4-hour class?

(The correct answer is 5 copies.)
Now let's finish viewing the videotape. As you look at the class in the videotape, try to identify the activities you see in the videotape on the observation form.

SHOW THE REMAINDER OF THE VIDEOTAPE NOW

Are there any questions about the observation form or the videotape?

ANSWER AND DISCUSS QUESTIONS

There are several things to keep in mind when you observe in a real classroom.

[OVERHEAD #35]

Your mission is to be as unobtrusive as possible. What are the best ways to maintain the observer's rules of conduct?

PAUSE FOR RESPONSES

WRITE RESPONSES ON FLIP CHART

(These are sample correct answers: Wear conservative clothing. Don't rustle your observation forms. If a teacher talks to you, tell him/her you must record and can't talk.)

It's time to assemble your clipboards and observation forms for the practice observations.

PAUSE FOR ORGANIZING

The teachers are expecting you for the observations. They have been asked to continue teaching in their normal manner. You should record students' activities for a full hour. Before you start, take a few minutes to catch your breath. Then count the students present several times to verify the number. It's very important for determining the proportions of time. Be sure to return here by __ o'clock. Are there any questions?

ANSWER QUESTIONS

PARTICIPANTS LEAVE FOR OBSERVATION SITES.
WHEN THEY RETURN, THEY WILL WANT TO DISCUSS THEIR EXPERIENCES. FORM SMALL GROUPS OF THREE TO FOUR PARTICIPANTS TO SHARE RESULTS. THEN REASSEMBLE AS A WHOLE GROUP AND LIST THE MOST COMMON INSIGHTS ABOUT TEACHERS' MANAGEMENT STYLES. ALSO DISCUSS COMMON CONCERNS ABOUT CONDUCTING OBSERVATIONS IN VO-TECH CLASSES.
Presentation 7: Compute Time Use

Notes

- Begin Presentation 7 after the participants have had an opportunity to share their observation experiences with each other and the whole group.

- Although a few participants may already have completed the computations, explain each step carefully for the sake of those who might find this confusing.

- HINT: Calculators are highly recommended to facilitate computing time use.

Some (many) of you have already completed the first step of computing time use by adding each column on your observation forms. If you haven’t done so, add each column (down) and write the results in the “Totals” row across the bottom of each observation form.

[OVERHEAD #34 REPEAT]

WAIT UNTIL ALL PARTICIPANTS COMPLETE THIS STEP.

The next step is to transfer the results from the bottom of each observation form to Worksheet II.

[OVERHEAD #36]

[HANDOUT #9]

WAIT UNTIL ALL PARTICIPANTS COMPLETE THIS STEP.

As the directions at the top of Worksheet II indicate, add (across) each row to find the grand total for each activity.

DEMONSTRATE ON THE OVERHEAD WITH A NON-PERMANENT MARKER. WAIT UNTIL ALL PARTICIPANTS COMPLETE THIS STEP.

The most critical part of computing time use is the next step. Divide the grand total for each activity by the grand total number of students. Let the math symbols on Part B of the worksheet guide you. The answers are the proportions or percentages of class time spent on each activity.

WAIT UNTIL ALL PARTICIPANTS COMPLETE THIS STEP.

When you're finished, add (down) the proportion column, the last column. The total should be approximately 100 percent.
Notes

- You may need to provide individual assistance with computations. Spot-check to ensure that all participants understand the procedures.

Due to rounding, you could have 98.8 percent or 100.9 percent and be satisfied. If the total is more than 5 percent off, double-check your math and retrace your steps to find the error.

WAIT UNTIL ALL PARTICIPANTS COMPLETE THIS STEP.

Now, add the grand total columns in each SUBTOTAL section. Compute each subtotal section to find the proportion of class time on curriculum-related tasks, time on other tasks, breaks, and time off task.

ALLOW TIME FOR PARTICIPANTS TO COMPLETE ALL CALCULATIONS.
Presentation 8: Display and Interpret Results

There are several ways to display the results of your time-use analysis. One way is to make a pie chart like the one you did earlier. Another way is to make a bar graph or line graph, as shown on Worksheet III.

[OVERHEAD #37]

[HANDOUT #10]

Fill in the key to show what activity each letter represents. It's helpful to include the actual percentage of time in parentheses beside each activity, too. If you want to be more elaborate, shade in an activity or two that you want to stand out.

WAIT UNTIL ALL PARTICIPANTS COMPLETE THEIR GRAPHS.

The most difficult part of time-use analysis is interpreting the results. The reason is that there is no single acceptable level of time on task. As you know, the research showed that vo-tech classes had an AVERAGE OF 71 percent time on task. That included the highest and the lowest time on task across all the classes observed.

But the average may not be acceptable in your school or school system. In fact, many teachers and administrators believe students should be on task 85 to 95 percent of the time.

PAUSE FOR DISCUSSION

To interpret the results of a time-use analysis, consider the purpose of doing it in the first place. In most cases, the purpose is to help teachers teach better by giving them feedback on how their students react to their teaching in terms of time spent actually learning.

[OVERHEAD #38]

[HANDOUT #11]
Notes

It's very important to present the results to the teacher in a nonthreatening way. Use Worksheet IV to focus your discussion with the teacher on actual classroom activities.

WAIT UNTIL ALL PARTICIPANTS COMPLETE WORKSHEET IV.

HAVE PARTICIPANTS FORM TEAMS OF TWO TO ROLE-PLAY AN OBSERVER AND A TEACHER, USING WORKSHEET IV TO INTERPRET THE FINDINGS. HAVE THEM SWITCH ROLES AFTER 10 MINUTES OR SO AND CONTINUE THE ROLE PLAY.
Presentation 9: Enhance Time Use

Notes

- HINT: By brainstorming strategies for increasing student time on task before you discuss the research findings, you will pique participants' interest in the research-recommended strategies.

- HINT: Place a sheet of paper on Overhead #40 and uncover each strategy as you discuss it.

The most important part of time-use analysis is using the results to change day-to-day classroom management. How time is used is one of the few factors teachers can control.

With the specific information teachers receive from the interpretation of results, they can choose to make changes, but they also need to know what works to increase student time on task. Based on your observations, what are specific strategies teachers can use?

