

Principles of Vocational, Technical  
and  
Adult Education

WTCS #51

Dennis James

Taking Ownership

Spring 2011



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# Principles of VTAE

## **Syllabus**

WTCS #51

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Facilitator: Dennis James

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Course Information: 2 credits. (WTCS Certification Credits, University credit also available.)

Date: Saturday: February 5, February 19, March 15, March 26, and April 2

Number of Weeks: 5

Meeting Times: 9 A.M. - Noon or 1 P.M. – 4 P.M.

Location: Truax – Room 142A

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## Course Description:

You will explore your own personal educational philosophy through historical research about familiar institutions, infrastructure analysis of local public schools, colleges, and the WTCS, and the fundamentals of educational processes. Ideally, you will make cross-college connections that will lay the groundwork for future teamwork efforts.

## Course Learning Objectives:

Students will learn: How past historical events have influenced the "shape" of the current system, evaluate how national issues and trends impact Madison Area Technical College/WTCS. From this knowledge, students will develop a personal plan to continuously improve on playing an effective role in increasing positive change.

Students will learn: To interpret the missions of the WTCS, Madison Area Technical College and their program, and evaluate how they relate to each other as well as to the missions of the University of Wisconsin System, Public K-12 System, and other educational providers.

Students will learn: To analyze the major sources of WTCS revenue and describe the role they play in management of district funds and resources.

Students will learn: To understand how occupational analysis and the WTCS program development process guides the development, implementation, and evaluation of instructional programs. They will develop a plan to implement a process of continuous improvement in a program or functional area.

Students will learn: To question how their professional role relates to the roles and responsibilities of others in both the WTCS and Madison Area Technical College. They will develop a personal strategy for contributing to the continuous improvement of their program, department, or division.

## Method:

We will use group interaction and dialogue; guest presenters; readings from the workbook, and the League of Innovations Cross paper – Learning Is About Making Connections; journaling,; team and individual projects; a WebQuest; and sharing with the larger Learning Academy Community.

## Course Supplies:

The Principles of VTAE Workbook & related readings.

Course Evaluation Measures: These are the expectations of work to be completed for the course.

Learning Activities	Cert. Only	Undergrad Credit	Graduate Credit
Daily Journal & Activities Stop & Adapt	✓	✓	✓
Complete Homework Readings	✓	✓	✓
Read Learning Is About Making Connections	✓	✓	✓
Daily Assessments	✓	✓	✓
Personal Mission Statement Presentation	✓	✓	✓
Action Implementation Plan	✓	✓	✓
Project- develop and present an activity to visually and /or visually communicate your Personal Philosophy (Mission) to the Learning Academy	✓	✓	✓
Final Project- Paper on implementation plan for next semester		✓	✓
Serve as a staff member at the Learn to Learn Camp		✓	✓
Research project on effectiveness of Learning to Learn Camp			✓

## Certification Requirements

Learning Academy

Principles of VTAE Workshop

The following are the expectations of work to be completed for the workshop.

<b>For Certification Only</b>	<b>For Undergraduate Credit</b>	<b>For Graduate Credit</b>
Daily Journal Activities- Stop & Adapt	Daily Journal Activities- Stop & Adapt	Daily Journal Activities- Stop & Adapt
Complete Homework Readings	Complete Homework Readings	Complete Homework Readings
<b>Read – Learning Is About Making Connections</b>	<b>Read – Learning Is About Making Connections</b>	<b>Read – Learning Is About Making Connections</b>
Complete Daily Assessments	Complete Daily Assessments	Complete Daily Assessments
Personal Mission Statement Presentation	Personal Mission Statement Presentation	Personal Mission Statement Presentation
Action Implementation Plan	Action Implementation Plan	Action Implementation Plan
Project- develop and present an activity to visually communicate your Personal Philosophy (Mission) to Learning Academy	Project- develop and present an activity to visually communicate your Personal Philosophy (Mission) to Learning Academy	Project- develop and present an activity to visually communicate your Personal Philosophy (Mission) to Learning Academy
<i>Everything can be completed in the weeklong Learning Academy, but if for some reason you have outstanding work you have until Friday, April 9<sup>th</sup>, 2011 to complete it.</i>	Final Project- Paper on implementation plan for next semester. AND Serve as a staff member at the Learn to Learn Camp  <i>Due August 30<sup>th</sup>, 2011</i>	Final Project- Paper on implementation plan for next semester AND Serve as a staff member at the Learn to Learn Camp AND Research project on effectiveness of Learning to Learn Camp  <i>Due August 30<sup>th</sup>, 2011</i>

## Schedule at a Glance



## Personal Implementation Plan Strategy Form

(Only for those who are taking Principles of VTAE for Undergraduate or Graduate Credit)

Name \_\_\_\_\_ Date \_\_\_\_\_

Instructions: This planning form is for you to create a “contract” for the completion of your implementation plan for next semester. It must be completed prior to the end of the face-to-face portion of the course. It is designed for you to begin planning how you will implement changes, adaptations and improvements to your course for the next semester. You must answer each item and provide as much detail as possible.

1. What are your goals for implementing new teaching and learning concepts, activities and skills during the next semester? List at least 3 specific goals.
2. Explain how you will measure the effectiveness of each goals listed above.
3. Which course will you focus on with respect to implementing new activities, concepts, and skills?
4. What are three possible content areas in the above-mentioned course in which activities, concepts, and skills could be developed over the next semester?

## Research Project for Under/Graduate Credit

This project is only for those students who wish to take the course (Principles of VTAE Workshop) for Under/Graduate Credit.

Design a plan to measure the effectiveness of your contributions to building and further developing the Madison Area Technical College Learning Community. Build cross-college connections that lay the ground work for future team work efforts. You may tie this to the college strategic plan, your personal implementation plan, and department unit plan or seek to enhance work already underway.

You may enlist others in your department in the development of your plan if it is appropriate. You may use AQIP, LSQIP, QRP or other Madison Area Technical College or market data available to you as the baseline for your research.

Your results will be communicated in a report that answers the following prompts in this report:

What exactly will you measure your effectiveness?

How are you going to measure it? What is your methodology?

What data will form your baseline?

How will you choose your control group? What are the criteria?

Who else will participate in the study and in what ways?

Your paper must:

Be between 3 and 5 pages long.

Be typewritten, with few or no grammar or spelling errors.

Include a clear introduction and conclusion.

Include documentation of any source materials used in the project.

This design and initial report for this project is due by August 30<sup>th</sup>, 2011. Your research and the subsequent report must be made available to CETL by January 30<sup>th</sup>, 2012.

## Principles of VTAE Course Development Guide

*This guide was developed to help you create a visual representation of your Personal Mission Statement. The outcome is to define your Personal Philosophy of Teaching to share with the class on Friday. Creativity and Innovation are encouraged in your choice of method for sharing your statement.*

*Have fun!*

Create a Poster that illustrates your philosophy  
Develop an “Elevator Speech” that communicates your philosophy  
Create a Mind Map that illustrates your philosophy  
Create a Poem, Song or Performance that demonstrates your philosophy  
Build a 3-D Model or artistic rendering that illustrates your philosophy  
Create a computer presentation (PowerPoint) that clarifies your philosophy  
Create a Blog that illustrates your philosophy  
Create a Wiki that illustrates your philosophy  
Use your creativity to create a game, interactive puzzle or other activity that illustrates your philosophy  
Develop your own alternative to one of these activities.

# My Personal Action Plan

## Resistance to Change Response

### Reflective Prompts:

#### #1 It can change

- Identify the “IT” you want to change in your teaching or course.

#### #2 I do want to change.

- Identify your motivation for wanting to make this change.

#### #3 I know what to change

- Identify exactly what you want to change in your teaching or course. Be specific.

#### #4 I know how to change

- Establish a plan for how you will make this change in your teaching or course.
- What is the timeline?
- What materials do you need to make this change?
- What further learning do you need to do to make this change?
- How will you implement the change in your course?
- How will you assess the effectiveness of the change?

## Philosophy Paper Assignment

- Two page paper (minimum) on your personal philosophy of VTAE (Due April 2, 2011)
- A philosophy promotes an understanding and helps provide clarity
- A philosophy sensitizes you to various needs
- A philosophy provides a framework for distinguishing, separating, and understanding personal values
- A philosophy promotes flexibility and consistency in working with adult learners
- We will tie-up loose ends and discuss our personal philosophy's on the last day of class.

## Day 1 (2/5) – History

***“I have but one lamp by which my feet are guided, and that is the lamp of experience. I know no way of judging the future but by the past”***

Edward Gibbon

- Introductions
- Learning is About Making Connections
- Philosophy Paper
- History
- Mission Statements
- Organizational Structures
- Trends
- Homework/Assessment

# History of Vocational Education in Wisconsin

## Foundation of Vocational Education in Wisconsin in the Late 1800's

After the Civil War, the United States began to remake itself. The 1890's in particular saw many changes and modernization of our industries and society began full tilt. The 1890's set a foundation for the Twentieth Century and changed the world. We moved from an agrarian society (<http://en.wikipedia.org/wiki/Agrarian>) to an industrialized nation.

In 1889, the Paris Exposition ([http://en.wikipedia.org/wiki/Exposition\\_Universelle\\_%281889%29](http://en.wikipedia.org/wiki/Exposition_Universelle_%281889%29)) gave the world the Eiffel Tower, but more importantly, it introduced the world to a number of new technologies (or new applications of old technologies, such as pneumatics). In 1893, the United States responded with the Chicago World's Fair (a.k.a. -- The World's Columbian Exposition ("in 1492 Columbus sailed the ocean blue"), also called the White City). The fair highlighted the best of America's architecture, culture, and technology.

These events plus many other factors changed the educational needs in America as well. Factors that drove change in educational needs were:

- The need for reform and change was of national concern
- Additional education promotes general welfare
- New needs in preparation of youth & adults for employment
- Employment requires a sound basic education
- "Vocational" Education needs to be planned & conducted in close cooperation with business & industry
- Education needs to provide skills & knowledge valuable in the labor market
- The educational system should provide for continuing education

These were considerations for Vocational Education in the 1890's and continue to be relevant today.

## Origins of Vocational Education

### Federal Government Incentive

- 1862 Morrill Act were statutes that allowed for the creation of land-grant colleges. President Lincoln cedes federal land to states to sell for money for AG and Mechanical Arts
- 1887 Hatch Act gave the states money for agriculture research
- 1890 2nd Morrill Act - More money
- 1906 Adams Act - More money with no restrictions

In the early 1900's there was little need for advanced or basic education, we saw the Industrial Revolution moving into high gear, manufacturing processes are becoming more advanced, we have new inventions & machines. The United States is becoming a world power; Frederick

Taylor gives us Scientific Management. Shop management (1895) uses product specifications to define standards of output performance, inspects defects out of the end product, and discards 'bad product'. This process was used as a guide for school boards.

Other key dates:

- 1848 Wisconsin Statehood
- 1849 State Apprenticeship law
  - indenture to masters
- 1889 Bennet Law -- 7-14 years old, 12 weeks in school (all instruction in English)
- 1901 Legislative Reference Law
  - Dr. Charles McCarthy - Father of WTCS
- 1906 – Milwaukee School of Trades
  - Sponsored and equipped by the Milwaukee Merchants' and Manufacturers' Association
  - Year-long programs
    - plumbing
    - patternmaking
    - moulding
    - machinist trade
    - mechanical drawing math
- 1907 Chapter 122 - Local school boards to operate trade schools
  - Separate property tax could be levied
  - Requires Advisory Committees
- 1909 Trade School for Girls
- 1917 - Federal Law - Smith-Hughes Act of 1917

Advocacy for change in Wisconsin

- Milwaukee Merchants' and Manufacturers' Association
- Waukesha Fox Head Brewery
- National Society for the Promotion of Industrial Education
- National Association of Manufacturers
- National Metal Trades Association

Theory Debate (1900-1917)

- The Social Efficiency
  - "Technocratic training-job specific"
- The Industrial-Democracy
  - John Dewey
  - "Humanistic-life long learning"

Definitions for Vocational Education

- Accident Theory (Smith-Hughes)
- Mold life to what exists
- Environmental forces are active
- Individual is a passive variable

- People “fitted or matched to job”
- Vocational education was training of less than college grade to fit for useful employment

#### People and Dates

- George Hambrecht, State Director (1921-1943)
- 1930’s Depression
  - Access for all
  - WPA (Work Progress Administration)
- World War II
  - Vocational Education for National Defense
- 1955
  - loss of Stout to the UW System
  - State Board was Stout trustee
- 1950’s Image Challenge
  - “can’t make it” go to vocational school
  - “The School of Last Chance”
  - low-tax low-spend ideologies
  - emphasis on hobby and recreation activities
  - poor public relations
  - mediocre teaching staff
  - facilities poor
- Clarence Greiber, State Director 1944 - 1970
- Chapter 453, 1957, bill enabled any area with a population of 20,000 to form a vocational district
  - Provided for a mill tax and for an elected board
- Chapter 414, 1964, enabled county boards to form VTAE districts
- Area Reorganization Bill, 1965
  - 18 districts
  - #17 & 18 = Indianhead
  - #7 & 6 merged to form Gateway
- Vocational Education
  - VE Act 1963
  - Vocational educational means vocational or technical training or retraining - business & office
- VE Act 1968
  - added “recognized occupations”
  - vocational guidance and counseling

#### Historical Development

Trends in educational reform are related to the following:

- Related to world events
- Related to technology events
- Related to social needs

For more on the history of the VTAE in Wisconsin read the Blue Book under Supplemental Materials – Page 75.

## Trends

From Wikipedia, the free encyclopedia

Trend may refer to:

- The process of getting others to follow/copy, of their own free will your actions and/or style.
- A fad or fashion trend

<http://en.wikipedia.org/wiki/Trend>

Trend Hunter Magazine - <http://www.trendhunter.com/>

## Homework for Day 2

- Journal – we find that journaling can help in the development of your activity and paper
- Complete the WebQuest on Adult Learners
- Read Day 2 Materials
- See you on February 19<sup>th</sup>

## Adult Learners WebQuest

By  
James DeGidio  
Dawn Sebranek  
May 15, 2009



## Introduction

Adult learners, also known as “non-traditional students”, are usually over the age of 25. The non-traditional student makes up over one half of the students today. The more non-traditional the student the more likely they will choose to attend a community college and the less likely they are to complete a program.



## Task

This WebQuest will guide you through the ABCC's of adult learners and how we, as instructors, can facilitate adult learning.

In class, you will be divided into small groups to discuss the information that you learned from this WebQuest.

You will develop a short activity on your topic to share with the whole group.

A [process checklist](#) has been created to assist you in keeping track of the completion of activities for each of the following tasks.



A = Andragogy

B = Barriers to Adult Learning

C = Characteristics of Adult Learners

C = Critical Elements of Adult Learning

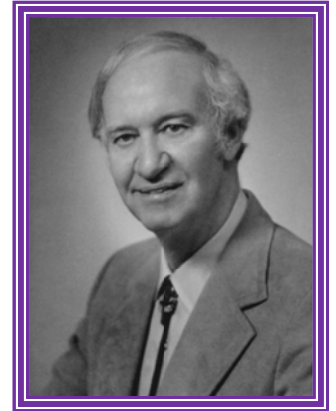
'S = Styles of Learning

## Process of Adult Learning



### Andragogy

Andragogy is a term associated with adult learning. Review the following websites. What is Andragogy? How does it differ from pedagogy? What are the 4 principles of Knowles theory? Write a paragraph summarizing what you have learned from reviewing these websites:



Wikipedia Definition - <http://en.wikipedia.org/wiki/Andragogy>

Andragogy vs. Pedagogy -

<http://agelesslearner.com/intros/andragogy.html>

Knowles Theory -

[http://projects.coe.uga.edu/epltt/index.php?title=Adult\\_Learning](http://projects.coe.uga.edu/epltt/index.php?title=Adult_Learning)

More on Knowles Theory –

<http://www.infed.org/lifelonglearning/b-andra.htm#debate>

### Barriers

Through your research, identify the many barriers that adult learners encounter. How would you respond to a student who presents with one of these barriers? What resources does MATC have to assist students with these barriers? Choose one barrier and write a paragraph about how you would assist a student with this barrier and/or refer this student to one of MATC's resources.

[http://www.prel.org/products/pr\\_/adult-learners.htm](http://www.prel.org/products/pr_/adult-learners.htm)

<http://tss.colstate.edu/TSStraining/2AdultLearner/barriersG054.pdf>

<http://learn2instruct.com/module3.html>

## Characteristics of Adult Learners

There are many characteristics of the adult learner that contribute to the barriers encountered with adult learning. Adult learners, as non-traditional learners, have some different characteristics than that of the traditional learner. List the characteristics and be ready to discuss this further in your group.



### Characteristics

<http://www.suite101.com/content/positive-adult-learning-environments-a92618>

### Adult Learner Characteristics

<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm>

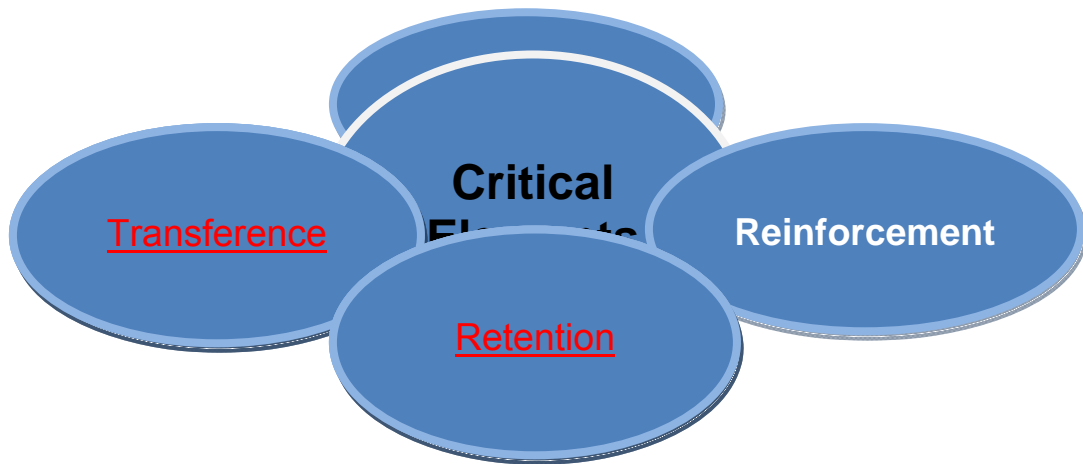
### Principles of Adult Learning

<http://www.nomolos.org/trdv500/principles.html>



## Critical Elements

There are four critical elements to adult learning. Choose one of the four elements to research. Describe how you, as an instructor, can facilitate that particular critical element in your classroom.



<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm>

<http://www.slideshare.net/gzanderson/motivating-adult-learners>

<http://toolboxes.flexiblelearning.net.au/demosites/series4/425/site/staff/r.htm>

<http://fire.lacounty.gov/ProgramsEvents/PDFs/CertInstructorsManualPDFs/Adult%20Learning.pdf>

## Styles of Learning



We already know that adults learn differently than children, may have barriers to learning, and have a variety of characteristics that contribute to their individual learning. One of these characteristics includes diverse learning styles.



Discover your own personal learning style by taking this [quiz](http://www.personal.psu.edu/bxb11/LSI/LSI.htm) - <http://www.personal.psu.edu/bxb11/LSI/LSI.htm>

Identify four [learning styles](http://homeworktips.about.com/od/homeworkhelp/a/learningstyle.htm) - <http://homeworktips.about.com/od/homeworkhelp/a/learningstyle.htm>

[Compare and contrast](http://wikieducator.org/Facilitate_adult_learners'_individualised_learning/Activities/Discover_your_Learning_Style) each style. [http://wikieducator.org/Facilitate\\_adult\\_learners'\\_individualised\\_learning/Activities/Discover\\_your\\_Learning\\_Style](http://wikieducator.org/Facilitate_adult_learners'_individualised_learning/Activities/Discover_your_Learning_Style)

Think about your teaching. Do you cater to one particular learning style?



Evaluation

<b>Philosophy of Vocational Education</b>				
<b>Adult Learner WebQuest</b>			<b>Due: February 19<sup>th</sup>, 2011</b>	
<b>Rubric for Grading</b>				
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Andragogy & Knowles Theory	Incomplete definition of Andragogy. Did not research Knowles theory.	Defined Andragogy Identified less than 4 principles of Knowles Theory.	Defined Andragogy Identified Knowles 4 principles.	Defined Andragogy & Identified & Understand Knowles Theory.
Barriers	Does not identify any barriers.	Identifies Barriers.	Identifies how the barriers affect the adult learner.	Identifies how the barriers affect the adult learner and explores resources to assist students with the barriers.
Characteristics	Did not research characteristics.	Researched characteristics.	Created a list of characteristics.	Created a list of characteristics & is prepared to discuss with the group.
Critical Elements	Did not identify critical elements.	Identified critical elements	Researched one element & prepared to discuss with the group.	Researched more than one critical element.
Styles of Learning	Completed one of the four learning style activities.	Identified the four different learning styles.	Took the learning style quiz.	Compared and contrasted the different learning styles.
				<b>Scale</b>
				3 = Excellent
				2 = Satisfactory
				1 = Adequate
				0 = Needs Improvement

## Conclusion

Upon completion of this webquest, you will be able to define & describe androgogy and Knowles theory of adult learning. You will be able to identify characteristics of the adult learner and their barriers to starting and exploring the educational process. You have learned what resources are available through MATC to address these barriers. You have now recognized that there several styles of learning and teaching strategies that apply to these styles.

Through this assignment you have developed an understanding of the components of a webquest as another teaching tool to use with your students.

## Credits

Thanks to WebQuest.Org <http://www.webquest.org/index.php> we were able to develop our first webquest.



## Adult Learner Webquest Process Checklist

Check off each activity as you complete them. Bring checklist to class.

Project Name: Adult Learners Project Author: James DeGidio & Dawn Sebranek			Notes:
No	Yes	Activities	
<input type="checkbox"/>	<input type="checkbox"/>	Defined the term "androgogy".	
<input type="checkbox"/>	<input type="checkbox"/>	Identify the 4 principles of Knowles theory.	
<input type="checkbox"/>	<input type="checkbox"/>	I wrote a paragraph regarding what I learned about androgogy and Knowles theory.	
<input type="checkbox"/>	<input type="checkbox"/>	Make a list of the adult barriers.	
<input type="checkbox"/>	<input type="checkbox"/>	Review MATC resources available to students to assist with their barriers.	
<input type="checkbox"/>	<input type="checkbox"/>	I wrote a paragraph describing how I would assist a student who approaches me with one of the above listed barriers.	
<input type="checkbox"/>	<input type="checkbox"/>	Developed a list of characteristics of adult learners.	
<input type="checkbox"/>	<input type="checkbox"/>	Identified the four critical elements of adult learning.	
<input type="checkbox"/>	<input type="checkbox"/>	Choose one of the four critical elements of adult learning to research. Describe how an instructor can facilitate that critical element in the classroom setting.	
<input type="checkbox"/>	<input type="checkbox"/>	Completed the learning style quiz to discover my preferred learning style.	
<input type="checkbox"/>	<input type="checkbox"/>	Compared and contrasted the four learning styles.	
<input type="checkbox"/>	<input type="checkbox"/>	Thought about the teaching strategies that I use in my classroom and whether I meet the needs of varied learning styles.	



