DOCUMENT RESUME

ED 394 034   CE 071 386

AUTHOR   Weeks, Christopher
TITLE   The Dynamic Academy System for Larger High Schools:
                An Example Application.
PUB DATE   96
NOTE   29p.
PUB TYPE   Reports - Descriptive (141)

EDRS PRICE   MF01/PC02 Plus Postage.
DESCRIPTORS   *Academic Education; *Career Academies; Curriculum;
                *Curriculum Development; High Schools; *Integrated
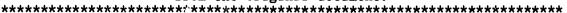   Curriculum; Program Development; Program
                Implementation; *Vocational Education

ABSTRACT
                This document presents the basics of the career
academy, a method of integrating vocational with academic educational
systems and of providing a contextually valid education. The first
section outlines the problems that the academy systems attempt to
address, the four major principles essential for the success of
career academies, and the nine major defining components used by all
career academies. The second section describes the dynamic academy
system, a system in which students from the 7th through 12th grades
generally participate in two successive academies. Academy focus
areas, the dynamism of the system, and what is done during those five
years are discussed. The remainder of the document outlines a
specific example of how the dynamic academy might be implemented. It
presents, in a hierarchical format, a description of the academy
example, beginning with the broad overview and successively narrowing
the focus until the lessons in one unit of one class are detailed.
The example given is that of an academy preparing students for a
variety of careers using the World Wide Web. These sections follow:
general academy information; specific academy example; information on
courses and units; example course information; unit information for
the course, Resources for Continued Learning; and description of the
seven lessons in the Producers and Suppliers unit of the course.
(YLB)

The
Dynamic Academy System
for
Larger
High Schools

an Example Application

by
Christopher Weeks

PREFACE

As a *reform* movement, the integration of academic and vocational education has the potential to overcome many of the shortcomings that have been identified in the high schools:

» a curriculum that is available to **all** students (no tracks);

» a curriculum that is flexible and fluid to adapt the content to evolving work and life skills (less reliance on traditional textbooks);

» hands-on learning strategies that incorporate relevant content with "real world" life experiences to enhance transferability (irrelevant subject matter);

» motivated, interested students who value their learning (increased drop-out rates); and

» faculty that are no longer divided into vocational and academic departments where labels determine the importance of the subject matter (no competition).

Instead, the promise of vocational and academic integration rests on the premise of providing education for all students, regardless of academic ability, socioeconomic status, and career goals. What this means is that the skills that are necessary for all students to become productive citizens must be incorporated into a **whole** curriculum. Skills, such as communications (reading, writing, listening, and speaking), human relations, math, scientific principles, technology, problem solving/decision making, creativity, and critical thinking, are common to **all** occupations.

To this end, the state of Missouri has approved a set of Show-Me Standards that are grouped around four goals that recognize the commonality of competencies essential to leading productive, fulfilling, and successful lives:

» Students in Missouri public schools will acquire the knowledge and skills to gather, analyze, and apply information and ideas.

» Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom.

» Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.

» Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society.

The Show-Me Standards reflect the competencies that are needed to succeed in today's business, social, and global environment. They are intended to foster the commonalities of both academic and vocational education. They serve as a blueprint to enhance curriculum that will help students *apply* their knowledge and skills--making it imperative that teachers choose instructional methods to help all students achieve their maximum potential.

3

Students at the University of Missouri-Columbia in a graduate class entitled, *Strategies for Integrating Academic and Vocational Subjects*, utilized the Show-Me Standards, the SCANS[1] competencies, and the workplace basics skills[2] to develop a curriculum based on one of the eight models proffered by Grubb[3]:

Model 1:	Incorporating more academic content in vocational courses
Model 2:	Involving academic teachers in vocational programs to enhance academic content in vocational programs
Model 3:	Making academic courses more vocationally relevant
Model 4:	Curricular alignment modifying both academic and vocational courses
Model 5:	Senior projects
Model 6:	The academy model
Model 7:	Occupational high schools and magnet schools
Model 8:	Occupational clusters, careers paths, and majors

The model used in this curriculum focuses on Model 6: The academy model. It is the author's intention through the development of this model to present the possibilities and promises of academic and vocational integration.

Donna R. Everett
Assistant Professor
Business Education
University of Missouri-Columbia
Columbia, MO

---

[1]Secretary's Commission on Achieving Necessary Skills. Washington, D. C.: Department of Labor. *Learning a living: A blueprint for high performance* (April, 1992).