HAVE EACH PARTICIPANT LIST STRATEGIES ON A SHEET OF PAPER. AFTER A FEW MINUTES, LIST AS MANY STRATEGIES AS POSSIBLE ON THE FLIP CHART BY GOING AROUND THE ROOM TO EACH PARTICIPANT UNTIL NO ONE HAS ANY LEFT. DISCUSS THE STRATEGIES BRIEFLY. THEN HAVE PARTICIPANTS IDENTIFY THE TOP FIVE.

You came to many (some) of the same conclusions as the researchers who observed vo-tech classes. Based on their analysis, there are 10 major strategies teachers can use to increase their students’ time on task.

[OVERHEAD #39]

1. TREATING TIME AS AN IMPORTANT RESOURCE means recognizing that all class time is potentially time for learning. Beginning class when the bell rings, whether or not all the students are present, is one way to use time more efficiently. If students commonly arrive at different times, start with individual activities, instead of a whole-class lecture.

2. DEFINING GOALS CLEARLY sounds deceptively simple, but it’s surprising how much difference it makes. Teachers who tell students exactly what is expected and when it’s due have classes with the highest proportion of time on task.

3. PLANNING AND ADVANCE ORGANIZATION of lessons, materials, and equipment prevent “down time” when students must wait. Some problems,
such as equipment shortages, seem to be beyond the teacher's control, but they can still be com-
batted through staggered assignments.

4. When teachers VARY THEIR TEACHING
METHODS by using audiovisual aids, doing dem-
onstrations, conducting field trips, and inviting guest speakers, students spend more time on task. Most teachers use a very narrow range of methods. Some provide one-to-one instruction almost con-
tinually and lose valuable opportunities to motivate their students through, for example, a small-group discussion of a demonstration of a complicated maneuver.

5. The next recommendation, HAVE POSITIVE
EXPECTATIONS AND PROVIDE POSITIVE REIN-
FORCEMENT, may seem trite. It's surprising to see the decrease, however, in time on task in classes where the teacher is negative. Students are less inclined to work on their own when they are afraid of being criticized. Positive teacher attitudes, on the other hand, appear to encourage time on task.

6. The sixth recommendation, ENCOURAGE STU-
DENTS TO WORK INDEPENDENTLY, is closely tied to the last one. When students are forced to wait for the teacher every step of the way, they lose valuable time and the opportunity to explore alter-
native methods.

7. ASSIGNING MEANINGFUL TASKS is related to good planning. When students are assigned to do routine work that does little to increase their skills, they quickly lose interest. Students are more likely to stay on task when they are motivated by chal-
 lenging activities.

8. Most teachers don't want to hear that WHOLE-
CLASS BREAKS SHOULD BE DECREASED OR
ELIMINATED. When students take only the breaks they need as they need them, they spend far less time off task. Some students don't even want breaks and work through them if permitted. Whole-
class breaks also interrupt work momentum which is often difficult or impossible to regain afterwards.
9. For the most part, such interruptions as public address announcements don't affect time on task very much. It is such interruptions as students coming into the classroom to chat with friends that cause problems. Closing the door at the beginning of class helps cut down on unwanted visitors.

10. The last recommendation is a personal one for teachers. The researchers observed that when teachers were obviously dedicated to their work, students worked better too. Teachers are role models in the way they dress for the occupational area, the ways they observe the safety and work rules, and their enthusiasm for their work.

**INITIATE A DISCUSSION ABOUT THE 10 RECOMMENDATIONS.**

The final step in time-use analysis is to help teachers develop action plans. You can use Worksheet V to do this.

[OVERHEAD #40]

[HANDOUT #12]

Changing day-to-day practice is up to the teachers. We are going to regroup into teams and role-play once more. In the role play, use the results from your partner's time-use analysis to develop your action plan as if you were a teacher.

**REGROUP THE ROLE-PLAY TEAMS TO DEVELOP ACTION PLANS.**

**WAIT FOR ALL PARTICIPANTS TO COMPLETE ACTION PLANS. ASK FOR VOLUNTEERS TO DISCUSS THEIRS BRIEFLY.**
The purpose of this workshop has been to show you how to conduct time-use analyses. Whether you teach others to conduct time-use analyses or conduct them yourself, you now have a foundation in the principles of the three-stage process.

[OVERHEAD #41]

The first stage was discovering how time is used—learning to use the observation form, then observing a class for practice. The second stage was computing how time was used and deciding if changes should be recommended. The third stage was changing day-to-day practice. We could only role-play the third stage because, in reality, teachers have to make the changes in their own class management and teaching methods to increase time on task.

One way to use the teachers' action plans is to include them in their annual staff development goals. We listed several ways that teachers can change. Obviously, teachers won't transform themselves overnight. A realistic goal, however, is to make at least one change that can significantly improve students' opportunities to learn and develop their skills.

For example, just by starting class on time, many teachers can save an astonishing amount of time.

[OVERHEAD #42]

If 10 students in a class of 15 wait 10 minutes every day for the last 5 students to arrive, they will lose 300 hours of learning time during a typical school year. So this one simple change can greatly increase students' opportunity to learn!

PAUSE FOR FINAL QUESTIONS OR DISCUSSION

The last activity is your chance to evaluate this workshop. Your comments will help us (me, our inservice coordinator, our coordinator, etc.) make changes in the workshop the next time it is offered.
HAND'OUT THE EVALUATION FORMS

[HANDOUT #13]

THANK THE PARTICIPANTS, COLLECT THE EVALUATION SHEETS, AND ADJOURN THE WORKSHOP.
The report *A Nation at Risk* prompted discussion and debate in almost every city, town, and hamlet in the United States. The state of educational excellence in this country is under close scrutiny at all levels of involvement—local, State, and Federal. The debate this document has initiated will not be quickly resolved. Rather, it will take the long-term commitment of all those concerned with the educational system to bring about the necessary changes.

The National Commission on Excellence in Education, which issued this report, was created by the Secretary of Education in August 1981. This commission was charged with the task of examining the quality of education in the United States. The commission began with the premise that "a high level of shared education is essential to a free, democratic society and to the fostering of a common culture, especially in a country that prides itself on pluralism and individual freedom."

