

Applying a Systems Approach to Curriculum Development

Dr. Kitty Manley, Professor  
Ferris State University  
Director, Michigan Center for CTE

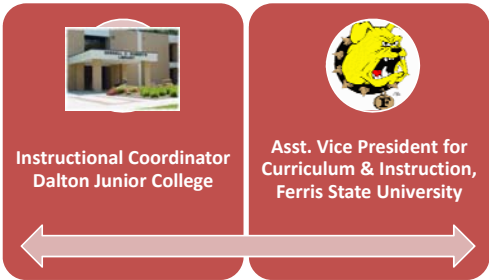
### High School Teacher



**Business Education**

- USA
- Iran

### College Administrator



Instructional Coordinator  
Dalton Junior College

Asst. Vice President for Curriculum & Instruction,  
Ferris State University

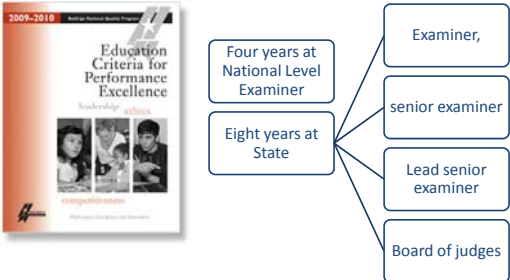
### Research Specialist



T · H · E  
**OHIO STATE UNIVERSITY**

The National Center for Research in Vocational Education

### Baldrige National Quality Award



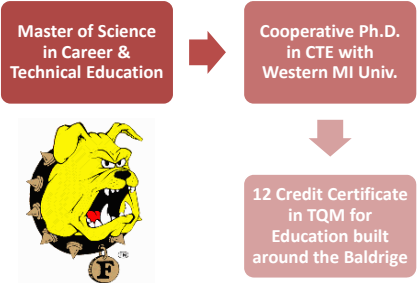
2009-2010 Education Criteria for Performance Excellence

Four years at National Level Examiner

Eight years at State

- Examiner,
- senior examiner
- Lead senior examiner
- Board of judges

### Teacher Educator



Master of Science in Career & Technical Education

Cooperative Ph.D. in CTE with Western MI Univ.

12 Credit Certificate in TQM for Education built around the Baldrige

### Consultant--Clients Include...

- Robert Bosch
- General Mills
- Toyota Motor Mfg
- Caterpillar
- Hershey
- Walt Disney World
- Kellogg
- Nestle
- Coca Cola
- Lucent Technologies
- Miller
- Nestle
- Quaker
- Phiip Morris
- 3M
- AC Delco
- Sappi Fine Paper
- Quaker—Gator Aide
- Delphi

Michigan  
CTE At A  
Crossroads

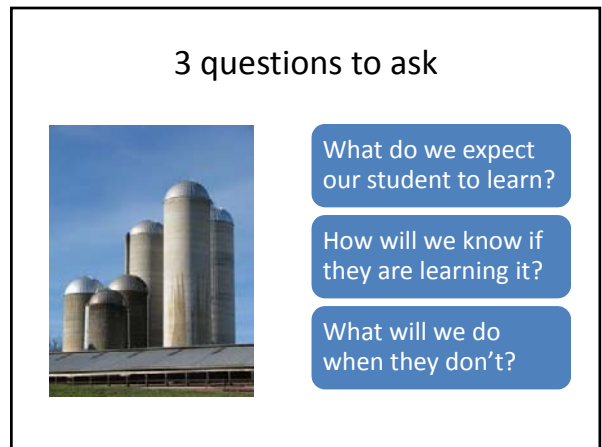
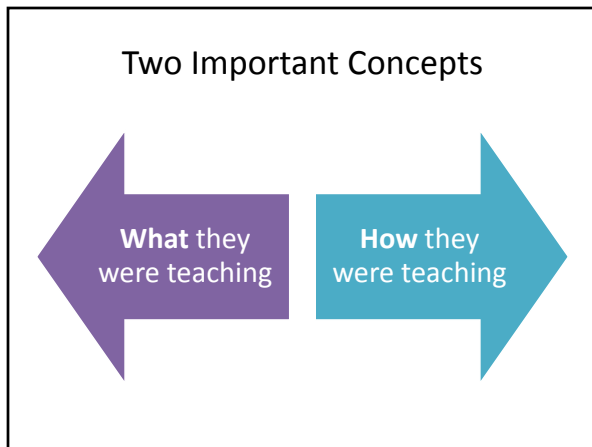
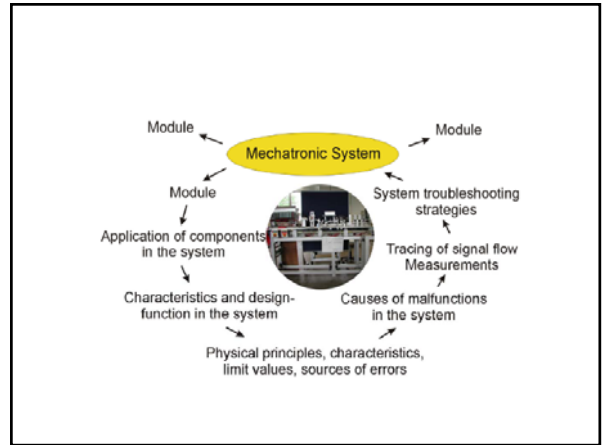
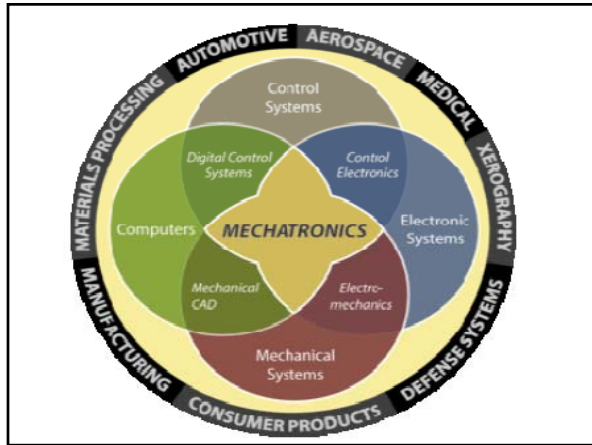
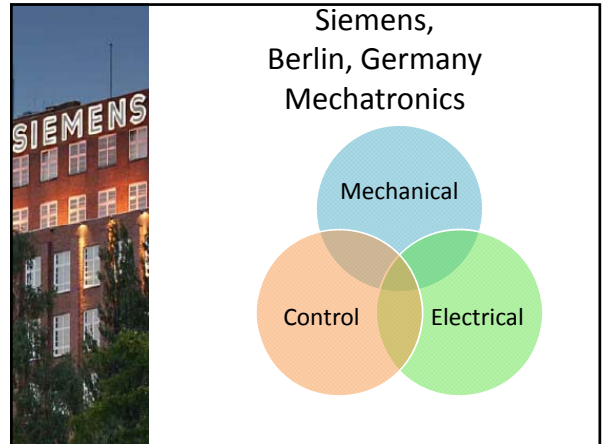
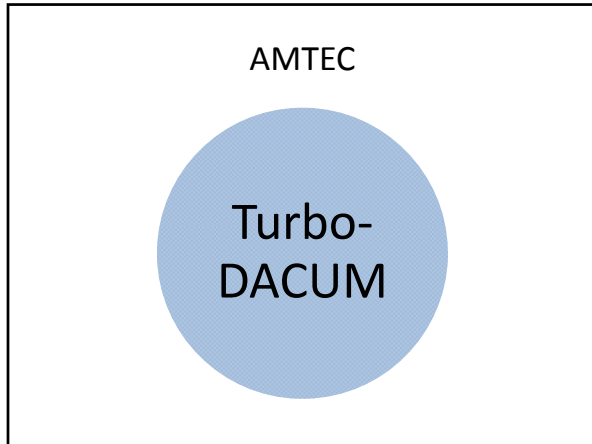
### Retool verb