[2]Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1990). *Workplace basics training manual*. San Francisco, CA: Jossey-Bass Publishers.

[3]Grubb, W. N. (1995). *Education through occupations in American high schools: Approaches to integrating academic and vocational education*, Volume 1. New York, NY: Teachers College Press.

Introduction

Career Academies are being used across the country as a method of integrating vocational with academic educational systems and as a method of providing a contextually valid education. Since 1969, many of the academy efforts have met with success on several fronts. These academies have provided a superior education to students of all success levels as well as an impetus for staying in school for countless at-risk students.

This document is the result of a process of compilation of several sources of related literature and of creative application of the ideas presented therein. This is intended to present career academy basics and to provide an expanded example of what I think that the academy model can do to improve the state of education in America. This document is also the culmination of my work for a graduate course at the University of Missouri entitled *Strategies for Integrating Academic and Vocational Subjects* and the emphasis herein is on the integration of vocational and academic curricula. This has two reasons. First, my exposure to information and the bias which my training as a vocational educator has taken leads me to more concern for and understanding of the vocational/academic issue. Second, there is a synthetic, yet distinct and damaging rift between the vocational and academic educational communities in America, which must be addressed and corrected. I intend that the concepts presented be taken to apply to integration of any set of subject materials without regard to academic or vocational status. Reintegration of all the curricula is necessary to insure that the infusion of reality and meaningful context into education, that our students and our society so desperately need, takes place.

The academy model for curricular integration was selected over the other seven outlined by Grubb because it provides a number of benefits and has proven successful in several instances. The focus of the academy environment as well as the conveyance of realistic technical skills in a multidisciplinary environment works to satisfy a great many standards which educational programs are measured against. Several of the other standard models of integration were deemed too easy to mishandle such that the changes to the curricula and to the instructional methods resulting would be insignificant. In addition, an academy implementation, as a smaller version of many magnet school implementations, is more feasible for many school districts and more equitable for the students involved. The smaller scale allows more diversity in the focus areas especially in medium sized school districts.

Career Academies

The problems that the academy systems attempt to address are:
- general track education lacks focus and leads the participating students to neither post-secondary education, nor to the work force
- perceived irrelevance of curriculum leads to increased dropout rates for high school aged young people
- an increasing number of high school graduates are unemployable due to a distinct lack of marketable skills.

It is popularly accepted that these accurately describe the state of many educational institutions in America and that this situation is an acute societal problem.

Because the academy approach to integrative education can take a quite diverse set of manifestations, the most appropriate method for describing what a career academy is, is to list the defining components of the variety of academy programs. There are four major principles which all of the major academy efforts have subscribed to and are considered essential for their success, these are:

- building a sense of community,
- enhancing teacher professionalism,
- integrating the curriculum, and
- facilitating students' school to work transition.

These principles can lead to a variety of plans and implementations, but there seem to also be at least nine major defining components which are used by all of the career academies. These are:

- the school within a school methodology for particular grades which is taught and administered by a core group of teachers from across the disciplines,
- the recruitment of students who want to be involved in the academy,
- the focus on a career theme which is locally relevant and profitable,
- combination of vocational and academic subjects for reality, perceived relevance, and to keep open the option of a continued education,
- the inclusion of practical experience through employment in the focus field,
- alliance with industry which provides assistance in planning the program, speakers, field trips, job supervisors, and career mentors,
- small and personal classes, parent involvement, and motivational activities, all of which enhance the students' sense of community membership,
- administrative support, at least in the form of extra time for collaboration and planning, and
- curricular inclusion of lessons on 'employability skills.'

The rest of the academies' implementations vary widely.

While academies originally targeted at-risk students, many are now targeting an audience of maximum diversity in which understanding of the real world can be obtained. Many of the academies revolve around high-technology professions such as biotechnology, computers, aviation, law and government, and medicine. In these academies, as in the related professions, there are students at every level of educational success. Many of the graduates go on to college. In fact, some of the academy programs show better rates of continued education than their 'mother' schools.

At the beginning, I stated that academies were targeting certain problems in American education. The attempts at solutions, imparted by the academies are multifaceted. Career academies teach students how to acquire and maintain important skills and knowledge which will be demanded of the students in their post-secondary experiences. Also, the relationship formed between educational faculty of a three-year academy and the students is more likely to allow the instructors to demand rigor without alienating the students. By making the curriculum relevant to a projected future life, the students are motivated to participate and excel in academic subject areas. The career focus of the academy system gives students the skills which allow for meaningful employment immediately following, and even concurrent with, the secondary education experience.