## **Day 2 (2/19) – Organization**

*“The achievements of an organization are the results of the combined effort of each individual.”*

Vince Lombardi

### **Agenda/Overview - Principles of VTAE – Day 2**

- Housekeeping
- Finish Trends
- Andragogy/Analysis of Adult Learners
- Learning College Principles
- Developing a Personal Philosophy

## Trends in Technical College Teaching and Learning

*These trends were developed in addition to the list of trends developed during Phase 1 of the Certification Review Project*

- Instructors have no control on who takes certification courses as there are no entrance requirements. This can result in a very diverse group of participants with differing needs.
- No established sequence of courses
- There is an interest by participants in being part of a Learning Community
- Push to collaborate more state-wide with other districts
- More and more short-term certificates being offered
- Push for laddering of programs
- Emphasis on transferability of courses
- Also looking at transferability of certification courses
- Learning is leading technology now rather than technology leading learning (positive change!)
- Some colleges are requiring all new faculty to complete certain modules of the certification courses as a cohort during their first year or so of employment
- Would be nice to be able to “bar code” students to easily be able to track their educational history
- More technical college students already have other degrees (B.S., B.A., Masters or Ph.D.)
- More technical college students are “course takers” and are not interested in a credential or degree
- WTCS program success measures to not reflect the realities of student needs

## Andragogy

- Self-concept
  - Dependent to self-directed
- Experience
  - With maturity, a growing reservoir of experience becomes a resource for increased learning
- Readiness to learn
  - With maturity the readiness to learn grows
- Orientation to learning
  - Maturity brings a change in perspective: changes from postponed application of knowledge to immediacy of application and from subject-centered to problem-centered
- Motivation to learn
  - Motivation to learn becomes internal

### Activity:

We are going to develop an activity around Adult Learners together. What are the unique qualities of our students, and how we would express this to others. Five (5) teams around each of the above areas. Each team to prepare 5-10 questions you could ask others.

### Framework for analyzing technical/adult education

Many have found the following four aspects beneficial to consider in clarifying or developing a philosophy

1. Adults as learners (What do we believe about adults as learners?)
2. Aims for adult/technical education (What do you feel are the aims?)
3. Teaching/learning (Adult learning and teaching approaches)
4. Content (Issues involving content for technical education)

## Madison Area Technical College: A Learning College

MATC embraces the Learning College principles and is working toward creating or enhancing support structures and systems to make the principles real in the life of the college.

Through the efforts of the League for Innovation in the Community College a set of principles was created to help guide the colleges development and focus. These 6 original principles, together with the newer 7<sup>th</sup>, form a kind of compact or guide that colleges aspiring to be “All About Learning” make. The Principles are grounded in ideas of learner centered education, creating ownership of knowledge and skills, broadening open access, creating flexibility in learning options, making connections based on what we know about learning from brain research, and fostering a commitment to transform the lives of students across this nation. These Principles are a clear call for action in reforming higher education and lifting up our nation’s community colleges as models of excellent learning institutions for the world.

Step 1. Review the 7 Learning College Principles listed below. Choose one principle that connects or resonates most closely with your personal philosophy of education. We’ll form discussion groups based on your choices.

### Key Learning College Principles

<http://www.league.org/>

1. The Learning College creates substantive change in individual learners.
2. The Learning College engages learners in the learning process as full partners who assume primary responsibility for their own choices.
3. The Learning College creates and offers as many options for learning as possible.
4. The Learning College assists learners to form and participate in collaborative learning activities.
5. The Learning College defines the roles of learning facilitators by the needs of the learners.
6. All Learning College employees identify with their role in supporting learning.
7. The Learning College and its learning facilitators succeed only when improved and expanded learning can be documented for learners and skills to enhance quality of life and boost economic vitality. We are committed to extending learning beyond the classroom and throughout life. To meet each student’s educational needs, we:
  - deliver high quality instruction and services that are responsive, flexible and accessible;
  - join talent and technology to make learning generously available and imaginatively delivered;
  - commit to high standards and accountability;

- create strategic alliances that expand students' learning opportunities;
- respect each other's dignity, embrace diversity and offer opportunities for growth.

Step 2: Consider the following five sentence stems as you discuss your choice in your small group.

- The Principle I chose connects with my teaching when I...
- The Principle I chose is important to our college because ...
- The Principle I chose is critical to the success of my students because...
- The Principle I chose helps us create community by...

Step 3: Share your ideas with the larger group. Each small group will have 1 minute to report out on their ideas, especially those on which they reached consensus.

## Adults as Learners

Part of being an effective instructor involves understanding how adults learn best. Compared to children and teens, adults have special needs and requirements as learners. Despite the apparent truth, adult learning is a relatively new area of study. The field of adult learning was pioneered by Malcom Knowles. He identified the following characteristics of adult learners:

- Adults are *autonomous* and *self-directed*. They need to be free to direct themselves. Their teachers must actively involve adult participants in the learning process and serve as facilitators for them. Specifically, they must get participants' perspectives about what topics to cover and let them work on projects that reflect their interests. They should allow the participants to assume responsibility for presentations and group leadership. They have to be sure to act as facilitators, guiding participants to their own knowledge rather than supplying them with facts. Finally, they must show participants how the class will help them reach their goals (e.g., via a personal goals sheet).
- Adults have accumulated a foundation of *life experiences* and *knowledge* that may include work-related activities, family responsibilities, and previous education. They need to connect learning to this knowledge/experience base. To help them do so, they should draw out participants' experience and knowledge which is relevant to the topic. They must relate theories and concepts to the participants and recognize the value of experience in learning.
- Adults are *goal-oriented*. Upon enrolling in a course, they usually know what goal they want to attain. They, therefore, appreciate an educational program that is organized and has clearly defined elements. Instructors must show participants

how this class will help them attain their goals. This classification of goals and course objectives must be done early in the course.

- Adults are *relevancy-oriented*. They must see a reason for learning something. Learning has to be applicable to their work or other responsibilities to be of value to them. Therefore, instructors must identify objectives for adult participants before the course begins. This means, also, that theories and concepts must be related to a setting familiar to participants. This need can be fulfilled by letting participants choose projects that reflect their own interests.
- Adults are *practical*, focusing on the aspects of a lesson most useful to them in their work. They may not be interested in knowledge for its own sake. Instructors must tell participants explicitly how the lesson will be useful to them on the job.
- As do all learners, adults need to be shown *respect*. Instructors must acknowledge the wealth of experiences that adult participants bring to the classroom. These adults should be treated as equals in experience and knowledge and allowed to voice their opinions freely in class.

## Motivating the Adult Learner

Another aspect of adult learning is motivation. At least six factors serve as sources of motivation for adult learning:

- **Social relationships:** to make new friends, to meet a need for associations and friendships.
- **External expectations:** to comply with instructions from someone else; to fulfill the expectations or recommendations of someone with formal authority.
- **Social welfare:** to improve ability to serve mankind, prepare for service to the community, and improve ability to participate in community work.
- **Personal advancement:** to achieve higher status in a job, secure professional advancement, and stay abreast of competitors.
- **Escape/Stimulation:** to relieve boredom, provide a break in the routine of home or work, and provide a contrast to other exacting details of life.
- **Cognitive interest:** to learn for the sake of learning, seek knowledge for its own sake, and to satisfy an inquiring mind.

## Barriers and Motivation

Unlike children and teenagers, adults have many responsibilities that they must balance against the demands of learning. Because of these responsibilities, adults have *barriers against participating in learning*. Some of these barriers include lack of time, money, confidence, or interest, lack of information about opportunities to learn, scheduling problems, "red tape," and problems with child care and transportation.

**Motivation factors** can also be a barrier. What motivates adult learners? Typical motivations include a requirement for competence or licensing, an expected (or realized) promotion, job enrichment, a need to maintain old skills or learn new ones, a need to adapt to job changes, or the need to learn in order to comply with company directives.

The best way to motivate adult learners is simply to *enhance* their reasons for enrolling and *decrease* the barriers. Instructors must learn why their students are enrolled (the motivators); they have to discover what is keeping them from learning. Then the instructors must plan their motivating strategies. A successful strategy includes showing adult learners the relationship between training and an expected promotion.

## Learning Tips for Effective Instructors

Educators must remember that learning occurs within each individual as a continual process throughout life. People learn at different speeds, so it is natural for them to be anxious or nervous when faced with a learning situation. Positive reinforcement by the instructor can enhance learning, as can proper timing of the instruction.

Learning results from stimulation of the senses. In some people, one sense is used more than others to learn or recall information. Instructors should present materials that stimulates as many senses as possible in order to increase their chances of teaching success.

There are four critical elements of learning that must be addressed to ensure that participants learn. These elements are

1. **motivation**
2. **reinforcement**
3. **retention**
4. **transference**

**Motivation.** If the participant does not recognize the need for the information (or has been offended or intimidated), all of the instructor's effort to assist the participant to learn will be in vain. The instructor must establish rapport with participants and prepare them for learning; this provides motivation. Instructors can motivate students via several means:

- **Set a feeling or tone for the lesson.** Instructors should try to establish a friendly, open atmosphere that shows the participants they will help them learn.
- **Set an appropriate level of concern.** The level of tension must be adjusted to meet the level of importance of the objective. If the material has a high level of importance, a higher level of tension/stress should be established in the class. However, people learn best under low to moderate stress; if the stress is too

high, it becomes a barrier to learning.

- **Set an appropriate level of difficulty.** The degree of difficulty should be set high enough to challenge participants but not so high that they become frustrated by information overload. The instruction should predict and reward participation, culminating in success.

In addition, participants need specific knowledge of their learning results (*feedback*). Feedback must be specific, not general. Participants must also see a *reward* for learning. The reward does not necessarily have to be monetary; it can be simply a demonstration of benefits to be realized from learning the material. Finally, the participant must be **interested** in the subject. Interest is directly related to reward. Adults must see the benefit of learning in order to motivate themselves to learn the subject.

**Reinforcement.** Reinforcement is a very necessary part of the teaching/learning process; through it, instructors encourage correct modes of behavior and performance.

- *Positive reinforcement* is normally used by instructors who are teaching participants new skills. As the name implies, positive reinforcement is "good" and reinforces "good" (or positive) behavior.
- *Negative reinforcement* is normally used by instructors teaching a new skill or new information. It is useful in trying to change modes of behavior. The result of negative reinforcement is *extinction* -- that is, the instructor uses negative reinforcement until the "bad" behavior disappears, or it becomes extinct.

When instructors are trying to change behaviors (old practices), they should apply both positive and negative reinforcement.

Reinforcement should be part of the teaching-learning process to ensure correct behavior. Instructors need to use it on a frequent and regular basis early in the process to help the students retain what they have learned. Then, they should use reinforcement only to maintain consistent, positive behavior.

**Retention.** Students must retain information from classes in order to benefit from the learning. The instructors' jobs are not finished until they have assisted the learner in retaining the information. In order for participants to retain the information taught, they must see a meaning or purpose for that information. They must also understand and be able to interpret and apply the information. This understanding includes their ability to assign the correct degree of importance to the material.

The amount of retention will be directly affected by the degree of original learning. Simply stated, if the participants did not learn the material well initially, they will not retain it well either.

Retention by the participants is directly affected by their amount of practice during the learning. Instructors should emphasize retention and application. After the students demonstrate correct (desired) performance, they should be urged to practice to maintain the desired performance. Distributed practice is similar in effect to intermittent reinforcement.

**Transference.** Transfer of learning is the result of training -- it is the ability to use the information taught in the course but in a new setting. As with reinforcement, there are two types of transfer: *positive* and *negative*.

- Positive transference, like positive reinforcement, occurs when the participants uses the behavior taught in the course.
- Negative transference, again like negative reinforcement, occurs when the participants do not do what they are told not to do. This results in a positive (desired) outcome.

Transference is most likely to occur in the following situations:

- *Association* -- participants can associate the new information with something that they already know.
- *Similarity* -- the information is similar to material that participants already know; that is, it revisits a logical framework or pattern.
- *Degree of original learning* -- participant's degree of original learning was high.
- *Critical attribute element* -- the information learned contains elements that are extremely beneficial (critical) on the job.

Although adult learning is relatively new as field of study, it is just as substantial as traditional education and carries and potential for greater success. Of course, the heightened success requires a greater responsibility on the part of the teacher. Additionally, the learners come to the course with precisely defined expectations. Unfortunately, there are barriers to their learning. The best motivators for adult learners are interest and selfish benefit. If they can be shown that the course benefits them pragmatically, they will perform better, and the benefits will be longer lasting.

## Mission Statements

These prompts are included to strengthen your thoughts about the value of creating mission statements. As our guest, Dr. Ed Clarke, leads you through the development of the Madison Area Technical College Mission Statement and you begin to think about your own mission statement, these prompts may help you.

- What elements might be included in a useful mission statement?
- Why create a mission statement anyway?
- How will I use my mission statement once I have it?
- How will creating a mission statement enhance student learning?
- What if my mission changes or is “reorganized”?
- How specific should my mission statement be?
- How can I connect my mission statement to the colleges’ mission statement?
- How can my mission statement help me create connections and community in my classroom?

## Homework for Day 3

- Journal
- Read Day 3 Materials
- Read Learning is About Making Connections by Pat Cross and answer the questions on Page 37
- Create an outline for your Personal Mission Statement

# Building Community in the Classroom

Learning is About Making Connections  
K. Patricia Cross

As you read the Cross Papers Number 3 consider the following prompts which will be used in our class discussions.

- How does the concept of a “schema” or “schemata” as Cross describes them connect with your teaching? If you recognize and use this concept in your teaching, share how you do so. If not, why?
- Contrast “surface” and “deep” learning as described by Ramsden and explain how you create conditions for “deep” learning in your teaching.
- Looking at the strategies of “rehearsal,” “elaboration,” and “organization,” which strikes you as the best description of how you teach? How does your method enhance student learning?
- How do you construct your classroom to encourage “metacognition” in your students?
- How do the experiential learning experiences you provide for your students enhance their learning? If you currently don’t practice experiential learning, how could it enhance student success?
- Describe the role that “reflection” plays in your teaching? How does it enhance student learning in your experience?
- How does your understanding of the importance of creating connections connect with your personal philosophy of teaching and learning?



## **Day 3 (3/5) Planning**

*“Plans are nothing; planning is everything”.*

Dwight D. Eisenhower

### **Agenda/Overview - Principles of VTAE – Day 3**

- Discuss “Building Community in the Classroom
- Strategic Planning/Budget
- Personal Philosophy Outline Review

# Madison Area Technical College Strategic Planning

Goal: To understand and effectively participate in the process for planning in the college.

Activity: Explore the planning process. Assigned teams will explore and report out on the Madison Area Technical College planning process by creating a visual map of a portion of the planning process using tape, paper and found objects to symbolize the important inputs, discussions and actions in the process.

Step 1: Review Board End Statements, College Strategic Plan, Sample Unit Plans. Review Process described by SA Web site. Explore the process in your team.

Step 2: Explore your assigned portion of the process with an eye toward responding to these prompts.

Prompts:

- What inputs are included in this portion of the process?
- What people are involved in these discussions?
- What products are generated in this portion of the process?
- What actions are taken....?

Step 3: Design a model for the piece of the process assigned to your group.

- Prompts for planning the model.
- How can you symbolize actions, inputs and outputs of this process?
- Demonstrate the order that actions take place in this portion of the process?
- Explain when this portion take place in time?
- Who is involved in your portion of the process?
- How often is this part of the process replicated?

Step 4: Using tape, paper, string and markers; create your model in 3 dimensions on floor, walls and space in our classroom. Connect your portion of the process to the other teams work. A spokesperson from your group should be prepared to explain your portion of the process.

## Madison Area Technical College Strategic Plan and Board Ends

There are 3 different groups who are identified as being involved in the Madison Area Technical College comprehensive [planning process](#). First, the Board of Trustees, which are appointed by the County Board Chairs in our area. They meet monthly to levy taxes and create general policies. They work on setting the vision for the College and identify major themes and areas for us to focus on in order to accomplish that vision. They establish college-wide goals or “End Statements.”

**Relationship Matrix  
Board Ends and Strategic Plan**

	All Students will succeed	Opportunities and options for learning reflect the needs of students and clients	All who interact with Madison Area Technical College have positive experiences	Community education, and business partnerships result in enhanced educational opportunities	The Madison Area Technical College environment rewards innovation and continuous improvements
All students achieve the learning necessary to be successful in their educational and career goals.	X	X	X		
Madison Area Technical College prepares students for gainful employment and continuing education.		X			
Madison Area Technical College provides skilled workers that meet employer needs and the communities changing needs.			X	X	

<p><b>Madison Area Technical College provides open access and a welcoming environment for all students and members of the community in pursuit of lifelong learning opportunities.</b></p>		<p style="text-align: center;"><b>X</b></p>	<p style="text-align: center;"><b>X</b></p>		<p style="text-align: center;"><b>X</b></p>
<p><b>Madison Area Technical College proactively provides support and resources to collaborative community efforts to the extent resources will.</b></p>			<p style="text-align: center;"><b>X</b></p>	<p style="text-align: center;"><b>X</b></p>	

Secondly, the College Council, an executive leadership group of the College who represent all the major units in the College and report to the Vice Presidents and the President, make a recommendation on Strategic Goals. The Union Presidents also participate in this group. The College Council takes the Board's vision and themes and figures out the most important outcomes to achieve the vision and to track progress. They look at strategies and priorities - what are the most important things we need to do in order to accomplish that vision and work on those themes. This work results in the college's Three Year Strategic Plan, revisited annually.

**2006 – Madison Area Technical College  
Three-Year Strategic Plan**

\*\*\*\*\*

**Mission:** Madison Area Technical College provides accessible, high quality learning experiences that serve the community

**Values:** Excellence, Respect, and Integrity

\*\*\*\*\*

**Vision:** Transforming lives, one at a time

## Goals:

1. All students will succeed.
  - a) Students will academically succeed in their first 15 enrolled credits as measured by the number of students who complete coursework with a C or better.
  - b) MAAP will be fully implemented by 6/30/08.
  - c) Within 3 years, all students will participate in a First Semester Experience activity.
  - d) The percentage of students from racial/ethnic minority populations will reflect the racial/ethnic minority population of the Madison Area Technical College district as measured through annual enrollment data.
  - e) All students, regardless of race, ethnicity, gender, disability and/or economic level will succeed at the same rate as evidenced by success rates in all courses students are registered for as of the 10<sup>th</sup> day of the semester.
  - f) Students enrolled in developmental courses at Level 2 and above will transition to degree credit courses in three semesters or less.
  - g) Learning outcomes are achieved through regular assessment.
  
2. Opportunities and options for learning reflect the needs of students and clients.
  - a) Enrollments will increase to 9,230 FTE's\* in technical, transfer and apprenticeship courses. Enrollments will increase to 35,587 headcount in adult basic education, adult continuing education, community service and contract training by 2010.
  - b) Courses and/or programs utilizing flexible learning strategies will increase by 50% over 3 years.
  - c) The number of persons served through the career pathways model will triple within 3 years.
  - d) A comprehensive academic master plan will be completed by 6/30/07.
  
3. All who interact with Madison Area Technical College have positive experiences.
  - a) Overall student satisfaction with Madison Area Technical College credit students will be above the national norm as measured by the Noel Levitz survey and other methods.
  - b) Student satisfaction on admission and registrations processes will be above the national norm as measured by the Noel Levitz survey and other methods.
  - c) Employees of Madison Area Technical College perceive a positive work environment as compared to the national norm on the PACE survey or other methods.
  - d) Companies contracting with Madison Area Technical College for training will indicate a "very satisfied" rating on surveys. A 25% increase of repeat and new contract clients will occur within 3 years.
  - e) The average community perception rating of Madison Area Technical

College will increase to “A” based on responses from the Dane Track perception questions and other methods.

4. Community, education, and business partnerships result in enhanced educational opportunities.
  - a) Within the next three years, 23% of recent graduates of district high schools will come directly to Madison Area Technical College.
  - b) Within the next 3 years current partnerships with business and industry, CBO's, community and public agencies are strengthened and new partnerships created as evidenced by an increase in the following: 1) opportunities for students; 2) participation in Advisory Committees; 3) % of students placed in their field; and 4) resources and donations.
  - c) Over 4 years, an annual increase of 10% of students will successfully transfer to the four year college of their choice.
  - d) Madison Area Technical College will increase the number of students in new and start up companies as well as occupations of greatest need (as defined by the department of workforce development).
  - e) Madison Area Technical College will increase cooperative ventures and external resources by 15% through partnerships.
  
5. The Madison Area Technical College environment rewards innovation and continuous improvement.
  - a) All newly hired employees are innovative, demonstrate professional excellence, cultural competence, and exemplify continuous improvement practice.
  - b) Innovation is valued as demonstrated through support, recognition, and reward each semester.
  - c) Employees will demonstrate innovation and continuous improvement practices as evidenced through annual employee assessment beginning in June 2007.
  - d) Within 3 years the college workforce will reflect the population in our community.
  - e) Application of AQIP principles and continuous improvement practices result in improved systems and processes as measured by performance on the systems portfolio in May 2009.

\*FTE=30 credits over a one-year period.

## Unit Plans

And last, The Unit plans, which make up all employee work groups at the College. All staff is involved in planning and improvement efforts through their unit planning process. Beginning with the board end goals, the Strategic Plan and their own goals and data, they create a vision for the future of their area and they identify how they can support the college direction.

### **Unit Plan FY0809**

#### **Unit Name: Center of Agriscience & Technologies**

#### **Division/Department Name: Administrative Asst/Business Software App**

a) What is your long-term vision for your program/department? In your discussion, consider the following: what do we want our stakeholders (students, employers, general public, graduates, etc) to be saying about us, what results would we like to be producing in 3 years. Summarize your discussion.

The AA/BSAS programs offer market-responsive and innovative programs that are flexible and accessible. We deliver high-quality learning experiences through a variety of delivery methods and at an exceptional price/value point. Our graduates are respected for their preparedness, professionalism, and performance. Our long-term vision for the future of AA/BSAS programs is to provide an excellent educational opportunity to students in the Business Technology Department that enables them to obtain gainful employment in a business environment. In order to achieve this vision, we need to produce the following results: increase the number of students and graduates; foster an inclusive climate where all campus community members experience a sense of connection and belonging and are valued, respected, and supported in fulfilling their goals; provide a curriculum that includes state-of-the art technology; prepare program students for successful career.

b) What opportunities and challenges do you face as you plan for the future? In your discussion, consider the following: physical environment, technology needs, curriculum changes, completions, retention, job opportunities, staff retirement/change, funding, etc. Summarize your discussion.

- Keep current with technology, software, and hardware changes through training and conferences
- More bilingual course offerings
- Advising all program students
- Continually assessing and updating program curriculum in order to stay current in the marketplace
- Curriculum money needs to be available
- Increase full-time staff based on the number of part-time instructors
- Maintain full-time staffing level based on projected full-time retirements

## 1) Planning Discussion ~ Envision the Future

a) Where are we now? Using the table that follows, list the top outcomes from last year's plan, the results and whether or not the outcome was completed. To enter data and view Table 1, complete the following steps (see last two pages for definitions and samples):

- Double click on the table Enter information – All columns have a pop-up message when you click on the cell. If a drop-down menu is provided, you must enter / select one of the drop-down options. If you enter data that is not included in the drop-down menu you will receive an error message. Tip: The pop-up message can be moved to another area of the table simply by clicking and dragging the box.
- Tip: The table has been formatted to fit within the Word document. Any changes made to the formatting will cause problems when viewing the final document; therefore, do not make formatting changes to the table. Boxes/cells will expand to accommodate your text. When finished, click outside the Excel document to continue with the remainder of the Word document.

Outcome Description

Dept. # | Program #

## 2) Assess the Present ~

b) Review and discuss all data trends. What key data or external feedback do you have and how can this information guide your planning. Consider the following in your discussion: LSQIP data, Research and Planning data,

Advisory Committees, Accreditation, Internship supervisors, employers, professional association, graduates, certification agencies, vendors, affiliation sites, other programs, and surveys.

<b>Data/trend source</b>	<b>Data/trend</b>	<b>What it means to the Program/Department</b>
AA Exit Interview	Appropriate curriculum	Add Outlook and QuickBooks software
AA/BSAS Online Surveys	Delivery of instruction	Madison Area Technical College versus eTech instructors
IAAP Partnership	Appropriate curriculum	Update curriculum and student recruitment
Madison Area Technical College Placement Report	Employers and salaries	New student recruitment
LSQIP	Appropriate curriculum	Improvement of programs
Advisory Committee	Appropriate curriculum	Speakers for classes
Employer Job Postings	Appropriate curriculum	External awareness of programs
WTCS state-called meetings	Other colleges within the system have significantly invested in smart classrooms and updated their learning labs.	Business Technology labs need to be updated and converted into “smart” classrooms. Consistent curriculum within the state.
Student demand	Students want greater flexibility in learning delivery methods.	Accelerated, hybrid/blended, and other alternative delivery method courses should be developed.
Wisconsin Dept. of Commerce and Career Clusters in Southcentral Wisconsin	Office and Administrative support demand increasing	New program opportunities for degrees and certificates as well as for continuing education and contract training.