As the result of numerous meetings held throughout the country, the commission identified four important aspects of the present educational process in America:

- Content
- Expectations
- Time
- Teaching

Of these four areas, that which is of greatest concern to our current endeavor is time.

The commission found the following facts about the use of time in education in America:

- American students spend much less time on school work than students in other nations.
- Time spent in the classroom and on homework is often used ineffectively.
- Schools are not doing enough to help students develop either the study skills required to use time well or the willingness to spend more time on school work.

These findings led the commission to make the following recommendations:

- We recommend that significantly more time be devoted to learning the New Basics. *This will require more effective use of the existing school day, a longer school day or a lengthened school year.*
• The time available for learning should be expanded through better classroom management and organization of the school day.

• Administrative burdens on the teacher and related intrusions into the school day should be reduced to add time for teaching and learning.

Copies of A Nation At Risk may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
Price: $4.50
APPENDIX B

Review of
A Place Called School

John Goodlad's book *A Place Called School* (1984) is a report of perhaps the most comprehensive study of public schools ever undertaken in this country. Goodlad and his colleagues spent several years in an intensive study of 38 elementary and secondary schools, surveying 8,624 parents, 1,350 teachers, and 15,163 students and observing more than 1,000 classrooms. A portion of this study concerned time use in the classroom.

In Goodlad's study, both teacher and student behavior were observed in the classroom. Although the information was gathered from all types of secondary schools, not just vocational programs, it nevertheless provides insight on the subject of managing time more effectively in the classroom.

The study points out that some schools seem almost unaware that time is virtually the most precious learning resource at their disposal. In reference to resources for learning, Goodlad states, "One of the most important of these is time."

To underscore this conclusion, an example is given regarding the time an average child spends in school. Taking an average, an elementary student is in school 6 hours a day for 180 days a year. At the end of 12 successive years, a 12-year-old will have spent 7,020 hours in school—or 6.5 percent of the total hours lived. By the age of 15, the number of hours the student has spent in school rises to 10,260 or 7.7 percent of the total hours lived. By the time high school is completed, the percentage of time has climbed to only 8.5 percent. Even this figure should be tempered to reflect the fact that this is not actual engaged learning time, but only time spent in school.

Hence, this available time is the basic framework for learning. With this as the starting point, Goodlad and his colleagues set out to find to what extent teachers spent time on instruction, as compared with managing classroom routines, allowing students to socialize, or controlling student behavior. The result of observation revealed that the average time spent on instruction was about 76 percent.

Goodlad goes on to state that by finding more efficient ways to handle classroom routines, and by learning to manage the classroom with a minimum of time lost to social activity and to controlling students' behavior, teachers can increase the amount of time spent on learning and presumably enhance achievement.

In summarizing the findings of his study, Goodlad continues to discuss the use of time, stating the need for administrators to become conscious of the efficient use of students' time in school, and for teachers to become more aware of how class time is utilized.
The book contains much significant information in addition to that concerning time and its critical role in education. It deserves careful study, for the issues presented are vital for all schools. 

Copies of *A Place Called School* may be ordered from:

McGraw-Hill Publishing
1221 Avenue of the Americas
New York, NY 10020
212-512-2000

Prices:
- hard cover: $18.95
- paper cover: $9.95
APPENDIX C

Videotape Log: Time-Use Analysis

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2</td>
<td>Introduction to the videotape — Introduction to time-use analysis</td>
</tr>
<tr>
<td>2 - 5</td>
<td>Ten strategies for managing learning time</td>
</tr>
<tr>
<td>5 - 7</td>
<td>Time use in a vocational education classroom: electronics class</td>
</tr>
<tr>
<td>7 - 9</td>
<td>The observation form</td>
</tr>
<tr>
<td>PAUSE</td>
<td>Break in the videotape to discuss the observation form</td>
</tr>
<tr>
<td>9 - 16</td>
<td>Time use in a vocational education classroom: cosmetology class</td>
</tr>
<tr>
<td>16 - 17</td>
<td>Summary of videotape and acknowledgements</td>
</tr>
</tbody>
</table>

37
REFERENCES


Halasz, I., and Behm, K. *Time on Task in Selected Vocational Education Classes*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.


National Commission on Excellence in Education. *A Nation at Risk: The Imperative for Educa-