6

The Dynamic Academy System

The Dynamic Academy System, as I have conceptualized it, is a system in which students from the seventh through twelfth grades generally participate in two successive academies. There are a number of key features of this system which bear explanation. Specifically, the academy focus areas, the dynamism of the system, and what is done during those five years each require a bit of understanding.

In the traditional career academy, the focus area is obviously vocational in nature. It is my intention to provide a system which allows for and encourages less clearly vocational focus areas in addition to the traditional occupational focus areas. In one of these academies, the area of focus might be career-based as in a traditional academy, but it could also be academic or artistic in nature. These focus areas could be considered vocational as well, but the intent and the flavor of the academy needn't be job-related. The limit on the available subject matter is determined by the imaginations and enthusiasm of the teachers, administration, and students who are participating. Within one high school, there could simultaneously be an academy of finance, an academy of poetry, and an academy of fraternal orders operating. One of these is obviously vocational, the other two are less so. The approach of the designers influences the degree to which the academy is vocationally preparatory.

The dynamism of the system that I've designed and herein exemplified come from the changing nature of the academies. In most high schools which sponsor an academy program of some kind, the academy is created and then stays as long as the program can report significant success. The academy will change its methods and attempt to meet new challenges appropriately, but the focus of the academy doesn't change.

The dynamic part of The Dynamic Academy System is that determination of the focus area is market driven after a fashion. Students suggest or nominate focus areas a year in advance of when the academy will begin. The instructional staff examines the focus areas selecting the ones which are thought to be possible given the sum of their resources and their situation. They then present to the student body the list of nominations which would be possible to implement. Discussion and editorial comments in the school newspaper follows for two weeks and the students and teachers then vote for their preferences. As many of the academy options as possible are implemented and planning gets underway. It is believed that many times, a successful academy will be nominated and selected repeatedly, and that unsuccessful academies will be replaced by others. In this way, an attempt to meet the needs of the students is continually getting better.

The students have one academy option during the eighth and ninth grades and another daring the tenth and eleventh grades. Generally, the academies will be targeted for one of those age groups and will be restricted to that group. Also, the second academy slot only may take on an intense occupational flavor with career mentors, summer work programs, etc. Under exceptional circumstances, students of one grade level will be allowed to participate in an academy designed for the other grade level. Extra work is required by the student and the instructors to make sure that the curriculum is appropriate for the grade level.

During the five year participation in the Dynamic Academy System, the students generally spend half of each day of the seventh through eleventh grades in a traditional classroom and half of each

3

day in an academy environment. The traditional half of the day is tailored to catch what the academy is addressing the least and to satisfy any local, state, and federal requirements which don't fit neatly into the academy curriculum. The organization of the time spent in the academy varies considerably from one academy to another. During the twelfth grade, prior to graduation, the students take courses at the high school to catch any graduation requirements which were not addressed prior to that time. During this year, there is also a senior project required which includes production of some unique work. The work must reflect the participation in any academies and may also include any personal or scholarly areas of emphasis or interest. A significant written report must be completed by each student in addition to some model or application which may take a variety of forms. If time and circumstances permit, the students may take courses at local colleges and count the time spent toward graduation while obtaining advanced college credit.

The remainder of this document outlines a specific example of how the Dynamic Academy might be implemented. Presented here, in a hierarchical format, is a description of this academy example beginning with the broad overview and successively narrowing the focus until the lessons in one unit of one class are detailed. The example given is that of an academy preparing students for a variety of careers using the World Wide Web, a part of the internet.

Christopher L. Weeks
5 May 1996

8

General Academy Information:

Title:	Dynamic Academy System
Grade Level:	8-12

Description:
The Dynamic Academy is a system of education for a large high school in which a variety of subjects is available to the students. In this case, an academy is a series of courses with a related theme spanning two years. In some cases the academies are vocational in focus, and partnerships with corporate or industrial entities help to strengthen the academies. The academies available change in response to a number of factors including: student demand, the abilities of the instructors, the job-availability market, and administration approval.

Prerequisite Knowledge/Skills:
Generally, the academies are designated for a specific grade level while other prerequisite considerations are avoided. There is an application process which must be completed by all students who wish to participate. Prior knowledge isn't generally an acceptance criterion.

Following this description of the overall program, a specific example academy will be further detailed.

