

The Plant Academy Story

1997-2000

BY J.A. BARDOUILLE PH.D., L.H. SMITH PH.D.

PLANT ACADEMY
CENTER FOR ORGANIZATION LEARNING

PLANT OPERATIONS DIVISION
THE UNIVERSITY OF MICHIGAN
Ann Arbor, MI



The Plant Academy Story 1997-2000

By J.A. Bardouille, Ph.D., L.H. Smith, Ph.D.

**A first edition in honor of the first graduating class of the
Plant Academy Supervisor Leadership Programs
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FOREWORD

The Plant Academy, by that name or any other, was inevitable. The Plant Operations Division was introduced to Edwards Deming and the total quality movement in 1991. A quality-focused mission and vision had earlier been developed for the University and presented to the Regents. A University-wide design team was meeting to create a quality management approach tailored to the University of Michigan. The quality movement quickly grew in the fertile ground that was being cultivated. In a short time, three activities (Quality Improvement Teams, Planning for Excellence, and Quality in Daily Activities), undergirded by the fundamental principle of Pursuing Continuous Improvement and three supporting principles (Respecting People and Ideas, Managing by Fact, Satisfying Those we Serve) were "Michiganized" into the logo that all of you have seen many times. M-Quality was born.

But birth alone does not produce results. Quality service does not just happen. Neither does empowerment. And before the work world can really change, front line supervisors - and many others - must learn the new skills needed to support the change. The Plant Academy was asked to facilitate that learning so that the logo of M-Quality could deliberately become the reality of superb customer service.

The Plant Academy started very humbly at first. Doug Fasing, Armando Lopez, and others had the vision, developed a curriculum, and taught some essential courses, including Covey's Seven Habits of Highly Effective People and empowerment theory and practice. But they had "day jobs" that limited the amount of time they could devote to this effort. With JB Bardouille's appointment as full-time "dean" of the Plant Academy in 1997, the Plant Operations Division speeded the transformation into a Learning Organization - the only kind of organization that can survive for long in today's work world.

Now, in the year 2000, the scope of the Plant Academy is being broadened to include the entire Facilities and Operations group. It is useful from time to time to review why an organization was created and where it has been. Documenting history helps us gain perspective. It also helps us to determine how to deal with the challenges of the next few years. Those are the purposes of the Plant Academy Story 1997-2000. Enjoy the journey.

Jim Christenson
Director of Plant Operations
May, 2000

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Introduction

PREFACE

In January 1997 the Plant Operations Lead Team charged the Plant Academy with responsibility for developing and implementing a strategic plan for division-wide education and training to facilitate Plant's evolution to a true "learning organization" and to prepare its workforce to meet the challenges of radical and continuous change.

The charge was in direct alignment with Plant Operations' strategic directions and goals for the twenty-first century.

The Plant Academy Story, 1997-2000, presents a schematic picture of the Academy's development, its philosophy of learning, and its accomplishments over the past three years. This story pays tribute to the Plant Operations Lead Team who championed this endeavor and to J.A.Bardouille and Leslie H. Smith who had primary responsibility for turning the vision of a learning organization into a reality.

The story is organized in five parts: Part one pays tribute to those who made this journey possible. Part two outlines the Plant Operation's mission, vision, strategic directions and commitment to staff development and links them to the University's transformation strategy for the new century. Part three of this story identifies the conceptual framework for developing a learning organization. Part four details programmatic accomplishments. Part five provides quantitative and qualitative evaluation of programs by participants.

ACKNOWLEDGEMENTS

The Plant Academy would not have become a reality without the support of the many people who have contributed greatly to its development.

We recognize the dedicated efforts of the Plant Academy staff and interns and the high quality of their work.

We say thank you to Plant Operations Division directors and managers who helped determine and prioritize the competencies required for supervisory performance in the division.

We offer a most heartfelt thank you to the Plant Academy faculty who volunteered many hours in teaching, coaching and facilitation.

We especially thank the Plant Operations supervisors and staff who have, through their participation and attendance in programs, made it possible for Plant Academy to implement a unique process of providing education, skills training and performance improvement.

J. A. Bardouille
Director

TRIBUTE TO THE PLANT OPERATIONS LEAD TEAM

The Plant Operations Lead Team exemplifies the vision of William E. Trout in their commitment to ongoing learning and performance improvement.

- They provided the opportunity and resources for the development of the Plant Academy
- They participated in learning and instruction and engaged in ongoing dialogue with their managers and supervisors in the classroom setting
- They supported the vision of the learning organization
- They were empowering within their various leadership styles
- They expected learning to be linked to performance objectives and business goals
- They understood the imperative of ongoing learning as the key to organizational success
- They encouraged the participation of the Plant supervisors in professional development
- They mentored unselfishly

I wish to thank the Plant Operations Lead Team for the wonderful opportunity of developing a learning organization here at the University of Michigan.

*J. A. Bardouille, Ph.D.
Director Plant Academy*

THINK ABOUT

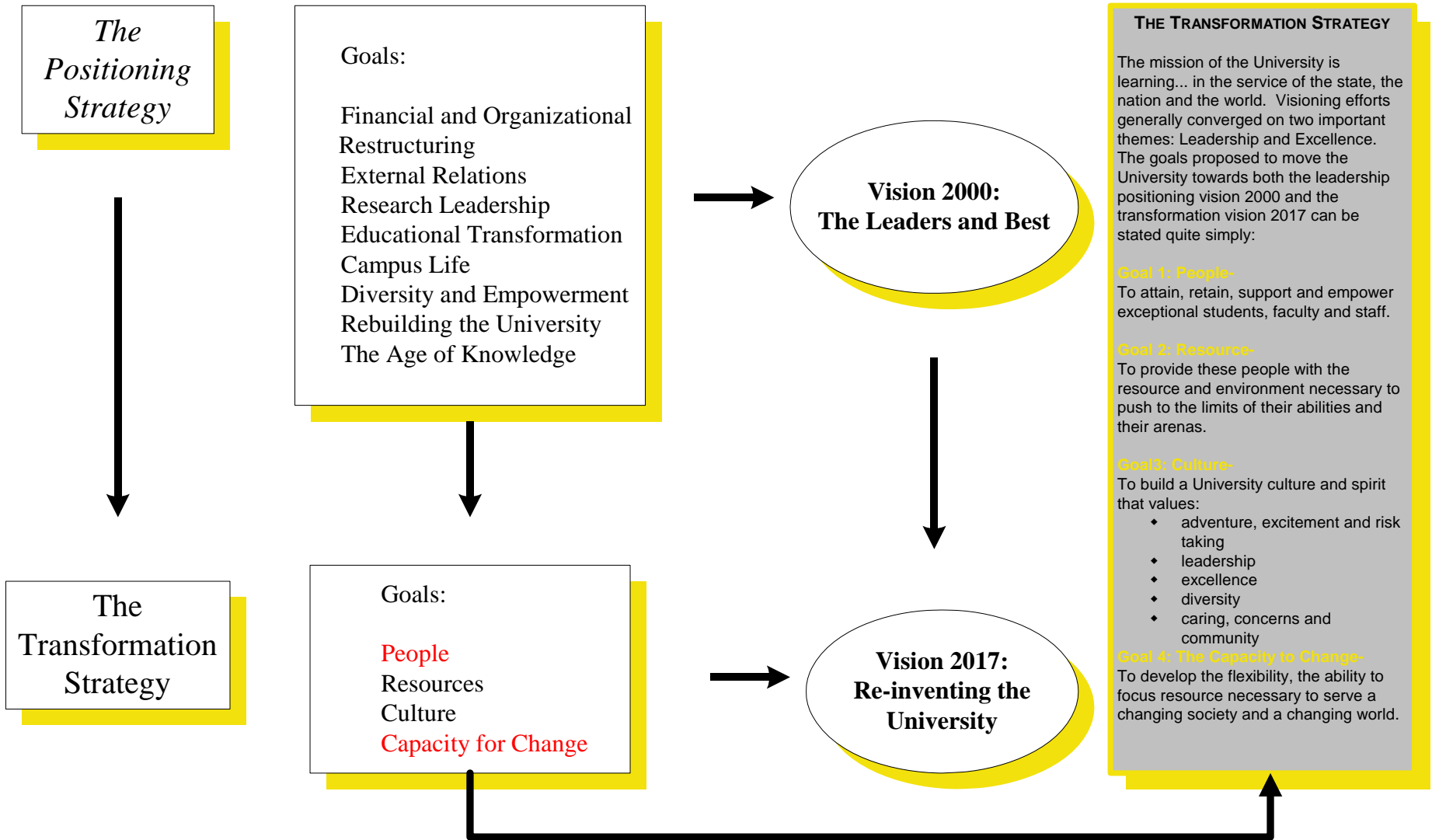
"It was invigorating to think of the work of a leader in fundamentally different terms than simply doing those tasks that control and restrict human behavior. I learned that leaders don't have to do everything, and they don't have to have all the answers. They do have to publicly acknowledge their own lack of knowledge and honestly talk about their private dilemmas and secret fears. I was prepared to do that. I was ready to leave behind old ways of leading and seek out a new approach to leadership. More than anything else, I took away from Deming's teachings the following convictions about the role of leaders:"