<table>
<thead>
<tr>
<th>#</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Managing Learning Time</td>
</tr>
<tr>
<td>#2</td>
<td>Time on Task in Education</td>
</tr>
<tr>
<td>#3</td>
<td>Time on Task in Vo-Tech Education</td>
</tr>
<tr>
<td>#4</td>
<td>Basic Premise of Time on Task</td>
</tr>
<tr>
<td>#5</td>
<td>Finding Time</td>
</tr>
<tr>
<td>#6</td>
<td>Ways to Increase Time</td>
</tr>
<tr>
<td>#7</td>
<td>Alternatives 1 &amp; 2</td>
</tr>
<tr>
<td>#8</td>
<td>Alternatives 3 &amp; 4</td>
</tr>
<tr>
<td>#9</td>
<td>Alternatives 5 &amp; 6</td>
</tr>
<tr>
<td>#10</td>
<td>Alternative 7</td>
</tr>
<tr>
<td>#11</td>
<td>Objectives</td>
</tr>
<tr>
<td>#12</td>
<td>Emphasis In Early Studies</td>
</tr>
<tr>
<td>#13</td>
<td>Carroll's Theory</td>
</tr>
<tr>
<td>#14</td>
<td>Bloom's Theory</td>
</tr>
<tr>
<td>#15</td>
<td>Fisher's Findings</td>
</tr>
<tr>
<td>#16</td>
<td>Anderson &amp; Scott's Findings</td>
</tr>
<tr>
<td>#17</td>
<td>Bloom's &amp; Evertson's Findings</td>
</tr>
<tr>
<td>#18</td>
<td>Goodlad's Recommendation</td>
</tr>
<tr>
<td>#19</td>
<td>Objectives of Research</td>
</tr>
<tr>
<td>#20</td>
<td>Student Time Use</td>
</tr>
<tr>
<td>#21</td>
<td>Time on Task/Curriculum</td>
</tr>
<tr>
<td>#22</td>
<td>Time on Task/Noncurricular</td>
</tr>
<tr>
<td>#23</td>
<td>Time off Task</td>
</tr>
<tr>
<td>#24</td>
<td>Show Your Students' Use of Time</td>
</tr>
<tr>
<td>#25</td>
<td>Changes in Time on Task</td>
</tr>
<tr>
<td>#26</td>
<td>Time Use in Secondary Vo-Tech</td>
</tr>
<tr>
<td>#27</td>
<td>Time Use in Postsecondary Vo-Tech</td>
</tr>
<tr>
<td>#28</td>
<td>Important Findings/Teachers</td>
</tr>
<tr>
<td>#29</td>
<td>Important Findings/Classes</td>
</tr>
<tr>
<td>#30</td>
<td>Plan Time-Use Analyses</td>
</tr>
<tr>
<td>#31</td>
<td>Worksheet I</td>
</tr>
<tr>
<td>#32</td>
<td>Time-Use Analysis Rules</td>
</tr>
<tr>
<td>#33</td>
<td>Observation Form</td>
</tr>
<tr>
<td>#34</td>
<td>Completed Observation Form</td>
</tr>
<tr>
<td>#35</td>
<td>Observer's Rules of Conduct</td>
</tr>
<tr>
<td>#36</td>
<td>Worksheet II</td>
</tr>
<tr>
<td>#37</td>
<td>Worksheet III</td>
</tr>
<tr>
<td>#38</td>
<td>Worksheet IV</td>
</tr>
<tr>
<td>#39</td>
<td>Strategies to Increase Time on Task</td>
</tr>
<tr>
<td>#40</td>
<td>Worksheet V</td>
</tr>
<tr>
<td>#41</td>
<td>Stages of Using Time Better</td>
</tr>
<tr>
<td>#42</td>
<td>Lost Learning Time</td>
</tr>
</tbody>
</table>
MANAGING LEARNING TIME
TIME ON TASK IN EDUCATION:

Time when students are actively engaged in learning activities.

Bloom 1974
TIME ON TASK IN VOCATIONAL-TECHNICAL EDUCATION:

Student use of time in classrooms, laboratories, shops, or training stations for activities that build vocational-technical and related skills.

Halasz 1983
BASIC PREMISE OF TIME ON TASK:

The more time devoted to learning, the more will be learned.
Finding time is difficult. If you want time, make it.

Salada Tea “Proverb”
ALTERNATIVE WAYS TO INCREASE TIME FOR LEARNING:

1. Lengthen the school year.
2. Lengthen the school day.
3. Lengthen class periods.
4. Require more academic credits for graduation.
5. Improve student attendance.
6. Assign more homework.
7. Maximize available class time.
ALTERNATIVES 1 & 2:

1. Lengthen school year?
2. Lengthen school day?

Very costly; most school systems cannot afford.
ALTERNATIVES 3 & 4:

3. Lengthen class periods?

4. Require more academic credits for graduation?

Decreases number of classes students can take. Decreases time for non required courses, extracurricular activities, and sports.
ALTERNATIVES 5 & 6:

5. Improve student attendance?

6. Assign more homework?

Difficult to change; out of school or teacher control.
ALTERNATIVE 7:

7. Maximize available class time?

Most controllable by teacher; does not cost school system any more; proven ways to do it.
OBJECTIVES OF THIS WORKSHOP:

1. To DISCOVER how students use time in vocational-technical classes.
2. To DECIDE if it is necessary to increase student time on task.
3. To CHANGE day-to-day practice to increase student time on task.
EMPHASIS IN EARLY STUDIES:

Amount of time spent in school and in classes is a measure of the amount learned.
The amount students learn depends on the actual amount of time they spend on learning tasks.

Carroll 1963
Enough Time to Learn

+ =

Mastery of Subject Matter

Motivation to Spend Time Learning

Bloom 1974
To increase students' time on task, teachers can simply allot more time for learning.

Fisher & Others 1978
Individual student differences call for different teaching methods.

Anderson & Scott 1978
Low achievers need more time to learn than high achievers.

Yet, low achievers spend less time (40%) on task than high achievers (85%).

Bloom 1977

Evertson 1980
One of the most important resources for learning is time . . . some schools seem almost unaware that time is virtually the most precious learning resource they have at their disposal.
OBJECTIVES OF THE RESEARCH IN VOCATIONAL-TECHNICAL CLASSES:

- To develop definitions and observation procedures for vocational-technical classes.
- To determine proportions of time students spend on-task and off-task activities.
- To identify teacher behaviors and classroom variables related to student time on task.
TIME ON TASK: CURRICULUM-RELATED ACTIVITIES

- Basic Skills (reading, writing, calculations, e.g., workbook activities)
- Theory of Technical Skills (lectures, discussions, audiovisuals, etc.)
- Practice of Technical Skills (hands-on practice)
- Employability Skills (work values or attitudes, job seeking, maintaining and advancing skills; knowledge of the world of work)
- Human Relations Skills (helping students become socialized to the world of work, e.g., simulating a coffee break at the workplace.)
- Youth Organization Activities (reinforcing and using leadership, interpersonal, and others skills, e.g., HERO, FFA, VICA, DECA, FBLA, OEA)
TIME ON TASK: OTHER NONCURRICULAR ACTIVITIES

- Setup (preparing or organizing equipment and materials)
- Cleanup (cleaning up equipment, workspace, and classroom/shop/laboratory)
- Managerial Tasks (roll-taking, making announcements, collecting money for a field trip, etc.)
TIME OFF TASK:

The time students spend on activities that do not lead to building their vocational-technical skills.

- Taking breaks (whole-class or individual)
- Whispering or talking
- Waiting (for the teacher) or doing nothing
- Behaving disruptively (goofing off)
SHOW YOUR STUDENTS' USE OF TIME IN A PIE CHART

Theory of Technical Skills
Practice of Technical Skills
Basic Skills (read, write, compute)
Employability & Human Relations Skills
Setup & Cleanup
Breaks (Individual or whole-class)
Time off task (talking, waiting for teacher, goofing off, etc.)