Example Academy Information:

Title: World Wide Web Engineer

Grade Level: 10-11

Description: This Academy is intended to prepare successful students for one of several careers in design, maintenance, and implementation of World Wide Web documents and services.

Prerequisite Knowledge/Skills: A general understanding of the World Wide Web and proficiency with a web browser is required for this course. If these requirements are not met before the academy begins, a two day remedial class prior to the beginning of the school year is available to the students which will satisfy the requirements.

Assessment Procedures: For each lesson the students receive a score of one to five. The mean of these daily scores is considered the base course score. This base score is modified by projects and papers required in the course. The maximum that the base score may be modified by the project score is ±1 point.

The procedure for determining the students' scores is as follows modified by instructions found in the itemized lessons. A student who is unexplainedly absent receives no points. A student who is tardy starts with a base of one point. A student who is one time as expected starts with a base of three points. Up to two points are awarded for participation in the given exercise.

Following this general information about the academy, is information detailing the series of courses contained within the academy.

Course Information:

Number of Courses: 11

Course Length: The course lengths vary. Each course has an assigned place in the sequence of courses within the academy and time is provided for each course during it's specified semester.

Course Names:

Semester One:
- Professional Skills
- Programming in C++
- Technical Writing

Semester Two:
- Digital Layout Design
- HTML for the Professional

Semester Three
- Customer Relations and the Business World
- Digital Graphics
- Resources for Continued Learning

Semester Four:
- Multimedia Competency
- Programming for the WWW using Perl
- Training Technological Concepts

Major Units of Each Course:

Professional Skills:
- Workplace Attitude
- Workplace Attire
- Speaking Clarity
- Timeliness
- Professional Resources
- Workplace Courtesy
- Telephone Habits

Programming in C++:
- Programming Overview
- The Object-Oriented Environment
- Objects and Data Structures
- Functions
- Memory Management
- Looping Mechanisms and Conditional Statements
- File I/O
- Libraries

Technical Writing:
        Introductory Composition
        Technical Writing Standard
        Models and Examples
        Conversion of Knowledge to Text
Digital Layout Design:
        History of Layout Methods
        Design Strategies
        Desktop Publishing Software - PageMaker
        Utility Collaboration and Interaction
        Advanced Topics
HTML for the Professional:
        HTML as a Layout Medium
        Text Formatting
        Image Tags
        Links
        Lists
        Tables
        Colors and Backgrounds
        Downloadable Information
Customer Relations and the Business World:
        Business Essentials
        Marketing of Technology
        Introduction to Sales Theory
        Customer Service
        Customer Interaction
        You Work for the Customer
Digital Graphics:
        Legal Issues in Graphics
        Graphic Formats
        Scanning and Capturing Images
        Introduction to Adobe Interaction
        Photoshop Basics
        Illustrator Basics
        Premier Basics
        Advanced Topics
Resources for Continued Learning:
        Software Manufacturers
        Professional Liason and Networking
        Conferences
        The World Wide Web
        Usenet and Mailing Lists

12

Multimedia Competency:
    Multimedia Hardware and Examples
    The Aspects of Multimedia Presentations
    Multimedia Software
    Sound Manipulation
    Element Coordination
    Interactivity
    End Production of Multimedia

Programming for the WWW using Perl:
    Overview of the Unix Environment
    Filehandles, Variables, Lists, and Arrays
    Data Manipulation, Pattern Matching, and File I/O
    Operators, Statements, and Regular Expressions
    Functions
    The Perl Library
    Interaction with HTML
    CGI-bin Scripting
    Forms
    Advanced Topics

Training Technological Concepts:
    Your Relationship With Students
    Use of Instructional Technology
    Technophobia and Technophilia
    Analogies as an Aid for Abstraction
    Examples and Hands-On Learning
    One-to-One and Group Interaction

This section on the courses and their units is followed by a more detailed examination of one of the courses in the program, *Resources for Continued Learning*.

Example Course Information:

Title of Course: Resources for Continued Learning

Grade Level: 10

Description: This class is taught in the second semester of the students' participation in the academy. This is one of the courses in which the emphasis is more on professional skills than on technical skills related to the focus area. Students in this course gain a familiarity with the techniques thought to be important for further growth in the related fields of electronic publishing.

Class Meeting Time: Three hours daily

Prerequisite Knowledge/Skills: None beyond successful completion of the preceding courses in the academy sequence.