- to reorganize or rearrange, usually for the purpose of updating:
  - to retool the industrial organization.

- “If a doctor, lawyer, or dentist had 40 (or 400) people in his office at one time, all of whom had different needs, and some of whom didn't want to be there and were causing trouble, and the doctor, lawyer, or dentist, without assistance, had to treat them all with professional excellence for nine months, then he might have some conception of the classroom teacher's job.”
  - - Donald D. Quinn

### AMTEC Locations and US OEM's

- Core Partner List
- AMTEC and KCTCS's KCEAM & Bluegrass CTC with TMMX & Webasto Roof Systems
- KCTCS's Jefferson CTC with Ford Louisville (2 plants) & Nix Springs Precision of America
- Lansing CC with GM Delta Plant & Grand River Assembly , Capitol Area Manufacturing Council & Woodbridge Group
- Macomb CC with General Motors & Chrysler Corp. & GM Pontiac Assembly
- Cayhogs CC with Lincoln Electric & Ford Lima Assembly
- Owens Community College with Reiter Automotive
- Pellissippi State Tech Community College with Bosch
- Spartanburg Community College with BMW
- Alamo Community College District with TMMT & Avanzar Interiors
- Tarrant County College with GM Arlington
- Ivy Tech with TMMI
- Henry Ford Community College with Ford Motor Company
- CARCAM: Consortium for Alabama Regional Center for Auto Manufacturing & AMA: Alabama Automotive Manufacturers Association
- Danville Community College & Goodyear
- Itawamba Community College & TMMM



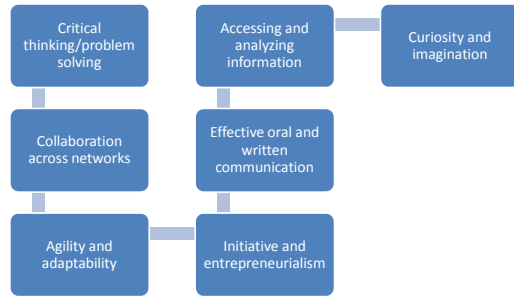
### Dr. Tony Wagner

- "The challenge of change leadership is to create a 'system' for continuous improvement of teachers' lessons and supervision in a common vision of the performance standards students must meet."

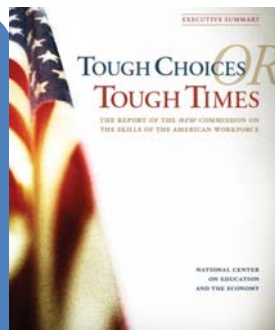


Author, *The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills Our Children Need—And What We Can Do About It.* (2008)

### 7 Survival Skills



"The core problem is that our education and training systems were built for another era. We can get where we must go only by changing the system itself."



*Tough Choices and Tough Times*, New Commission on the Skills of the American Workforce (2007)

The problem is not with our educators. It is within the system in which they work.

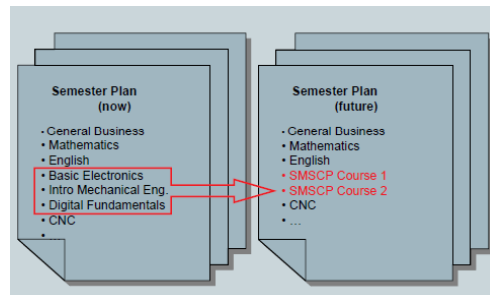
Tough Choices or Tough Times



### WHAT

Look at the problem!

### Siemens Curriculum



We Must Eliminate

- Silos
- Bottlenecks
- Turf Battles

Solution

Embrace Career Clusters

**Manufacturing Cluster**

Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing process engineering.

<ul style="list-style-type: none"> <li>15.0403 - Electro-Mechanical Technology</li> <li>15.0612 - Industrial Production Technology</li> <li>48.0501 - Machine Tool Operation</li> <li>48.0508 - Welding, Brazing, and Soldering</li> </ul>	<ul style="list-style-type: none"> <li>47.0636 - Marine Maintenance</li> <li>48.0701 - Woodworking General</li> </ul>	<ul style="list-style-type: none"> <li>49.0000 - Transportation</li> <li>49.0100 - Air Transportation</li> <li>49.0200 - Rail Transportation</li> <li>49.0300 - Water Transportation</li> <li>49.0400 - Pipeline, Bus, and Motor Vehicle Transportation</li> <li>49.0500 - Truck, Bus, and Motor Vehicle Operation</li> <li>49.0600 - Air Traffic Control</li> <li>49.0700 - Transportation Support and Maintenance</li> <li>49.0800 - Transportation, Storage, and Distribution</li> <li>49.0900 - Transportation, Storage, and Distribution Support and Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>43.0000 - Business and Administrative Support</li> <li>43.0100 - Business and Administrative Support</li> <li>43.0200 - Business and Administrative Support</li> <li>43.0300 - Business and Administrative Support</li> <li>43.0400 - Business and Administrative Support</li> <li>43.0500 - Business and Administrative Support</li> <li>43.0600 - Business and Administrative Support</li> <li>43.0700 - Business and Administrative Support</li> <li>43.0800 - Business and Administrative Support</li> <li>43.0900 - Business and Administrative Support</li> </ul>	<ul style="list-style-type: none"> <li>41.0000 - Health and Environmental Awareness</li> <li>41.0100 - Health and Environmental Awareness</li> <li>41.0200 - Health and Environmental Awareness</li> <li>41.0300 - Health and Environmental Awareness</li> <li>41.0400 - Health and Environmental Awareness</li> <li>41.0500 - Health and Environmental Awareness</li> <li>41.0600 - Health and Environmental Awareness</li> <li>41.0700 - Health and Environmental Awareness</li> <li>41.0800 - Health and Environmental Awareness</li> <li>41.0900 - Health and Environmental Awareness</li> </ul>
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Cluster Knowledge and Skills