Document your top outcomes and key activities to accomplish each outcome below. **The Outcome Table and Activity Table have been placed in an Excel format for sorting and aggregating data and support needs across the college.** Use the table that follows to identify your outcomes and activities respectively. To enter data and view Tables 2 and 3, complete the following steps (see last two pages for definitions and samples):

- Double click on the table Enter information –All columns have a pop-up message when you click on the cell. This message includes brief instructions / clarification of what data is required. If a drop-down menu is provided, you must select one of the drop-down options. Tip: The pop-up message can be moved to another area of the table simply by clicking and dragging the box.
- Tip: The table has been formatted to fit within the Word document. Any changes made to the formatting will cause problem
- s when viewing the final document; therefore, do not make formatting changes to the table. Boxes/cells will expand to accommodate your text. When finished, place cursor in cell A1 then click outside of the Excel document to continue with the remainder of the Word document.

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### 3) Document your plan ~

Dept. #	Program #	Year Work Begins	Outcome Number	Outcome Description	Expected Completion Year	Measure	Target	College Strategic Plan Goal Alignment
10600	113	FY0708	1	Establish strategic partnerships to support student success.	FY0809	Participation rates in Advisory Committees, # transferring on to Franklin University, FTE of IAAP student enrollments	75% participation rate in advisory committee, 10% increase in transfer students, 10% increase in IAAP student enrollments	4) Community, education, and business partnerships result in enhanced educational opportunities.
10600	113	FY0708	2	Enhance student success through improved classroom environments and teaching excellence.	FY0809	Number of faculty engaged in professional development activities such as CETL, Number of new smart classrooms, Graduate Rates and Graduate Employment Report	100% of vacant positions filled, 1 new positions allocated for the AA/BSAS program, 75% of faculty attend professional development conference, 2 labs converted to smart classrooms, 10% increase in employment reports	1) All students will succeed
10600	113		3	Develop market-responsive and innovative technical and continuing education offerings, as well as contract training programs.	FY0910	New program created such as Virtual Assistant, FTEs in bilingual offerings increase	Virtual Assistant degree created. Enrollments in bilingual offerings increase by 30%, FTE in alternative delivery courses (self-paced, Friday/Saturday/hybrid) increase by 30%	2) Opportunities and options for learning reflect the needs of students and clients.



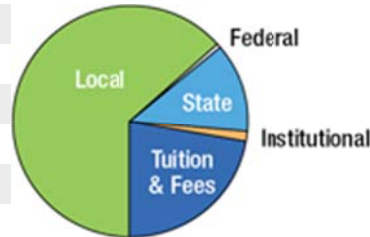
# Madison Area Technical College Budget

Where does the money come from and where does it go?

## Our funding

### 2008–09 General Fund Revenues

Local	55.4%
State	9.6%
Federal	13.9%
Tuition and Fees	19.0%
Institutional	2.1%
<b>Total</b>	<b>100.0%</b>



**General fund revenue & fund transfers** \$159,482,000

**General fund expenditures** \$178,241,000

## Local Revenues

Madison Area Technical College received an average of 6.23 cents of every dollar paid in property taxes for tax year 2005. (The percentage will vary in communities whose local taxes are higher or lower than average.)

## District Employees

Approximately 2,000 employees work at Madison Area Technical College full- or part-time.

- Madison Area Technical College budget online:  
<http://matcmadison.edu/in/madison-area-technical-college-district-budget-plans>

Madison Area Technical College does not discriminate on the basis of political affiliation, age, race, creed, color, handicap (disability), marital status, sex, national origin, ancestry, sexual orientation, arrest or conviction record, service in the armed forces, genetic testing and the use or non-use of lawful products off the employer's premises during non-working hours.

SPACE FOR YOUR THOUGHTS, QUESTIONS, FRUSTRATIONS AND DREAMS.....

## Madison Area Technical College Strategic Planning

<http://matcmadison.edu/strategic-direction>

Three groups involved in the planning process

1. Board of Trustees (District Board) - <http://matcmadison.edu/district-board>
2. College Council - <http://matcmadison.edu/in/college-council>
3. Unit Plans <http://matcmadison.edu/in/matc-unit-plans>

### ***District Board End Statements***

- All students achieve the learning necessary to be successful in their educational and career goals.
- Madison Area Technical College prepares students for gainful employment and continuing education.
- Madison Area Technical College provides skilled workers that meet employer needs and the communities' changing needs.
- Madison Area Technical College provides open access and a welcoming environment for all students and members of the community in pursuit of lifelong learning opportunities.
- Madison Area Technical College proactively provides support and resources to the enhancement of collaborative community efforts to the extent resources will allow.

### The College Council

The executive leadership group of the College who represent all the major units in the College and report to the Vice Presidents and the President, make a recommendation on Strategic Goals. The Union Presidents also participate in this group. The College Council takes the Board's vision and themes and figures out the most important outcomes to achieve the vision and to track progress. They look at strategies and priorities - what are the most important things we need to do in order to accomplish that vision and work on those themes. This work results in the college's Three Year Strategic Plan, revisited annually.

Numbers of Students by Program - <http://systemattic.wtcsystem.edu/reports/>

Unit Planning - <http://matcmadison.edu/in/matc-unit-plans>

Budget Planning - <http://matcmadison.edu/in/madison-area-technical-college-district-budget-plans>

## Homework for Day 4

- Journal
- Planning for the presentation.
- Read Day 4 materials



## **Day 4 (3/26) Quality Improvement**

*“Quality is not an act, it is a habit.”*

William A. Foster

### **Agenda/Overview - Principles of VTAE – Day 4**

- DACUM Process
- Program Development
- AQIP/LSQIP
- WTCS Program Evaluation

## The DACUM Process

### DACUM (day-kum) DEFINITION

An abbreviation for Developing A Curriculum.

An occupational analysis performed by expert workers in the occupation.

An occupational skill profile which can be used for instructional program planning, curriculum development, training materials development, organizational restructuring, employee recruitment, training needs assessment, meeting ISO 9000 standards, career counseling, job descriptions, competency test development, and other purposes.

### The DACUM philosophy states that:

Expert workers are better able than anyone else to describe their occupation.

An occupation can be described effectively in terms of the tasks successful workers perform.

Successful task performance is directly related to the knowledge, skills, tools, and attitudes that workers must possess to perform the tasks correctly.

### The DACUM Process

The DACUM process for occupational analysis involves local men and women with reputations for being the “top performers” at their jobs, working on a short-term committee assignment with a qualified DACUM facilitator. Workers are recruited directly from business and industry. These workers become the Panel of Experts who collectively and cooperatively describes the occupation in the language of the occupation.

Expert workers are in a better position to describe their job/occupation than anyone else. A carefully chosen group of 8-12 expert workers from the occupational area under consideration form the DACUM committee. Committee members are recruited directly from business, industry, or the professions. Modified small-group brainstorming techniques are used to obtain the collective expertise and consensus of the committee.

DACUM has been successfully used to analyze occupations at the professional, technical, skilled, and semi-skilled levels. Some examples of analysis include:

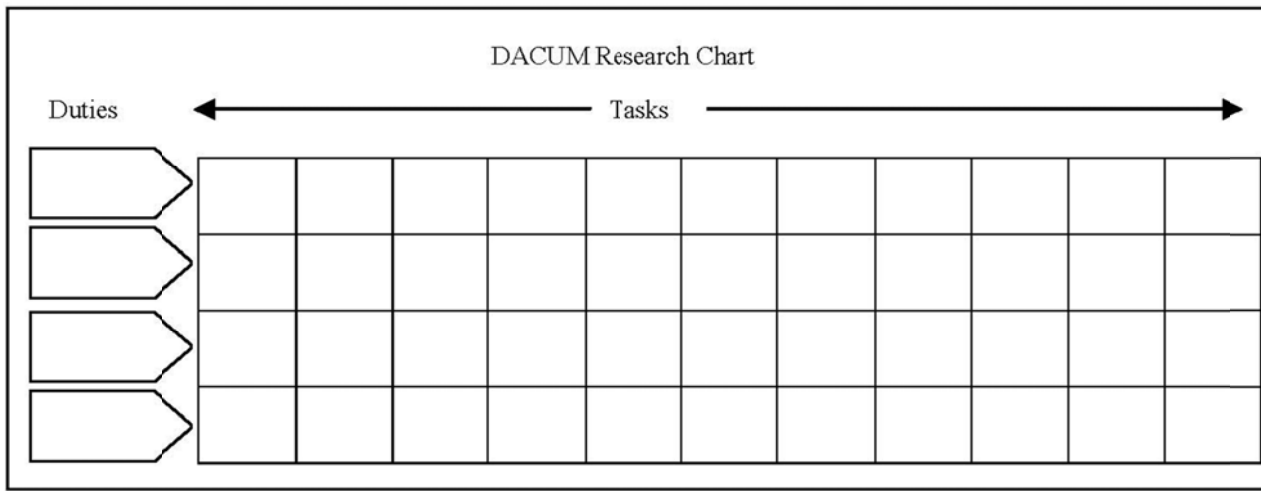
- Custodian
- Early Childhood Education Directors
- Emergency Medical Technician (EMT)
- Equal Employment Opportunity Manager
- Executive Secretary
- Food Service Manager
- Horticulture Technician Law Enforcement Officer
- Licensed Practical Nurse
- Pharmacy Technician
- State-Level Vocational Education Specialist
- Travel Consultant
- Industrial Maintenance Technician

The Panel works under the guidance of a trained facilitator for two days to develop the DACUM Research Chart. The chart contains a list of general areas of competence called DUTIES and several TASKS for each duty. Brainstorming techniques are used to obtain the collective expertise and consensus of the committee. As the Panel determines each task, it is written on a card. The cards are attached to the wall in front of the Panel. The completed chart is a graphic profile of the duties and tasks performed by successful workers in the occupation.

Any job/occupation can be effectively described in terms of the tasks that successful workers in that job/occupation perform. The analysis typically results in the identification of 6 to 12 duties involving 50 to 150 tasks that define what a successful worker in a particular job or cluster of related jobs must be able to do. The end product of a DACUM analysis is a complete competency profile, the validity of which is comparable to that of any other analysis method.

The Panel also identifies the general knowledge and skills required of successful workers, the tools, equipment, supplies, and materials used, the important worker behaviors essential for success, and the future trends and concerns likely to cause job changes. The process produces superior results for all occupational levels.

All tasks, in order to be performed correctly, require certain knowledge, skill, and attitudes. Whereas the primary focus of DACUM is on the performance aspects of a job, these lists represent four other aspects of job analysis; they represent different ways of looking at the requirements of the job. Because they are distinct (though related), it is very important to keep them separate if a high quality analysis of job performance requirements is to be obtained.



## Facilitator Role

The DACUM committee is carefully guided through each of the following steps by the facilitator:

1. Orientation
2. Review of job or occupational area description
3. Identification of general areas of job responsibility
4. Identification of specific tasks performed in each of the general areas of responsibility
5. Review and refinement of task statements
6. Sequencing of task statements
7. Identification of general knowledge and skill requirements of the occupation, tools, equipment, supplies, materials used, desirable worker traits, and attitudes.
8. Other options, as desired (i.e., identification of entry level tasks)

Because of their current occupational expertise, committee participants do not need to make any advance preparations. Participants on past DACUM committees, have found the activity to be a professionally stimulating and rewarding experience.

# Accreditation of Our College

## Academic Quality Improvement Program

The Academic Quality Improvement Program (AQIP) is a new re-accreditation process developed by the North Central Association to guide colleges in their efforts to be quality institutions. With AQIP, an institution has the opportunity to demonstrate it meets the Higher Learning Commission's accreditation standards and expectations through sequences of events that naturally align with those ongoing activities that characterize organizations striving to improve their performance. By sharing both its advancement activities and the results of these actions with AQIP, an institution provides the Higher Learning Commission with the evidence it needs both to make a public quality assurance judgment and to support and to assist the institution in its efforts to excel at achieving the distinctive higher education mission it has set for itself.

AQIP has 5 core processes that play an integral part in the re-accreditation of Madison Area Technical College - Action Projects, Systems Portfolio, Systems Appraisal, Strategy Forum, and the [reaffirmation of accreditation](#), which enables Madison Area Technical College to demonstrate its ongoing requirements of the Commission's criteria for accreditation.

Institutions must maintain and share three or four Action Project Updates annually to the HLC on the progress or completion of each Project. Action Projects are based on new opportunities or target systems and processes that have served it poorly in the past. The Project must make a serious and visible difference to performance, embody challenging but attainable goals, stretch the organization to learn and to excel in new ways, and focus on both efficiency and benefits to students and other stakeholders. AQIP provides written feedback on these reports.

For more information regarding AQIP visit their website at [www.AQIP.org](http://www.AQIP.org)

## Learning Systems Quality Improvement Process (LSQIP)

Goal: To understand the value of the LSQIP process by reviewing assessments through the eyes of the review team.

Activity: After an introduction and exploration of the LSQIP Process, teams of 4-6 people will review one of two sample LSQIP Portfolios as if they were the LSQIP Review Team (LRT).

Step 1: Introduction to LSQIP, review goals and process via brainstorming and review of documents reprinted here. Participants are asked to respond to this prompts:

- How does your department (unit) ensure that the work you do is achieving the desired effect?
- How do you validate the results?

Step 2: Create a LSQIP Review Team of 4-6 members and explore the LSQIP Guiding Principles to be sure you all understand them.

Step 3: Review the sample LSQIP Portfolio generating and refining your teams' response using the forms attached.

Step 4: Debrief from the experience as a Large Group.

## Learning Systems Quality Improvement Process (LSQIP)

The Learning Systems Quality Improvement Process (LSQIP) provides the basis for organizational self-assessment. The process has been designed to serve three important roles:

- to help improve performance practices, capabilities and results;
- to facilitate communication and sharing of best practices; and
- to serve as a working tool for understanding and managing performance.

The goals of the process are to deliver increased value to students and stakeholders and to improve overall effectiveness and capability.

- [Update 2007\\*](#) (.pdf)
- [Guiding Principles\\*](#) (.pdf)
- [Process\\*](#) (.pdf)
- [LSQIP Fact Sheet\\*](#) (.pdf)
- [LSQIP Overall Chart\\*](#) (.pdf)
- [In-depth Process\\*](#) (.pdf)
- [LSQIP FAQ\\*](#) (.pdf)

### Data

[Data Provided to Programs\\*](#) (.pdf)

[Comparison Data for Reviewers, Programs and Service Areas\\*](#) (.pdf)

[Madison Area Technical College Three-Year Strategic Plan\\*](#) (.pdf)

[LSQIP Data Definitions\\*](#) (.pdf)

[WTCS QRP State Level Indicators\\*](#) (.pdf)

### Portfolio Process

[LSQIP Program Portfolio](#) (.doc)

[LSQIP Service Portfolio](#) (.doc)

[Self-Assessment Rating Rubric\\*](#) (.pdf)

(Note: To work in the portfolio, save it as a Word document on your computer.)

### LSQIP Schedule

[Monthly Program Schedule 2006-2007\\*](#) (.pdf)

[LSQIP Five-Year Rotation Schedule\\*](#) (.pdf)

### Within the Institutional Research and Effectiveness Website

[About Institutional Research and Effectiveness](#)

Learning Systems Quality Improvement Process (LSQIP)

#### Related Links:

- [Madison Area Technical College AQIP Process](#)
- [AQIP](#) - national

## **LSQIP Review Team**

The LSQIP Review Team is a working team composed of faculty, staff and administrators at the college. This is a working team and this work consists of reviewing two portfolios a month (usually between 20-25 pages long) writing 3-5 strengths and opportunities for improvement comments that are aligned with the assessment criteria in the portfolio; submitting these comments to the Director for Institutional Research and Effectiveness via email two days prior to the monthly meeting; and meeting once per month, during the last week of the month for about an hour, to come to consensus on the comments for each program.

In addition to reviewing portfolios and providing feedback, this team reviews annual market and trend data and refers programs with low or declining performance trends to the [In-depth Analysis Process](#).

The Review Team also reviews the LSQIP process on an annual basis to determine how it can be improved. In addition, the team will assess the success of implementing improvement projects, the ability of the college to provide sufficient resources to projects and the level of involvement by staff in the assessment and improvement process.

[Writing Feedback When Reviewing a Portfolio\\*](#) (.pdf)

[Review Team Comments Flow Chart\\*](#) (.pdf)

[LSQIP Review Team Reviewer Comments form](#) (.doc)

[Overall Maturity Rating Rubric](#) (.doc)

(Note: To use the comments form and rating rubric, save them as Word documents on your computer.)

## **LSQIP Best Practices 2005-2006**

Ongoing program assessment of course, faculty and teaching methods is a matter of doing business for the **Medical Assistant program**. This program responded to workforce needs by modularizing and resequencing curriculum for the Workforce Development Program which resulted in a 60% increase in enrollments over 3 years.

The **Architectural Technician** program LSQIP portfolio was well written and provided data and information to support the self-assessment ratings. The LSQIP Review Team felt this program's portfolio can serve as a "best practice" for other learning programs.

The FAQ website for students is an excellent idea of the **Barber/Cosmetologist** program, who demonstrated a strong use of assessment and a commitment to improve and innovate with limited resources.

The **Paralegal** program affords students the ability to complete their program through one of two options (two-year Associate Degree and two-semester Post-Baccalaureate Certificate), resulting in accommodation of different learning styles, greater student flexibility, and targeting different student populations. The Marketing Department

website and the Paralegal Student Handbook are good examples of getting important information into the hands of students. Their exit interview provides insight into program specific areas as well as what students find helpful and areas needing improvement or refinement.

Drive time for students to campus and clinical sites is minimized due to accommodation in scheduling by the **Radiography** program, and graduates and employers are surveyed by phone or face-to-face in order to collect data regularly and thoroughly.

The **Supervisory Management** program is a model for the development and delivery of accelerated learning methodologies and it is a leader in Fastrack degree delivery. Faculty members are great resources and always willing to share techniques and lessons in this area.

### **LSQIP Blackboard Site**

The LSQIP Blackboard site has further information, including examples of completed portfolios, program best practices, and program data. For access to the Blackboard site, contact [Jeanne Rathgeber](#).

## LSQIP: Learning Systems Quality Improvement Process

### Why

The Learning Systems Quality Improvement Process provides the basis for program and service level self-assessment. The process has been designed to serve three important roles:

- To help improve performance practices, capabilities and results
- To facilitate communication and sharing of best practices
- To serve as a working tool for understanding and managing performance

The goals of the process are to deliver increased value to students and stakeholders and to improve overall effectiveness and capability.

Stakeholders are individuals or groups who benefit from the activities of a program, process or service area. For example, if you work in the admissions area of the college, students are key stakeholders, but so are academic programs.

### How

LSQIP is intended to be a collaborative process. All faculty and staff that are associated with a program or service area should have input into the LSQIP assessment and improvement plan. Involvement strategies will vary by area. Programs or services that

involve regional campuses should be sure to incorporate the views and comments of participants from all areas.

#### What

LSQIP consists of four main parts:

1. The Annual Planning process is focused on self-assessment and improvement planning.
2. The 3-year portfolio process is a more detailed self-study process. One third of programs and service areas will complete the portfolio process each year. The portfolio system captures processes, projects and results generated from the annual improvement process; includes self-assessment and rating; and develops a three-year plan for improvement. Each 3-year portfolio is reviewed by a Monitoring Team, reviewed by an Advisory Committee (if appropriate) and approved by the manager or dean.
3. The LSQIP Monitoring Team is composed of faculty, staff and administrators. In addition to reviewing portfolios and providing feedback, this team reviews annual market and trend data.
4. Programs or service areas may also use a seven-step in-depth analysis process to address particularly difficult problems.

#### Who

All programs and service areas of the college will be included in the LSQIP process. In 2003-2004 year 25 academic programs completed the 3-year portfolio process in LSQIP. The annual assessment and planning process will be implemented in 2004-2005. Service areas will begin participating in LSQIP in 2004-2005.

#### Where

Programs or services participating in LSQIP enter information directly into a formatted Word document. The document is emailed to the Assessment and Evaluation staff who generate the portfolio document from the information provided.

#### When

- Programs or service areas choose the best time of year to complete the portfolio process. Program portfolios can be processed in September, October, November, December, February, March, April and May. Service area portfolios can be processed in July, August, September, October, November, December, February, March, and June. The total number of programs and services completing work in any month is limited to five (6) so that the Monitoring Team is able to review and comment on all portfolios.
- The annual assessment and planning process is due to be complete and submitted by May 1 of each school year for programs, and September 1 for service areas. These dates coincide with the unit planning process.

#### Process Improvement

The Monitoring Team will review the LSQIP process on an annual basis to determine how it can be improved. The team will assess the success of implementing improvement projects, the ability of the college to provide sufficient resources to projects and the level of involvement by staff in the assessment and improvement process.

Guiding Principles  
for the  
Learning Systems Quality Improvement Process (LSQIP)

**Enhancing Student Learning.** High performing programs create a learning-centered environment for students. They continually seek more effective ways to enhance student achievement through careful design of curriculum and assessment of program and classroom learning outcomes. Learning outcomes are documented and analyzed to create improvements in program and classroom systems and to create substantive change in individual learners.

**Stakeholder Needs.** High performing programs identify the changing needs and satisfaction of students and other stakeholders (e.g., industry and transfer colleges). Based on an analysis of those needs, they make decisions related to educational offerings, services, delivery methods, curriculum, and access issues. They maintain positive relationships with internal and external stakeholders, students, and potential student groups.

**Continuous Improvement.** High performing programs have and communicate a clearly defined mission, vision, and focus. The focus includes strategies and action plans that meet the needs of stakeholders, contribute to the direction of the college, and continually improve the program based on a defined assessment process. The program assessment process includes performance criteria and measures of effectiveness identified by the program which are used for improvement. Leaders allocate resources to implement improvement plans.

**Valuing People.** High performing programs value the contributions of their faculty, staff, administrators, and external advisors. Program personnel maintain credentials and skills required for effective performance as well as pursue on-going training and development in order to contribute fully and effectively throughout their careers. They participate in personnel evaluation systems, orient new members, and share skills and information across the program. Leaders establish an environment of communication and trust, empowering others to contribute.

**Accountability.** High performing programs are accountable for implementing the above principles - student learning, meeting stakeholder needs, and continually improving as a program and as professionals. Leaders monitor results, make appropriate adjustments, and communicate outcomes. They are responsible for working with support systems within the college and with external stakeholders.

LSQIP Review Team Reviewer Comments

Name:                      Date:                      Program:

Please submit a total of 3-5 Strengths and 3-5 Opportunities for Improvement. You can draw from any of the 5 Guiding Principles.

Strengths	Opportunities for Improvement
<b>Learning</b>	
<b>Stakeholder Needs</b>	
<b>Continuous Improvement</b>	
<b>Valuing People</b>	
<b>Accountability</b>	

Is there anything in the portfolio which you would recommend as a best practice in addition to what the program/service area has identified in their Assessment Summary?

Do you have questions you would like to ask the unit representative who will attend the review meeting?

What level of maturity does this program exhibit?

**Other Comments:**

## **Homework**

- Journal
- Be prepared to share your personal philosophy







## Day 5 (4/2) Way of Being

### *The People*

*formed a circle round the fire,  
each showing an attentive face  
to every other person.*

### *And They Spoke*

*each waiting quietly  
until the other had finished,  
as they had learned to do,  
a circle of silent listening  
framing the wisdom each contained  
until the wisdom of all was spoken,  
contained at last by the Circle of the People*

### *Thinking now*

*Of the quiet circle of listening hearts,  
they were filled with understanding  
of the value of their way*

**AND A FIRM RESOLVE SWEEPED THROUGH THEM.**

Paula Underwood  
The Walking People

### *Sit*

### *Listen*

*To the sound of the wind in the trees  
Hear the rhythm of the world*

Dennis James



## **Principles of VTAE Supplemental Readings**



# 1981-1982 Blue Book

## History of Vocational Education in Wisconsin

### CHAPTER 1 - Vocational Education Gets A Start In Wisconsin

Education was considered important to Wisconsin's well-being from its beginning. The State Constitution directed the Legislature to provide for the establishment of common schools, free to all children between the ages of 4 and 20 years, to provide for the establishment of a state university and other colleges throughout the state, and to establish a school fund, the proceeds of which should be used to support common schools and normal schools, academies and libraries. When Wisconsin became a state in 1848, over one third of the population was foreign-born. Germans were the major ethnic group; others were Scandinavians, Irish, British, Canadians, Bohemians, French, and Polish. Among the immigrants from Europe, education and skilled crafts- were held in high regard.