Total 100%
CHANGES IN TIME ON TASK FROM DAY TO DAY

MONDAY

NUMBER OF STUDENTS ON TASK
0 5 10 15 20 25

NUMBER OF MINUTES OF CLASS
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55

WEDNESDAY

NUMBER OF STUDENTS ON TASK
0 5 10 15 20 25

NUMBER OF MINUTES OF CLASS
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55

FRIDAY

NUMBER OF STUDENTS ON TASK
0 5 10 15 20 25

NUMBER OF MINUTES OF CLASS
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55
STUDENT USE OF TIME IN SELECTED VOCATIONAL-TECHNICAL CLASSES (SECONDARY)

KEY

TIME ON TASK
A = BASIC SKILLS
B = THEORY/OTHER CONTENT
C = EMPLOYABILITY SKILLS
D = PRACTICE
E = NONCONTENT

TIME NOT ON TASK
F = BREAK
G = TIME OFF TASK

71% 29%
STUDENT USE OF TIME IN SELECTED VOCATIONAL-TECHNICAL CLASSES (POSTSECONDARY)

KEY
- A = Basic Skills
- B = Theory/Other Content
- C = Employability Skills
- D = Practice
- E = Noncontent

TIME ON TASK
- A
- B
- C
- D
- E

TIME NOT ON TASK
- F = Break
- G = Time Off Task

83% on Task
17% Not on Task
IMPORTANT FINDINGS: TEACHERS

• Teachers controlled student use of time. Student time on curriculum-related tasks (56%) was consistently less than amount allocated by teachers (67%).

• Teachers spent 33% of their time on one-to-one instruction.

Halasz & Behm 1983
IMPORTANT FINDINGS: CLASSES

• Wide variations of time use among classes—from 49% to 86% time on task.

• Medium-sized classes (15-17 students) had significantly higher proportions of time on task than large-sized classes (24-26 students). The smallest-sized class (7 students) had highest proportion of all classes, of time on task.

• Longer (146-176 minutes) classes had higher proportions of time on task than medium (111-126 and short (46-55) classes.

Halasz & Behm 1983
PLAN TIME-USE ANALYSES:

- Determine purpose of time-use analysis.
- Select specific classes.
- Schedule staff.
# Worksheet I

**Observation Schedule**

<table>
<thead>
<tr>
<th>Class</th>
<th>Begin-End Times</th>
<th>Teacher</th>
<th>Observation Dates</th>
<th>Observe:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4th</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5th</td>
<td></td>
</tr>
</tbody>
</table>

Date: ___________________________  Organizer: ___________________________

School: _________________________  Position: _____________________________
TIME-USE ANALYSIS RULES:

- Observe at least three class periods.
- Observe each period from beginning to end.
### Observation Form

Date __________________ Class ____________________

Observation 1 2 3 4 5 Observer ____________________

School __________________ Number of Students Enrolled ____________

Class Begins ____________ Ends ______________

<table>
<thead>
<tr>
<th>TIME</th>
<th>NUMBER OF STUDENTS ON CURRICULUM-RELATED TASKS</th>
<th>NUMBER OF STUDENTS ON OTHER TASKS</th>
<th>NUMBER OF STUDENTS BREAK</th>
<th>NUMBER OF STUDENTS OFF TASK</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory of Technical Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(lecture, discussion, test, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practice of Technical Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(hands-on)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(read, write, compute)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employability Skills (resumes, world of work information)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Relations Skills (interpersonal, on-the-job)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Youth Organization Activities (projects, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Setup (organize for practice, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleanup (own work area, classroom, shop)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managerial Task (fill out school forms, listen to announcements, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual Breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scheduled Class Breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual Breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wait, do nothing, hang around</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Whisper, talk quietly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behave Disruptively (warrants discipline)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of Students Present at This Moment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Describe any unusual circumstances that are decreasing time-on-task opportunities such as assemblies, fire drills, etc.
### OBSERVATION FORM

#### EXAMPLE

**Date:** Jan. 2  
**Class:** Home Economics I  
**Observer:** Mrs. White  
**School:** Wash. JHS  
**Number of Students Enrolled:** 23  
**Class Begins:** 8:00 am  
**Ends:** 11:15 am

<table>
<thead>
<tr>
<th>TIME</th>
<th>NUMBER OF STUDENTS ON CURRICULUM-RELATED TASKS</th>
<th>NUMBER OF STUDENTS ON OTHER TASKS</th>
<th>NUMBER OF STUDENTS OFF TASK</th>
<th>NOTES</th>
</tr>
</thead>
</table>
|      | Theory of Technical Skills  
(lecture, discussion, test, etc.)  
Practice of Technical Skills  
(hands-on)  
Basic Skills  
(read, write, compute)  
Employability Skills  
(resumes, world of work information)  
Human Relations Skills  
(interpersonal, on-the-job)  
Youth Organization Activities  
/projects, etc.)  
Clean Up (own work area, classroom, shop)  
Managerial tasks (fill out school forms, listen to announcements, etc.)  
| Setup (organize for practice, etc.)  
| Individual Breaks  
| Class Breaks  
| Whisper, talk quietly  
| Behave Disruptively (warrants discipline)  
| Number of Students Present at This Moment |
| 8:02 | 63 | 24 | 35 | 61 | 284 |
| 8:04 | 63 | 24 | 35 | 61 | 284 |
| 8:06 | 63 | 24 | 35 | 61 | 284 |
| 8:08 | 63 | 24 | 35 | 61 | 284 |
| 8:10 | 63 | 24 | 35 | 61 | 284 |
| 8:12 | 63 | 24 | 35 | 61 | 284 |
| 8:14 | 63 | 24 | 35 | 61 | 284 |
| 8:16 | 63 | 24 | 35 | 61 | 284 |
| 8:18 | 63 | 24 | 35 | 61 | 284 |
| 8:20 | 63 | 24 | 35 | 61 | 284 |
| 8:22 | 63 | 24 | 35 | 61 | 284 |
| 8:24 | 63 | 24 | 35 | 61 | 284 |
| 8:26 | 63 | 24 | 35 | 61 | 284 |
| 8:28 | 63 | 24 | 35 | 61 | 284 |
| 8:30 | 63 | 24 | 35 | 61 | 284 |