Following this brief description of the course is a list of the major units of study in the course and a detailed examination of the first unit, *Producers and Suppliers*.

Unit Information for the Course, Resources for Continued Learning:

Units in course:
Producers and Suppliers
Professional Liaison and 'Networking'
Conferences
The World Wide Web
Usenet and Mailing Lists

Unit #1 — Producers and Suppliers:

Scope/Rationale:
This unit is used to introduce the students to the benefits available through the judicious use of vendors and producers of: software, hardware, equipment, office supplies, services, etc. Students should know how to make use of their current suppliers as well as how to acquire new ones. Other useful information in this unit includes how companies react to customer feedback, what services different types of companies are likely to provide, and how to acquire demonstration and preview products. The students will complete this unit able to compose business letters and use the telephone in a professional manner.

Unit Description:
This unit consists of seven lessons, six of which primarily address cognitive concerns. Lesson #4, however, as a hands-on exercise addresses sensorimotor and affective skills as well.

Unit Objectives:
In order to stay current with the field's growing body of information, the students will learn to effectively work with vendors and producers of hardware and software used in the fields of print and electronic publishing. Students also will know how these companies respond to the needs of the customers and how they may affect the companies' decisions. Students will demonstrate proficiency at composing business letters and using the telephone in a professional manner.

Related Guidance Competencies:
The instructors should be familiar with the appropriate policies regarding library use, television/VCR requests, field trips, and computer lab scheduling.

Unit Teaching Strategies/Activities:
The strategies and activities vary with the lessons. A field trip is ideal for showing the students how a corporation uses customer feedback. Videos are available which can help the students learn professional letter-writing and telephone skills. These videos are then supported with follow-up labwork using telephones and word processing computers. As in any subject and class, trips to the library are helpful during this unit.

Unit Resources: The videotapes, *The Professional Telephone Way* and
                                   Letterwriting in the Business World are each available for use
                                   during class along with the student manuals that accompany
                                   each of these. The annual *Register of Graphic Suppliers and
                                   Producers* is helpful for many facets of this unit.

You will now see a description of the seven lessons in the *Producers and Suppliers* unit of the *Resources for Continued Learning* Course.

16

Unit #1 Lessons:

Number of Lessons: 7

Lesson Length: Each lesson is three hours long. There is generally one lesson
                            per day.

Lesson Names: Companies You Already Know
                            New Corporate Contacts
                            What Companies Will do for You
                            Letter Writing and Telephone Requests
                            How Companies Handle Customer Feedback
                            How to Acquire Demonstration Products
                            Summary of Corporate Support

This Brief list is followed by detailed explanation of each lesson in the *Producers and Suppliers* unit
of the *Resources for Continued Learning* Course.

Lesson #1:   **Companies You Already Know**

Description: This lesson combines an introduction to resources for
                             continued learning in general with a survey of the companies
                             with which the students are already familiar. The students
                             brainstorm a list of companies they are already familiar with.
                             They then repeat the process regarding what kinds of
                             information that would be available from each of those
                             companies. After the class is over, the students are expected to
                             compose a one or two page essay summarizing the class'
                             findings.

Primary Instructional Objectives: To get the class started and comfortable and to get them
                             thinking about their continued education.

Secondary Instructional Objectives: To give the students a list of companies in the field which they
                             and their peers are familiar with.

Resources Required: A dry-erase board and markers, chalkboard and chalk, or
                             an overhead projector, slides, and pens are required to guide the
                             brainstorming activities. The students should have paper and
                             writing implements for notetaking.

Specific Directions for Organizing and Conducting Activities:
                             This lesson is generally free form and the role of the teacher is
                             truly that of a guide. Ideally, the instructor would act as the
                             secretary for the students, writing the results of the
                             brainstorming so that they are visible to the whole group. If
                             the students stray too far off topic, the instructor can nudge
                             them back into the exercise by suggesting a company or service
                             that has yet to be suggested. Asking the students to defend
                             their statements and opinions is also in order. As the students
                             are preparing to leave, the teacher should assign the short paper
                             as homework for the next day.

Assessment Procedures/Criteria: The standard grading policy holds for this exercise, modified as
                             follows. If no paper is returned, two points are subtracted. A
                             poor paper is worth no point modification, an average paper is
                             worth an extra point, and a superior paper is worth two extra
                             points. As always, the score is limited to values between zero
                             and five inclusive.