Although a compulsory school attendance law was passed in 1879, it was not very effective. Wisconsin then passed the Bennett Law in 1889, which required that every child between 7 and 14 be in public or private school for at least 12 weeks each year. All instruction was to be in English. So, Wisconsin residents had opportunities to receive at least elementary, school education, and throughout the 1800s that was adequate for most people. Wisconsin's agrarian economy and dependence on forestry, and to some extent on mining, called for more physical than cognitive labor. The industries of the cities typically involved repetitive hand work. Industrial jobs required agile fingers and coordination, but little or no training. Hence, it was common for boys and girls to leave fifth grade to go to work. Only families with substantial incomes sent their children to high school; fewer families yet sent children to college.

In some parts of the state, school was closed whenever local work seemed more important. Since schools occupied very little of most peoples' lives, they were often neglected. Rural schools, in particular, were frequently inadequate. Many teachers were only meagerly prepared to teach all the subjects to all the students. The facilities were frequently rundown, and more significantly, the curriculum was rundown. It appeared to have little relevance to daily life. In cities and villages, high schools were developing. But they too were limited in facilities and qualified instructors.

A few high schools offered manual training or general shop courses where students could become familiar with tools and rudimentary manufacturing and repair processes. It is reported that Eau Claire had such courses by 1884. The purpose of early manual training in high school was educational and cultural, not vocational. It was intended to round out an academic education. Manual training was added to high schools in Milwaukee and Menomonie in 1891. The 1895 Legislature passed a law to encourage manual training in high schools (Chapter 358, Laws of 1895).

Not surprisingly, the dropout rate was very high. It was estimated that in 1900 more than half of those who began primary school in rural areas quit by fifth grade. Only one in 30 graduated from high school. People discontinued school for a reason more basic than inadequate facilities or institution - they had no reason to get additional education. It was simply not necessary for the work the majority of the people did.

That changed, however, as the 1900s clattered in with the next stage of the Industrial Revolution. Manufacturing processes became more complex. New inventions and machines required more technical knowledge and a greater understanding of the total production process. Abruptly, a need for more education appeared that had not existed before. The need for well-trained workers was particularly felt in Milwaukee, a thriving industrial center. As it became clear that the public school system was inadequate to the task of educating highly skilled workers, private businesses in Milwaukee were forced to take the initiative. The Milwaukee School of Trades opened in 1906, sponsored by the Milwaukee Merchants' and Manufacturers' Association. Yearlong programs were offered in plumbing, patternmaking, moulding, the machinist's trades, mechanical drawing, and mathematics. The equipment was provided by the Manufacturers' Association and tuition was \$10 per month.

Although the Milwaukee School of Trades was extremely popular at once and the programs had waiting lists, it was a costly proposition. An organizer of the School of Trades (August Lindemann of the Waukesha Fox Head Brewery) and other industrialists saw that the need for training and the costs of providing it were growing beyond what they could maintain.' Following enabling legislation in 1907, the Milwaukee School Board took it over and it became the Milwaukee Public School of Trade for Boys. This Milwaukee proprietary school was to have a great impact on state legislation.

In spite of new demands in the labor market for more skills, the average person at the turn of the century was not necessarily clamoring for more education. At the time, going back to school was simply not something that adults did. Even if it would have been more acceptable to do so, few could have paid for it. In his A History of the Milwaukee Vocational and Adult Schools, Robert Tarbell observed that "The old rut was comfortable and had a measure of security about it. So, in 1900, many adults were in the class of the untutored, were not too much concerned, and could do little about it." At the same time, a wiry, somewhat ruffled Irishman was getting settled in Madison with his new bride. Charles McCarthy, the only Brown University football player ever to have scored against Yale and Harvard, was now a graduate student in history at the university. This man's vision would create an educational system for Wisconsin that other states would envy.

## McCarthy

Charles McCarthy is considered the father of Wisconsin's vocational-technical system. From his unlikely position as head of the state's Legislative Reference Library, he launched the vocational technical and adult education system that exists today.

He was born into a poor Irish family in Brockton, Massachusetts, an industrial community dependent on shoe manufacturing. Growing up, he saw the effects of harsh strikes, especially on families and children. McCarthy developed an interest in improving the life of the laborer, even though he was determined it would not be the life for him. He was convinced that education alone could even out the disparity of concentrated wealth of business against the concentrated poverty of unskilled workers.

After receiving his Ph.D. in history from the University of Wisconsin at Madison, McCarthy landed a job in 1901 in the State Capitol, The Legislative Reference Library (called the early days, later the library, now the bureau) had just been created by the Legislature. The library was needed because the State Historical Society had moved into its new building at the other end of State Street and had taken all the historical and research documents with it. McCarthy was to be the cataloger for the new library. Keenly interested in government and in the issues of the day, he quickly became a well-known figure in the Capitol. Within several years the Legislative Reference Library became a much-used resource for state legislators. It kept current information on legislation in other states and information on matters coming up for review, and it began to provide a bill drafting service. Since most legislators had neither the legal background nor the interest in detail to draft proper bills, they relied heavily on McCarthy and his eventual staff. He maintained stringent standards in the bill drafting process to ensure that the library did not influence policy, but provided technical writing services. He was, however, in a unique position. He knew all the legislators and knew the political situation intimately. When he saw a just cause, he did not hesitate to use his influence to further it.

The state's educational situation was one of his greatest concerns. He was appalled by the number of people who quit school and began their working lives with so little preparation. He called them the "disinherited." He himself might have been one of them, had he not worked so hard not to be. At the same time he recognized that industry needed more adequately trained workers. Agriculture was training people to be better farmers. Why wouldn't it work for industry? In a letter to Milwaukee Senator Edwin Fairchild, he wrote, "... the example in Germany has shown to us that a country can be a great manufacturing country and have great prosperity by the same means so prominent in our state."

He had a grand plan for education that was part of "The Wisconsin Idea." The essence of it was that there should be education for all people all through their lives regardless of their income or employment. The first phase was to put the University of Wisconsin on wheels through the University Extension Division. McCarthy wanted the university to go to the people, offering them courses that they would otherwise have to take by correspondence from somewhere else, or not at all.

The University of Wisconsin Extension opened in one of McCarthy's library offices in the Capitol. He spent \$700 of his own money to keep the extension going in its early days. It began by taking over debating clubs and by organizing study clubs in communities. The University Extension offered correspondence courses, first for engineering, then for the entire university. The "University on Wheels" was an important element of his incubating plan for continuation schools.

McCarthy in 1909 wrote to August Lindemann, the leader of the brewery lobby, suggesting a study of the state's educational needs by "A commission composed of the State Superintendent, the President of the University of Wisconsin, Director of the University Extension Division, the librarian of the Legislative Reference Department, and the Superintendent of the Milwaukee Training School."

That same year, Milwaukee Senator Fairchild introduced 1909 Senate Joint Resolution 69, which was adopted and enrolled as JR-53. It began:

"Whereas reliable statistics show that there are at least 104,000 illiterates in the state of Wisconsin at the present time.

"Whereas, there is a great movement through this entire country at the present time to establish night schools and night trade schools so that workers and those who have been denied education cannot only get the elements of education, but can also improve themselves in their business and life.

"Whereas, the growing need of instruction to our people who cannot attend schools demands from us some investigation of this great problem..."

In accord with the joint resolution, the Commission on Industrial and Agricultural Training was formed to study the situation and report its recommendation to the next legislature.

The commission was composed of Superintendent of Schools C.P. Cary, President of the University of Wisconsin C.R. Van Hise, Director of University Extension L.E. Reber, Librarian of the Legislative Reference Department McCarthy, and Superintendent of the Milwaukee Public Schools C.G. Pearse.

Cary was chairman of the commission and McCarthy was secretary. The commission divided into two subcommittees, one on industrial education and the other on agriculture. McCarthy was made head of the industrial education group. As secretary, McCarthy was charged with writing the commission's report to the legislature. It was clear from the start that the commission was controlled by the one who had engineered its creation, Charles McCarthy.

McCarthy did not take on the job of investigating half-heartedly. The joint resolution had provided for travel expenses for members of the commission. Yet, at his own expense McCarthy traveled to the East Coast and to Europe to study industrial education systems. In the East he visited Cincinnati, Pittsburgh, New York, Boston, and Lowell, Massachusetts. He noted that in Massachusetts trade schools offered very specific preparation for specific careers. He felt that while trade education was needed, by itself

it was not enough. Instead he favored a "continuation school" for those already working. He envisioned, not a high school, but an educational opportunity for the "80 to 90 % of those who never go to high school, but who go into industry as soon as they are 14 years of age."

In Europe, he visited Munich, Frankfurt, Coblenz, Cologne, London, Brussels, and Ireland. He was very much interested in Munich's *Forbildung*- founded by Dr. George Kierschensteiner. At this trade school for boys, students learned the manual skills necessary to make them journeymen. They were also taught calculating, sketching, reading of plans, understanding of materials - all of which made them competent workmen. (In 1925 Dr. Kierschensteiner visited Milwaukee's Vocational and Adult School. Later, at a conference in Edinburgh he would say, "My friends, if you want to see the greatest vocational school in the world, you must go to Milwaukee in North Am\* McCarthy had died by then, but he would have been delighted.)

### Apprenticeship Problems

At the time of the commission's study, apprenticeship in Wisconsin was undeniably in bad shape. An 1849 state apprenticeship law enabled minors with parental consent to indenture themselves to masters. The master was to teach the apprentice a trade along with some reading, writing, and figuring. An apprentice was to receive a pay allowance throughout the training and a Bible at the end of the indenture. The major problem with the Law was that it was largely ignored.. Charles McCarthy called it "worthless". Some indenture agreements were written (in very general terms), although most were merely verbal agreements. Wages were extremely low. An apprentice machinist at the turn of the century could expect to make 5 cents per hour and to work 10 hours per day, 6 days per week. Economic exploitation of apprentices was common. The quality of training was seldom high. It was impossible for trades people to teach apprentices more than they knew themselves. Particularly in smaller shops where the same people had worked for years, job tasks were limited; equipment was old. Worse yet, some crafts people guarded their "tricks of trade" and were reluctant to pass them on to apprentices. In most occupations, there were no uniform standards from trade to trade or shop to shop. Bricklayers, carpenters, and plumbers were exceptions, having fairly uniform standards. However, McCarthy pointed out in his report to the commission that instruction in those trades was too narrow. Apprentices were learning technical skills without an understanding of the total production or construction process. They knew what to do, but not necessarily why. McCarthy recommended that additional education throughout the indenture at continuation or night schools would contribute to a broader understanding of the total process.

McCarthy's final report, entitled "Report of the Commission Upon The Plans for the Extension of Industrial and Agricultural Training", proposed 4 types of education:

- Continuation schools for boys and girls, ages 14-16, who had quit high school and were working (or not working).
- Evening schools for adults.
- Trade schools.
- Related instruction for apprentices.

The continuation school was to be the first phase of the plan because, McCarthy said, "it meets the broadest aim and it will at once reach the greatest number at the least cost." Local control was a German feature that had found its way into the commission's report. In Germany, the trade schools were governed by bureaus of commerce and industry. Using practicing trades and crafts people as governing boards or "bureaus" helped ensure that the instruction taking place was what workers really needed to become more proficient.

The one thing McCarthy did not like about the German system was that children were socially stratified at an early age. They were essentially locked into occupations they chose in adolescence. He was certain that continuation schools for those who had quit school to work would not necessarily restrict students. Rather than restricting people to narrow occupational choices, the continuation schools could break up tendencies to class distinctions by offering opportunities not presently available. "If carefully supervised, the boy who is already working, can go on through the continuation schools and work his way up the ranks in the same way as his more fortunate brother."

He felt that the presence of the University Extension alongside the continuation schools would also contribute to breaking down class barriers. He planned that evening classes would be provided by the extension in the same buildings the continuation students attended by day. The university would supplement the industrial course-work of evening schools with classes ranging from basic reading and writing to the most technical subjects. The new schools would be ladders for people whose education had been cut short, so that they could make the most of their abilities.

McCarthy's report suggested that both management and labor stood to gain from the proposed schools. He claimed that, under the extant system, workers had to "steal" their trades. "A workman today has to steal his trade in a great many industries, and in so doing he has created trade schools. Trade schools exist today in great numbers and at great cost; in fact, every factory is a trade school. A boy steals his trade, and by doing so makes the manufacturer pay for it. He gets a position by misrepresentation and then proceeds to try a machine and of course spoils and wastes until found out. When he is discharged, he proceeds to do the same thing time and again in some other place, until finally he becomes a fair workman on his machine ... but at what cost to the manufacturer, to industry, and to the public, and finally, at what cost to organized labor!"

The need for public education for employment was becoming recognized by industrialists and educators across the country at about the same time. In 1906, the National Society for the Promotion of Industrial Education was formed. With the support of the National Association of Manufacturers and the National Metal Trades Association, the organization brought public attention to the need for industrial education. It was also active in promoting federal support for industrial education. The legislative efforts of the National Society for the Promotion of Industrial Education culminated in the federal Smith-Hughes Act of 1917. The organization later merged with an other association to become today's American Vocational Association.

McCarthy stressed that learning by doing would be essential, especially for people already working. "The 'teaching by doing' method so common in all industrial education in Germany as well as in successful industrial education in America, is the only one which can be used with any degree of success in our evening schools in Wisconsin. The teacher who has been teaching all her life in public schools, does not realize and cannot realize that she has to change all her methods to become a successful teacher of boys and girls who are working in shops and behind counters all day. The private [vocational] schools do not merely teach mathematics; they teach shop mathematics."

He suggested that workers be chosen as teachers and given summer classes in teaching methods. The commission stressed that, like the German system, the continuation schools must be compulsory. "Children will not go to school voluntarily; parents will not make them go to school, and many employers will not allow them to go unless the state requires it." Though attendance was to be compulsory, McCarthy wanted nothing compulsory about the curriculum. Flexibility was to be the key. Courses would be offered that were needed by local workers for local industries. Each school would be tailored to its own community.

The report of the commission recommended that: An Advisory Board for Industrial Education be appointed by the Governor and that an assistant for industrial education be added to the State Superintendent's office to support and encourage industrial education. The assistant would be appointed by the state superintendent and approved by the state board. Local boards of the same composition as the state board control industrial education and evening schools in their cities.

Continuation schools be provided for 14 and 15 year olds already employed. (They should be compelled to go to school a specific time each week and that time, as much as possible, should be used for industrial training.)

State aid be given to establish continuation, trade, and evening schools.

Apprentice laws be updated and fitted more harmoniously into the educational system. (This meant that apprentices should receive related instruction in the continuation schools).

Appropriations for University of Wisconsin Extension Division be increased so that it could be a flexible element in the gradual development of an industrial and commercial education. Some state institutions be given the responsibility for training teachers for industrial education and agriculture. A minimum salary apply to all industrial education and agriculture teachers to attract the best from industry. The other 9 recommendations of the commission dealt specifically with agriculture. McCarthy pointed out the need to extend the educational opportunities existing in agriculture to industrial education. He compared the short courses of agriculture to continuation schools. "Boys have come into these schools who are actually farmers and have learned how to solve their problems."

### The 1911 Continuation School Law

In 1911, following study of the commission's report, the Wisconsin Legislature passed the first comprehensive continuation school legislation in the country. Several measures were actually enacted. Chapter 616, Laws of 1911, provided for the continuation, trade, and evening schools as McCarthy had proposed. The law authorized a State Board of Industrial Education. The 9- board would consist of 3 employers and 3 employees appointed by the governor, the state superintendent of public instruction, and 2 other ex officio members.

The main function of the State Board of Industrial Education would be to allocate state aid to local continuation, trade, and evening schools on a matching basis. The board would have no say in curriculum matters; the state superintendent of public instruction was to oversee curriculum. The state superintendent was authorized to employ an assistant to supervise, the new schools. The superintendent's assistant was to be appointed with the approval of the state Authority was split between the state board and the Superintendent of Public Instruction, C.P. Cary. This built-in conflict would plague the new system until 1921, the end of Cary's incumbency.

The 1911 law required the city school board of every community of more than 5,000 to establish a local board of industrial education; communities under 5,000 could do the same if they wished. Each 5-member board was to have 2 employers and 2 employees appointed by the local school board for 2- terms. The ex officio member was to be the local school superintendent. Local boards were to establish and maintain continuation, trade, and evening schools.

Local boards of industrial education were authorized to impose a property tax of up to one-half mill. Education for those employed was to be financed separately from common education. The tax levy was not to be subject to review by the city council. This significant provision would eventually give vocational, technical and adult education a vitality and an ability to meet local needs not possible had budgets been subject to political control. Local boards were empowered to charge up to 50 cents per week for tuition.

Four related pieces of legislation were also passed in 1911. Chapter 526 was essentially a compulsory attendance law requiring any employed minor over age 14 either to prove literacy or to attend continuation school. An accompanying law, Chapter 505, was more specific. It required employers to release 14 to 16 year old workers for part-time attendance in the continuation schools. The workers were required to attend 5 hours per day for at least 6 months per year. The hours spent in school were to be considered as part of the total work hours; employers could not require additional hours of work to make up for hours spent in school.

Chapter 347, Laws of 1911, required that a written agreement be drawn up for each apprentice, specifying the terms of training to be received. The agreement had to include 5 hours per week for instruction (out of a total of 55). Instruction was to be

provided in a public school or in a manner approved by the just created local board of industrial education. Because of the employment orientation of the new continuation schools, they became, in a short time, the schools for apprentices. The law further required that a copy of the indenture agreement be sent to the State Industrial Commission. This was perhaps the most significant part of the law. It made the state a party to the indenture. No longer would apprenticeships be haphazard. The Industrial Commission would supervise the agreements and make meaningful the clause in the law that provided penalties for employers who breached the terms of those agreements. Chapter 544, Laws of 1911, set the minimum salary for teachers of agriculture, domestic economy, and manual training at \$60 per month.

## The New Schools

Racine was the first city in the state to open a continuation school, doing so in October of 1911. The school attracted 325 students and offered courses in patternmaking, cabinetmaking, moulding, drafting, shop math, house plans and specification, commercial subjects, cooking, dressmaking, and millinery. The Racine school was the only one to open that first year.

## CHAPTER 2 - The 1920s

### A New Link With Business

A new kind of vocational education personnel appeared in the amended 1924 State Plan for vocational education - the coordinator. Federal policy encouraged the use of coordinators to ensure that vocational education and business and industry remained close. Some of the duties of the coordinators included:

- Providing vocational guidance to students,
- Developing of instruction to meet individual needs,
- Adapting materials of industry to vocational schools,
- Maintaining advisory committees,
- Keeping student records, and
- Serving as advocates for vocational education in the community.

Like teachers' salaries, coordinators' salaries were to be reimbursed up to 50% with federal Smith-Hughes funds. Today's VTAE system utilizes coordinators in a manner similar to that proposed in 1924.

### Programs In The 1920s

#### Itinerant Programs

Since the establishment of continuation schools, sporadic proposals had been made for hiring itinerant teachers for the trades. It was not until 1924 that the first itinerant teacher was reported. The plumbing instructor traveled between the vocational schools in northeast Wisconsin. In 1928, there were 4 circuits in plumbing. Circuits by then had been established in electricity, paper mill instruction, painting and decorating, and

foreman training. By 1930, the itinerant programs were so popular that they, plus adult trade extension classes, would require all the federal funds available for trade and industrial education.

### Trade and Industrial Education

The day programs in trade and industrial education offered 3 types of courses:

Trade extension - for those already employed,

Trade preparation, and Trade finding - those who were not sure which occupation they wanted acquired experience in a variety of shops.

By the end of the 1920s, a great variety of trade and industrial courses was available: woodworking; carpentry; patternmaking; cabinetmaking; machine shop; printing; electricity including specific courses in electrical wiring, armature winding, construction, and power; auto mechanics, including units in automotive repair, ignition, battery service, tire service, motors, and chassis; sheet metal; and drafting. Some of the larger schools had courses in shoe repair, foundry practice, forging, plumbing, brick laying, painting and decorating, general metal working, mechanical dentistry, watch repair, meat market practice, and special courses for the service trades.

In Milwaukee a program in Technical Engineering was begun in 1924. The program consisted of 2 nights of class over 5 years. The first "graduating class" was one man. Despite this modest beginning, Milwaukee's Technical Engineering program was the forerunner of today's 2-year technical programs.

Trade and industrial courses for girls were limited because, according to Robert Spinti in his doctoral dissertation: "It was claimed that most girls preferred the homemaking courses. Trade and industrial courses offered for girls were power machine operation, telephone operation, manicuring, hair dressing, beauty culture, dress making, and millinery. These were offered either on a trade preparatory or trade extension basis."

### Health Occupations

Health occupations are often spoken of as the most recent occupational additions to vocational technical education. As early as 1923, however, the Milwaukee Vocational School was asked to offer nursing science classes to registered nurses training in hospital diploma programs. The school provided the nurses with anatomy, bacteriology, and chemistry, while the hospitals provided the practical hospital experience.

### Agriculture

The first high school agriculture programs in Wisconsin were established in 1909 before the creation of the State Board of Industrial Education.

During the 1920s, all agriculture programs administered by the State Board of Industrial Education were located either in high schools or county schools of agriculture. Funds from the federal Smith-Hughes Act were used to initiate and support the programs. In 1924-25, the board supervised 65 funded programs enrolling 1,970 boys and 181 girls.

In 1924, the state board introduced evening classes for adult farmers and part-time classes for boys 14 to 20. These evening and part-time classes also were offered in high schools. In most schools, the regular agriculture instructor taught night classes. In Clintonville, the program was so well received that a full-time instructor was hired in 1924 for adult and out-of-school young farmers.

The national organization for voc-ag students, Future Farmers of America, was organized in 1928. By 1929, Wisconsin had become affiliated with the FFA.

The State Board of Vocational Education also encouraged adult education. A 1925 bulletin pointed out that although federal aid could only be used for evening trade extension classes, there were no limitations on programs that could be funded with state aid. When Shorewood requested aid for bridge, whist, ballroom dancing, and indoor golf, this position had to be modified. But evening enrollment, which tended to represent adults, continued to grow with the state board's encouragement.

#### A Fight For Existence

The 1929 Legislature established an interim committee to study the possibility of organizing all state education agencies under a single State Board of Education ( 1929 SJR- 108). The joint resolution charged that with 5 educational boards and departments, there appeared to be overlapping and duplication of some activities. State Vocational Director Hambrecht appeared before the committee in 1930 to voice objections to the proposal. Although the interim committee was complimentary concerning the work of the board, it finally recommended adoption of one State Department of Education under a Board of Education and the abolition of existing educational boards and agencies. The recommendations were incorporated into 1931 Senate Bill 198.

However, there was local support for keeping the boards separate. The AFL Convention meeting in Fond du Lac went on record as being vigorously opposed to the consolidation bill. The bill passed the Senate, but failed in the Assembly 62 to 30.

#### A Glimpse of the Future

In 1929, Clarence L. Greiber, an accountant, was hired as the Assistant Secretary of the board. Initially, hired for business administration of the board, Greiber became increasingly active in policy matters, more so as the career of State Director Hambrecht neared its tragic end.