**NOTES**

- Teacher working at desk. All students work on own projects, etc.
- Bus in lot today. Students not here yet.
- Hungry to get to class.
- Did not begin lesson.
- 21 students present at this moment.
OBSERVER’S RULES OF CONDUCT

• Be absolutely quiet.
• Stay in the background.
• Sit down whenever possible.
• Do not talk with the students.
• Do not talk with the teachers or teacher’s aide.
• Move only when necessary to get a better view.
• Do not “sneak” around the room when you must move.
Worksheet II
COMPUTE TIME USE

Directions: Make several copies of this worksheet. Then add the total number of students present on each page of the observation form to find the grand total. The grand total of students present is __________. Now, follow the directions in Parts A and B. The answers in the last column show the proportions (percent) of class time used for each activity. Keep in mind that all the percents (or the subtotal percents) should add to 100 percent.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Page 1</th>
<th>Page 2</th>
<th>Page 3</th>
<th>Page 4</th>
<th>Page 5</th>
<th>Page 6</th>
<th>Page 7</th>
<th>Page 8</th>
<th>Page 9</th>
<th>Page 10</th>
<th>Page 11</th>
<th>Grand Total Divided by Grand Total of Students Present</th>
<th>Proportion (%) of Class Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory of Tech. Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice of Tech Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employability Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Relations Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Org Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUB TOTAL Curriculum-related Tasks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleanup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial Tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUB TOTAL Other Tasks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class Breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUB TOTAL Breaks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wait, Do Nothing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whisper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk Quietly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behave Disruptively</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUB TOTAL Off Task</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dates of Observation __________________________**
Worksheet III
DISPLAY TIME USE

Directions: Use copies of this worksheet to graphically show the proportions of time calculated in Worksheet II. Imagine that the block of time below represents the time in an entire class period, or 100 percent. Using the proportions of time calculated on Worksheet II, draw a line to divide the class time by the various activities. For example, if 25 percent of the time was used for theory of technical skills, draw a vertical line at the 25-percent mark. Continue drawing lines until all the activities are shown. Next, code each division of time with a letter. Then, write a key to indicate the type of activity each letter represents.

TIME USE IN THE _______________ CLASS

KEY:  
A =  
B =  
C =  
D =  
E =  
F =  
G =  

Class ___________________________  
Observer ___________________________
Worksheet IV

INTERPRET RESULTS

Class ___________________________ Date ___________________________
Teacher __________________________ Observer _________________________

Directions: Duplicate copies of this worksheet for the teacher, observer, and others involved in interpreting the results. Refer to the completed observation forms and Worksheet III to answer and discuss the following questions:

1. What was the average percent of students' time on task? __________

2. How much of the time (percent) did students spend on:
   - theory of technical skills? __________
   - practice? __________
   - basic skills? __________
   - employability skills? __________
   - human relations skills? __________
   - youth organization activities? __________

3. How was the time used in relation to the objectives of the class?

4. Why did students spend _____ % of time waiting or doing nothing?

5. How much time (percent) did students spend on:
   - setup? __________
   - cleanup? __________
   - managerial tasks? __________

6. How much time (percent) did students spend on breaks? Were the breaks taken as a class or individually? __________________________

7. What time was class started? What time was cleanup announced? __________________________

8. How much time (percent) was used for roll call and other managerial activities? __________
TEACHING STRATEGIES TO INCREASE TIME ON TASK

• Treat time as an important resource.
• Define individual and class goals clearly.
• Plan and organize class activities in advance.
• Use a wider range of teaching methods.
• Use a wider range of teaching methods.
• Have positive expectations of students and reinforce them in a positive manner.
• Encourage students to work independently.
• Assign meaningful tasks.
• Minimize scheduled whole-class breaks.
• Decrease opportunities for interruptions from outside classroom.
• Serve as a role model for the world of work.
# Worksheet V

**TEACHER'S ACTION PLAN**

Teacher ___________________________  Date ___________________________

**Directions:** Use this worksheet to decide what changes you will make to increase student time on task. Refer to Worksheets III and IV for information about the current use of time in your classroom. Plan at least one, but no more than three changes at this time. Good luck in accomplishing your goals!

<table>
<thead>
<tr>
<th>Current use of student time I want to change. (List percents of time if possible.)</th>
<th>My goal for student use of time. (List percent of time if possible.)</th>
<th>Specific strategies I will use to accomplish my goal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STAGES OF USING TIME BETTER

Stage 1
DISCOVER
How students use time in vocational-technical classes

Stage 2
DECIDE
If it is necessary to increase student time on task

Stage 3
CHANGE
Day-to-day practice to increase student time on task
EXAMPLE OF LOST LEARNING TIME:

If 10 students wait 10 minutes each day for other students to arrive, they lose **300** hours of learning time in a typical school year.

<table>
<thead>
<tr>
<th>180 school days</th>
<th>× 10 students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800 minutes</td>
<td></td>
</tr>
</tbody>
</table>

= **300** hours lost
#1: Agenda (1)*
#2: Review of A Place Called School (1)
#3: Student Time Use in Vo-Tech Classes (1)
#4: Show your Students' Use of Time (2)
#5: Time Use in Secondary Vo-Tech Classes (1)
#6: Time Use in Postsecondary Vo-Tech Classes (1)
#7: Worksheet I (2)
#8: Observation Form (6)
#9: Worksheet II (3)
#10: Worksheet III (2)
#11: Worksheet IV (2)
#12: Worksheet V (2)
#13: Evaluation Form (1)

*Number in parentheses indicates how many copies each participant should receive.
TIME-USE ANALYSIS WORKSHOP

DAY 1

Introductions
Introduction to Time on Task
Workshop Objectives

Break

General Education Research
Time Use in Vocational Technical Education

Lunch

Plan Time-Use Analysis
Conduct Observations
Recap Observations

Adjournment

DAY 2

Compute Time Use
Display and Interpret Results

Break

Enhance Time Use
Summary and Workshop Evaluation

Adjournment

HANDOUT #1
REVIEW OF
A PLACE CALLED SCHOOL

John Goodlad's book A Place Called School (1984) is a report of perhaps the most comprehensive study of public schools ever undertaken in this country. Goodlad and his colleagues spent several years in an intensive study of 38 elementary and secondary schools, surveying 8,624 parents, 1,350 teachers, and 15,163 students and observing more than 1,000 classrooms. A portion of this study concerned time use in the classroom.