Academic Foundations • Communications • Problem Solving and Critical Thinking • Information Technology Applications • Systems • Safety, Health and Environmental • Leadership and Teamwork • Ethics and Legal Responsibilities • Employability and Career Development • Technical Skills

**Manufacturing Cluster**

Cluster Knowledge and Skills

- Production Pathway
  - Electro-Mechanical Technology
  - Industrial Production Technology
  - Machine Tool Operation
  - Welding, Brazing and Soldering
- Manufacturing Process Pathway
- Maintenance, Installation and Repair Pathway
  - Marine Maintenance
  - Woodworking General
- Quality Assurance Pathway
- Logistics & Inventory Control Pathway
- Health, Safety and Environmental Awareness Pathway

<ul style="list-style-type: none"> <li>Entrepreneur • Chief Executive Officer • General Manager • Accounting Manager • Account Executive • Payroll Manager • Assistant Cash Manager • Billing Manager • Business &amp; Development Manager • Compensation &amp; Benefits Manager • Credit &amp; Collections Manager • Facility Manager • Operations Manager • Public Relations Manager • Human Resources Manager • Management Analyst • Facilities Manager • Sports &amp; Entertainment Manager • Hospital Manager • Government Manager • Public Organization Manager • Manufacturing Manager • Purchasing Manager • First-Line Supervisor • Senior Manager • Management Trainer • Small Business Owner</li> </ul>	<ul style="list-style-type: none"> <li>Information Systems Manager • Accounting Clerk • Accounting Supervisor • Chief Financial Officer • Chief Information Officer • Budget Analyst • Budget Manager • Billing Manager • Management Analyst • Controller • Merger &amp; Acquisition Manager • Price Analyst • Top Collections Executive • Information Technology Director • Chief Financial Officer • Finance Director • Chief Public Accountant • Project Manager • Cost Subcontractor • Occupational Analyst • Compensation, Benefits &amp; Job Analyst Specialist • Human Resources Information Systems Specialist • Meeting &amp; Convention Planner • Employment Interviewer • Private Public Employment Service • Personnel Recruiter • Human Resources Assistant • Payroll Professional • Identification Clerk • Human Resources Generalist</li> </ul>	<ul style="list-style-type: none"> <li>Human Resources Manager • International Human Resources Director • Human Resources Coordinator • Industrial Relations Director • Compensation &amp; Benefits Manager • Employment &amp; Placement Manager • Employee Assistance Program Manager • Training &amp; Development Manager • Human Resources Coordinator/Corporate Trainer • Training &amp; Development Specialist • Affirmative Action Specialist • Conciliation/Mediator/Arbitrator • Employee Relations Representative • Labor &amp; Personnel Relations Specialist • Information Systems Specialist • Equal Employment Opportunity Specialist • OSHA/ADA Compliance Officer • Pay Equity Officer • Interpretive Translator • Organizational Subcontractor • Occupational Analyst • Compensation, Benefits &amp; Job Analyst Specialist • Human Resources Information Systems Specialist • Meeting &amp; Convention Planner • Employment Interviewer • Private Public Employment Service • Personnel Recruiter • Human Resources Assistant • Payroll Professional • Identification Clerk • Human Resources Generalist</li> </ul>	<ul style="list-style-type: none"> <li>Training and Development Manager • Operations Analyst • Sales Manager • Sales Representative • Retail • Sport &amp; Recreation Sales Manager • Department Manager • Customer Service Supervisor • Product Manager • Project Manager • Marketing &amp; Development Manager • Supervisor • Marketing Manager • E-commerce Manager • Employment • Wholesale &amp; Retail Buyer • International Distribution Manager • Warehouse Manager • Logistics Manager/Supervisor • Logistics Manager/Coordinator • Marketing Information Manager/Public Relations Specialist • Distributor • Worker • Wholesale, Freight, Stocking, Handling, Material Moving and Packing Worker • Traffic, Shipping &amp; Receiving Clerk • Department and Product Promotion • Supply Chain Manager • Director of Non-Profit • Approval/Operations Operations Specialist/Manager • Industrial Production Manager</li> </ul>	<ul style="list-style-type: none"> <li>Administrative Assistant • Executive Assistant • Office Manager • Administrative Support • Information Assistant • Desktop Publisher • Customer Service Assistant • Data Entry Specialist • Receptionist • Communications Equipment Operator • Computer Operator • Gangprinter • Dispatcher • Shipping &amp; Receiving Assistant • Word Processor • Medical Transcriptionist • Legal Secretary • Bookkeeper</li> </ul>
General Management	Business Information Management	Human Resources Management	Operations Management	Administrative Support

Cluster Knowledge and Skills

Academic Foundations • Communications • Problem Solving and Critical Thinking • Information Technology Applications • Systems • Safety, Health and Environmental • Leadership and Teamwork • Ethics and Legal Responsibilities • Employability and Career Development • Technical Skills

## Jobs In Information

- Information Systems Manager
- Accounting Clerk
- Accounting Supervisor
- Adjuster
- Chief Technology Officer
- Auditor
- Bookkeeper
- Budget Analyst
- Budget Manager
- Billing Supervisor
- Management Analyst
- Controller
- Merger & Acquisitions Manager
- Price Analyst
- Top Collections Executive
- Information Technology Director
- Chief Financial Officer
- Finance Director
- Certified Public Accountant
- Project Manager
- Cost Accountant
- Librarian
- Payroll Accounting Clerk

## Business, Management & Administration

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## BMA Cluster Foundation Knowledge and Skill Topics

- Cluster Topic: **Communications**
- Cluster Topic: **Ethics and Legal Responsibilities**
- Cluster Topic: **Employability and Career Development**
- Cluster Topic: **Leadership and Teamwork**
- Cluster Topic: **Problem Solving and Critical Thinking**
- Cluster Topic: **Information Technology Applications**
- Cluster Topic: **Safety, Health, and Environmental**
- Cluster Topic: **Academic Foundations**
- Cluster Topic: **Systems**

## BMA Pathway Skills

I	Pathway Topic: <b>Business Law</b>
A	Knowledge and Skill Statement: <b>Understands business's responsibility to know, abide by, and enforce laws and regulations that affect business operations and transactions</b>
II	Pathway Topic: <b>Financial Analysis</b>
A	Knowledge and Skill Statement: <b>Understands tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources</b>
III	Pathway Topic: <b>Information Management</b>
A	Knowledge and Skill Statement: <b>Understands tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate information to assist business decision-making</b>
IV	Pathway Topic: <b>Operations</b>
A	Knowledge and Skill Statement: <b>Understands the processes and systems implemented to monitor, plan, and control the day-to-day activities required for continued business functioning</b>
V	Pathway Topic: <b>Professional Development</b>
A	Knowledge and Skill Statement: <b>Understands concepts, tools, and strategies used to explore, obtain, and develop in a business information management career</b>
VI	Pathway Topic: <b>Strategic Management</b>
A	Knowledge and Skill Statement: <b>Understands tools, techniques, and systems that affect a business's ability to plan, control, and organize an organization/department</b>