- We have responsibility for the success of those we lead, and we must continually be attentive to the bottlenecks and barriers that keep people from succeeding in their work. We bear ultimate responsibility for giving people the tools and training necessary for success.
- We must articulate and communicate clearly the aim of the organization and strive to align the organization's activities with that aim. We must create and sustain a constancy of purpose that helps everyone move the organization toward its desired aim.
- We must build a foundation of trust in our organization. We must continually drive out fear that keeps people from making meaningful contributions to the organization.
- We must habitually help people focus on improving the processes that produce the results of our work. We must also look at improving the very system of work itself, for it is the system that greatly controls individual performance.
- We must study the needs of our customers and continually work on customer/supplier relationships. We must build meaningful partnerships with those customers we serve inside and outside the organization in a way that constantly adds value for everyone.

The Journey, by William E. Trout, president of Belmont University and chair of the National Commission on the Cost of Higher Education. NACUBO Business Officer, January, 1998

The University of Michigan

VISION AND GOALS FOR THE NEW CENTURY



Source: *A Strategy for Our Future*, Office of the President, University of Michigan: Ann Arbor, MI. 1996

PLANT OPERATIONS DIVISION

1997- 2000

**Plant Operations
Board of Directors
"Plant Lead Team"
1997-2000**

Jim Christenson
Director
Plant Operations

Valerie Amo
Executive Secretary
Plant Director's Office

J. A. Bardouille
Director
Plant Academy

Pat Cunningham
Director
Parking & Transportation

Doug Fasing
Director
Grounds & Waste Management
Retired 1999

Mike Gaubatz
Interim Director
Grounds & Waste Management

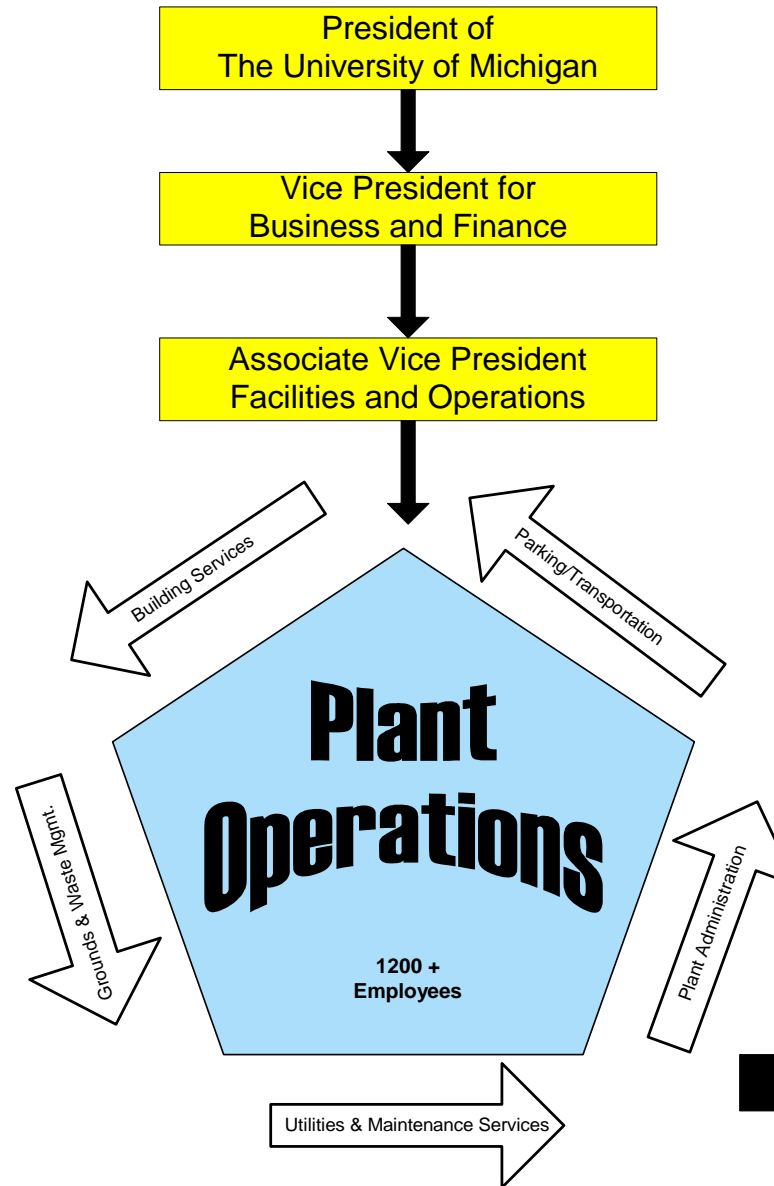
Sue Kirkpatrick
Director
Planning

Armando Lopez
HR Officer
Plant Operations
Retired 1999

Nathan Norman
Director
Building Services

Rich Robben
Director
Utilities & Maintenance Services

Rich Steiner
Manager
Administrative Services



PLANT OPERATIONS DIVISION 1997-2000

MISSION

The mission of Plant Operations is to maintain the physical environment and provide related services to support the University in reaching its goal of excellence in teaching, research and public service. To serve the needs of the University through partnerships and mutual understanding, Plant Operations employs approximately 1,290 people in service to our students, faculty, staff, and administration, more than 60,000 people in total. All funds operating budget exceeds \$150 million dollars and Plant Operations Departments are Administrative Services, Building Services, Grounds and Waste Management, Parking Services and Transportation Services, and Utilities and Maintenance Services.

VISION

- To be an organization where continuous and measurable improvement in services is the standard.
- To be recognized by the University community for excellence in service, as a partner in solving our customers' problems, and as the provider of choice.
- To be an innovative leader in facilities management.
- To be an organization where all employees are treated equitably and honestly.
- To be an organization where the atmosphere of trust encourages creativity and innovation.
- To be a learning organization, where all staff members are empowered and supported in reaching their full potential

GUIDING PRINCIPLES

Our vision can only become reality through the efforts of all members of the Plant Operations team. This requires that everyone identify processes that need to be improved and the milestones that must be achieved as we seek to be the provider of choice for those we serve. We will be guided by these principles:

Focus - We exist to serve the needs of the University through partnerships and mutual understanding.