## CHAPTER 3 - The 1930s

### Depression

The growth in vocational programs that characterized the '20s did not stop after 1929. However, the Depression and President Roosevelt's "alphabet programs" did change the student population of the schools dramatically. With fewer jobs for students, more remained in high school. Unemployed adults who wanted to retrain for something better

started attending evening classes. In Milwaukee adults even began attending the day school, which had previously been almost exclusively patronized by boys and girls. Enrollment figures for 1930-31 for the state showed that day school enrollments decreased by 3,000 to 32,928, while evening enrollment increased by 6,000 to 54,600.

The staff, laboratories and equipment provided by such federal programs as CCC, WPA, PWA and, particularly, the National Youth Administration (NYA) marked the beginning of full-time, post-secondary trade training for adults in Wisconsin. The federal programs provided occupational training, retraining, and personal enrichment. Adult education provided through these programs attempted to help students meet their own basic needs for food, clothing and shelter. Even unemployed musicians were involved as teachers and performers in vocational education classes. These often became civic symphonies, orchestras, bands and choruses, many of which continue today. These federal New Deal programs of the Depression showed the link between basic economic needs and occupational training and continuing adult education. Additionally, because the institutions were staffed, equipped operating to provide adult trade training, the system was in gear for war production training that would soon be needed.

During the Depression, college transfer programs evolved. Director Rasche of the Milwaukee Institute of Technology was approached by the Milwaukee Teachers College to provide opportunities for inner city youth who were not prepared for college programs. They recognized the need for a transitional program which could also be a second chance for those who had already failed. Thus the forerunner of the junior college was established as part of Milwaukee's Vocational and Adult Schools in 1934. Tarbell writes: "As the plan took shape, the students enrolled in academic subjects for one-half of the day. The other half of each day was taken up in preparing for a vocation. This meant that at the end of two years, a student would have been following an academic program on a college level and laying the foundation for a vocation at the same time." The academic credits earned could be transferred to the university if the student so desired. Director Hambrecht was incensed with this junior college idea and informed Milwaukee Director Rasche that vocational institutions should not be getting involved in college transfer courses. Nevertheless, the program had strong local support. College transfer programs were later added at Madison and Rhinelander.

Both of those subsequent college parallel or transfer programs were added for different reasons. In Madison, the college transfer program was added in 1966 to accommodate the large group of students who came to it from the University of Wisconsin or went from the Madison Area Technical College to the university. The college transfer program was added at Rhinelander in 1968 because there was no existing institution of higher education serving the North. Nicolet College, as it was named, was intended substantially to meet the needs of the northern part of the state for both liberal arts and vocational-technical education.

In spite of a net gain in enrollments, the state was forced to reduce appropriations for vocational schools in 1932. The federal government did the same. In fact, the Depression marked the end altogether of the Federal Board for Vocational Education. President Roosevelt abolished it by executive order in 1933.

High unemployment meant that many juveniles who had quit school were in school one day a week and on the street the rest of the time. The President of Milwaukee's board, Cooley, is credited with saying: "Some way must be found to get unemployed youths out of the pool rooms and into the school rooms." That "some way" was another compulsory attendance law. Passed in 1933 (Chapter 143), it required full-time attendance in a high school or vocational school until age 18 unless students were employed under work permits in districts where vocational schools existed. This law had the effect of increasing enrollments in the high schools rather than in vocational schools. It was an incentive to stay in high school for a diploma, since vocational schools could not grant diplomas.

Director Hambrecht and Superintendent of Public Instruction Callahan were aware of the far-reaching implications the law would have for vocational education. They knew the vocational schools would lose continuation students. (They were right. In 1932-33, there were 22,300 continuation students. By 1965, there were less than 3,000.) But they also foresaw that the compulsory attendance law would open up places in vocational schools for adults and working youth who needed retraining or upgrading. The emphasis would shift from compulsory youth education to adult education. To reflect the new emphasis, in 1937 the State Board of Vocational Education became the State Board of Vocational and Adult Education.

#### Federal Initiatives During the 1930s

The 1933-34 Federal Emergency Relief Administration began Work Relief in Education to employ teachers on relief and to provide adult education for those on relief. The teaching was not to compete with any ongoing educational activities. Fortunately that stipulation was not strictly followed, since Wisconsin's vocational and adult schools were already providing those types of services. State Director Hambrecht wrote to Harry Hopkins of the Federal Emergency Relief Administration objecting to the government's view of adult education as a temporary make-work activity. Hambrecht asked for permission to use the funds to expand existing programs of general adult education, trade extension and literacy. The request was approved.

Hambrecht was critical of the federal government's approach to putting people to work without training. He later said: "With this nationwide plan to make jobs for the unemployed, no adequate funds were provided for the vocational training of the unemployed for greater vocational usefulness and for better living. In fact, requests for increased federal aid for vocational training were actually resisted most strenuously by many of those in authority."

#### Programs in the 1930s

By the 1930s, enrollments were high enough to require a more refined approach to placing students in classes. As a result, the trade and industrial program in Wisconsin was organized into 4 phases which included:

- General trade finding
- Specific trade finding
- Specific trade preparation, and
- Trade extension

The 4 phases were a logical sequence. Enrollees in any trade and industry program would be placed in the phase appropriate for them. First used on a trial basis in Sheboygan, the 4-phase program was adopted by the Directors' Association in 1931 (the Directors' Association had been functioning since 1924). By the 1930s, the itinerant programs absorbed almost all of the federal matching funds for trade and industry. The Circuit Relations Committee was formed to direct the itinerant program. The committee hired, fired, set up schedules and set salaries. In spite of the committee structure for administrative matters, the circuit instructors were understood to be under the authority of the local director of whatever school they were in. In 1935, circuits were added in sales training, cosmetology, banking, dairy products, and conservation. A police training circuit was added in 1938 with the help of federal George-Dean Act funds (P.L. 74-673, 49 Stat. 1488).

### Agriculture

The Depression did not hamper enrollments in agriculture. In spite of low farm production, and heat and drought in the mid-'30s the reverse is true. The decade was a period of substantial growth for agriculture. Figure 3 shows how enrollments almost tripled in 10 years.

Figure 3. VOCATIONAL AGRICULTURAL ENROLLMENTS		
	1930-31	1939-40
Number of departments	97	201
Number of instructors	100	206
Enrollments: Total day	3,656	9,861
Part time	1,206	3,912
Evening	1,749	3,260

Source: Floyd J. Doering, A History of Vocational Agriculture in Wisconsin. 1900-1976, Wisconsin Department of Public Instruction, 1976.

#### Distribution

In 1931 distributive education was added to the list of programs offered in vocational schools and supervised by the state board. Distributive education deals with merchandising of both tangible and intangible products. D.E. began as a general sales program; specialty areas eventually developed in the program such as advertising, merchandise display, showcard writing, etc. From the beginning, working in business was a part of students' training. Still today D.E. students are involved in cooperative education, attending classes part time and working in a job related to their course of study.

#### Teacher Training in the 1930s

The most significant development in teacher training in the 1930s was the tightening up of certification requirements. Concurrently, the state board assumed more responsibility for meeting local training needs. In 1931, the State Board of Vocational and Adult Education mandated that a member of the teacher training staff at Stout would have personal contact with every instructor and would advise state staff on what training was needed.

The problem faced by part-time instructors was addressed. Unlike fulltime instructors, they were not able to get away during the summer for teacher institutes. Itinerant classes were set up for the part-timers. Having made provisions for teacher training, the board resolved that after 1935, no state or federal aid would be used to reimburse salaries of full-time instructors unless they had a certificate or were in a training program.

#### An Early Attempt At Larger Districts

An area vocational bill was introduced in 1937, a version of which finally passed 30 years later. Hambrecht and Clarence Greiber were seeking a broader economic base for the schools, which were striving to accommodate more Depression students with reduced state and federal funds. Assemblyman Laurie Carlson from Ashland County introduced 1937 Assembly Bill 570. The bill would have established county boards of vocational and adult education to develop and administer area vocational education programs. The bill failed, was reintroduced in 1941, and failed again.



## CHAPTER 4 The 1940s

### World War II

"I want it to be said in Wisconsin that every ounce of energy is put behind this defense training and placement program." Those were the words of George Hambrecht during World War II. During the war, the President authorized a Works Progress Administration (WPA) project for vocational education for national defense. The federal government purchased equipment for local schools and placed the titles in the name of the state board. Since supplies, instruction, and supervision were paid for by the federal government, no fees were charged. Three groups were eligible for Vocational Education for National Defense (VE-ND) training programs: People in national relief training programs like WPA, National Youth Administration (NYA), and the Civilian Conservation Corps (CCC);

Unemployed over 18 registered with state unemployment agencies, but not in national relief programs;

Those employed in jobs essential to national defense, including: aircraft manufacturing, maintenance, repair; machine tools, shipbuilding, maintenance, repair; auto manufacturing, maintenance, repair; electrical; forging, boiler and steel plate; foundry; light manufacturing; sheet metal; chemicals, ammunition and military supply.

All the VE-ND programs were concentrated and short term. Courses were not to exceed 10 to 12 weeks, and some were as short as three. The training was much more oriented towards production and less concerned with broader understanding than regular vocational programs.

Federal regulations stipulated that VE-ND programs were not to interfere with regular vocational programs. Classes were to be scheduled on shifts when regular classes were not in session. The claim that vocational schools ran 24 hours a day, 7 days a week during the war is no exaggeration.

Hambrecht, in spite of his willingness to direct Wisconsin's resources to the war training effort, was critical of what he felt was the government's lack of foresight. Speaking in 1940 at the National Education Association meeting in Washington, he said that if an adequate vocational training program for the unemployed had been carried on during the 1930s, there would have been enough "young men well prepared to run all the machines we are likely to need, to service them, and to build new ones."

By April of 1942, 600 instructors were teaching 565 defense programs using every one of the 3,000 training stations in the 43 vocational schools in Wisconsin. Monthly enrollments averaged 8,000, a significant portion of which were women. Later that year, Hambrecht was authorized to hire a woman supervisor in vocational training for war production workers because of the many women involved.

Early in the war, the demand for workers had been so great that some factories hired untrained people. This practice resulted in damage and lowered productivity. The training-within-industry program was added to VE-ND in 1941. In Milwaukee alone, 27

war production plants had Milwaukee Vocational and Adult School instructors in house over 2 years.

#### Additional Aid Sought

Also in 1942, the Directors Association, which had been functioning since 1924, decided to seek more state aid. The increased training activity of the war was severely straining local fiscal resources despite federal programs like VE-ND. The amount of state aid for vocational education was raised from \$255,000 to \$420,000 to become effective July 1, 1944. Governor Goodland vetoed the bill, but the Assembly and Senate both overrode his veto.

In 1945, the U.S. Commissioner of Education ordered all vocational training for war production to terminate on May 31. By the end of the war, 148,614 people had received some type of training for war production in Wisconsin. Of these, 63,791 were in pre-employment (job preparation) and 78,451 were in supplementary training programs. 24,095 were enrolled in VE-ND training-within-industry programs. The total number of women trained in the VE-ND program was 22,567.

#### A New State Director

On December 23, 1943, a fire in the home of George Hambrecht brought on a fatal heart attack. He had served 22 years as State Director. John Callahan was appointed Acting Director. Clarence Greiber, formerly Secretary of the Board was appointed Director on April 3, 1944. Serving in the Navy at the time, he was released upon request of the state board.

#### George-Barden

Washington was favorably impressed by the defense training that vocational and adult schools had provided during the war. This appreciation was manifested by passage of the federal George-Barden Act in 1946 (P.L. 79586, 60 Stat. 775). George-Barden Act funds stimulated the growth of new full-time programs in Wisconsin. The additional funds enabled the state board to fund equipment for new programs starting in 1947 (previously, only salaries were reimbursed).

#### Tax Levy Limits Raised

In 1947, the Wisconsin Legislature raised the maximum tax levy for vocational education from 1.5 mills to 2 mills (Ch. 396, Laws of 1947). This time, vocational educators and labor and business had faced a tough fight with the League of Wisconsin Municipalities. The league was opposed to any increase in the guaranteed mill rate. A hot contest had gone on in the Senate with Senator Warren Knowles against and Senator Louis Fellenz for the increase. In spite of the opposition from the league, the bill passed both the Senate and the Assembly.

Even with the increase, local vocational and adult schools were strained financially because of rising instructional costs. By 1947, the state board was no longer able to

match reimbursable trade and industry education expenses 50-50, and was forced to prorate the available federal funds.

There were not enough state aids to go around for the 57-day and evening schools either. A maximum reimbursement for first class cities (Milwaukee) had been set at \$30,000; \$15,000 for other cities. The total claimed for state aids in 1947-1948 was \$1,072,983.19 (more than the state aid available), so aids also had to be prorated.

### Veterans

Thousands of veterans enrolled in vocational and adult schools after World War 11, either for occupational training or to finish high school. Local boards worked directly with the U.S. Veterans Administration to provide veterans with on-the-job training.

The Veterans Administration had objected in other states to what amounted to subsidized employment (veterans were placed in jobs that did not require training). Wisconsin apparently provided realistic training settings. Commander Ralph A. Seatman, National Director of Veterans Affairs of the American Retail Federation, wrote to the state board, "I have rather conclusively formed the opinion that Wisconsin is doing about as fine a job in this field [on-the-job training] as any state in the union." As a result of P.L. 16 and P.L. 346, federal veterans training laws, Wisconsin trained 30,951 veterans between 1945-48.

### Aidables Changed

Governor Rennebohm and the 1947 Legislature were concerned about the state's support of the arts and crafts classes offered under home economics in the vocational and adult schools. Lawmakers felt that these non-occupational classes should be financed locally, and partly through course fees. (The rationale for state aid in the first place had been to promote occupational training that benefited the whole state. The crafts classes did not fit that criterion.) By January of 1947, the state board had adopted a policy of not reimbursing state aid claims for social, craft or recreational classes. Local directors opposed the move, defending the value of the courses to the community. Politically, however, the board had no choice but to discontinue a practice which so thoroughly chagrined both the Governor and the Legislature.

### Legislative Commission Looks At Vocational Education

That same year, the Legislature created a commission to study the state education system ( 1947 Chapter 573). The commission questioned the use of the city as the administrative unit for the vocational and adult schools. Vocational Director Greiber suggested that the commission study the feasibility of extending the boundaries of vocational schools to include the local trade area. Greiber had tried unsuccessfully in 1937 and 1941 to have district boundaries changed to county lines.

The question of consolidation of the state board with a general education board came up again. As it had in the past, labor opposed such a move. Spinti quoted the words of George A. Haberman, President of the Wisconsin State Federation of Labor, against the idea.

"Another method of weakening vocational education is to attempt to consolidate it under the general education system. This the State Federation has always opposed for obvious reasons. The two types of education do not mix; courses and systems of teaching are not comparable and administrative problems have no common ground."

The commission ultimately made no recommendation for changing the operation of vocational education.

## Programs During The 1940s

### Agriculture

World War 11 had both a positive and a negative effect on vocational agriculture enrollments. There was an increased demand for the instruction-farm prices improved and demand increased for food and fiber for national defenses. Rural electrification progressed steadily. Ample credit was available for both short and long term loans, As the need for agricultural production increased, so did the need for increased instruction. Enrollments grew through 1942. The move in Wisconsin away from one-room schools to consolidated districts benefited vocational agriculture programs. Just before the United States entered into the war, many new schools were erected which, for the first time, provided adequate facilities for vocational agriculture. Forty new farm shops were built with the help of National Youth Administration (NYA) workers. Enrollments in vocational agriculture programs fluctuated particularly from 1942 to 1946 because of an extreme teacher shortage caused by the war. A number of teachers entered the Armed Services. In addition, many potential instructors enlisted or were drafted out of college. As a result, local areas that wanted vocational agriculture had to do without. In 1943-44, 28 schools were without instructors.

The war stimulated growth of Future Farmers of America. The chapters took an active role in productivity programs, scrap metal drives, rubber and paper drives, and stamp sales campaigns.

With new machinery nearly impossible to obtain, vocational agriculture departments offered programs for farm machinery repair and reconditioning. In one year, 351 programs in farm machinery repair were held which resulted in the reconditioning of thousands of pieces of equipment.

After the war, as instructors became available, vocational agriculture enrollments again began to rise. Starting in 1944, the federal government used Wisconsin as an experimental state for subsidized on-the-farm veterans training program.. By 1956, 16,270 veterans had received on-the-farm training.

### Health Occupations

In health occupations, the major development in the 1940s was in the introduction of one-year Practical Nursing Programs. The practical nurse role was created to free registered nurses to attend to more complex duties. Kenosha was the first vocational school to offer the program, followed by Milwaukee.

### Trade and Industrial Education

During the 1930s, the Circuit Relations Committee was established to coordinate the activities of itinerant instructors. In 1941, the state board issued a bulletin outlining policies for the circuit program teacher certification, salaries, travel schedules, and other issues. During the early 1940's circuit instruction was offered in baking, barber science, carpentry, cosmetology, electricity, firefighting, foremanship, foundry, insurance, industrial first aid, industrial safety, life underwriting, painting and decorating, personnel relations, pharmacy, plumbing, rural electrification, sales and steamfitting.

Trade and industry enrollments varied from a high of over 47,000 in 1940-41 to 36,596 in 1948-49. Forty-five schools offered trade and industrial education day and evening programs. An additional 11 offered only evening classes.

Thousands of veterans attended vocational schools to learn new trades and/or to complete high school educations interrupted by the war. Local boards of vocational education worked directly with the Veterans Administration to provide veterans with on-the-job training. By June 1948, 31,000 veterans had been enrolled in trade and industrial programs.

### Adult Education

The significant development in adult education during the decade was the announcement from the state board that aid would no longer be available to vocational schools for non-occupational classes such as social, craft, and recreation. The move helped to define vocational schools more sharply as occupational training institutions.

## CHAPTER 5 - The 1950s

### Financial Challenges

During the 1950s, local districts continued to assume a greater proportion of the costs. By 1956-57, 87% of the costs of operation were paid by local taxes. To bolster the increasingly inadequate resource base of vocational and adult schools, the legislature raised out-of-district tuition for day programs from \$1.00 to \$1.50 per day. (Evening classes for nonresidents remained at \$0.50.)

The system was gradually moving toward larger districts with larger tax bases. Legislation in 1951 (Chapter 372, Laws of 1951 ) allowed expansion of the city vocational districts to the public school boundaries. The legislation had been initiated by the Director at Antigo. The change was of special interest to the northern part of the state, which was sparsely populated and, therefore, had limited fiscal resources. The law permitted a unified school district to petition to have a vocational program in the district. If the unified district included a city with an existing vocational school, the voters of the city had to approve the expansion.

Another change in the nonresident fee structure was made in 1955. Fees were to be charged to the nonresident's vocational school district. Previously, the fees were charged to the nonresident's city, village, or town. This change reflected the needs of the newer, larger districts that extended past municipal boundaries.

Legislation during the 1950s to broaden the vocational base had primarily conceptual rather than practical impact. The drawback of existing legislation was that implementation was not adequately provided for. Yet several schools, including Green Bay, Wausau, Superior, Eau Claire and La Crosse, were operating on a regional basis rather than on a strictly municipal basis. The success in these districts contributed to the momentum for a regional design.

Nevertheless, it was a time of program expansion. In the 1950-51 school year, the total vocational and adult enrollment was 105,115. In 1951-52, enrollments were 111,346; in 1956-57, enrollments had grown to 131,817. In 1955, because of the financial strain caused by the expansion, the board ordered that all 2-year technical full-time programs needed prior approval by the state. This policy was meant to discourage the addition of programs without evidence that the occupational preparation was really needed in that area and without regard to the geographical location of similar programs.

#### Defeat

Prior to 1955, virtually every request made by the state board for additional state funds had been granted. It was a shock to the entire system when 1955 Assembly Bill 242, which would have increased aid by \$355,000, did not pass. It proposed to maintain the historical appropriation of \$420,000 with a maximum of 20,000 for Milwaukee and \$15,000 for others. A different formula was proposed for the additional \$355,000:

- \$140,000 to boards for compulsory youth
- \$40,000 for apprentice instruction; those who by law had to attend vocational school or high school);
- \$111,000 to aid students attending at least half time in an occupational preparation program; and
- \$25,000 to boards for providing instruction to rural communities a group not previously served to any extent by the schools.

The directors unanimously supported the bill, as did labor. However, the support of the business community had diminished significantly. The non-occupational courses of the schools had become too visible. Though occupational programs were being carried on, legislators and many business people felt that vocational education was devoted mostly to "how to make whipped cream, millinery, and basket weaving."

A large portion of the proposed increase would have gone for compulsory youth education. According to McGivney, one observer remarked:

"Greiber would make a good case before the Joint Finance Committee but he did not get sufficient local support for the increase. The dropout could be shown as "needy" but the dropout could not provide any organized political support. Vocational schools were

perceived to be the resting place for the kickouts, the dropouts, the undesirables, and the rest of their program was heavily oriented to arts and crafts."

At the time, the state board lacked the interagency support it had enjoyed earlier. The University of Wisconsin Extension Division was an integral part of the original continuation school plans. As the schools became vocational and adult schools, they provided adult education locally, and so became competition for the extension.

### Defining the Mission

In the mid-1950s, State Director Clarence Greiber and a group of local directors decided that vocational educators needed to let the right people know that there was more than millinery going on in vocational schools. Greiber went to the Interim Education Subcommittee of the Legislative Council in 1956 to explain the significance of occupational education. In the presentation, he established a case for the need for training, which he was able to support with data from business and industry. He also showed how the percentage of state aid had declined. In 1913-14, state aids had paid 32% of the costs of the vocational schools. In 1954-55, only 5 % of the cost was reimbursed by the state.

The committee agreed that vocational education got the lowest share of any publicly supported education. They directed Greiber to bring back a new plan for state aids. The plan he presented to the commission in 1956 included:

- Increased aids from \$420,000 to \$975,000 annually;
- No change in existing guidelines for the traditional \$420,000;
- \$0.10 for each student in board-approved courses; and
- 50 % of the cost of local administration, supervision, and salaries up to \$5,000.

Greiber's plan eventually became 1957 Senate Bill 48. Proposed in 1957, it was not passed because the Legislature felt it was too costly. Instead the Legislature passed a one-time increase in state aid for vocational education, adding \$180,000 to the existing annual appropriation of \$420,000.

However, in 1960, Governor Gaylord Nelson signed Chapter 696, Laws of 1959, which had the same principles as the 1957 bill - a flat reimbursement rate plus an additional reimbursement rate based on student attendance. Each school would be reimbursed a maximum for administration, supervision and coordinator salaries. The bill would reimburse local schools for educational services to apprentices, adults, and compulsory youth (those who had quit high school).

The actual amounts were: \$315,000 for salaries; \$1,080,000 for courses with vocational objectives, excluding technical (2 year) courses, based on anticipated reimbursement of 150 per student period of attendance; \$390,000 for terminal technical courses on the basis of 300 for each student period of attendance.

The bill's emphasis on technical programs (300 reimbursement for each student period of attendance) was to encourage the growth of such programs during the 1960s.

### Programs During the 1950s

### Vocational Agriculture

During the 1950s, vocational agriculture enrollments leveled off. The huge enrollment growth experienced after World War I had declined by the end of the decade.

Enrollments in the veterans on-the-farm training were dropping because there were fewer veterans. As veterans completed their training, the program lost 200-300 enrollees per month. By 1954, only 1,489 veterans were enrolled. This increased as veterans of the Korean War became eligible. By 1956, 2,200 Korean veterans were in on-the-farm training. By 1959, 3,442 were enrolled.

Vocational agriculture enrollments declined also due to requirements of the U.S. Office of Education. The Office of Education required that any programs funded with federal monies meet certain requirements for facilities, equipment, and the length of class periods. Thirteen schools that were unable to comply lost their programs.

### Business Education

The State Board of Vocational and Adult Education approved minimum standards for business education in 1956.

### Health Occupations

The practical nursing programs begun in the late 1940s continued to grow. By the mid 1950s, practical nurse programs were in operation in Milwaukee, Kenosha, Neenah, Menasha, and Superior. Programs in Fond du Lac and Green Bay were added in 1958 with federal funds.

### Home Economics

Adult home economics programs were conducted in all 63 vocational schools. Program growth was stimulated by passage of the Federal George Barden act in 1946. In 1951, the Madison Vocational Board received \$5,000 of those federal funds to purchase equipment to begin a Hotel and Restaurant Cookery Program. The Wisconsin Restaurant Association had requested the program.