Computer Applications

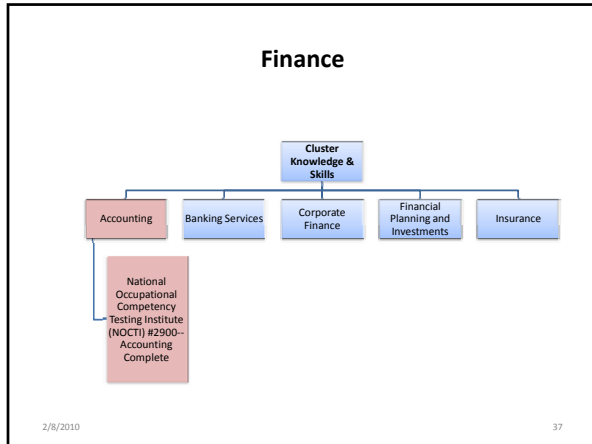
- Word
- Excel
- Power point
- Access

English Language Arts Business Law

Information Management Financial Analysis

## Finance Cluster

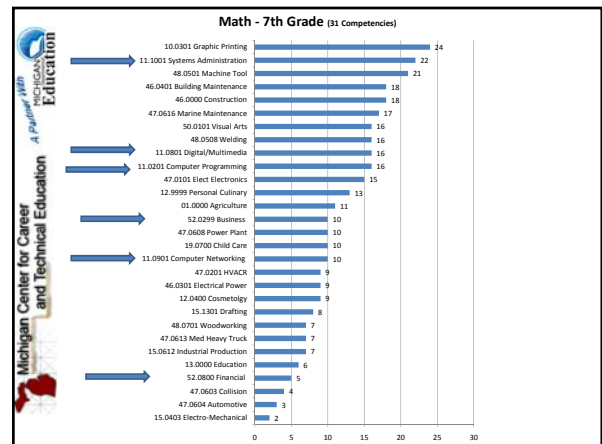
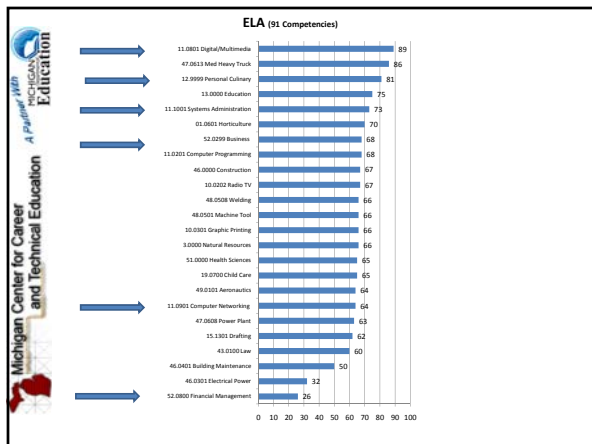
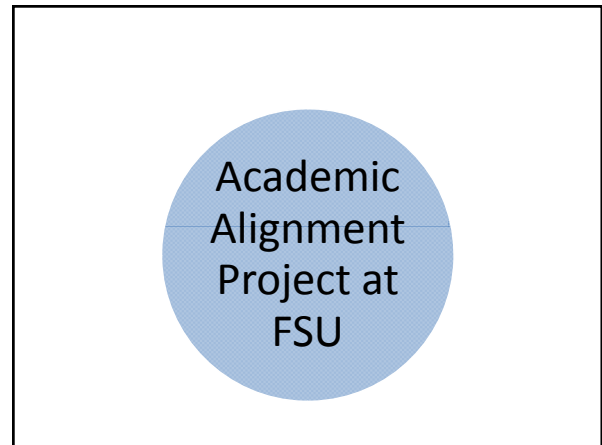
	Personal Financial Advisors • Tax Preparation Specialists • Sales Agents • Securities, Commodities • Investment Advisers • Brokerage Representatives • Development Officers • Securities Investment Analysts • Stock Brokers	Accountants • Financial Analysts • Treasurers, Controllers and Chief Revenue Agents • Auditors • Economists • Tax Analysts • Collectors • Revenue Agents • Escrow Specialists • Real Estate Analysts • Certified Purchasing Professionals • Client Managers	Credit Analysts • Loan Officers • Account Representatives • Tellers • Loan Processors • Customer Service Reps • Data Processors • Internal Auditors • Compliance Officers • Life Researchers & Examiners • Abstractors • Reposition Agents • Network Service Representatives • Operations Managers • Debt Counselors	Claims Representatives, Examiners, and Investigators • Insurance Appraisers • Underwriters • Actuaries • Sales Agents • Customer Service Agents • Processing Clerks • Direct Marketing Representatives • Insurance Brokers • Loss Prevention Specialists
Specialty Career Pathways (Computer)				
Pathways	Securities & Investments	Business Finance	Banking Services	Insurance
Cluster Skills	<b>Cluster Knowledge and Skills</b> • Academic Foundations • Communications • Problem Solving and Critical Thinking • Information Technology Applications • Systems • Safety, Health and Environmental • Leadership and Teamwork • Ethics and Legal Responsibilities • Employability and Career Development • Technical Skills			