Integrity - How we do our work and how we relate to each other are of paramount importance. Our conduct must conform to the highest, uncompromising standards of trustworthiness and character. We will never knowingly make decisions that harm people or that are not in the best interests of the division or the University.

Respect for People - Respect for people and their intrinsic worth is the cornerstone of our relationships with one another, our customers, and our suppliers. We appreciate the diversity of the human family and recognize our differences as sources of collective strength and wisdom.

Empowerment - We are a Plant Operations team. Team members are stakeholders in the success of the enterprise, and must be involved in the decisions that affect their work lives. "Empowerment", with its freedoms, responsibilities and boundaries, describes the intended work culture. Empowerment requires competence, sharing of information and ongoing learning. We are dedicated to becoming the best workforce in our industry. A person seeking to improve service to a customer will not be blamed for taking reasonable risks or for trying something new that does not quite work out.

Innovation - We are a learning organization. We recognize that improvement of ourselves, our work processes and our methods is essential to our success. We must be creative. We must challenge our own thinking. We must seek to learn from our mistakes.

Responsibility to Environment - We will respect the physical environment that we share. We will wisely use and preserve the resources at our disposal by reducing waste, recycling, and whenever feasible, using recycled materials.

STRATEGIC DIRECTION AND GOALS

THE POSITIONING STRATEGY

1. Become a "University Community" Focused Service Provider
 - Assess our services for fit with the university community
 - Eliminate waste
2. Strengthen Relationships with the University Community
 - Help our university community solve problems
 - Establish communication links with the community to understand directions and trends in the community

THE TRANSITION STRATEGY

3. Become a Learning and Empowered Organization
 - Develop the "best" workforce in our industry to support our vision and carry out our mission
 - Build inter-departmental, cross functional, and self-directed work teams
- **Create the Plant Academy**

PEOPLE

"OUR MOST IMPORTANT RESOURCE"

THE UNIVERSITY OF MICHIGAN STAFF DEVELOPMENT PHILOSOPHY

The University of Michigan recognizes that people are our most important resource for sustaining excellence in teaching, research, and service. To enhance the ability of staff members to contribute to their departments and to provide career satisfaction for productive employees, we are committed to supporting ongoing staff development for any staff member. Staff development is defined as growth in an individual's knowledge, skill, and personal effectiveness.

The above statement was formally adopted by the University's Executive Officers in 1993

PLANT OPERATIONS STAFF TRAINING AND DEVELOPMENT PHILOSOPHY

Plant Operations is a "learning organization." As a member of the Division, you are encouraged to enhance your skills, knowledge and abilities to respond to the changing needs and expectations of our customers, as well as to the rapid changes in technology and the work environment. The organization's ability to sustain necessary change and to be innovative depends on everyone's ability to continually learn new roles, competencies, and processes; and to acquire highly tuned interpersonal skills. Your professional and personal development is important: it adds value to what Plant does and enriches your life. We want to create a partnership with you for continuous learning.

Plant Operations Policy Guide: 4.9.2, May 1997

Plant Operations Division has assumed a leadership role in transforming to a quality organization and in recognizing that employees are our most valuable assets for sustaining excellence in service.

1997

CREATING THE PLANT ACADEMY

Charge to Plant Academy

- Develop and implement a strategic plan for division wide education and training to facilitate Plant's evolution to a learning organization
- Provide consultation services, facilitate strategic planning, develop and implement a performance management system
- Develop education and training programs and activities to enhance the skills, knowledge, and leadership attributes of managers, supervisors, and professional staff
- Plan and coordinate organization development and workplace cultural change efforts to facilitate Plant Operations' transition to an organization based on the principles and qualities of M-Quality, and on self-directed employees
- Establish a team of training coordinators to facilitate implementation of division-wide training programs
- Conduct studies to measure the impact of training and organization development activities on performance and productivity goals; disseminate outcomes
- Recruit and train faculty for the Plant Academy consisting of internal and external instructors and facilitators
- Develop and manage an educational training resources center to include printed, video, and interactive video material, and learning aids
- Manage the Plant Academy
- Partner and collaborate with other University units in the development, implementation, and dissemination of programs and organizational development activities

Plant Academy

Center for Organization Learning

Vision

Create a learning organization that integrates the education, skills, competency development needs, and the renewal of employees with the business objectives and performance goals of their departments.

Mission

Develop and deliver education, training and organizational development programs and services to support and reinforce Plant Operation's mission, policies, culture and strategic goals.

CLIENTS

The primary clients are the managers and supervisors in the five operating departments in Plant Operations. Secondary clients are the 1200+ employees in the division.

Directive

Plant Lead Team officially establishes the Plant Academy as an administrative unit

Program Director hired in 1997

ORGANIZATION LEARNING

An organization's ability to learn, and translate that learning into action rapidly, is the ultimate competitive advantage.

- Jack Welch, Chairman,
General Electric

Student Intern Perspective

On the campus of the University of Michigan, starting in January 1997, a learning organization was established called The Plant Academy. The Plant Academy, a unit of Plant Operations Division, was created with the intent to evolve as a true learning organization with responsibility for developing and implementing division-wide learning to prepare its work force to be the best in class and to meet the challenges of the University's transformation strategy and future vision. In essence, the Plant Academy is part of the training and development sector of the University, accountable for conducting ongoing assessment of training and organization development needs. Since 1997, the Plant Academy has become a functioning learning organization.

A Plant Academy staff member defined a learning organization as, "an organization that teaches itself and learns from itself." Learning organizations continuously strive to promote personal and professional development for employees to achieve tremendous business and personal results. As Senge wrote, "by focusing on performing for someone else's approval, corporations create the very conditions that predestine them to mediocre performance. Over the long run, superior performance depends on learning" (Senge, 1990). As it appears, the most important role or function of a learning organization is learning to change or changing the way of learning. An important factor to recognize is that one cannot exist without the other. The need to keep up with change and never end the learning process are two common, connected themes observed in the majority of the research materials available on learning organizations: *building organizations where people are continuously learning and expanding their capabilities to shape their futures.*

The Plant Academy is focused on creating the type of environment that is becoming the favored organization structure for the future. Traditional authoritarian organizations, based on controlling principles and structures that are hard to make changes within, will continue to diminish with time. Recent reports and journals favor organizations striving towards organization learning models. The list of benefits generated from already functioning learning organizations is getting longer and longer, creating more incentives for organizations to begin the evolution process. Kline and Saunders (1993) created their own list of successful organizations that redesigned themselves to become true learning organizations. The results from these companies provide actual proof of the improvement in the overall efficiency in the workplace. The training programs created a focus for the organizations' managers and supervisors to become aware that the people of an organization are really its most valuable asset. If the people are continuously learning, the organization will continue to function smoothly.