### Trade and Industrial Education

The most significant programmatic development of the 1950S was the growth of technical programs. A need had existed for some time for a program -- more academically demanding than traditional vocation programs --which would prepare paraprofessionals in engineering. Such technical graduates were needed to support and extend the efforts of professional personnel. In 1949, the University Cooperating Committee of the Wisconsin Society of Professional Engineers recommended that technical graduates should be prepared in technical institutes organized and administered by the Wisconsin Board of Vocational and Adult Education. The committee also recommended a maximum of 2 years for technical programs. (Previously courses of a vocational- technical nature had been offered in all vocational schools. The programs, however, did not confer degrees.)

By 1956, standards had been established by the state board for evaluating technical programs. Shortly afterwards, technical programs in electronics, automotive technology and mechanical technology were approved by the board.

In 1957, the state board received an appropriation from the Legislature to supervise and conduct classes in firefighting, and fire protection and prevention. In so doing, the Legislature gave the vocational-technical system the responsibility for training members of volunteer and paid fire departments throughout the state.

In 1948, 10 % of the federal funds available under the George-Barden Act was set aside for the purchase of equipment. As a result, Janesville was able to equip and offer an F.A.A. approved program in aviation mechanics in 1953.

## CHAPTER 6 - The 1960s

### Coordinating Council for Higher Education

In 1955 the Coordinating Committee (called Council by 1967 law) for Higher Education had been established by the Legislature to foster cooperation between the University of Wisconsin and the state colleges. It included 5 University of Wisconsin regents, 5 State Universities regents, the state superintendent of public instruction, and 4 members at large. When the CCHE was organized under Governor Walter Kohler, vocational-technical education had not been considered part of higher education. By 1960, there were many who were beginning to believe it was.

The Co director of the CCHE staff from 1956-63 was Ira Baldwin, a University of Wisconsin vice president. Baldwin had worked with former Director Hambrecht and then Director Greiber to coordinate teacher training for agriculture. The CCHE studied vocational education in 1957-58 and subsequently recommended higher state support. The committee based its recommendation on the fact that so many vocational programs clearly had significance for the entire state, such as the aircraft mechanics program offered only at Janesville. Especially as vocational enrollments grew, Baldwin felt the state board should be represented. Greiber and the board agreed. Greiber was designated as the informal liaison with the joint staff to the coordinating committee.

Governor Gaylord Nelson was one of those interested in seeing the State Board of Vocational, Technical, and Adult Education become an official member of the coordinating committee. The President of the University of Wisconsin and the Director of the State Colleges also wanted the state board on the coordinating committee so that there would be a formal means for resolving conflicts. In July 1960, with all parties seeming to be in agreement, the board wrote to the CCHE indicating its willingness to have representation.

Labor reacted negatively to the plan. George Haberman, President of the State AFL-CIO, and other labor leaders feared that vocational education would be diluted or lost if it joined the committee. George Parkinson, Director of the Milwaukee Vocational and Adult School, was also opposed and lined up a number of other local vocational school directors behind him. In view of opposition of labor and some of the influential directors, a 6-person liaison committee was formed to work on the problem in 1961.

The state board appointed 3 members to the Liaison Committee and the CCHE did the same. The Liaison Committee was to try to win over the opposition to the board's membership. After working with labor, local directors, and CCHE members, the committee reported to the CCHE in June 1962 that the state board would accept membership under conditions that:

The vocational board and system have responsibility for the development of all post-high school vocational-technical programs; and

The state board have a number of representatives equal to the University of Wisconsin and state colleges.

The CCHE agreed to these conditions and legislation was drafted for the 1963 session. The coordinating committee subsequently reviewed the separate budgets of all the higher education agencies (except for VTAE budget items unrelated to post high school transfer and technical programs) and combined them into a single consolidated biennial budget for the Governor.

It is felt by some that securing membership on the CCHE was one of the most important actions ever taken by the state board. It was an official expression that vocational-technical education was not an alternative to higher education, but was higher education.

### Federal Legislation in the 1960s

Two federal bills to encourage vocational training of unemployed people were passed in the 1960s - the 1962 Manpower Development and Training Act and the 1963 Federal Area Development Program. The latter benefited primarily the northern part of the state in starting programs in stenography, machine operation, power sewing, and nurses aid for the unemployed and underemployed.

The board had decided to target the limited federal funds to the hard core unemployed. A 1966 report showed that 4,513 completed training at an average cost of \$775.00 per trainee excluding individual subsidies, and that 77,8 % were placed in full-time, permanent employment. The federal Vocational Education Act (VEA) was passed in 1963 (Public Law 95-40). In Wisconsin, it had the greatest effect on the development of programs in business and distributive education, because these areas were only minimally addressed in earlier federal legislation. Funds from the Smith-Hughes Act and George-Barden Act continued to be appropriated. The legislation provided for maintenance of existing programs where necessary.

The most obvious effect of the VEA was the stimulation of the building of new facilities. For the first time, federal funds were available for construction. Eau Claire and Kenosha were the first to build new facilities using the federal funds. The facilities were badly needed to meet the mounting demand for vocational-technical education. At least 2,300 students were turned away in 1964 because of a lack of adequate teaching facilities. The actual number desiring training was probably higher. As one director at the time suggested, "Once word gets around that school is full, other would-be students don't bother to apply." The new institutions at Eau Claire and Kenosha served as models for the rest of the state. However, it became apparent that facilities like those were not feasible for most vocational-technical schools because most did not have a sufficient tax base to justify or even maintain the modern shops, laboratories, and other facilities.

Cecil W. Beede, District-One Director from 1963 to 1974, points out that the new facilities had a salutary effect on the movement to divide the state into districts, which - at that time - was just around the corner.

"My own experience in Eau Claire was that the major schools of the state visited the Eau Claire School, as I know they did the Kenosha School, and became very enthused about going back to their own areas and promoting technical institute building for their area, Eighty high schools of the Eau Claire area visited our facility. All of the county chairmen whose districts were to be served by Eau Claire toured the school and discussed the district possibilities. When it came time to move on the district plan, District-One did not have one negative vote."

### Area Redistricting

The most significant state vocational legislation' since 1911 was enacted in 1965. Through the 1950s and into the 1960s, local vocational and adult schools had faced a struggle in trying to provide occupational training with only a municipal tax base to draw upon. The state had been moving towards area consolidation. In 1964, Chapter 414, Laws of 1963,. enabled county boards to form VTAE districts., That year, 5 districts in the Fox River Valley became interested in forming a VTAE district. Their interest resulted in Chapter 418, Laws of 1963, which enabled two or more contiguous school districts to form a VTAE district.

Redistricting legislation came from outside the vocational-technical system. David Martin, an Assemblyman from Neenah-Menasha, was the legislator responsible for it. Martin was interested because his father had been a general science teacher at Appleton Vocational School. Martin asked for and received permission from Governor Knowles to develop a plan of action for vocational education.

Martin asked State Director Greiber to prepare a mandatory redistricting bill. The provisions for redistricting embodied in eventual 1965 Assembly Bill 501 were quite general - a district could be formed from any contiguous combination of counties, municipalities, or school districts operating high schools. However, all parts of Wisconsin were to be part of a VTAE district by 1970.

In the meantime, the Coordinating Committee for Higher Education introduced its own redistricting bill, 1965 Senate Bill 220. In parts it was identical to Greiber's bill, but with some important differences. SB-220 would have:

- created a system of community and technical education institutions;
- provided state support of construction through, dummy building corporations;
- created a state board appointed by the governor without appointees from labor, management, and agriculture; and
- discarded requirements of local district boards to have appointees from labor, management, and agriculture.

The CCHE was essentially proposing a community college system. Though Governor Knowles favored a community college system, the Legislature wasn't interested and the bill was killed. Martin's redistricting bill, 1965 AB-501, not only had the support of the

Governor, but of both parties as well. Such prominent Democrats as Assemblymen Obey, Nikolay, and Molinaro worked hard for the passage of the Republican bill with Assemblymen Martin, Steiger, Heinzen, and Pornmerening.

There was bipartisan support to strike the word "community" from the bill to dispel any confusion with a community college system. Bipartisan support existed also for the separate board for VTAE.

Several amendments were offered primarily from rural constituencies to try to reduce the potential tax liability. For example, one amendment would have required approval of all government units in a district before the tax could be levied. All were rejected by the Assembly Committee on Education.

The Assembly debated 1965 Assembly Bill 501 on July 22, 1965. By the time it was passed, the bill included 2 amendments. Assembly Amendment 10 was a so-called anti-community college amendment: no collegiate transfer program could be offered in a vocational-technical or adult school in any town, city, or village where there was an existing institution of higher learning unless the city had a population of 150,000 or more. Assembly Amendment 12 provided that local boards would charge resident tuition at 20% of the instructional cost for statewide, full-time, collegiate transfer courses approved by the board,

The Senate added to 1965 AB-501, the redistricting bill, Senate Amendment 4. It stipulated that compulsory students, aged 16 to 18, could be referred to vocational schools if one existed in the city of residence. Governor Knowles signed the bill as amended and it became Chapter 292, Laws of 1965. By 1970, everyone in Wisconsin would have to be in a Vocational, Technical and Adult Education district.

### Creating the New Districts

In 1965, Philip Lerman was elected President of the State Board of Vocational, Technical and Adult Education. Joseph Noll was elected Vice President. It \*as an unlikely combination. Lerman, an employer member, was a liberal Democrat with close ties to the labor movement. He personally believed in the concept of community colleges. Joseph Noll, also an employer member, described himself as a fiscal conservative with close ties to the Republicans and to the Manufacturers Association. These two men were referred to by contemporary Democrats as "the dynamic duo." It was said, "When these two guys can agree on vocational education policy, they can take on anybody else and 'beat' them." Lerman and Noll were to be the most pivotal figures in the redistricting effort. The stage was set for the state board to be much more active in policy matters.

The redistricting bill had not defined criteria for the establishment of districts. The Wisconsin board staff had grappled with the idea of area organization or districting in the late 1950s and early 1960s. The earliest plan was to divide the state into districts based on congressional district boundaries. The 10-district plan was based on population. State board staff felt that the congressional districts had the population base necessary to support regional institutions and that smaller districts, would fall short of resources. However, state staff and district directors did not agree; so the ~0-district

plan underwent constant revisions. The Executive Office became impatient with the prolonged debate and designated an interagency committee to study the matter, Out of that committee came a plan for 15 districts. In 1966 both the Coordinating Committee for Higher Education and the state board approved criteria for the formation of a total of 15 districts. Districts could be established where there were:

- 3,000 high school students;
- a potential for 780 full-time equivalent students in vocational-technical programs;
- a minimum population of 185,000;
- an equalized valuation of at least \$450,000,000; and
- ability to provide adequate facilities.

In August, September, and October of 1966, hearings were held in 14 locations throughout the state chaired by either Lerman or Noll. The hearings produced some changes in boundaries, but the 15-district plan was retained and approved shortly afterwards by the state board, by the CCHE, and by the Education Committee of the Legislative Council.

By 1970, the 15 districts approved in 1966 had grown to 18. The changes took place primarily in the Eau Claire, Racine, and Kenosha Districts. Originally, District-One, which had its primary facility in Eau Claire, included all of Eau Claire, Pierce, Burnett, Polk, and St. Croix Counties. Local citizen groups requested that the large district be subdivided into Districts 1, 17, and 18. The change was approved in 1967 by the state board and the Legislative Council Education Committee. However, District 18 was not able to unify itself fiscally or programmatically. Both District 17 and District 18 had found that their districts were too small to really provide technical education. A petition from Pierce County of District 18 to join District One was granted, with the remainder of District 18 being placed under the stewardship of the state board. In 1971, both District 17 and District 18 were abolished, and a new district, Indianhead, was formed. District-7 (Racine) and District-6 (Kenosha) were merged in 1971 for quite different reasons. Racine purchased as its primary facility, a former UW-Extension building situated on Lake Michigan. Those in District-7 west of Interstate-94 were extremely unhappy with the choice. It meant driving through the city to reach the facility, further away than the facility at Kenosha, which was out of their district. The state board took the opportunity to merge the 2 districts. They had originally been planned as one district by the board, since the 2 cities were barely 10 miles apart, However, a historical rivalry between the 2 urban areas and the objection particularly of Racine had prevented one consolidated district earlier. The merger of Racine and Kenosha meant a greatly expanded financial base and more options for the students in the new district.

#### Programs During the 1960s

It was during the decade of the 1960's that Wisconsin's vocational-technical system was transformed into the post-secondary system we know today. The stage had been set in the 1930's with New Deal training programs for adults. During the 1960's modern facilities built partly with federal funds meant that a greater number and variety of programs could be offered. The growth during the '50s particularly of technical

programs provided a basis for further growth. Most importantly, Chapter 5 1, Laws of 196 1, authorized the Board of Vocational and Adult Education to offer associate degrees for 2-year technical courses. This law, which had passed with the full support of the Coordinating Committee for Higher Education, was important because it affirmed that the vocational-technical system offered quality education worthy of a post-secondary degree. In recognition of its new privilege and responsibility, the board was renamed the Wisconsin Board of Vocational, Technical and Adult Education. The ability to grant associate degrees influenced all 5 program areas supervised by the state board.

### Vocational Agriculture

Two noteworthy events occurred during the 1960s relative to agriculture. In 1967-68, the responsibility for high school vocational agriculture programs was transferred to the Department of Public Instruction. The state board retained responsibility for young and adult farmer programs.

Enrollments in both high school and post-secondary vocational agriculture programs slowly declined until the mid 1960s. One reason was the lack of participation by girls. Girls were barred from participation in Future Farmers of America. In 1965, only 40 girls were enrolled in vocational agriculture.

Another factor that discouraged enrollment was the offering only of production agriculture during a time when the number of family farms was decreasing and when potential young farmers were going on to post-secondary education or the war in Vietnam.

The second event was the introduction of agribusiness, which encompasses the nonproduction aspects of farming such as agricultural mechanics, feeds, seeds, fertilizers, conservation, farm machinery parts and sales, and food processing. With the help of funds from the Vocational Education Act of 1963, new programs were developed in agribusiness. The first agribusiness program was offered at Oshkosh: a 2-year program in conservation.

In an additional effort to get away from strictly production agriculture, pilot programs were initiated in 1968 in 9 secondary schools, in areas such as horticulture, agriculture metal fabrication, meat processing, feed mill operations, agriculture supply, sales, and service.

At the request of the Wisconsin Florists Association, the state board approved a one-year horticulture program in Kenosha at Gateway Technical Institute. Other post-secondary agribusiness programs started in the '60s included: food manufacturing; chemicals and fertilizers, and feed, seed and farm supply; farmstead mechanization; machinery parts and sales; animal technician; and agriculture building service.

### Business and Distributive Education

A 2-year technical program in data processing was approved. A one-year fashion merchandising program was also approved.

## Health Occupations

Prior to the 1960s, nursing programs had been funded and supervised by Trade and Industrial Education. The Vocational Education Act of 1963 made federal funds available for the first time specifically for health occupations. A program in technical nursing (R.N.'s) was approved in 1964. The availability of federal funds immediately expanded health offerings.

In the early 1960s there were 9 programs in health occupations education offered in the state (7 in Practical Nursing and 2 in Medical Assisting). By the end of that decade there were 40 programs of 12 different types with enrollment increasing from 760 in 1965 to 3,639 in 1969.

At the urging of the State Dental and Medical Societies, the state board approved one-year programs for dental and medical assistants in 1964.

Soon after, programs for occupational therapy assistants, respiratory therapists, optometric assistants, ward clerks, operating room assistants, and dental laboratory technicians were approved.

During 1965-66, nursing assistant programs were conducted in 36 communities. Five of these were operated under the federal Manpower Development and Training Act or Area Redevelopment Act.

One of the challenges for state board's health supervisors during the 1960s was recruitment and retraining of teachers and maintaining of adequate clinical facilities for the practical nurse program.

The state board also began offering continuing education classes during the 1960s: medical classes and refresher courses for dental assistants.

## Home Economics

As was the case with agriculture, supervisory responsibility for high school home economics programs was transferred to the Department of Public Instruction in 1967. The WBVTAE retained authority for adult and full-time post-secondary programs.

With the passage of the 1963 amendments, home economics was given the responsibility for developing occupational programs in the areas related to home economics, namely: Food Management Production and Services; Clothing Management Production and Services; Child Care and Development; Home Furnishings and Interior Design; Institutional/Home Management Production and Services. The supervision and development of Cosmetology programs also became the responsibility of home economics personnel. At that time, there was one program in Cosmetology. By 1975, there were 7 approved programs.

Comprehensive VTAE districts began to be formed in 1965 and home economics was included in all eight of the then newly formed districts. Each district offered courses for adults in foods and nutrition, clothing and textiles, consumer education, child development, parent education, and family relationships. These courses were primarily for homemakers.

Between 1966 and 1970 additional programs were developed in Food Management Production and Services. New programs were developed in Child Care and Development, Clothing and Textile Services, and the first associate degree program in Interior Design was approved.

With the passage of the 1968 federal Vocational Education Act, consumer education was given special emphasis through categorical funding. These special funds are used to further develop home economics programs.

### Trade and Industrial Education

Technical programs continued to gain enrollments. Enrollees in trade and industrial education accounted for 32% of the total vocational school program enrollment (186,665) in 1966-67. Two-year technical programs approved by the board in the 1960s included mechanical production technology, industrial electronics, law enforcement, fluid power maintenance, and architectural design.

Apprentice programs enrolled 6,097 that same year. The largest enrollments were in barbering, bricklaying, carpentry, cosmetology, electrical work, machine tool, painting and decorating, plumbing, sheet metal, steam fitting, and tool and die-making. An additional 39 apprentice programs received instruction from technical institutes.

Trade extension classes were provided to keep those already employed up to date in the latest techniques and equipment. Trade extension classes were offered to 15,140 workers in 1966-67 in appliance servicing, automotive repair, barbering and cosmetology, building trades, food preparation, foundry, heating, metal trades, painting and decorating, and plumbing.

### Kellett Education Commission

In 1969, Governor Knowles created the Governor's Commission on Education. The commission (it became known as the Kellett commission on education) made its report in 1970. Looking at the entire educational structure in the state, the commission recommended the creation of a State Education Board to oversee all education boards. With regard to vocational education, it recommended a Board of Regents for Technical Colleges and the creation of a system of state-financed technical colleges that would retain the functions and programs of the vocational-technical schools and "expand opportunities for general studies relevant to career preparation." However, with the election of a new administration in November of 1970, the report of the Kellett commission on education appears to have received little consideration.

## CHAPTER 7 - The 1970s

The challenge of Vocational, Technical and Adult Education for the 1970s was making the new districts workable. In 1971, Eugene Lehrmann became State Director. Formerly a vocational agriculture instructor and Director of Kenosha's vocational school, he had served as Assistant State Director since 1967. Also in 1971, the presidency of the Wisconsin VTAE Board was assumed by John Zancanaro.

Lehrmann saw that one of the biggest challenges of redistricting would be "How to do what we said we would do - deliver vocational-technical education to everyone in the new districts." Another challenge would be distributing vocational programs by geographic location. The newly formed districts were anxious to initiate new programs, yet it was the responsibility of the Wisconsin Board of VTAE to be sure that high cost programs were distributed so that all parts of the state would have equitable access to them. The Wisconsin board aggressively disapproved programs that it felt were either not needed or that were proposed in geographic locations not advantageous to the rest of the state. In 1971, the board disapproved 16 associate degree (technical) programs, 11 one-year vocational programs, one 2-year program, and 6 programs of less than one year.

The 1970s saw some major changes. In 1975, for the first time, students in VTAE institutions paid tuition. As was the case in other higher education programs, students enrolled in VTAE occupational programs were eligible for state and federal financial aid.

Another major change affecting the system was the merger of the University of Wisconsin and the State University System. The Coordinating Council for Higher Education was abolished shortly before the merger. The significance of this event for the VTAE system was two-fold. First, the mission of the VTAE system was defined by law. Institutions of vocational, technical, and adult education were to provide occupational preparation programs below the baccalaureate level, including associate degree, as well as training of apprentices and adult education below the professional level. Secondly, the chairman of the Wisconsin Board of VTAE would be an ex-officio member of the University of Wisconsin Board of Regents, and the president of the Board of Regents would be an ex-officio member of the Wisconsin Board of VTAE. This mutual representation would mean that the university system and the VTAE System would function cooperatively yet independently.

In 1977, the procedure for appointing local boards was refined. The new appointment procedure was intended to make local boards more representative of the populations within each district and to ensure participation by women and minority groups. The change reflected the system's efforts to reach those groups with services (see Chapter 9, Administration).

During the 1970s, the Wisconsin Board of Vocational, Technical and Adult Education continued its attention to thorough evaluation of its own efforts and those of all 16 local

districts. Evaluation standards for programs had been developed in the 1950s and 1960s for individual programs. In 1970 evaluation was standardized in the state. In 1974, the first follow-up study of the state's VTAE graduates was conducted. In 1978, the Wisconsin Board began collecting data according to the requirements of the federal Vocational Education Data System (VEDS). Now all occupational programs in the state are evaluated every five years for instructor quality, curriculum, equipment, and, most important of all, the success of graduates. Each year an accountability report is prepared summarizing these findings. Between state and federal reporting requirements, the system is probably the most thoroughly evaluated of all the state's educational agencies.

Closely tied to evaluation is planning. Using program goals and information from each district and the recommendations of the State Advisory Council for Vocational Education, and the Wisconsin board itself, the board staff prepares "The Five-Year Plan for Vocational Technical and Adult Education". The plan is updated yearly.

In 1979, Robert Sorensen became State Director of Vocational, Technical and Adult Education. He had served as Director at Moraine Park Technical Institute prior to assuming the state directorship. Sorensen took over a system profoundly sensitive to economic and sociological developments in the state. The efforts of the system to respond to changes and meet new needs will make the decade of the 1980s challenging and at the same time positive years for vocational, technical and adult education,

## CHAPTER 8 - The 1980s

Describing today's VTAE system is just about as difficult as describing the whole State of Wisconsin. There is so much that might be said. The following chapter identifies trends in the system and cites examples of those trends in particular vocational-technical institutions. For the sake of space, not every institution that has a similar program is cited every time. If you read that 'x' Technical Institute has such and such a program, that does not mean that your district does not have the program. To find out, write or call your local technical institute. If it does not have the program you want, let your interest be known. That is how new programs get started in the VTAE system.

### Enrollments

Enrollments in the Vocational, Technical and Adult Education system have increased dramatically in comparison with other educational systems. Total enrollments in 1979-80 topped 453,000. Enrollment in full-time occupational preparation programs and continuing education programs to retrain or upgrade current employees was 366,883 (unduplicated headcount). By the end of 1980-81, 458,000 Wisconsin adults will have taken at least one course from a local vocational-technical institution.

Wisconsin's enrollment of students over age 18 in VTAE programs is more than twice the national average.

The present VTAE system, composed of 16 districts, just celebrated its 10th anniversary. Although Wisconsin's vocational system dates back to 1911, by law, all parts of Wisconsin had to be in a VTAE district by 1970. The system has grown steadily since then. Students in full-time occupational programs in the fall of 1970 totaled 37,175. The fall 1980 figures of 88,700 in full-time programs represent a 138 % growth in enrollments in occupational programs over the past 10 years. (This corresponds to results of a study by Kevin Munstenteiger showing a 55 % jump nationally in the rate of less-than-baccalaureate degrees between 1970-76. During the same time, the number of baccalaureate degrees increased by only 10 % ).

There are 4 major reasons for the past decade of growth in the system: the quality of education, student demand, technology, and lifelong learning.

**Quality of Education.** There was a time when vocational schools were frankly looked on as an alternative to higher education. Today's modern laboratories and shops, skilled instructors, and sophisticated instructional delivery systems offer students top quality post-secondary education.