Connections to other Disciplines: This exercise is designed to increase the students' ability to
                             think creatively, to write cogently, and to expand their
                             understanding of the vocational world.

Suggestions for Modifications for Learners with Special Needs:

None. Within the context of this academy, the range of special needs students, regarding both 'faster' and 'slower' students, is shallow. During this lesson, the students who are either ahead of or behind the average will be normalized and assisted by the other students. The students who become bored easily are able to participate fully as they have new ideas. The students who are a bit slower, will be able to participate at their own rate and will gain from the atmosphere of free creativity.

19

Lesson #2:   **New Corporate Contacts**

Description: This lesson is designed to get the students to identify
                                      potentially useful companies from sources such as the
                                      literature, ads, professional recommendations, etc. and to be
                                      able to contact the companies and put them to work for the
                                      students' continued growth. The lesson consists of discussion
                                      between the instructor and the students regarding their
                                      suggestions for how these goals might be obtained. After this,
                                      the students work in groups to review periodical literature in
                                      search of unfamiliar companies. Each group presents a few
                                      companies that were found as well as a short assessment of
                                      their estimated uses. The class then comments on each
                                      presentation and a discussion may ensue.

Primary Instructional Objectives: To show the students how to find, contact, and assess the value
                                      of new companies.

Secondary Instructional Objectives: To get the students to assess the potential uses of companies
                                      prior to contact based on available information.

Resources Required: Periodical literature for the students. The students should have
                                      paper and writing implements for notetaking.

Specific Directions for Organizing and Conducting Activities:
                                      Group size for the periodical search depends on class size, but
                                      groups of two are probably best. Make sure that everyone
                                      understands that they must participate even though it would
                                      sometimes be easy to let other group-members do more than
                                      their fair share of the work.

Assessment Procedures/Criteria: The standard grading system for the academy is used in this
                                      lesson.

Connections to other Disciplines: While this is founded as a vocational exercise, the building of
                                      critical thinking skills is required by every discipline. (e.g.
                                      math, science, English, history.)

Suggestions for Modifications for Learners with Special Needs:
                                      If the instructor is assigning groups, make sure that any slow
                                      students get grouped with students who are capable but are
                                      likely to give their peers a fair input in the assessment process.

Lesson #3:   What Companies Will do for You

Description: This lesson consists of a discussion of what types of services are available from various types of companies. While the emphasis is on obtaining information, the acquisition of products is often as viable a means of continued learning and is discussed as well. Both producers and distributors in this field often conduct workshops or classes to support the newest versions of their products, and these services are often quite valuable as a resource for continued learning. Each of these options, as well as others are discussed as fully as possible. The students classify the companies found during the prior lesson, based on what services the students expect to be able to receive. After the students are done with this, the instructor distributes a packet of business letters enquiring after different types of support. These are to be examined by the students in relation to their list of categorized companies.

Primary Instructional Objectives: To explore the variety of services which are available from different companies leading toward furthering the goal of continued learning.

Secondary Instructional Objectives: To prepare for the next lesson in which students will be required to practice letter writing and telephone skills.

Resources Required: Students should have paper and a writing implement for notetaking. The instructor needs to have a variety of prepared letters requesting information, product samples, etc. for distribution to the students.

Specific Directions for Organizing and Conducting Activities

As in the prior lesson, the discussion should be guided by the instructor who, rather than supplying the ideas, should get the students to generate the ideas themselves. When the company categorization exercise begins, the instructor should have extra lists of companies so that any students who don't have their own lists from the prior lesson can be given one for participation in this exercise. When the packets of business letters are distributed, the teacher should ask the students to examine them in relation to their lists and to try to match a request letter, as appropriate, with each of the companies on their lists.

Assessment Procedures/Criteria: This lesson uses the standard grading system.

Connections to other Disciplines: In the discussion regarding the various companies, history is fully integrated while aspects of other disciplines always arise.

23

The main focus of this lesson is to further research and learning skills which are metadisciplinary.

22

Lesson #4:   Letter Writing and Telephone Requests

Description: In this lesson, the students watch two short video tapes, one
                            about letter writing, and another about professional telephone
                            etiquette. Practice phone conversations are held and assessed
                            with the students. In this exercise, two students enact an
                            exchange on the phone while the rest of the students and the
                            instructors listen on a remote speakerphone. Each time this is
                            done, the class briefly discusses anything about the exchange
                            that bears comment. Time is then allocated for the students to
                            use the computer lab to write a business letter to each of four
                            companies from their lists. The students are supplied a simple
                            schematic of business letters, but are not permitted to use actual
                            letters as a guide from which to copy.