Lessons in Building a World-Class Work Force

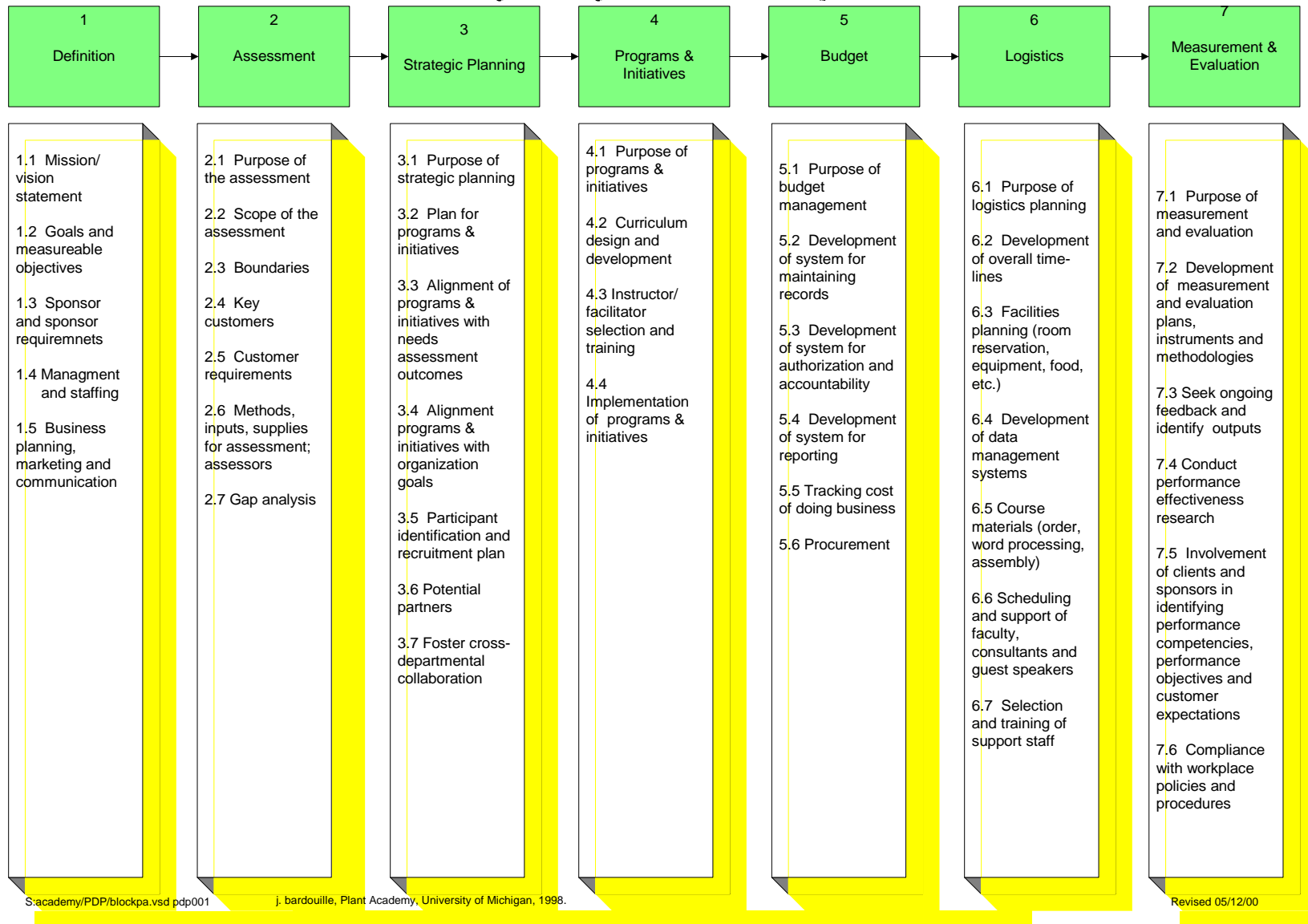
1. Tie the goals of training to the strategic needs of the organization
2. Provide all levels of employees with opportunities for lifelong learning
3. Require workers to be accountable for learning new skills
4. Extend training beyond the internal employees to key members of the customer/supply chain
5. Hire smart so training can have the greatest impact on productivity
6. Consider new employee orientation a strategic process, rather than a one-time event
7. Design a CORE curriculum to stress the three Cs - Corporate Citizenship, Contextual Framework, CORE Competencies
8. Experiment with ways for individual employees and teams to learn - both inside and outside the classroom
9. Sustain the message of training with a system of employee recognition
10. Cascade employee successes throughout the organization

Corporate Quality Universities
Lessons in Building a World-Class Work Force
Jeanne C. Meister, ASTD, Irwin, Inc. 1994

Beth Livedoti, Plant Academy Intern, 1998-2000

A SYSTEMS APPROACH TO PLANNING

A Planning Model for Division-wide Education, Training and Organizational Development

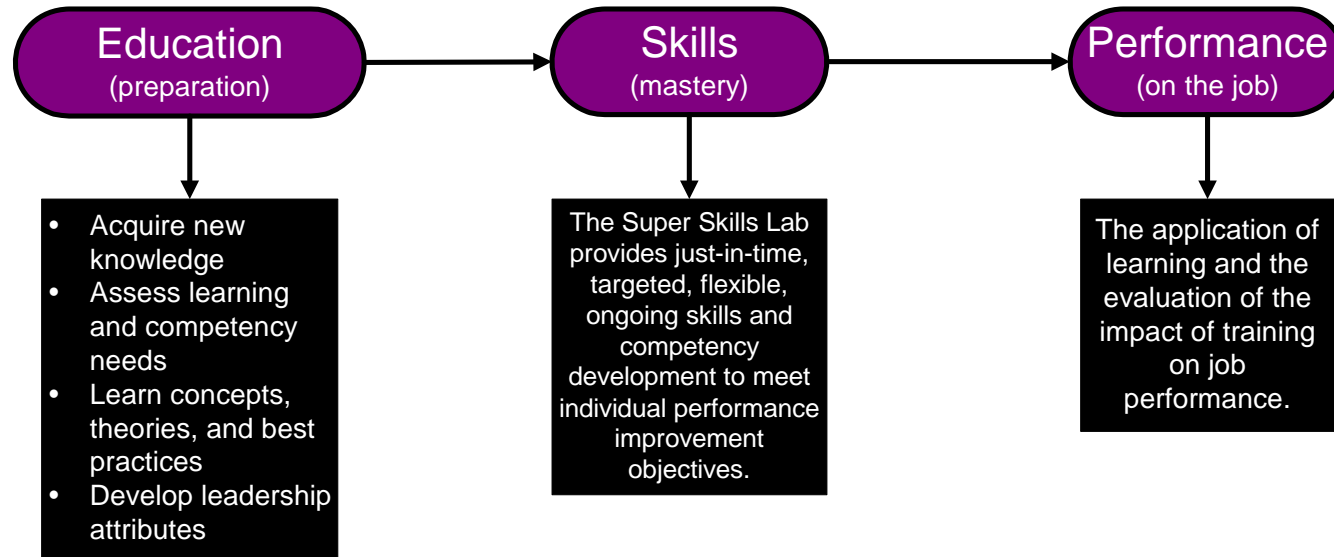


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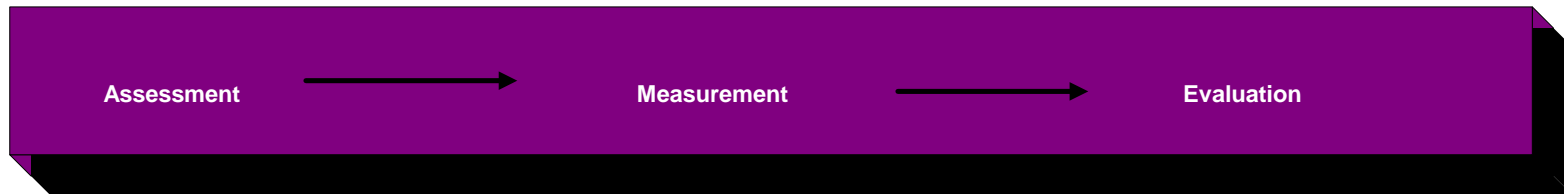
j. bardouille, Plant Academy, University of Michigan, 1998.

Revised 05/12/00

THE ESP MODEL FOR LEARNING



The ESP Model for Learning is based on the concept that training must tie to the performance goals of the work unit, and that the design and execution of training programs should be addressed at three levels of learning for maximum application to and impact on department objectives.



Developed by J.A. Bardouille, PhD, 1996

The ESP Model is integrated into all Plant Academy programs

THE APPROACH TO ASSESSMENT

The most critical step of the ESP Model is the assessment process. This takes place in the education component of the model. The assessment process is a "grassroots" approach: it follows a horizontal path across the ESP Model (education, skills, performance), which in turn is supported by AME (assessment, measurement, evaluation).