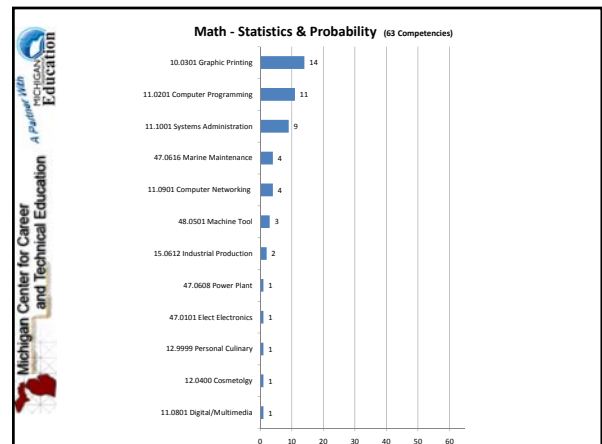
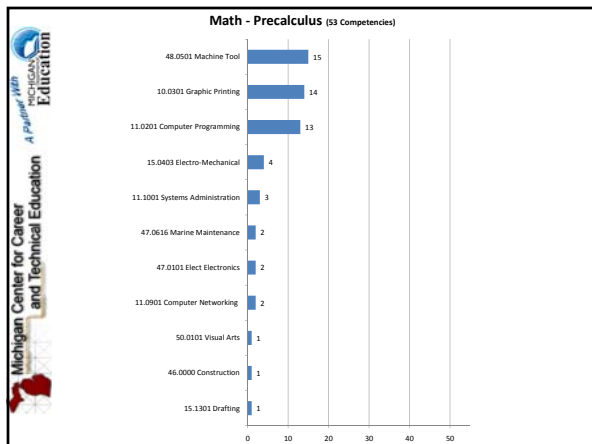
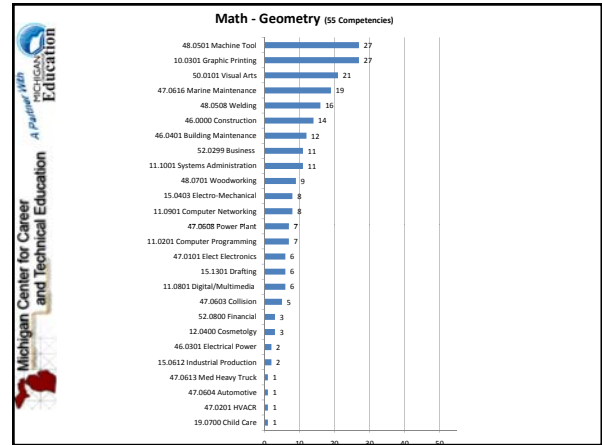
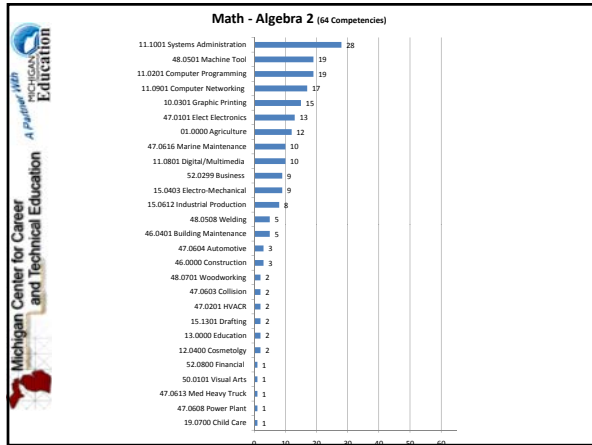
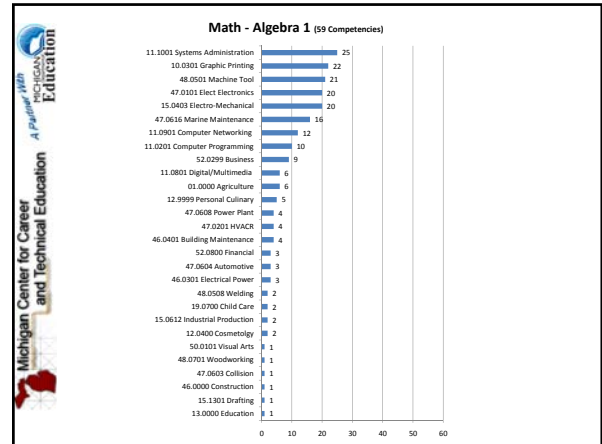
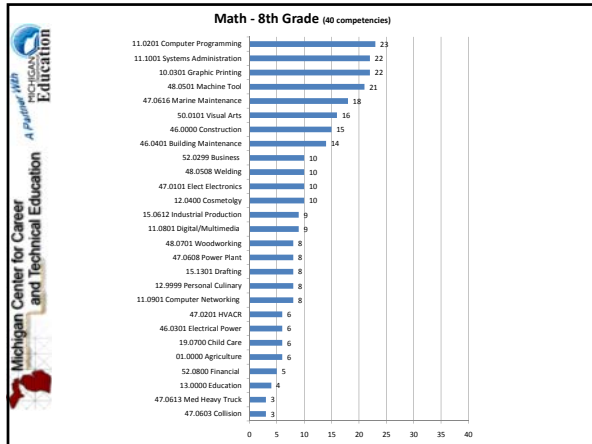
- ### Finance Cluster Foundation Knowledge and Skills
- Cluster Topic: **Communications**
  - Cluster Topic: **Ethics and Legal Responsibilities**
  - Cluster Topic: **Employability and Career Development**
  - Cluster Topic: **Leadership and Teamwork**
  - Cluster Topic: **Problem Solving and Critical Thinking**
  - Cluster Topic: **Information Technology Applications**
  - Cluster Topic: **Safety, Health, and Environmental**
  - Cluster Topic: **Academic Foundations**
  - Cluster Topic: **Systems**
  - Cluster Topic: **Technical Skills**

### Finance Pathway Knowledge and Skills

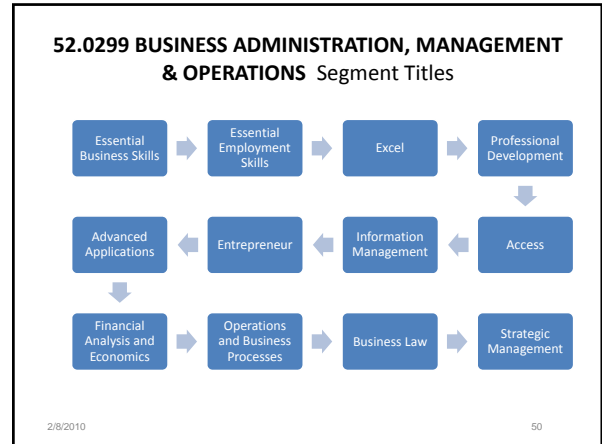
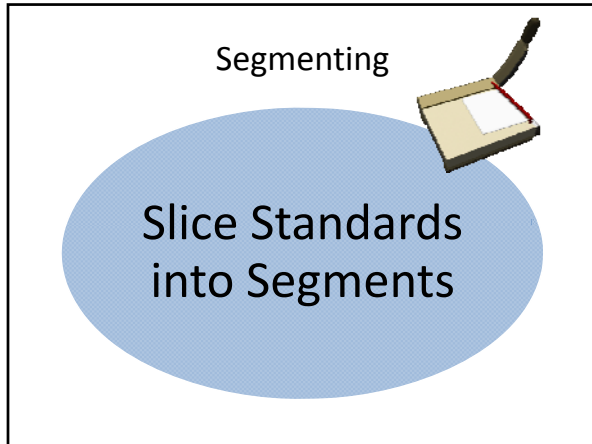
I		Pathway Topic: <b>Business Law</b>
	A	Knowledge and Skill Statement: Understands business's responsibility to know, abide by, and enforce laws and regulations that affect business operations and transactions
II		Pathway Topic: <b>Financial Analysis</b>
	A	Knowledge and Skill Statement: Understands tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources
III		Pathway Topic: <b>Information Management</b>
	A	Knowledge and Skill Statement: Understands tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate information to assist business decision-making
IV		Pathway Topic: <b>Professional Development</b>
	A	Knowledge and Skill Statement: Understands concepts, tools, and strategies used to explore, obtain, and develop in an accounting career