Primary Instructional Objectives: To give the students enough practice at telephone and written
                            communication skills to be able to effectively function in the
                            workplace.

Resources Required: A room with the two small offices and the three-way telephone
                            setup is required. A computer lab sufficient for the class size is
                            the other basic requirement. A TV/VCR and the two course
                            video tapes, *The Professional Telephone Way* and *Letterwriting
                            in the Business World* are each required for the demonstration
                            section of the lesson. Copies of the business letter schematic
                            are required as guides for each student when typing.

Specific Directions for Organizing and Conducting Activities:
                            The order in which the two exercises in this lesson are pursued
                            is irrelevant. The instructors should have the students
                            watch the video for each section immediately before practicing
                            that exercise rather than just watching both tapes and then
                            proceeding to the lab. When participating in the telephone
                            exercise, the students should be aware that the first participants
                            are likely to make more 'mistakes' and draw more comments
                            than the later participants because as time passes, they will
                            learn from the earlier participants. Their evaluation is based on
                            participation and attempt to learn, not the precise quality of
                            their phone exercise. The students should be given enough
                            time to complete their business letters, 20-30 minutes should
                            suffice.

Assessment Procedures/Criteria: Each student starts with a score of zero. For paying attention
                            to the videos, a point is added to the students' scores. For
                            participating in the telephone exercise, a point is added. For
                            exceptional participation in the telephone evaluation
                            conversations, another point is added to the score. An extra

point is earned for participating in the writing lab. The fifth and maximum point is only added to each student's score if an overall high quality participation is noticed. Two points are subtracted from the score of each student who is late to the class.

Connections to other Disciplines: While clearly a hands-on type vocational exercise, the communication skills gained are typically addressed in an English or language arts course.

Suggestions for Modifications for Learners with Special Needs:

During the telephone practice exercise, if there are students who require it, a script-like sheet can be given to the student to help them work through the conversation. For students who are unable to work in front of an audience, the instructor should record the exchange assuring the students that they are not being overheard. The instructor or the class may then review the recording after the fact.

24

Lesson #5:   **How Companies Handle Customer Feedback**

Description: This lesson consists of a field trip to two or three companies' public relations offices. (The closer to WWW and publishing these companies are, the better.) A representative of the office will lead a discussion regarding how their office uses letters, phone calls, and other forms of communication from customers. The students can and should ask questions to fill out the presentation. During each of these presentations, the teachers prompt alterations to the discussion by asking questions on relevant matters. The students also get a feel for the business world by being exposed to the corporate setting. Another of the benefits of this lesson is that the students have the opportunity to compare and contrast the different PR reps' attitudes and discussions. The students write a paper on some aspect of the trip and the presentations which will modify the overall grade for the class rather than the day's grade and is thus a longer project which will be worked on in collaboration with the teachers.

Primary Instructional Objectives: To show the students how companies really react to customer feedback.

Secondary Instructional Objectives: To give the students a feel for how real companies operate.

Resources Required: Students should be neatly dressed and have paper and a writing implement for notetaking. The instructors must be able to conduct a field trip and maintain field trip security.

Specific Directions for Organizing and Conducting Activities:

If the different locations are near each other, conducting the excursion is greatly simplified. Pointing out to the students that these companies are potential employers helps to keep them on their best and most professional behavior. Also, if the field trip travels to some of the companies that have ties with the academy, the students may be able to make contacts for their internship employment for the remaining summers during high school. This trip can also be worked in with the overall structure of the academy to include a meeting with potential mentors.

Assessment Procedures/Criteria: For this exercise, the students are assigned a base of four out of five points. Each incident of unprofessional behavior at a corporate sight subtracts a point. For each presentation in which a student participates more than minimally, that student receives an extra point. Tardy students are left, and any students unexpectedly absent from the trip get zero points.

Suggestions for Modifications for Learners with Special Needs:

Assuming that the special needs are not so great as to preclude participation, accommodations for wheelchair-bound students should be made by using a handicap-accessible bus and other special needs must be addressed as encountered.