The Plant Operations Supervisor Competency Assessment Tool (SCAT)

In August/September, 1998, assessment of competencies essential for leadership in Plant Operations Division was conducted by 42 senior level department managers representing Building Services, The Plant Director's Office, Grounds and Waste Management, Plant Administration, Parking and Transportation, and Utilities and Maintenance Services.

The managers carefully reviewed 37 competencies for their applicability to the work of supervisors in the division. The competencies were rated on a scale of 1-5 for:

- Their importance to supervisor leadership
- Relative amount of time supervisor spend in each area
- Degree of improvement needed in each competency area

Result of the Assessment:

The managers rated 18 very important competencies; 13 important competencies; 6 moderately important competencies; and identified 5 new extremely important competencies essential to the work of supervisors across departments. These 42 competency areas were reviewed by the Plant Operations Lead Team and further developed into the Plant Operations Supervisor Competency Assessment Tool (The Plant Ops. SCAT). See next page for the Supervisor Competencies.

Application of The Plant Operations SCAT:

The Plant Ops. SCAT is used as a performance management tool. The Plant Ops. SCAT is used in Plant Academy's Supervisor Leadership Program as an instrument for learning how to do detailed task analysis, identify learning needs, set learning objectives, and performance standards.

Sources:

The Plant Ops. SCAT is based on the Supervisory Competency Self-Assessment, an instrument compiled by HRD/HRAA, University of Michigan and derived from the following sources:

- The Profiler: Management Skill Definitions, Personnel Decisions Inc.; Minneapolis, MN
- Models for Excellence: The Results of the ASTD Training and Development Competency Study, Patricia McLagan and David Bedrick, ASTD Training and Development Journal, 1983.
- University of Michigan M-Quality Resource Material
- Honeywell Management Skills Assessment Instrument

PLANT OPERATIONS SUPERVISOR COMPETENCIES

Rank	Competency Area	Average Ratings Across Division (n=42)			*CINs
		Importance	Time Spent	Improvement Needed	
1	Customer Service	4.62	3.81	3.76	Customer Service
2	Listening	4.57	3.67	3.76	Listening
3	Leadership	4.50	3.69	3.64	Leadership
3	Decision Making	4.50	3.76	3.24	Decision Making
4	Time Management	4.48	3.10	3.57	Time Management
5	Organizational Communication	4.43	3.21	3.98	Org. Communication
6	Coaching	4.36	3.29	3.71	Coaching
7	Relationship Building	4.33	3.29	3.74	Relationship Building
8	Managing Conflict	4.31	2.95	3.76	Managing Conflict
9	Motivation/Rew ards/Recognition	4.21	2.67	3.62	Motivating/Rew ards
10	Delegating	4.17	3.55	3.12	
11	Org. Security and Safety	4.14	3.14	2.71	
11	Feedback	4.14	3.24	3.74	Feedback
12	Group Processes	4.07	2.88	3.40	Group Processes
13	Administrative Duties	4.05	3.24	2.93	Admin. Duties
14	Staffing/Interview ing	4.02	2.33	2.88	
14	Managing Change	4.02	2.95	3.45	Managing Change
15	Planning	4.00	2.69	3.57	Planning
16	Goal Setting	3.98	2.52	3.26	Goal Setting
17	Project Management	3.95	3.33	3.38	Project Management
17	Problem Solving	3.95	3.24	3.38	Problem Solving
18	Strategic Planning/V isioning	3.86	2.43	2.93	Strat. Planning/V ision
19	Written Communications	3.83	2.88	3.17	Written Comm.
20	Managing Diversity	3.79	2.55	2.67	
21	Negotiating	3.74	2.62	3.24	Negotiating
22	Mentoring	3.67	2.52	3.38	Mentoring
23	Business Understanding	3.62	2.02	2.48	
24	Performance Management	3.60	2.29	3.55	Performance Mgmt.
25	Staff development/Career Planning	3.57	2.21	3.05	Staff Dev./Career Plan
25	Policies and Procedures	3.57	2.45	2.57	Policies/Procedures
26	Financial Management	3.55	2.43	2.71	Financial Mgmt.
27	Situation Analysis	3.43	2.64	3.00	Situation Analysis
28	Facilitating Meetings	3.38	2.50	2.81	
29	Verbal Presentations	3.31	2.10	2.69	
29	Org. Behavior Understanding	3.31	2.02	2.90	Org. Beh. Understand
30	Influencing	3.14	2.69	2.60	
31	Higher Ed. Industry Understanding	2.86	1.71	2.19	
na	Computer Software Applications	No data collected in this area			Computer Software
na	Knowledge in Tech Skills Areas	No data collected in this area			Tech. Skills
na	Union Contract Administration	No data collected in this area			Union Contract Admin
na	Leading Teams	No data collected in this area			
na	Managing Work Processes	No data collected in this area			
		*CINs: Critical and Immediate Needs			

Note: This data ranks the importance level of 37 supervisor competency areas as rated by 42 Plant Operations Department Managers. Next to the importance ratings, you will find an accompanying *time spent* and *improvement* needed rating. All ratings are on a 1-5 scale with 1 being the lowest and 5 being the highest.

MAJOR PROGRAM COMPONENTS

M-Quality & Empowerment

- M-Quality principles and practices adopted for all staff
- M-Quality education/training program launched
- Seven Habits of Highly Effective People was implemented.
- Focus groups to determine supervisory training needs conducted
- All managers, supervisors and staff attended empowerment seminars

ESP Model for Learning

The Plant Academy incorporated a unique model for continuous learning. It is fundamental to the creation of the Supervisor Leadership Programs, which address learning at three levels... Education, Skills, Performance.

Supervisor Competency Assessment Program

Individual consultation sessions with supervisors to assist them in developing their learning plans. By assessing their performance improvement needs and by analyzing critical workplace issues, supervisors build a learning agreement that includes a plan for skills development and an on-the-job practicum project.

Superleader Programs

- Developed a comprehensive management and supervisor leadership training program
- Conducted supervisor competency assessments, job task and learning needs analysis
- Developed the Super Skills Lab (targeted skills development to address performance goals)
- Developed the "Practicum" program (application of learning in solving real workplace problems)
- Developed and delivered the "Empowerment Seminars" (delivered in 1996)
- Delivered the "Seven Habits of Highly Effective People" program
- Developed and delivered the "Managing the Transition to AEC" program (Plant's new enterprise system)
- Reinventing Appraisals

Division-Wide Strategic Planning

- Provided leadership and facilitated division-wide strategic planning
- Facilitated vision and mission building and the development of strategic directions and goals
- Facilitated scenario planning

Consultation Services

One of the main functions of the Plant Academy is to provide performance and management consultation to serve organizational development needs and performance improvement goals of individuals, teams and work units. Areas of service include strategic planning, team development, performance planning and appraisal, work process analysis, coaching and facilitation, competency assessment.