### BMA—Number of Standards (performance elements)

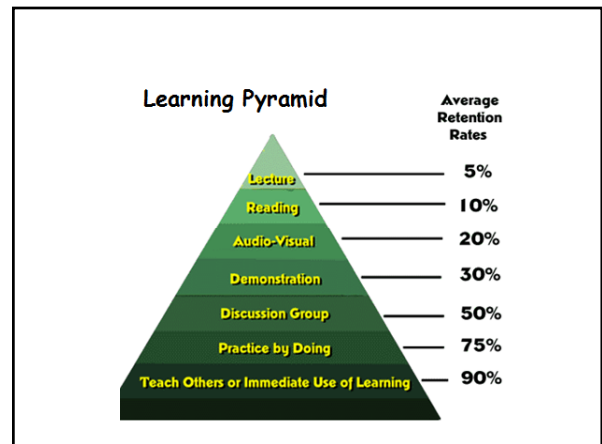
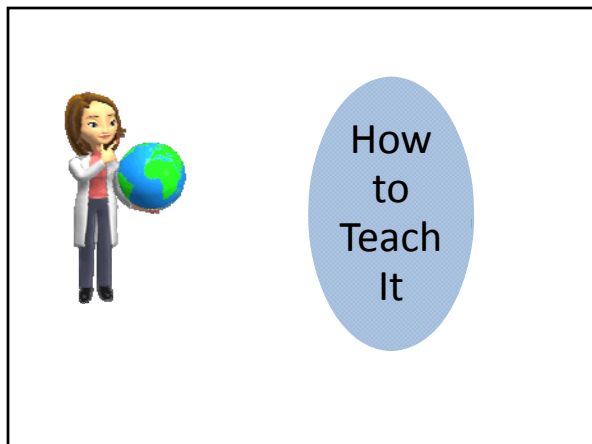
Seg		Technical	Pathway	Foundati on	Career & Employabi lity	Total	% Total
	Pre	0	0	0	54	54	9%
1	Essential Business Skills	31	3	19	18	71	12%
2	Essential Employment Skills	0	3	7	22	32	5%
3	Excel	26	0	5	6	37	6%
4	Professional Development	0	3	20	26	49	8%
5	Access	24	3	3	0	30	5%
6	Information Management	6	0	12	0	18	3%
7	Entrepreneur	0	0	33	13	46	8%
8	Advanced Applications	87	0	0	0	87	15%
9	Financial Analysis and Economics	0	3	26	0	29	5%
10	Operations and Business Processes	0	7	15	0	22	4%
11	Business Law	0	1	15	17	33	6%
12	Strategic Management	0	11	21	9	41	7%
	Post	0	4	38	0	42	7%
	<b>TOTAL</b>	<b>174</b>	<b>38</b>	<b>214</b>	<b>165</b>	<b>591</b>	<b>100%</b>

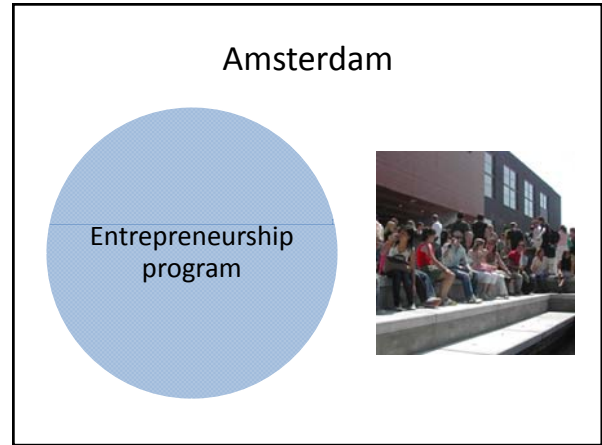
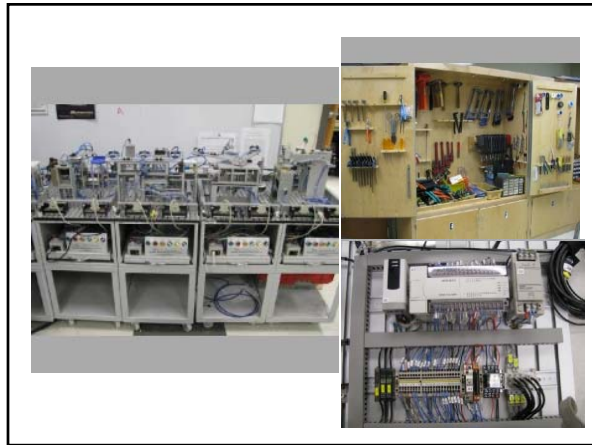
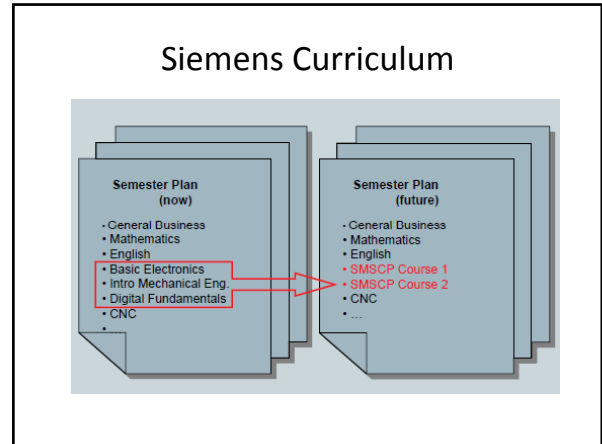
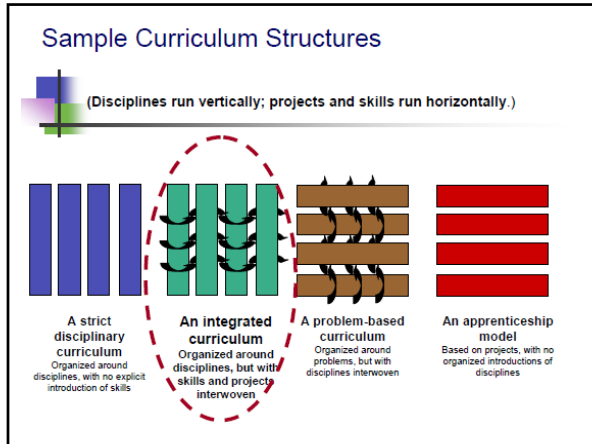
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### Estimate Clock Time by Segment

Segment	Title	Clock Hours
1	Essential Business Skills	40
2	Essential Employment Skills	20
3	Excel	80
4	Professional Development	100
5	Access	25
6	Information Management	60
7	Entrepreneur	25
8	Advanced Applications	100
9	Financial Analysis and Economics	50
10	Operations and Business Processes	20
11	Business Law	25
12	Strategic Management	70

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### Features

- Active learning
- Which is
  - Challenging
  - Authentic
  - multidisciplinary

An illustration of a person's head with gears, symbolizing thought and learning.