26

Lesson #6: How to Acquire Demonstration Products

Description:

This lesson builds on the earlier work regarding requesting services in that the goals are to acquire goods and services for preview. This lesson starts with a discussion between the teachers and the students about the potential for this sort of resource acquisition. The teachers and perhaps guest speakers can site examples from personal experience of both successful and unsuccessful attempts. These examples can be used to get the students to discuss why some attempts succeeded and others failed. The discussion turns to how these products and services help further learning. A key topic is how the students will be able to justify their requests, both within their own organizations and to the companies of which the requests are being made.

Primary Instructional Objectives:

To explain what goods and services are likely to be available for use and preview, and what types of companies are most likely to supply these demonstrations.

Resources Required:

The students should have paper and writing implements for notetaking.

Specific Directions for Organizing and Conducting Activities:

Typically, the instructors should have the students participate as much as possible during the conversations in this lesson. A significant part of the conversation is presentation by teachers and guests, but during each of the conversations, the students have the opportunity to comment, question, and analyze the situations. If the presenters can mix with the students while the discussion is taking place, it helps to encourage participation on all parts.

Assessment Procedures/Criteria:

The standard evaluation system is used in this lesson.

27

Lesson #7:   **Summary of Corporate Support**

Description: This lesson begins with a teacher-programmed review of the
                                    ideas and findings discussed in the previous six lessons. The
                                    students are asked to review any ideas that they thought were of
                                    special importance or significance. There is time to further
                                    explore any of the topics that the students or teachers feel was
                                    cut short during the unit. Once the first section of the review
                                    process is done, the students may meet with the instructors who
                                    are not currently engaged with the class to discuss their
                                    progress on their paper assignments.

Primary Instructional Objectives: To reinforce the concepts and trends discussed throughout the
                                    unit's lessons.

Secondary Instructional Objectives: To encourage the students to seek guidance regarding their
                                    papers by speaking with the instructors.

Resources Required: Notes from the previous six classes are required by each
                                    student and teacher. Everyone should have paper and writing
                                    implements for further notetaking.

Specific Directions for Organizing and Conducting Activities:
                                    The first section of the class should be led by as many of the
                                    instructors as have comments and were active throughout the
                                    rest of the unit. After the programmed review, the teachers
                                    who have comments and concerns should stay and discuss
                                    them with the students. The others should be available to help
                                    with the students' papers in a one to one atmosphere.

Assessment Procedures/Criteria: For this exercise, the students are assigned a base of four of the
                                    five points. For each student who participates more than
                                    minimally, an extra point is added to the score. Tardy
                                    attendance earns a subtraction of two points and absence
                                    results in a score of zero.

Works Referenced:

Bodilly, S., Ramsey, K., Stasz, C., & Eden, R. (1993). *Integrating academic and vocational education: Lessons from eight early innovators.* (Report No. R-4265-NCRVE/UCB). Santa Monica, CA: The Rand Corporation.

Burnett, Gary. (1992). *Career academies: Educating students for career success.* New York: ERIC Clearinghouse on Urban Education.

Grubb, W. N. (1995). *Education through occupations in American high schools: Approaches to integrating academic and vocational education,* Volume 1. New York: Teachers College Press.

Grubb, W. N. (1995). *Education through occupations in American high schools: The challenges of implementing curriculum integration,* Volume 2. New York: Teachers College Press.

Mansnerus, Laura. New pressures on vocational education. *New York Times,* 7 August 1994.

Michigan State Dept. of Education. (1995). *A guide to work based learning programs, Part II--Career Exposure.* Lansing, Michigan: Office of Career and Technical Education.

Missouri State Board of Education. (1996). *The show-me standards.* Jefferson City, MO: Missouri Department of Elementary and Secondary Education.

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform.* Washington, D.C.: United States Department of Education.

One Hundred Third Congress of the United States of America. (1994). *GOALS 2000: EDUCATE AMERICA ACT.* Washington, D.C.: Congress of the United States.

Quinn, Michelle. Biotechnology goes to high school. *New York Times,* 7 August 1994.

Stasz, Cathleen, Kaganoff, Tessa, & Eden, Rick A. (1994). Integrating academic and vocational education: A review of the literature, 1987-1992. *Journal of Vocational Education Research, 19 (2) 25-72.*

Stern, D., Raby, M., & Dayton, C. (1992). *Career academies: Partnerships for reconstructing American high schools.* San Francisco: Jossey-Bass.

U.S. Department of Education. (1995). Career academies integrating academic and applied learning. *Profiles of promising practices - 1995, Raising the educational achievement of secondary school students - Volume 2.* World Wide Web: http://www.ed.gov/pubs/Raising/raise2/prof7.html.