In Goodlad's study, both teacher and student behavior were observed in the classroom. Although the information was gathered from all types of secondary schools, not just vocational programs, it nevertheless provides insight on the subject of managing time more effectively in the classroom.

The study points out that some schools seem almost unaware that time is virtually the most precious learning resource at their disposal. In reference to resources for learning, Goodlad states, "One of the most important of these is time."

To underscore this conclusion, an example is given regarding the time an average child spends in school. Taking an average, an elementary student is in school 6 hours a day for 180 days a year. At the end of 12 successive years, a 12-year-old will have spent 7,020 hours in school—or 6.5 percent of the total hours lived. By the age of 15, the number of hours the student has spent in school rises to 10,260 or 7.7 percent of the total hours lived. By the time high school is completed, the percentage of time has climbed to only 8.5 percent. Even this figure should be tempered to reflect the fact that this is not actual engaged learning time, but only time spent in school.

Hence, this available time is the basic framework for learning. With this as the starting point, Goodlad and his colleagues set out to find to what extent teachers spent time on instruction, as compared with managing classroom routines, allowing students to socialize, or controlling student behavior. The result of observation revealed that the average time spent on instruction was about 76 percent.

Goodlad goes on to state that by finding more efficient ways to handle classroom routines, and by learning to manage the classroom with a minimum of time lost to social activity and to controlling students' behavior, teachers can increase the amount of time spent on learning and presumably enhance achievement.

In summarizing the findings of his study, Goodlad continues to discuss the use of time, stating the need for administrators to become conscious of the efficient use of students' time in school, and for teachers to become more aware of how class time is utilized.

The book contains much significant information in addition to that concerning time and its critical role in education. It deserves careful study, for the issues presented are vital for all schools. Copies of A Place Called School may be ordered from:

McGraw-Hill Publishing
1221 Avenue of the Americas
New York, NY 10020
212-512-2000

Price: hard cover: $18.95
paper cover: $9.95
STUDENT TIME USE IN VOCATIONAL-TECHNICAL CLASSES

Student Time Use in Vocational-Technical Classes

Time on Task

Curriculum Related Activities
- Basic Skills
- Theory of Tech. Skills
- Practice of Tech. Skills
- Employability Skills
- Youth Organization Activity
- Human Relations Skills
- Managerial Tasks

Other On-Task Activities
- Setup
- Clean-up

Time off Task

Breaks
- Class
- Individual

Off-Task Activity
- Whisper, Talk Quietly
- Wait/Do Nothing
- Behave Disruptively

HANDOUT #3
SHOW YOUR STUDENTS' USE OF TIME IN A PIE CHART

Theory of Technical Skills
Practice of Technical Skills
Basic Skills (read, write, compute)
Employability & Human Relations Skills
Setup & Cleanup
Breaks (individual or whole-class)
Time off task (talking, waiting for teacher, goofing off, etc.)

Total 100%
STUDENT USE OF TIME IN SELECTED VOCATIONAL-TECHNICAL CLASSES (SECONDARY)

KEY

TIME ON TASK
A = BASIC SKILLS
B = THEORY/OTHER CONTENT
C = EMPLOYABILITY SKILLS
D = PRACTICE
E = NONCONTENT

TIME NOT ON TASK
F = BREAK
G = TIME OFF TASK

71%

29%
STUDENT USE OF TIME IN SELECTED VOCATIONAL-TECHNICAL CLASSES (POSTSECONDARY)

KEY
TIME ON TASK
A = BASIC SKILLS
B = THEORY/OTHER CONTENT
C = EMPLOYABILITY SKILLS
D = PRACTICE
E = NONCONTENT

TIME NOT ON TASK
F = BREAK
G = TIME OFF TASK

83%
17%
# Worksheet I

## OBSERVATION SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Organizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Position</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Begin-End Times</th>
<th>Teacher</th>
<th>Observation Dates</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
</tr>
</tbody>
</table>

**Observation Dates**

1st   | 2nd | 3rd | 4th | 5th | Observer |

**Observer**
### OBSERVATION FORM

- **Date** ____________________  
- **Class** ____________________

- **Observation** 1 2 3 4 5  
- **Observer** ____________________

- **School** ____________________  
- **Number of Students Enrolled** ____________________

- **Class Begins** ____________________  
- **Ends** ____________________

<table>
<thead>
<tr>
<th>TIME</th>
<th>NUMBER OF STUDENTS ON CURRICULUM-RELATED TASKS</th>
<th>NUMBER OF STUDENTS ON OTHER TASKS</th>
<th>NUMBER OF STUDENTS BREAK</th>
<th>NUMBER OF STUDENTS OFF TASK</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory of Technical Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(lecture, discussion, test, etc.) opportunity such as assemblies, fire drills, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practies of Technical Skills (hands-on)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic Skills (read, write, compute)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employability Skills (resumes, world of work, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Relations Skills (interpersonal, on-the-job)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Youth Organization Activities (projects, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Setup (organize for practice, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clean-up (own work area, classroom, shop)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Managerial Task (fill out school forms, listen to announcements, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual Breaks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wait, do nothing, &quot;hang around&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Whisper, talk quietly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behave Disruptively (warrants discipline)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of Students Present at This Moment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTALS**

**NOTES**: Describe any unusual circumstances that are decreasing time-on-task opportunities such as assemblies, fire drills, etc.