### Students

- Pursue personal interests and purposes
- Use and develop his/her abilities
- Build on his/her knowledge and experiences
- Develop a love of learning

An illustration of a student sitting at a desk with a laptop, representing a learner.

### Active Learning

Active learning occurs when students are given the opportunity to interact with the subject matter of a course.

It is anything students do in the classroom other than passively listening to a lecture.

### Active Learning

Students generate rather than receive knowledge.

The teacher facilitates rather than dictates the students' learning.

### Think-pair-share


Students are given time to

- think about a topic,
- turn to their neighbor for a short discussion, and
- then share the results with the rest of the class.

Can be used in any size classroom

Works well with any subject or topic

Useful in moving traditional lectures to active lectures




### Collaborative/Cooperative Learning

Collaborative learning is one of the most powerful tools instructors have in higher education.

Students get a chance to speak, share personal views, and develop the skill of working with others.

Requires that group members work together to complete a given task.



EDUC 511—Grades:

There will be **six GROUP tests** scheduled throughout the course. Each test will cover the material as noted on the attached class schedule. Tests are open book, notes, etc. Test items will be similar to the Self-Review Exercises given in the textbook. The total number of points available on each test is listed below: (150 points)

Test 1—Chapters 1, 2, 3, and 4	40 points
Test 2—Chapters 7 and 8	25 points
Test 3—Chapters 5 and 9	25 points
Test 4—Chapters 6 and 10	25 points
Test 5—Chapters 11, 12, 13, and 14	20 points
Test 6—Chapter 15	15 points

There will be **six GROUP homework assignments** that are designed to provide you and your group with opportunity to use the information provided in the text and during class. Each assignment is worth 25 points and may be resubmitted as often as required to earn the total 25 points. Each team member will individually receive the number of points on each assignment.

There will be a **PEER evaluation of your contribution** during the semester. In addition to the assignments and tests above, your group will work on other class-related activities. The peer evaluation of your contribution will be worth 50 points. You will receive the number of points based on an average of the peer evaluation rating form of your contribution by your fellow team members.

There will be **one individual project** required during the quarter. You must prepare a research proposal which will include a statement of a researchable problem, a literature review, and a methodology section. This project will form the basis for EDUC 512. The project is worth 125 points.

There will be **one individual final exam** consisting of 50 items similar to the Group tests above.

**PEER EVALUATION-EDUC 511**  
Summer, 1998

Using the Likert scale for items 1-10, please indicate the effectiveness of your colleagues who served on this team:

Not effective; low 1.....5 Very effective; high

	Name 1	Name 2	Name 3	Name 4	Name 5	Name 6
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Percent of Points  
Points (50 possible)

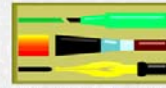
### Games

Games related to a subject can easily be incorporated into the classroom to foster active learning and increased participation.

Games might include matching, mysteries, group competitions, solving puzzles, and jeopardy.



### Accounting Simulations



*The Graphics Company*

The Graphics Company is a short, concise project. It is ideally suited as an evaluation assignment, examination, or general review of the complete accounting cycle. Students record 30 straight-forward transactions in five basic journals - Sales, Cash Receipts, Purchases, Cash Payments, General - and post to the General, Accounts Receivable, and Accounts Payable ledgers before making month-end adjustments and preparing financial statements.

### Debates

Debates staged in class can be effective tools for encouraging students to think about several sides of an issue.

Debates can vary from simple, in-class presentations to more elaborate work over a period of time and with a group.

Debates can be particularly powerful learning tools when students have to switch sides.



### Constructivism—Learning Theory

Learner actively creates his or her own knowledge

Emphasizes problem solving and understanding

Uses authentic tasks, experiences and assessment

### Case Study

Instructors who use case studies find real-life stories or problems that prompt students to integrate their classroom knowledge with their understanding of realworld situations, actions, and consequences.

Instructors can develop case studies to fit the topics and material being studied.



### Service Learning

Service-learning is an educational method that entwines the threads of experiential learning and community service.

It meets educational objectives through real-world experiences, while tapping youths as resources to benefit their college and communities.


Students can discuss and reflect on subject matter outside of the classroom and with others besides the instructor.



### Problem-Based Learning (PBL)


PBL is any learning environment in which the problem drives the learning.

PBL is an important part of Team based learning.



### EXAMPLE OF PROBLEM

*Positive proof of global warming.*




18th Century 1900- 1950 1970 1980 1990 2006

### Process

Emphasizes hands-on and real-life experiences

Occurs among a community of learners



Develop Custom Integrated Units by Segment

### Segments

Identify Power Standards

↓

### Segment 1—BMA Knowledge Level 1

	Knowledge	Segment 1	Type
I	Microsoft Office Specialist Exam Skill Standards: Word 2003 Expert	1	Technical Standards
III	Microsoft Office Specialist Exam Skill Standards: PowerPoint 2003	1	Technical Standards
III	Pathway Topic: Information Management	1	Pathway Standards
I	Communications	1	Foundation Standards
V	Problem Solving and Critical Thinking	1	Foundation Standards
VII	Safety, Health, and Environmental	1	Foundation Standards

**Focus on Power Standards but Don't Forget the Essential Pathway and Foundation Content**

**Segment 1—BMA**  
**Knowledge & Skill Levels 1 and 2**

	Knowledge & Skills	Seg	
I	Microsoft Office Specialist Exam Skill Standards: Word 2003 Expert	1	Technical Standards
A	Formatting Content	1	Technical Standards
B	Organizing Content	1	Technical Standards
C	Formatting Documents	1	Technical Standards
E	Customizing Microsoft Word	1	Technical Standards
III	Microsoft Office Specialist Exam Skill Standards: PowerPoint 2003	1	Technical Standards
A	Creating Content	1	Technical Standards
B	Formatting Content	1	Technical Standards
D	Managing and Delivering Presentations	1	Technical Standards
III	Pathway Topic: Information Management Knowledge and Skill Statement: Understands tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate information to assist business decision-making	1	Pathway Standards
A	Communications	1	Pathway Standards
I	Cluster Knowledge and Skill Statement: Understands the concepts, strategies, and systems used to obtain and convey ideas and information	1	Foundation Standards
A	Problem Solving and Critical Thinking	1	Foundation Standards
V	Cluster Knowledge and Skill Statement: Applies problem-solving and critical-thinking skills to help grow the business and/or to resolve workplace conflict	1	Foundation Standards
A	Safety, Health, and Environmental	1	Foundation Standards
VII	Cluster Knowledge and Skill Statement: Implements safety, health, and environmental controls to enhance productivity in business management and administration	1	Foundation Standards
A	APPLIED ACADEMIC SKILLS	1	MI Career & Employ
E	PERSONAL MANAGEMENT	1	MI Career & Employ
G	TEAMWORK	1	MI Career & Employ