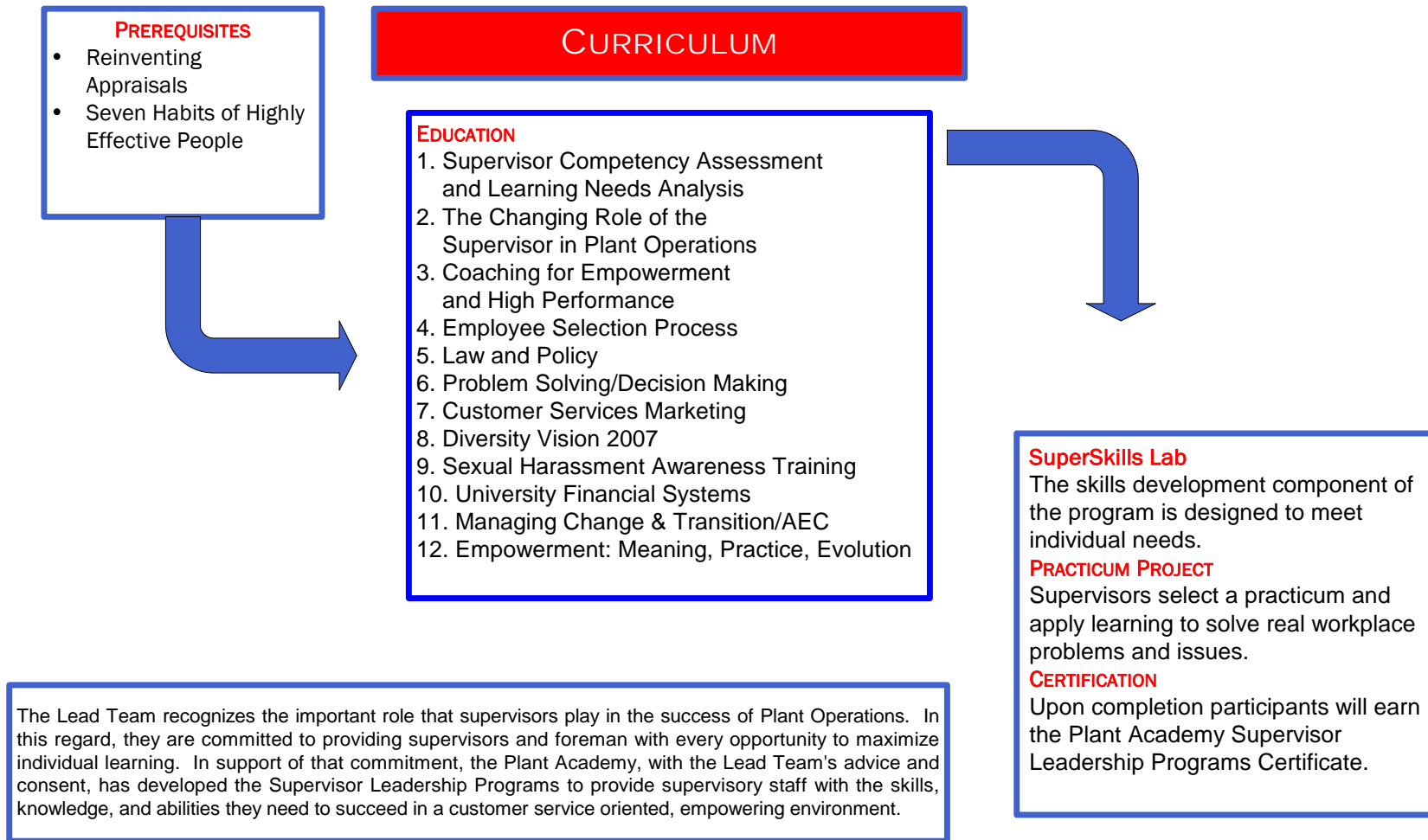
Performance Management System

- The Plant Academy has developed a Performance Management System
- The program has been piloted with the Network Services Administrators for Plant Operations
- The following steps makes up the system
 - Strategic Architecture
 - Performance Planning
 - Performance Action Steps
 - Performance Feedback
 - Performance Appraisal

Best Practices, Faculty and Student Development, Presentations, Train-the-Trainer

- Collected, documented and disseminated best work practices in Plant Operations
- Incorporate the participation of Plant Directors, Department Managers and Supervisors in classroom instruction.
- Developed an internship program to support the academic mission by giving graduate and undergraduate students opportunity to develop practical job-related skills (School of Education, Organizational Studies, Political Science Honors Program)
- Conducted a (6) month comprehensive train the trainer program on curriculum development.

SUPERVISOR LEADERSHIP PROGRAMS



See Appendix for the first graduating class

SUPER SKILLS LABS

1998-1999

Purpose

The Super Skills Lab exists to meet the specific skills development needs of individual employees, managers and supervisors as identified by their competency and skills needs assessment.

Programs in the Super Skills Lab are just-in-time, focused, and targeted to the individual's needs.

These sessions are directly focused to fill individual skill gaps. Training is delivered in a variety of methods including in-class sessions, videos, projects, consultations with teams, and independent study.

Flexibility in delivery of instruction is a characteristic of the Super Skills Lab.

Objectives

- Develop proficiency in doing skills needs analysis
- Set learning and performance objectives
- Demonstrate mastery in selected skills and competency areas
- Apply skills mastery to job performance

1. **Change Management Skills**
2. **Computer Keyboarding**
3. **Effective E-mail**
4. **Microsoft Excel**
5. **Microsoft Word**
6. **Ergonomics**
7. **Interpersonal Communication Skills**
8. **Interviewing Skills**
9. **Job Analysis Skills**
10. **Listening Skills**
11. **Marketing Plan Development**
12. **Negotiating Skills**
13. **Performance Coaching**
14. **Performance Planning**
15. **Presentation Skills**
16. **Problem Solving Skills**
17. **Team Building Skills**
18. **Faculty Coaching**
19. **Conflict Management**
20. **Relationship Building**
21. **Team Planning**
22. **Best Practices Documentation Process**

FACULTY DEVELOPMENT PROGRAMS

Train-the-Trainer Programs

- Criterion referenced instructional program
- One on one coaching for strategic planning facilitators
- Ongoing instructor recruitment and training
- Job Competency Profile development

Plant Academy Coordinators (PAC Team)

Connie Agius	Plant Administration
J. A. Bardouille	Plant Academy
Charles Bibins	Building Services
Steve Brabbs	Utilities & Maint. Services
David Judge	Building Services
Kristin Miller	Grounds & Waste Mgmt
Leslie Smith	Plant Academy
Anna Tobias	Parking & Transportation
W. Van Veen Miller	Administrative Assistant

Faculty Development Program

- Incorporated the participation of Plant Directors, Department Managers and Supervisors in classroom instruction

Connie E. Agius	Administrative Assistant II, PPAPO
Pasquale Alessi	Police Officer, DPS
John Baldoni, AB, MA	Consultant
Anna M Balhoff	Administrative Assistant I
J Annette Bardouille, PhD	Director of Plant Academy
Teresa L Bareis	Administrative Assistant II, PPAPO
Pamela M Barker, MS	Manager, OSEH
Joe Bennett	Consultant, Kepner Tregoe
David A Betts, BS	Personnel Representative II
Charles Bibins	Staff Development Assistant
John Bjorge, BA	Consultant
Stephen W Brabbs, MS	Utilities and Maintenance Services
Rene L Chenevert, MS	Police Sergeant
James E Christenson, PE	Plant Director
Brian L Clapham, MSW	Americans with Disabilities Act Coordinator
Patrick Cunningham, MBA	Director of Parking/Transport.
Gary L. Ernst	General Foreman, UMS
Douglas W Fasing, MA	Director of Grounds & Waste Mgmt (Retired May 1999)
Maria Begona Garcia, PhD	Program Associate I
Michael S Gaubatz, BS, MS	Asst Mgr, Grounds & Waste Mgmt
Stephen Gill, PhD	Consultant
John E Gleason	Asst Mgr Building Services
Gunter F Hilberer, Assoc.	Foreman I, UMS
David J Judge, BA, Mtheol	Staff Development Coordinator, BS
Susan A Kirkpatrick, PhD	Director of Planning
Armando A Lopez, BA	HR Officer, Plant Admin (Retired August 1999)
Jon C Lund, JD, MA	Employment Rep II, HRAA
John Middlebrook, BA	Consultant, Kepner Tregoe
Kristen Miller	Administrative Associate II, GWM
Nathaniel Norman, BS, BA	Director of Building Services
Kim Novak	Consultant, WCC
Deborah L Orlovski, MPA	Staff Development Associate
Wendy N Powell, BS	Personnel Rep II, HRAA
Susan H Rasmussen, BS	Director of HRAA (Retired February 2000)
Richard W Robben, PE, MBA	Director of Utilities & Maint Services
Thomas V Rumble	Foreman I, Construction & Arch Trades
Jerry Slattery, BA	Consultant, Kepner Tregoe
Leslie H. Smith, PhD	Research & Program Associate, PA
Richard R Steiner, BBA	Manager of Administrative Services
Jennifer M Symmans, A.B.	Police Officer
Anna M Tobias, MA	Staff Development Assistant
James W Vibbart, BA	General Foreman, UMS
Sally York	Area Manager, BS (Retired Jan. 2000)
Roberta J Young	Personnel Rep, HRAA