Page _______
Worksheet II
COMPUTE TIME USE

Class __________________________ Dates of Observation _______________________

Directions: Make several copies of this worksheet. Then add the total number of students present on each page of the observation form to find the grand total. The grand total of students present is _______. Now, follow the directions in Part A and B. The answers in the last column show the proportions (percent) of class time used for each activity. Keep in mind that all the percents (or the subtotal percents) should add to 100 percent.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Grand Total</th>
<th>Divided By Grand Total Students Present</th>
<th>Proportion (Percent) of Class Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory of Tech. Skills</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Practice of Tech. Skills</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Basic Skills</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Employability Skills</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Human Relations Skills</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Youth Org. Skills</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Curriculum-related Tasks</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Setup</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Cleanup</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Managerial Tasks</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Other Tasks</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Class Breaks</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Individual Breaks</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Breaks</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Wait Do Nothing</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Whisper, Talk Quietly</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Behave Disruptively</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
<tr>
<td>Time Off Task</td>
<td>+</td>
<td>=</td>
<td>%</td>
</tr>
</tbody>
</table>

Handout #9

109
Worksheet III

DISPLAY TIME USE

Class ___________________________    Observer ___________________________

Directions: Use copies of this worksheet to graphically show the proportions of time calculated in Worksheet II. Imagine that the block of time below represents the time in an entire class period, or 100 percent. Using the proportions of time calculated on Worksheet II, draw a line to divide the class time by the various activities. For example, if 25 percent of the time was used for theory of technical skills, draw a vertical line at the 25-percent mark. Continue drawing lines until all the activities are shown. Next, code each division of time with a letter. Then, write a key to indicate the type of activity each letter represents.

TIME USE IN THE ________________ CLASS

<table>
<thead>
<tr>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
<th>65</th>
<th>70</th>
<th>75</th>
<th>80</th>
<th>85</th>
<th>90</th>
<th>95</th>
<th>100 PERCENT</th>
</tr>
</thead>
</table>

KEY:  

A =  
B =  
C =  
D =  
E =  
F =  
G =  

HANDOUT #10
Worksheet IV

INTERPRET RESULTS

Directions: Duplicate copies of this worksheet for the teacher, observer and others involved in interpreting the results. Refer to the completed observation forms and Worksheet III to answer and discuss the following questions:

1. What was the average percent of students' time on task?

2. How much of the time (percent) did students spend on:
   - theory of technical skills?
   - practice?
   - basic skills?
   - employability skills?
   - human-relations skills?
   - youth organization activities?

3. How was the time used in relation to the objectives of the class?

4. Why did students spend _____ % of time waiting or doing nothing?

5. How much time (percent) did students spend on:
   - set up?
   - clean up?
   - managerial tasks?

6. How much time (percent) did students spend on breaks? Were the breaks taken as a class or individually?

7. What time was class started? What time was clean-up announced?

8. How much time (percent) was used for role call and other managerial activities?

HANDOUT #11
Worksheet V
TEACHER'S ACTION PLAN

Teacher _______________________________ Date __________________

Directions: Use this worksheet to decide what changes you will make to increase student time on task. Refer to Worksheets III and IV for information about the current use of time in your classroom. Plan at least one, but no more than three changes at this time. Good luck in accomplishing your goals!

<table>
<thead>
<tr>
<th>Current use of student time which I want to change. (List percents of time if possible.)</th>
<th>My goal for student use of time (List percent of time if possible.)</th>
<th>Specific strategies I will use to accomplish my goal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TIME-USE ANALYSIS WORKSHOP**

1. Please rate the following by letter grade:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
</tbody>
</table>

   **A. Workshop location**

   **B. Workshop meeting room**

   **C. Timing (on time; enough time)**

   **D. Overhead transparencies**

   **E. Packets or folders of materials**

   **F. Observation practice on site**

   **G. Facilitator's presentation style**

   **H. Contents of the presentation**

   **I. Refreshments**

2. What did you like best about this workshop and the materials you used? (Note: Refreshments do not count!)

3. What change would you recommend if this workshop were given again?

4. Overall, what letter grade would you give this workshop? (A-F)

5. What changes do you plan to make as a result of attending this workshop?

HANDOUT #13
### TO ORDER ADDITIONAL COPIES OF THIS PUBLICATION, USE—

<table>
<thead>
<tr>
<th>ORDER NUMBER</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT 69</td>
<td>$17.50</td>
</tr>
</tbody>
</table>

### TO ORDER RELATED PUBLICATIONS, REFER TO—

<table>
<thead>
<tr>
<th>TITLE</th>
<th>ORDER NUMBER</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Managing Learning Time&quot; (17-minute videocassette available in ¼&quot; VHS or ¾&quot; U-Matic format)</td>
<td>LT 69VC</td>
<td>$75.00</td>
</tr>
<tr>
<td><em>Managing Learning Time: A Vocational Educator's Handbook</em></td>
<td>SN 45</td>
<td>$5.50</td>
</tr>
<tr>
<td><em>Assessing Learning Time at the Co-op Training Station</em></td>
<td>SN 50</td>
<td>$6.25</td>
</tr>
<tr>
<td><em>Updating Teachers for Tomorrow's Technology: Programs and Practices</em></td>
<td>RD 241</td>
<td>$5.75</td>
</tr>
<tr>
<td><em>Updating Teachers for Tomorrow's Technology: A Strategy for Action</em></td>
<td>RD 242</td>
<td>$4.95</td>
</tr>
</tbody>
</table>

### ORDERING INSTRUCTIONS

To order additional copies, please use order number and title. Orders of $10.00 or less should be prepaid. Make remittance payable to the National Center for Research in Vocational Education. Mail order to:

The National Center for Research in Vocational Education
National Center Publications, Box F
1960 Kenny Road
Columbus, Ohio 43210-1090

Prices listed are in effect at the time of publication of this book. All prices include postage and handling. Prices are subject to change without notice.

### Quantity Discounts

Orders of five (5) or more items, as listed by publication number and title, with a total dollar value for the order of:

- $50 to $100, the discount is 5%
- $101 to $200, the discount is 10%
- $201 to $300, the discount is 15%
- $301 to $400, the discount is 20%
- $401 and above, the discount is 25%

### International Orders

All orders, in any amount, from outside the United States and its possessions are to be paid in U.S. currency. Additional postage and handling charges may be added for foreign shipments if necessary.