The quality of instructors cannot be overlooked, for although modern equipment is important, it is the instructor who finally determines the quality of instruction. The certification standards for instructors in the VTAE system are set by the state board. They are unique in requiring that teachers have 4,000 hours of work experience in the occupational area in which teach. To keep their certification current, VTAE occupational instructors continue to work intermittently in business and industry, or they take additional course work related to their instructional fields. These demanding certification standards result in instruction that reflects what is really going on in the world of work. Occupational advisory committees also help keep instruction relevant. The University of Wisconsin-Stout administers an examination for technical competence, the National Occupational Competency Testing Institute examination. UW-Stout reports that "The Wisconsin Trades and Industry teachers who have taken the trade tests have consistently scored above the (national) mean, and in most cases at least one standard deviation above the mean." Wisconsin's selection standards for instructors are credited for this distinction.

**Student Demand.**

In the past decade, students have become increasingly concerned with the employment potential of higher education. The U.S. Department of Labor reports that jobs requiring vocational training top the list of occupations employers most frequently seek to fill. The system's job placement rate of 93 % attracts many. VTAE institutions were established within commuting distance of any student in the district. Therefore, students can attend their vocational-technical institute without the need to relocate. No programs require over 2 years of full-time study and many require a year or less. This puts a technical education within the reach of many students who simply could not afford 4 years for a baccalaureate degree. Finally, new student groups are participating in the system.

Women, the handicapped and disadvantaged, and minority groups, although traditionally underrepresented in technical and trade occupations, are seeking technical training in unprecedented numbers. The federal encouragement to recruit these groups has naturally increased their rate of participation.

#### Technology.

The incredible rate of increase in technology means that workers must continue taking courses to keep up with advances in their fields. Madison Area Technical College provides an example of how the VTAE system helps employees keep up with technological demands. Madison Area Technical College maintains a Business Special Help Laboratory equipped with the latest business and office equipment. In addition to students who need extra help, people may come in off the street for urgent educational needs. Recently, the laboratory was used by a man who had only 3 days to learn to run a mag-card typewriter before starting his new job. Another woman needed a quick brush-up of her skills before taking her civil service examination. Hundreds make use of the Business Special Help Laboratory weekly.

A look at a list of VTAE classes will show courses ranging from "Using Microprocessors" to "What's New In Word Processing Equipment" to "Computers in Small Businesses" - all intended for current employees.

Even venerable old trades such as horology (watchmaking) need to be updated with new technology. Over the past 10 years, Milwaukee Area Technical College's horology instructor has developed new courses in electronic watch technology. Now students study micro-electronics in addition to the theory and construction of pocket and wristwatches.

Many choose or are forced by job obsolescence to change careers in midlife. On the average, today's jobs will be obsolete in 8 years. The U.S. Department of Labor estimates that the average worker will change, occupations 4 to 5 times in his or her lifetime. These changes require additional training that the VTAE system can provide. The problem of workers being displaced because of technology is not a new one. Charles McCarthy cited the problem in 1911 and added, "It is the duty of the state and public educational institutions to reach out a hand to this man and lift him over the stile."

#### Lifelong Learning.

The concept of lifelong learning has had great implications for the VTAE system. Conversely, the system makes lifelong learning possible. Earlier retirement, longer life expectancy, and a desire to keep up with the times influence adults to take classes throughout their lifetimes. In the early part of the century, few adults even considered getting additional schooling past grade school or high school. Tarbell, historian for the Milwaukee Vocational School, wrote: "Study and recitations were alright for young people, but not for grownups. Going back to school, sitting cramped in those seats, was out of the question. No other adults did it. The whole idea was unthinkable and unfashionable. The older generation had been out of school for five years up. There was still some nausea connected with the thought of restrictions, grade cards, restless

students, and watchful teachers. Education was necessary for youngsters, but not for grownups." Today however, stories of grandmothers and grandfathers receiving their high school diplomas or graduating from post-secondary programs are commonplace. Lakeshore Technical Institute offered an Elder Hostel program during the summer of 1981 which was a weeklong learning experience tailored for the elderly. Gateway Technical Institute's Adult Learning Center recently assisted a woman 102 years of age to attain a lifelong goal of becoming a naturalized American citizen.

The trend to lifelong learning has had a dramatic influence on the kinds of students who attend VTAE institutions. Early in the history of the system, the majority of those attending continuation and vocational schools were in their teens. Today the average age of students in the system is 28.

Lifelong learning has also increased the demand for avocational courses. The VTAE system's provision of noncredit avocational courses has been criticized by some as frivolous. Some critics feel that courses to make more productive use of leisure time have no place in state-supported institutions. However, since noncredit avocational courses are not eligible for state aid, it is the students and local taxpayers who finance them. VTAE institutions, because they are autonomous, reflect the desires of the communities in which they are located.

The occupational potential of many avocational courses is frequently over-looked. In the home economics area, students who perfect sewing, drapery, reupholstery, and decorative craft construction skills are developing their own wage-earning potentials. One person's hobby is another's livelihood. For example, a key person in a large bee supply company in northeast Wisconsin got her start when she took a noncredit beekeeping course from Fox Valley Technical Institute. Western Wisconsin Technical Institute recently received a letter of thanks from a student whose WWTI course in creative writing "provoked a second semiprofessional career" for her. She described various publications in which her works were being published. She said, "I've used and reused the skills from this class."

A new short course at Wisconsin Indianhead Technical District, the "Business of Harvesting and Marketing of Fur-Bearing Animals", is another example of the fine line that frequently exists between leisure and income-producing endeavors.

#### Success of Graduates .

93% Job Placement Rate. No other educational system evaluates its efforts as consistently and thoroughly as does vocational-technical education. Every year Wisconsin's State Board of VTAE conducts a follow-up study of the previous year's graduates. Each district attempts to contact its graduates 3 times by mail or by a combination of mail and telephone. Considerable effort is made to contact graduates to get the solid rate of response - 80% -that the state board aims for. (The placement study does not include the thousands of people who took one or several courses to improve their job skills or get additional training to change jobs. The study includes only graduates of full-time associate degree and vocational diploma programs.)

The major objectives of the follow-up study are to:

- find out the employment status of graduates,
- determine the relationship between graduates' education and their current activities,
- provide information that can be used for career planning, and
- provide data for program planning and evaluation.

In October 1979, 12,976 graduates were surveyed. Eighty-one percent or 10,572 responded.

Opinion of Their Training. Ninety-six percent of the respondents were satisfied or very satisfied with the training they received.

Labor Force Status. Ninety percent of the graduates are in or av for the labor force. Ten percent are not in the labor force due to: continuing education (7%), full-time homemaking (1%), or miscellaneous reasons (2%).

Placement Rate. Ninety-three percent of those available for the labor force are employed.

Where Employed. The VTAE system has always taken pride in serving local employment needs. The follow-up survey supports this claim. Of those employed, 71 % are employed in the VTAE district in which they received their training. A full 91 % are employed in Wisconsin.

Relatedness to Instruction. Of those employed, 84 % are employed in occupations directly related to their training. Fifteen percent are employed in occupations not directly related to their training. The remaining one percent did not report. The percentage of those employed in occupations directly related to their training rises every year. Figure 5 indicates the figure since 1974-75 when the first statewide follow-up studies were conducted.

A detailed summary of placement results for each program is available from the state board. As stated earlier, the primary mission of the VTAE system is to educate people for employment. With a job placement rate of 93 % in the 1978-79 school year, the system achieves its goal.

#### Economic Development And VTAE

One of the top goals of State Director Robert Sorensen is to expand the role which the VTAE system already plays in the economic development of Wisconsin. A state's economic development refers to its growth in terms of the number of new businesses and the expansion of existing businesses and industries. The rate of economic development is of concern to every citizen because it directly affects the employment rate and the tax rate. When industries are thriving, personal income taxes are less of a burden. In addition, the quality of life and the environment are affected. A stagnant economy means less government funds available for roads, education, social services and other government services. U.S. Representative Thomas Petri (R.: Wis.) recently said, "To have industrial expansion, we need a mixture of capital, entrepreneurship, and

solid skills. If we don't have the skills, the other two factors can't help us." Providing workers with those skills is the mission of the VTAE system. As a welcome partner of business and industry, it contributes to economic development in a number of ways:

1. Training for Employment. The VTAE system provides over 264 different full-time associate degree and vocational diploma programs to prepare people for employment in skilled fields such as welding, auto mechanics, farm machinery repair; technical fields like data processing, electronics, laser technology; and paraprofessional positions such as dental hygienist, dispensing optician, and legal assistants. Graduates of these programs provide the labor to meet the 7,000 new jobs resulting from Wisconsin's economic development. Significantly, 93 % of the graduates with associate degrees or vocational diplomas are employed in Wisconsin 6 months after graduation.
2. Training for Workers Already Employed. Rapidly expanding technology means that jobs become obsolete in an average of 8 years. By 1990, 66 % of the number of blue collar workers needed in 1950 will no longer be needed. The remaining 34%, however, will have to have considerably more technical skills.

The VTAE system helps businesses keep up with the demands of technology by upgrading or retraining existing employees. Wisconsin Indianhead Technical Institute offered a course in blueprint reading to 100 of one company's production personnel. Their upgrading enabled the company to install tape-operated automatic lathes. District-One Technical Institute provided two hydraulics courses to a local lumber company's employees to improve maintenance and decrease breakdowns in hydraulic equipment. (The course was provided on just 3 weeks' notice.)

The system's ability to provide in-plant training is of particular importance considering that 75 % to 80 % of the potential for economic expansion is already present in existing business and industry, most of which is considered small business.

Another way the vocational-technical system contributes to economic development is by helping businesses improve worker productivity. Fox Valley Technical Institute (FVTI) offers a course to businesses exclusively for increasing their productivity. An FVTI consultant works with enrollees, not just in the classroom, but also in the plant. The consultant analyzes the production process and recommends improvements. FVTI instructors have gone to such varied industries as cheese factories, clockworks, bakeries, paper mills, and heavy equipment manufacturers. Twelve Fox Valley businesses collectively increased their yearly productivity by \$100,000 in 1980, a gain they attributed to FVTI's assistance.

Another FVTI program, Individual Supervisory Development, trains managers through a technique similar to that used by hospitals in training doctors during their residencies. Although they work independently, the trainees are part of a team that provides diagnosis, feedback and advice. The program has proven successful; one Fox River Valley company experienced a dramatic rise in profits when its management personnel became involved in the FVTI program.

3. Training Workers for New Industries. When a firm decides to expand or open a new plant, one of the most important considerations will be - where will the skilled workers come from? A VTAE institution can set up training programs for virtually any industry. If a business plans and works with the local institution, the trained work force can be ready when the new plant opens. Southwest Wisconsin Technical Institute set up a welding program for 48 employees on 2 weeks' notice. Nicolet College and Technical Institute helped a local company to change its product line by training 17 new employees in safety and chain saw operation. North Central Technical Institute trained one company's 200 engineers, draftspersons, welders, and assembly workers in metric measurement. The newly acquired metric capacity of its workers allowed that firm to land a contract with a company in France.

The State Board of Vocational, Technical and Adult Education assists industries that are considering relocating by providing information on the state's work force. The state board routinely collects information on employment trends. Ordinarily this information is used to determine where a new training program may be started. For example, if Technical Institute "x" requests approval to offer a program in laser technology, the district must complete a 3-stage application process and the state board must first give its approval of the program. The board approves or disapproves based on the number of local businesses that might employ the graduates, prospective businesses, the population, and other trends relating to the work force. This up-to-date data base kept by the state board is at the disposal of business and industry.

4. Professional Seminars. The VTAE system contributes to the state's economic development by providing seminars and courses for professionals. The insurance and real estate industries rely heavily on the system to help people prepare for their licensure examinations and to continue training them in the many facets of those occupations. The medical profession relies on technical institutes to offer seminars for all members of the health care team from doctors to nurses to operating room assistants to occupational therapy assistants. Professional chefs have opportunities to sharpen their skills through technical institute activities.

North Central Technical Institute provided in-house simulated bank robbery programs to teach employees identification skills under stress. The course was taken by 360 bank employees.

District-One provided a course for ambulance service managers on organizational techniques and recruitment and retention of personnel. Examples of VTAE seminars for other professionals in fields from police science to gemology might be cited here. What must be kept in mind is that wherever there are well-trained professionals who stay that way, the economic climate of the communities is enhanced.

5. Supporting Innovation. The productivity-increasing work Fox Valley Technical Institute is doing with business and industry is an example of supporting innovation in fairly large businesses. Supporting innovation for small businesses and even individuals with the goal of increased economic activity is part of the system's commitment to economic development. Over 4,000 U.S. patents have been awarded to faculty and students of Milwaukee Area Technical College alone over the past 50 years. The Wisconsin VTAE Board sponsors Business and Industry Liaison (BAIL) programs in 9 districts. As part of the BAIL program, the board offered a series of clinics for inventors in 1977 and again in 1979. Many innovative ideas could develop into productive enterprises and employment if inventors knew how to develop, finance, produce, and market their ideas. The clinics were for people with "dreams, ideas, gadgets or products". They learned about framing the concepts, developing the product, production facilities, and marketing procedures. More than 1,400 attended the sessions, indicating that the service is needed. A third series of inventors' clinics was planned for 1981.

6. Future Needs. From the range of services provided by the system to stimulate economic development, it is clear that to do all that, a vocational technical institution must be flexible. If a business needs a course on microprocessors to prepare for an upcoming order, it cannot be put off until next year or even next semester. The institution must be able to react quickly to what business needs. This quick response capability must be retained if the system is to continue to be a significant force in Wisconsin's economic development.

A limitation on future economic development activities is the cost controls under which districts must operate. Priority must be given to low-cost programs, which will enable districts to stay within the limits of cost controls.

#### Outreach Efforts

As late as a decade ago, it was accepted that to get a higher education, a student had to commute to or live on a campus some distance from home. Going away to school, "Making the pilgrimage to Mecca", was accepted. Several developments have changed that. Although Wisconsin cities of 5,000 or more have had vocational schools since 1912, rural areas were largely uninvolved in vocational-technical education. With the exception of vocational agriculture and home economics, the system was urban. By 1970, however, every Wisconsin citizen was part of a VTAE district. That meant that rural populations were suddenly paying taxes to support their district institution of vocational, technical and adult education. The rural group wanted its fair share of services, including opportunities for vocational-technical education reasonably close to home. More recently, the high cost and limited supply of fuel have made students reluctant to commute for lengthy distances. Additionally, the majority of students do not have the luxury of attending school full time. Most adults work and/or have family responsibilities and attend classes part time; they are forced to keep their travel time and expense to a minimum. These factors have encouraged the growth of outreach centers in the VTAE system.

Outreach or satellite centers are smaller campuses or buildings located away from the central campus of each district. The outreach centers provide credit and noncredit classes. The trend is towards more credit courses - those that are intended for occupational preparation. All VTAE districts have at least one outreach center.

Proof that the system has made sincere efforts to promote outreach education is found in the number of locations in which programs are offered. Without an outreach effort, one could expect that associate degree courses and vocational programs would be offered in 16 locations - one for each district. However, in 1979-80, associate degree programs were offered in 392 locations. Vocational diploma programs were offered in 560 locations. Those figures attest to the system's efforts to provide occupational training not only at 16 major institutions, but throughout the districts.

One of the noteworthy outreach centers is the VTAE Regional Learning Center at Chilton. The center is a joint project between Fox Valley, Moraine Park, and Lakeshore Technical Institutes. The center is located in a rural area, parts of which lie in each of the 3 districts. There were not enough learners in the area to justify outreach centers by all 3 schools, yet clearly one learning center was needed to serve the communities of Brillion, Chilton, Hilbert, Kiel, New Holstein, Reedsville, and Stockbridge. Financed with a grant from the Governor's Employment and Training Office, and administered by the 3 districts, the VTAE Regional Learning Center opened in the spring of 1980. In its first year of operation, the Chilton VTAE Center reports the largest increases are in the classes offered for credit, rather than for personal enrichment.

Not all outreach efforts are to be found in a building. VTAE institutions are delivering education to people in a variety of ways. Southwest Technical Institute, Fennimore, developed a weekly series of radio tapes for homemakers who want or need to enter the job market. Gateway Technical Institute developed consumer radio programs that have been syndicated by National Public Radio. Madison Area Technical College used the daily newspaper to teach a course on energy to 95 people. Western Wisconsin Technical Institute had the state's first "careermobile". It contains a variety of printed and audio-visual career materials. The van is attended by career specialists who administer interest tests and counsel users on career choices. The van goes to the district's high schools as well as to central locations in the communities. The careermobile brings services to people who might not otherwise be able to take advantage of them.

Wisconsin Indianhead Technical Institute has a mobile nursing unit that travels to communities in the district that do not have laboratory facilities for instruction. The van is equipped with 4 beds and standard nursing unit equipment, so nursing assistant students can receive the same program of instruction whether they are at a WITI campus or in a small community some distance from campus. The mobile instruction unit is also used for community health classes and nursing career exploration.

Extent of Services

The VTAE system offers both credit and noncredit courses and programs. Credit programs are those which lead to occupational competency. Noncredit courses may be occupationally related, such as classes for current employees, or may be primarily for self-enrichment. The Wisconsin Board of VTAE concerns itself only with programs and courses for occupational training and upgrading. As noted earlier nonoccupational courses, called community service classes, are a local decision based on what the citizens of the district want.

The VTAE system distinguishes between 4 types of occupational programs or courses: associate degree, vocational diploma, continuing education, and apprentice programs.

**Associate Degrees.** Associate degree programs are 2 years in length. The associate degree is conferred upon a student who completes a technical or college parallel program. Associate degrees are further broken into associate of applied arts, associate of applied sciences, associate of arts, and associate of sciences. Associate degree programs generally emphasize theory and conceptual learning with some laboratory and experiential learning. In 1979-80, 94 different associate degree programs were offered.

**Vocational Diplomas.** Vocational diploma programs range in length from several weeks to 2 years, although most are shorter than two years. Emphasis is on laboratory and experiential learning with some theory. In 1979-80, 170 different vocational programs were offered in Wisconsin,

**Continuing Education.** Continuing education refers to short term or onetime offerings to upgrade or retrain people in occupational areas. These courses are usually not part of an associate degree or vocational diploma program. In 1979-80, 250,744 Wisconsin citizens took at least one continuing education course from the VTAE system. The majority of enrollments are in occupationally related Programs.

**Apprentice Programs.** Apprenticeship as a means of learning a trade is at least 4,000 years old. The code of Hammurabi contained regulations relating to apprenticeships. Plato mentions it as well as the Egyptians of the 1st century B.C. Apprenticeships were practiced in Wisconsin prior to the 20th century, but it is a very individualized-type of education. The length of indenture and what was actually learned varied greatly from craftsman to craftsman, trade to trade, shop to shop. The 1911 legislation which established Wisconsin's vocational system also set up guidelines for the training of apprentices. By making the state a party to the indenture, this legislation brought much needed uniformity to apprentice training in Wisconsin. Today Wisconsin apprentices learn a trade by working with an employer for pay, and attending related classes, with pay, at a local technical institute. The related instruction for Wisconsin's apprentice programs is supervised by local VTAE districts. A minimum of 400 hours of related instruction is required if the term of apprenticeship is longer than 2 years and 144 hours per year if the term is 2 years or less. The majority of apprentices receive their classroom instruction from technical institutes. The Wisconsin Department of Industry, Labor, and Human Relations' Division of Apprenticeship and Training approves and oversees all indentures to ensure that agreements are kept by all parties and that standards are maintained.

The Wisconsin Apprenticeship Advisory Council provides DILHR with advice on all aspects of the apprenticeship system. Joint apprenticeship committees (JACs), though advisory, are another valuable resource for the apprentice system. JACs exist at both the state and local levels and assist in establishing and maintaining standards for apprenticeship. Vocational-technical institutes receive assistance and advice from JACs to keep related instruction for apprentices relevant and current. Although apprentices are actually selected by sponsors, area joint apprenticeship committees rate, approve, and recommend candidates. (An exception is found in the electrical trades, where joint apprenticeship committees select and assign apprentices.)

Currently there are over 8,000 indentured apprentices in Wisconsin. Instruction for almost all of them is provided by the 1,6 VTAE institutions. The Department of Industry, Labor, and Human Relations and the VTAE system jointly provide apprentice programs.

#### Agriculture

Prior to the 1960s, most vocational agriculture programs supervised by the State Board of VTAE were located in high schools. High school vo-ag instructors typically taught evening classes for adult farmers in addition to the high school classes.

This changed when state law mandated that all geographical areas of Wisconsin be in a VTAE district by 1970. The districts, finding themselves with large rural taxpayer clienteles, began providing classes for farmers and those involved in agribusiness. Also, the success of the veteran on-the-farm training that program encouraged the organization of adult agriculture programs for non-veterans.

Throughout the 1970s agricultural education expanded to include agribusiness - the non-production facets of agriculture. Employment prospects are excellent for graduates of agribusiness programs.

Production agriculture is a program for recent veterans and for others established in farming. Farm training is for those becoming established in farming. Every year the VTAE system must train 1,374 new farm operators to keep Wisconsin's 48,000 farms going. The goal is to reach 60% of Wisconsin farmers with farm training,

Moraine Park Technical Institute offers 2 associate degree programs to train technicians for Wisconsin's food processing industries. They are Food Manufacturing-Dairy, and Food Manufacturing-Canning and Freezing.

To meet the need for butchers and inspectors in Wisconsin's meatpacking and processing plants and stores, a vocational program, All Around Butcher, is conducted by the Southwest Wisconsin Technical Institute.

Mid-State Technical Institute has the state's only irrigation and crop production program. Presently potato and specialty crops are irrigated. As prices for grain and forage rise, it is feasible to irrigate those crops as well. For that reason, a need is emerging for programs in irrigation equipment. This is a possible future program.

Forestry and wood products continue to be important to Wisconsin's economy. Nicolet Technical College has programs for timber production and timber harvesting heavy equipment operator. Other northern areas could benefit from these programs as well.

Horticulture is in great demand in the state. Gateway Technical Institute and the Milwaukee Area Technical College offer programs in production, retailing, and landscape. However, since many high schools are offering horticulture, demand may be overtaken by supply.

The animal technician program at Madison Area Technical College has been well received by veterinarians. Allied programs such as a animal caretaker and laboratory animal technician are also needed throughout the state. Overall it is the goal of the VTAE system to increase enrollments in adult or short-term programs in agriculture or agribusiness by 10% each year. All phases of agriculture/agribusiness/ natural resources and related occupations, except horticulture and conservation, are expected to experience a high demand for trained people in the 1980s.

The total number of farmers will decrease, but those remaining and young people replacing those retiring will need to be better trained in production, marketing, business management, and use of equipment because of changing technology. The agribusiness sector will probably experience an increased demand for trained employees in sales, parts, service, installation, and operations because of the production and marketing services provided to farmers by those groups. Owners and operators of agribusiness will require training in the operation and financing of their businesses.

## Distribution

Distribution concerns itself primarily with marketing, sales, real estate, insurance, and finance, although there are a number of other business areas included under distribution. This occupational family is unique in that it requires a diversified labor pool. Graduates of 2-year associate degree programs, one-year vocational programs, high school distributive education programs, and 4-year colleges are equally in demand.

Distribution is a relative newcomer to Wisconsin's VTAE system. Although agriculture, home economics, and trade and industry programs were in existence in Wisconsin's vocational schools since their beginnings, distributive education did not really get a start until the 1930s, when the federal George-Deen Act made funds available for distributive education. The distributive programs experienced a growth spurt in the 1960s as a result of interest in the program by professional associations such as the Wisconsin Bankers Association, the Wisconsin Real Estate Association, and the Furniture Manufacturers and Dealers Association. The support of these and other business organizations continues to encourage the growth of distributive programs.

The most marked trend in distribution is the demand for retraining and upgrading for promotion of current employees. As current employees achieve upward mobility through experience and education, they move into management and supervisory positions, opening up employment slots for newly trained sales workers. Another boost to the VTAE's distribution enrollments has come as a result of state legislation for the preparation and continuing education of real estate and insurance professionals. The greatest changes in distribution will probably not be in the number of new types of courses, but in the change in content of existing courses and programs. Computerized cash registers and inventory control, for example, have dramatically altered the substance of many jobs and have necessitated that employees use their time in different ways than previously,

### Home Economics

Vocational home economics education prepares males and females for the occupation of homemaking and for paid employment in home economics occupations. The 1963 Vocational Education Act amendments charged home economics with developing and maintaining wage-earning programs. Enrollment in full-time programs in 1979-80 was 1,378. Enrollment in the Consumer Homemaking/Adult Continuing Education was 40,351. This is unduplicated head count.