Student Internship Program

- Developed an internship program to support the academic mission by giving graduate and undergraduate students opportunities to develop practical job-related skills

Student Interns

Nicholas Delgado, 1999
 Beth Livedoti, 1998 - 2000
 Noah Rabinowicz, 1998
 Michelle Slater, 1997
 Cynthia Tobar, 1998 - 1999

LEADERSHIP PROGRAMS



Strategic Planning

- Conducted strategic planning work sessions with the Plant Lead Team
- Identified key challenges
- Determined the new mission
- Envisioned preferred future: Vision 2000
- Revisited the guiding principles
- Identified strategic directions and goals



Leadership Seminars

- Applied Strategic Planning
- Creating a Work Environment Built on Shared Values
- Development of Supervisor Competencies by Plant Operations' Management Lead Teams
- Diversity Vision 2007
- Empowerment: Acting on Leadership Principles
- High Impact Training
- Leadership Communication: Vision 2000
- Managing Transition to AEC
- Problem Solving/ Decision Making
- Reinventing Appraisals
- Seven Habits of Highly Effective People
- Strategic Marketing



Best Practices Documentation Program

Best Practices describe the optimum ways to perform a business process; they are a component or combination of component practices determined to be the most effective practicable action steps in performing work.

Goals of the program:

- Share solutions to work place problems from lessons learned
- Serve as a benchmark for assessing trends and conditions
- Identify who is doing what to implement commitment to business objectives
- Provide insight to policy options and capacity-building opportunities to improve service to customers
- Work through common issues
- Promote interdepartmental communication and collaboration
- Use as a training tool

Best Practices in Utilities and Maintenance Services:
 Plumbing Shop M3100
 Location and Exercising of Water Main Valves
"Protecting the Flow of Life"

Best Practices in Utilities and Maintenance Services:
 Architectural Trades
 Adapting to Change Through Work Flow Processes
"Millwork Projects"



Plant Academy

PERFORMANCE MANAGEMENT SYSTEM

STEPS IN THE PLANNING AND APPRAISAL PROCESS

Strategic Architecture

1. Mission, vision, guiding principles
2. Strategic directions of the organization
3. Business Objectives/ Department (Impact Mapping)
4. Core Work Processes
5. Success indicators
6. Core Competencies

Principle Centered

Performance Planning

1. Develop Job Competency Profiles (Knowledge, Skills, Attributes)
2. Key goals prioritized
3. Performance standards
4. Individual/Team Performance Plan

Performance Action Steps

1. Detailed plan of action to accomplish goals and objectives
2. Expected deliverables
3. Resource and budget needs
4. Assignments and timelines

Shared Vision

Commitment to Mission

Performance Feedback

1. Periodic review of results achieved
2. Adjust for changing needs and priorities
3. Provide coaching and advising
4. Develop teamwork
5. Identify performance improvement needs
6. Provide ongoing education and skills training
7. Monitor and evaluate on the job application of learning