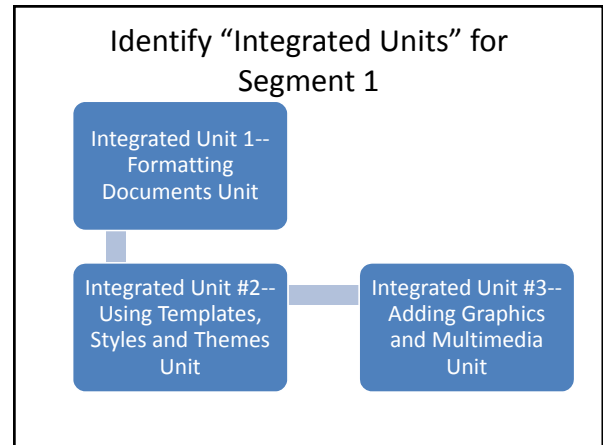
**Segment 1-BMA**  
**Includes Performance Indicators--Level 3**

I		Microsoft Office Specialist Exam Skill Standards: Word 2003 Expert	1	Technical Standards
A		Formatting Content	1	Technical Standards
	1	Create custom styles for text, tables, and lists	1	Technical Standards
	2	Control pagination	1	Technical Standards
	3	Format, position, and resize graphics using advanced layout features	1	Technical Standards
	4	Insert and modify objects	1	Technical Standards
B		Organizing Content	1	Technical Standards
	3	Modify table formats	1	Technical Standards
	5	Use automated tools for document navigation	1	Technical Standards
C		Formatting Documents	1	Technical Standards
	2	Create and modify document background	1	Technical Standards
E		Customizing Microsoft Word	1	Technical Standards
	2	Customize menus and toolbars	1	Technical Standards
	3	Modify Word default settings	1	Technical Standards

**Segment 1-BMA**  
**Includes Measurement Criteria—Level 4**

I		Microsoft Office Specialist Exam Skill Standards: Word 2003 Expert	1	Technical Standards
A		Formatting Content	1	Technical Standards
	1	Create custom styles for text, tables, and lists	1	Technical Standards
		English Expectations CE 1.3.5 From the outset, identify and assess audience expectations and needs, consider the rhetorical effects of style, form, and content based on that assessment, and adapt communication strategies appropriately and effectively.	1	Technical Standards
		English Expectations CE 1.3.3 Use effective written and spoken language, sound, and/or visual representations.	1	Technical Standards
		English Expectations CE 1.4.4 Use technology tools to produce polished written and multimedia work.	1	Technical Standards
	2	Control pagination	1	Technical Standards
		English Expectations CE 1.3.3 Select format and tone based on the desired effect and audience, using effective written and spoken language, sound, and/or visual representations.	1	Technical Standards
		English Expectations CE 1.4.4 Use technology tools to produce polished written and multimedia work.	1	Technical Standards
	3	Format, position, and resize graphics using advanced layout features	1	Technical Standards
	4	Insert and modify objects	1	Technical Standards
B		Organizing Content	1	Technical Standards
	3	Modify table formats	1	Technical Standards

**Power Standards come from this level 3!!!**



**BMA—Number of Standards (performance elements)**

Seg	Technical	Pathway	Foundati on	Career & Employabi lity	Total	%
Pre	0	0	0	54	54	9%
1	31	3	19	18	71	12%
2	0	3	7	22	32	5%
3	26	0	5	6	37	6%
4	0	3	20	26	49	8%
5	24	3	3	0	30	5%
6	6	0	12	0	18	3%
7	0	0	33	13	46	8%
8	87	0	0	0	87	15%
9	0	3	26	0	29	5%
10	0	7	15	0	22	4%
11	0	1	15	17	33	6%
12	0	11	21	9	41	7%
Post	0	4	38	0	42	7%
<b>TOTAL</b>	<b>174</b>	<b>38</b>	<b>214</b>	<b>165</b>	<b>591</b>	<b>%</b>

**Estimate Clock Time by Segment**

Segment	Title	Clock Hours
1	Essential Business Skills	40
2	Essential Employment Skills	20
3	Excel	80
4	Professional Development	100
5	Access	25
6	Information Management	60
7	Entrepreneur	25
8	Advanced Applications	100
9	Financial Analysis and Economics	50
10	Operations and Business Processes	20
11	Business Law	25
12	Strategic Management	70

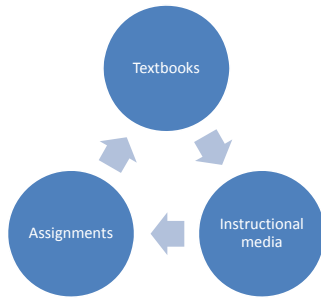
### Allocate Content to Possible Units

			P. S.	Formatting Unit	Templates, Styles Unit	Adding Graphics Unit
I						
	A			X		
	1		X		X	
		From the outset, identify and assess audience expectations and needs; consider the rhetorical effects of style, form, and content based on that assessment; and adapt communication strategies appropriately and effectively.				
		English Expectations C.E.1.3.3				X
		Select format and tone based on the desired effect and audience, using effective written and spoken language, sound, and/or visual representations.			X	
		English Expectations C.E.1.3.3				
		Use technology tools to produce polished written and multimedia work.		X		
		English Expectations C.E.1.3.4				
	2					
		Control pagination				
		Select format and tone based on the desired effect and audience, using effective written and spoken language, sound, and/or visual representations.		X		X
		English Expectations C.E.1.3.3				
		Use technology tools to produce polished written and multimedia work.			X	
		English Expectations C.E.1.3.4				
	3			X		X
		Format, position, and resize graphics using advanced layout features				
	4		X			X
		Insert and modify objects				

### Divide Segments into Units— Keeping Link to Standards

Mod.	Essential Business Skills	Lecture	Lab	Standard Link
1	Formatting Documents Unit	20		20, 42
2	Using Templates, Styles and Themes Unit	25	40	13, 14, 17
3	Adding Graphics and Multimedia Unit	15	20	15, 23
		60	60	

### Identify BEST Practices and Teaching Resources



### Summary

Hold ourselves accountable for what matters most

Do the new work using a system's approach to curriculum

Do the new work in new ways

- Collaborative teams (professional learning communities)