The 28 associate degree programs are in the following areas: Food Management Production and Services, Clothing and Textiles, Child Development, Interior Design, and the Occupation of Homemaking (consumer family manager).

The 47 one-year diploma programs are in the following areas: Food Services, Child Care Services, Clothing Services, Home Furnishings Services, and Cosmetology. The single 2-year diploma program is in the Food Production area. The 16 short-term vocational diploma programs are in: Food Service, Institutional/ Home Management Services, Clothing Services, Cosmetology, Floral Art, and Child Care (family day care).

There is evidence that there will be an increase in the number of short-term programs in the 1980s. This is due in part to the changing economy and persons being employed outside the home and assuming the dual role of wage earner and homemaker.

Demands for skilled labor will be in constant demand in the 1980s, There is also a trend toward attracting the older worker back into the labor force, necessitating retraining and updating of training.

Home economics has grown in enrollments and offerings since the 1963 mandate, and has made a valuable contribution in preparing individuals for the work force, particularly since many of the homemakers have returned to the labor force.

### Health Occupations

The acceptance of the idea that health care is a human right has increased the demand for the number of health care workers. At the same time, advances in medical technology have increased the need for more sophisticated training programs. In the past, private schools and hospitals carried on health training programs. However,

because of economics of scale, the majority of training has shifted to tax-supported institutions. The VTAE system, along with other educational institutions, plays an essential role in preparing the health care professionals needed by the state. Health occupations have traditionally attracted larger numbers of female students. The VTAE system has actively attempted to recruit male students and instructors into the system. Fox Valley Technical Institute has one of the nation's 3 male dental assistant instructors.

There are a number of linkages between the VTAE health occupations personnel and other agencies that deal with health care. Several VTAE districts plan and offer programs for nursing team members jointly with U.W.-Extension, thereby eliminating potential duplication of services. Other agencies with which the VTAE health staff interacts include: the Wisconsin Board of Nursing/Bureau of Nurses of the Department of Regulation and Licensing; the Division of Health and Division of Community Services within the Wisconsin Department of Health and Social Services; State Allied Health, Medical, Dental, and Nursing Associations, and other professional groups.

Health occupations offerings have increased to 126 programs in 28 occupational areas ( 13 technical or associate degree, 8 vocational, and 7 short-term). More than 7,000 students are enrolled in full-time health programs. There are 500 faculty members for the full-time programs, The 7,000 students receive their extended laboratory experiences in some 950 clinical resources in 250 Wisconsin communities.

In addition to full-time program students, additional 6,000-7,000 students are enrolled in VTAE occupational extension courses taught by part-time instructors. Enrollees in community health offerings are another sizable group. Both state board and local VTAE health personnel took part in the Statewide Study of Nursing and Nursing Education (SSNNE). The SSNNE concluded that the one-year (licensed practical nurse) program is insufficient to prepare graduates for the job situations many of them will face. Its recommendation is eventual phasing out of licensed practical nursing programs. The study points out that the recommendation is directed not toward the present Licensed Practical Nurse population, but toward programs preparing nurses to enter practice in the future. The recommendation reflects a trend in health occupations for longer, more intensive training. This is due not only to the dramatic increase in health care information, but also due to consumer demand. Average health care consumers are more knowledgeable about their own health needs and expect a great deal more from professionals than was previously the case. All 14 VTAE institutions that offer technical nursing programs provide opportunities to enable licensed practical nurses to become registered nurses.

A major portion of VTAE health offerings is in allied health rams, which are non-nursing occupations that provide services as part of health care teams. Examples are physical therapy assistant, medical records technician, optometric assistant. The need for these allied health workers will increase during the 1980s as will the need to keep current health workers updated.

Changes in the delivery system of health service and health care cost containment efforts will affect the future number and kinds of health workers needed, and therefore will affect preparatory programs also. Program evaluation and counsel from advisory committees should provide direction for new program development, program expansion, and/or discontinuance of non-effective programs.

## Office Occupations

The demand for office workers remains high in spite of technological inventions that do some of the repetitive work. But the demand is for workers who, in addition to having basic skills, are also knowledgeable about computerized word processing equipment, microprocessors, micrographics. Specialized occupations such as legal secretaries as well as accounting-related positions are in the greatest demand.

The VTAE districts of Wisconsin offer a variety of courses in office education to prepare students for a number of positions. These courses may be offered on a full-time or part-time basis and are designed to provide preparatory training or to upgrade skills of those employed. Length of the full-time program may vary from less-than-a-semester to 4 semesters.

Traditional office education programs such as secretarial, data processing, and accounting continue to be popular with students. Such broadly based programs may be offered at vocational diploma and associate degree levels.

Associate degree programs are offered in Banking and Finance, Personnel, Credit, Court and Conference Reporting, Office Mid-Management, Word Processing, and Data Processing, to name a few. One of the most recent programs, Legal Assistant, which is endorsed by the State Bar Association, is offered for those who wish to be employed in law offices and for a considerable number of persons already employed in law offices who wish to upgrade their skills.

The State Board of VTAE stresses that many of the specialized office occupations and skills do not require 2-year associate degrees. Shorter term programs are adequate in a number of situations. There is great employment potential for programs of less than one year in finance, data preparation, word processing, and medical office areas. Other vocational diploma programs include clerk, clerk typist, business machines, stenographer, and many more.

In view of the many changes in the economy of the country and the great technological improvements that have occurred in recent years in communications and processing, it must follow that business and office education programs will continue to expand and to be available to citizens of the state.

## Trades and Industry

Trades and Industry has the most varied range of programs of any of the occupational groupings of the Wisconsin Board of VTAE. Programs include occupations in

construction, manufacturing, safety, emergency services, and personal service occupations such as barbering. Trades and Industry is another one of the original occupational clusters included in Wisconsin's early vocational schools, although the number and variety of programs has increased dramatically over the years. Trade and Industry is experiencing its greatest growth in service occupations such as machine repair, office machine repair, and facilities maintenance, among others.

Vocational-technical institutions are preparing a record number of employees in fields related to energy audits, energy conservation, and inspection and maintenance of energy systems. The demand has also increased for technical and highly skilled supervisors. Less in demand are employees for manufacturing industries with lower level skills.

An innovation in the Trades and Industry area which has proven popular is municipal services' occupational training. Local districts employ full-time municipal services coordinators who work with local public officials to establish training programs for local elected and appointed officials and their staffs. Programs are offered for town clerks, assessors, supervisors, and local government employees who work with the public.

Technological changes naturally affect the substance and the methods of vocational-technical education. The introduction of robotized automobile manufacturing, of highly sophisticated control systems, and changes in construction techniques mean that new workers must be trained differently. Also the skills and technical knowledge of current workers must be upgraded. This challenge will result in more Trades and Industry programs that use industry based job training as part of a student's education.

## CHAPTER 12 - The 1990s: Conclusion

The future of Wisconsin's vocational, technical, and adult education will crystallize around technology and the resulting need for a highly skilled work force. The current rate of technological growth will only increase. Anyone who remembers certain older department stores of the 1940s will recall that transactions were conducted via cables strung between the checkout counter and the main office. A capsule containing the customer's money was cranked along the cable up to the office. Change and a receipt came back to the customer in capsule. Contrast this with today's electronic cashier register which "reads" prices with a laser gun, figures your change, keeps track of the store's inventory, and wishes you a nice day on your receipt. Those kinds of quantum leaps will continue to take place, not every 40 years, but every 5 to 10 years. At the same time, demand for skilled workers is rising, traditional labor sources are waning - post WWII workers are retiring and a declining high school population means there are fewer students to go into training immediately after high school. It is predicted that the shortage of skilled workers and technicians will be critical by 1990. A corollary is that the U.S. will import skilled workers if the shortage is not met.

However, vocational, technical and adult education can play an important role in preventing that shortage in Wisconsin. As technology changes the workplace, VTAE

will be there to train new workers, and perhaps even more importantly, to retrain existing workers.

All of the trends identified for the 1980s will exert an influence on the next century. The handicapped, disadvantaged, minority group members, and women whom the VTAE system has actively tried to reach in the past decade will continue to be target populations. New populations not now significantly served by the system will make up a large segment of enrollment - Cubans, Haitians, Southeast Asians. Such immigrant groups will need and will seek vocational-technical training.

Outreach education may become even more critical as Americans are forced to limit their travel due to increasingly expensive and scarce fossil fuels. More small towns and rural areas will have access to credit courses for occupational preparation through local VTAE learning centers, and through classes broadcast on television that require a minimum of actual class meetings. Though the existing campuses will still maintain the sophisticated laboratories and equipment needed for vocational-technical instruction, most citizens will be able to take much of their non-laboratory coursework in their own communities. The trend to lifelong learning will reinforce the present trend for an older student population. The median student age, now 28, will doubtless rise as adults enroll in order to stay occupationally current, to change occupations, to improve themselves, to plan for retirement, and to make constructive use of their leisure time after retirement.

Vocational, technical, and adult education in Wisconsin is organized to cope with change. Because each institution is local, it has flexibility and the ability to respond educational needs as they arise. In 1980, thousands Cuban refugees arrived at Fort McCoy. In less than 2 weeks, Western Wisconsin Technical Institute was providing classes in English As A Second Language and basic career counseling inside the fort. Few enterprises can organize and deliver complex services with that kind of lead-time.

Not only is the system equipped to cope with change, it creates and positively influences change. The blacksmith occupation provides an example of how the system both influences and adapts to change. During World War I and the early 1920s, blacksmithing was a popular program in the state's vocational schools. When automobiles replaced horses, vocational schools began training auto mechanics. A renewed interest in raising horses has prompted

Gateway and Lakeshore Technical Institutes to offer Farrier and Equine Management programs. Program graduates are employed in their own businesses, in stables, on farms, and on commercial race tracks. The availability of trained specialists will in turn stimulate horse-raising.

Because it is flexible, the system as a whole will change in the years ahead. Yet any changes will be made with these questions in mind:

- Will VTAE institutions still be able to respond quickly to local needs'?
- Will VTAE institutions remain flexible enough to respond to the latest technology and thus keep occupational programs up-to-date?

- Will the focus of the VTAE system remain on training for employment'?
- Will VTAE institutions continue to influence their local economies by providing skilled workers for industries in their districts?
- Will VTAE institutions still be able to meet the diverse training needs of their entire district populations of people from their teens to the elderly, of women, of handicapped, of disadvantaged, of minority group members?

A "yes" answer to all these questions will be the guide for the future. A final guide to future directions should be the role vocational, technical and adult education plays in national defense. It may be truly said that the VTAE system is the first line in the development of the work force, of productivity, and in economic development. As was demonstrated in World War 11, a sound VTAE system is the nation's first line of defense. Decision-makers must give it that same priority.

Writing in 1911, Charles McCarthy, the founder of Wisconsin's vocational technical system said, "Our country has changed from a new land of boundless virgin natural resources to a country which must preserve its inheritance.... Wisconsin's natural resources are not as large as those of a number of other states." Seventy years later, Wisconsin's 16 vocational, technical and adult education districts are developing and refining a natural resource that is renewable and abundant - its people.





# WTCS Educational Services Manual History

ESM (Revised 1/1/85)

Section I - Introduction

Chapter 1 - Foundations of Wisconsin Vocational, Technical and Adult Education (VTAE)

Unit 1 - Mission, History and Philosophy

The Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE) is mandated by law to fulfill the following mission:

## 38.001. Mission and purpose.

(1) The Legislature finds it in the public interest to provide a system of vocational, technical and adult education which enables eligible persons to acquire the occupational skills training necessary for full participation in the work force; which stresses Job training and 'retraining; which recognizes the rapidly changing educational needs of residents to keep current with the demands of the work place and through its course offerings and programs facilitates educational options for residents; which fosters economic development; which provides education through associate degree programs and other programs below the baccalaureate level; which functions cooperatively with other educational institutions and other governmental bodies; and which provides services to all members of the public.

-- (1) The board shall be responsible for the initiation, development, maintenance and supervision of programs with specific occupational orientation below the baccalaureate level, including terminal associate degrees, training of apprentices and adult education below the professional level.

(2) The principal purposes of the vocational, technical, and adult, education system are to:

(a) Provide occupational education, training, and retraining programs, including the training of apprentices that enable residents to obtain the knowledge and skills necessary for employment at a technical, paraprofessional, skilled or semi-skilled occupation. Such programs include general education courses to facilitate student achievement in occupational skills training. The district boards should maintain courses at standards acceptable to national, regional and professional accrediting agencies and associations.

(b) Provide CUSTOM12ed training and technical assistance to business and industry in order to foster economic development and the expansion of employment opportunities.

(3) The additional purposes of the vocational, technical, and adult education system are to:

1. (a) Contract with secondary schools to provide educational opportunities for high school age students in order to enhance their potential for benefiting from postsecondary education and -for obtaining employment.

2. Coordinate and cooperate with secondary schools to facilitate the transition of secondary school students into postsecondary vocational education through curriculum articulation and collaboration.

- (b) Provide a collegiate transfer program.
- (c) Provide community services and vocational or self-enrichment activities.'
- (4) Provide education in basic skills to enable students to effectively function at a literate level in society.
- (e) Provide education and services which address barriers created by stereotyping and discriminating and assist minorities, women and the handicapped or disadvantaged to participate in the work force and the full range of vocational, technical and adult education programs and activities.

### History

Wisconsin has developed a unique postsecondary educational system for providing vocational, technical and adult education to all persons throughout the state who desire these types of education and can benefit it from them. The educational delivery system is comprised of area technical colleges and institutes situated in 16 districts operating under the supervision of the WBVTAE.

The , 1909 Interim Committee which recommended the establishment of the system of vocational and adult education to the 1911 Wisconsin Legislature said in its report Wisconsin's natural resources are not - so large as those of a number of other states. "Her prosperity in the future is to be dependent not only upon the bounty of nature but upon the patience and hardworking qualities and Intelligence of her people. Her future greatest resource must be superior intelligence of the individuals in their various vocations."

The vocational, technical and adult education system in Wisconsin dates back to 1911 when the Interim Committee's study resulted in a proposal that agricultural and vocational training be provided to young workers in Wisconsin's urban and rural communities. The recommendations became law in the 1911 Legislature, creating a state system of vocational schools, the first vocational and adult education system in the United States.

Although it was the educational needs of young workers, which had prompted enactment of the legislation, the law provided for an educational system to serve all of the people. It called for a system of adult education in evening schools, agricultural education in rural areas, rehabilitation, and apprentice training.

The infant system was administered at the state level by an eleven member State Board of Industrial Education consisting of employers, employees, farmers, the Superintendent of Public Instruction, and the Chairperson of state's Industrial Commission. The local vocational schools, organized in communities with populations of 5,000 or more, were administered by local independent boards. The complete local board independence is illustrated by the board's statutory taxing power originally two mills.

The objective of this initial legislation was to provide equal educational opportunity for all Wisconsin citizens in order that they might have the capability to earn a better living and live a better life, as well as providing skilled manpower for state industry and agriculture.

The philosophy behind the vocational and adult school system was that, through knowledge, these same people would develop democratic ideals, respect for the worth of every human being, appreciation of the dignity of work and a realization that a variety of talents contribute to the common welfare.

The first schools were set up to fulfill the requirements of the 'new compulsory education law and to provide general offerings for adults. Many young people who had never attended school or dropped out before completing high school were attempting to enter the labor market uneducated and untrained. The farmers and industries of the state were in need of workers with specific skills. The new system was dedicated to those needs.

Apprentice programs took form, and young workers attended school on a part time basis to take related courses and meet the dictates of the compulsory education law. Preparatory training for those seeking employment and extension training for employed workers was oriented to the needs of the communities and the areas surrounding the schools. Even in the formative years, leaders recognized the necessity of keeping programs flexible to meet the changing needs of people and economic conditions.

With added diversity in business and industry, new talents were required in the work force. Industrial leaders soon recognized the value of vocational schools that could train and supply their manpower. Numerous courses were added to the curriculum.

In 1917, the federal government enacted legislation which encouraged the work pioneered in Wisconsin vocational education. It provided that a part of the expenses incurred for specific programs and courses in trade, industrial, homemaking and agricultural education would be reimbursed from federal funds through the State Board. In addition, in 1917, the name of the State Board changed to the State Board of Vocational Education.

The Depression caused a burden on existing vocational school facilities. The unemployed swelled the student ranks in order to acquire new job skills to qualify themselves for the few job openings. Business and distributive - . education programs were added to existing offerings. With the change in economic conditions, the people's requirements had changed, so the vocational schools changed and experienced tremendous growth. In 1937, the system had its second name change to the State Board of Vocational and Adult Education.

During World War II, men called into the service left the labor force depleted. Vocational schools assumed a major responsibility for war production training to prepare workers for employment in essential industries and businesses. Women filled the vocational school classrooms, learning the trades formerly familiar only to men. Rationing and shortages found homemakers also seeking more help in home management and home economics skills.

The vocational schools were crowded. Some operated around-the-clock during the war years. The system grew to maturity and once again proved its flexibility and ability to meet people's needs in the world's varying economic conditions.

During the postwar years, the vocational and adult schools accepted new challenges as returning servicemen filled the schools to learn a trade or new skills for job opportunities opening in many fields - Veterans looked for refresher courses in the jobs they had left behind.

Many people, weary of the restrictions and difficulties of the war years, sought the pleasures of leisure time arts and crafts. The scope of the schools widened to include everything from basic literary courses through the technologies.

After over five decades of steady growth, in 1965 the State of Wisconsin enacted legislation designed to broaden vocational, technical and adult education opportunities by dividing the state into 18 VTAE districts, thereby often incorporating several of the former local vocational schools into one of the new geographic districts. In 1965, the State Board of Vocational and Adult Education acquired its current name, the Wisconsin Board of Vocational, Technical, and Adult Education.

Although 18 districts were formed during the original organization of the state into VTAE districts, some consolidation of districts took place, and soon district numbers were no longer consecutive. The WBVTAE suggested generic names for the districts - sixteen districts make up the current state VTAE system.

In order to meet its responsibilities to Wisconsin's citizens, the VTAE system offers instruction in a wide variety of full- and part-time programs. The range of subject matter areas presented is as broad as the needs of the people.

It is the Intent of the WBVTAE to maintain the district structure as the delivery organization for this system of education.

Responsiveness to local needs is preserved through appointment of district boards consisting of employers, employees, additional members and a school district administrator. At least two of the members of the district board shall be elected officials. The employer and employee members shall be representative of the various businesses and industries in the district. Advisory committees are "a key to the identification and subsequent operation of programs based on community, state and national needs." The schools operated in this system should continue to meet the needs of local communities as well as the needs of the state and nation.

Since the educational needs, interests and abilities of the persons to be served are varied and change throughout their lifetimes, the system must continue to provide a wide range of programs. These programs should be available to youth and adults enrolled on a full-time or part-time basis, in the evening or daytime.

The system needs to maintain constant openness to change in human needs and conditions. These needs make participating by all levels of government essential if the

Wisconsin system of vocational, technical and adult education is to function effectively-to serve all persons in all areas of the state.

### Philosophy

The VTAE system is dedicated to meeting the occupational training needs of the people of Wisconsin through educational offerings and services developed and implemented by local districts. These offerings are designed to assist people in preparing to enter the labor market, upgrading skills to retain or advance in their present occupations and/or retraining for new occupations in accord with personal goals or changing technology.

In their efforts to provide comprehensive, high quality educational offerings which are appropriate to the needs, interests and abilities of students and pertinent to labor market needs, the districts are provided consultation, coordination -and support services by the state board staff.

The development and maintenance of instructional offerings and related services in the VTAE system focuses on maximizing the accessibility of these offerings to present and prospective students and on providing equal opportunities for vocational, technical and adult education to all persons regardless of age (16 or over or who have completed high school) (40 years and over), sex, handicap, creed, race, color, national origin, ancestry, arrest or conviction record, marital status, sexual orientation, or other factors unrelated to satisfactory job performance accepted by Wisconsin Board of Vocational, Technical and Adult Education, December 2, 1976 and submitted to Governor and State Legislature December

### Adult Basic Education

Many adults, because they lack a high school diploma, function below their potential. The Adult Basic Education (ABE) program is a second chance for many Wisconsin adults to acquire the basic educational skills necessary "for occupational training and more profitable employment." It is also a second chance to increase personal confidence and self-respect.

The ABE program began in Wisconsin in 1965 with initiative from the Economic Opportunity Act of 1964. Funding for Adult Basic Education is a joint arrangement with federal monies provided by the Adult Education Act, state dollars made available through the Wisconsin Board of Vocational, Technical and Adult Education, and local funding provided by the VTAE districts.

Each of the 16 VTAE districts provides ABE for its target population. Classes are located in technical institutes, store fronts, and community buildings. Teachers go where students are: some teach in jails and institutions; some teach in churches and homes for the aged; and some teach in the homes of invalids and the handicapped. The program is unique in its student orientation. Students in the ABE program set their own objectives, and work at their own pace and at a level appropriate for their academic needs. Teachers are available to help students individually, and instructional schedules are flexible to fit within work and family responsibilities



## Sample Paper

My personal philosophy for teaching is that “people matter.” The quality of life in any society is determined to a significant extent by the level of education and the productivity of the people in that society. Teaching is an activity that directly affects the level of education of people in a community, which in turn affects productivity and creativity, and thus directly affects quality of life. One of the primary reasons why I am a college instructor is because it is a socially useful occupation. Successful teaching transmits knowledge from one generation to the next. It enables students to learn how to learn, how to apply existing knowledge to new situations, and how to use basic analytical tools to generate new ideas.

In practice, the way I interpret this philosophy is that each person I meet is an individual who deserves to be treated with respect. If someone asks for help outside of class, I am willing to meet with that person and answer his or her questions. If someone comes to me with a personal issue outside of normal classroom topics, I direct that person to the offices or agencies that can best help the person deal with those issues. When teaching, I try to expose students to new ideas and new sources of information, some of which may actually be old ideas and historical sources, but new to these particular students. I try to develop students’ analytical and critical thinking skills and incorporate assignments and projects within the context of each course that will further these goals. I view my time and effort in this area as an investment in the next generation.

My personal philosophy for vocational, adult and technical education is simply an extension of my personal philosophy for teaching. People matter. In the case of vocational, adult and technical education, the emphasis of the education is on adult learners and the development of skills that may be directly applicable to the workplace and to specific professions. This focus changes the nature of some class activities and assessment procedures. However, it does not change my general philosophy for teaching. I still treat people with respect. I try to expose students to new ideas and develop their analytical and critical thinking skills.

The beauty of vocational, adult, and technical education is that this type of education is focused on developing skills that will assist people in finding productive work and leading a rewarding life. At Madison Area Technical College, there are people skilled in all walks of life – culinary arts, auto repair, graphic design, nursing, computer programming and many other fields. If the world outside of Madison Area Technical College disappeared overnight, people here have the knowledge and skills to build

and sustain a community. Participating in this community and passing on this knowledge and these skills to the next generation is a privilege.

Another reward of teaching in vocational, adult, and technical education is that many of our students come from backgrounds that are not privileged and they may not have the necessary skills for academic success from their previous schooling. These students would not be admitted to the elite educational institutions of this country because of constraints on their financial resources or limitations on their level of academic preparation or innate intellectual abilities. Although these conditions create an extremely challenging environment for an instructor in the classroom, they highlight the importance of teaching at an institution that opens its doors to people from all backgrounds and walks of life. The talented tenth of any population will succeed regardless of the instruction they receive. The layers of society that are not as fortunate financially or intellectually may need some assistance in developing skills to become employable. It is this group that can benefit most from the exposure to new ideas and the development of new skills.

People matter – in classrooms, in our communities, and in society. Teaching others skills that can assist them negotiate their way through life more easily and more wisely is a useful way to spend one's life. It is why I teach.