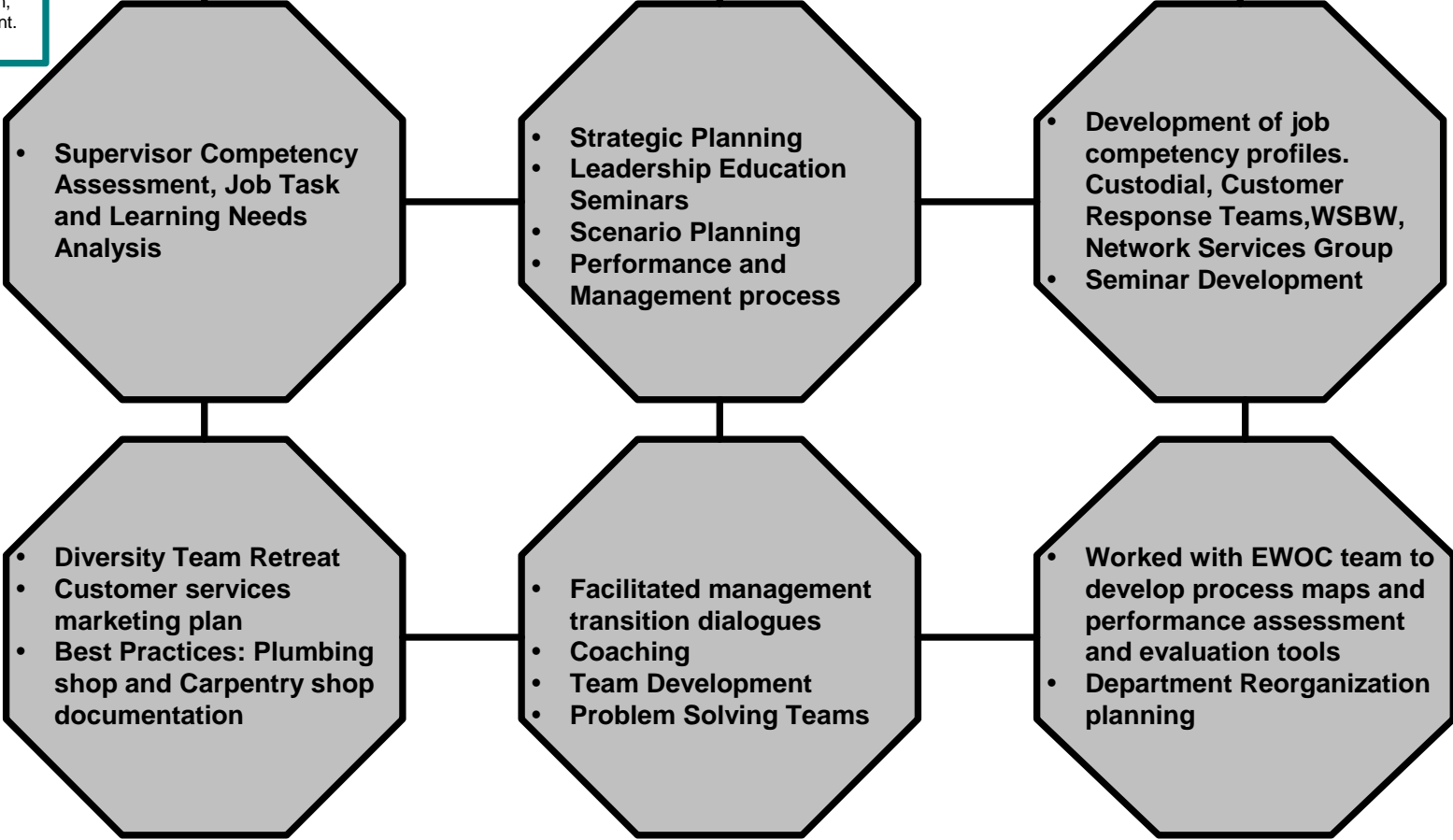
Continuous Learning

Performance Appraisal

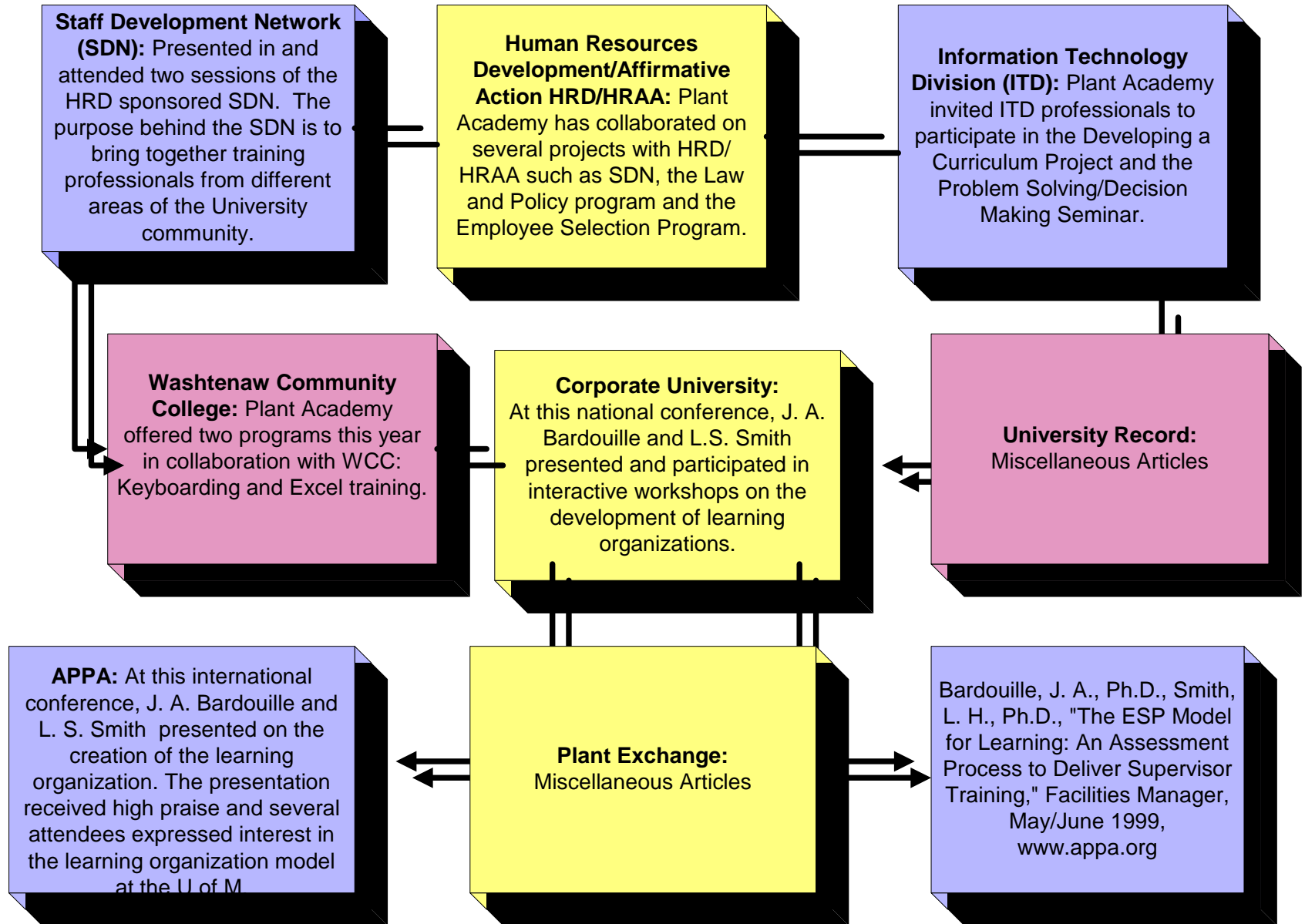
1. Conduct comprehensive appraisal conference at end of performance cycle
2. Rate performance and link to rewards and improvement goals

One of the main functions of Plant Academy is to provide performance and management consultation to serve organization development needs and performance improvement goals of individuals, teams and work units. Areas of service include strategic planning, team development, performance planning and appraisal, work process analysis, coaching and facilitation, competency assessment.

Consultation Services



PRESENTATIONS, PUBLICATIONS AND PARTNERSHIPS



STAFF BIOGRAPHY

J.A. Bardouille, Ph. D.

J.A. Bardouille (JB) is the Director of Plant Academy, Office of the Associate Vice President for Facilities and Operations, University of Michigan. JB is an Educational Psychologist with a doctorate from Purdue University. She has served as an industrial psychologist with the DuPont Company before devoting her career to higher education where she has held positions in teaching, research and administration. JB is a consultant to public and private sector organizations in the areas of total quality management, strategic planning, and human resource development. She is a specialist in the development of diversity competence programs for organizations. She is the founder of the IRLLE (Initiative for Responsibility in Learning and Life), training programs for teachers, parents and community leaders who work with middle and high school youth.

Leslie H. Smith, Ph. D.

Leslie Smith is Staff Development and Research Associate in Plant Academy, Office of the Associate Vice President for Facilities and Operations, University of Michigan. He holds a Ph.D. in Organization Behavior and Management from the Union Graduate School. Leslie is adjunct faculty at Central Michigan University and teaches courses in African Political Systems; he is a management consultant. Leslie was manager for facilities and physical plant operations for the Butler County 169 Programs. He also served as manager of engineering design and maintenance systems at the Jewish Federation (JVS) in Cincinnati. Leslie was former owner of Tri-State Buildings and Grounds Services, a construction management firm. His expertise is in Plant Operations Management, Organizational Development and Human Resources.

Anna Balhoff

Anna Balhoff is the Administrative Assistant for the Plant Academy. Anna instructs various computer applications courses and coordinates training logistics. She has previously held positions in the functional areas of Finance, Payroll, Personnel, and Computers Operations at the University of Michigan and has instructed a training course on AEC and Accident Investigation. Previous to her employment at the University, she served in the United States Marine Corps, worked for University Microfilms International and was self employed in direct sales. Anna is currently furthering her education in the areas of Microcomputer Business Technologies, Personal and Organizational Development and Business Management.

Interns

Beth Livedoti

Beth graduated in April 2000 with a BA in Organizational Studies from the University of Michigan. She has worked at the Plant Academy since May 1998. She plans to relocate to Cleveland, Ohio and work in the area of consulting/supervising while furthering her education by pursuing a JD/MBA degree.

SUMMARY & FUTURE STRATEGY

Summary

Plant Academy broke new ground in training supervisors in their new leadership roles in an empowered environment.

Championed by the support and involvement of Plant Operations Directors the Academy has, in the past three years, integrated M-Quality principles and systems thinking.

Strategic planning in Plant Operations Division provided the business goals for developing the supervisor competencies upon which ongoing learning is based.

Future Strategy

The scope of the Plant Academy is being broadened to include the departments in Facilities and Operations, Office of the Associate Vice President for Facilities and Operations.

- Plant Operations Division
- Plant Extension
- Occupational Safety and Environmental Health (OSEH)
- Department of Public Safety
- Architecture and Planning

Key Recommendations for the Plant Academy

1. Conduct assessment of training and performance competence needs in Facilities and Operations departments.
2. Link training to the business goals and performance objectives of Facilities and Operations departments.
3. Establish the ESP Model for Learning as the standard method for training delivery in Facilities and Operations.
4. Utilize the Supervisor Leadership Programs to prepare targeted staff for supervisory positions.
5. Expand Plant Academy programs and consultation services to an external clientele.
6. Develop the E-Academy - a web-based training data management, scheduling, registration and communication system.
7. Track training data for performance management, rewards and recognition decisions.
8. Continuously recruit and train internal Facilities and Operations content experts to serve as Plant Academy faculty.
9. Continue the collaboration with Washtenaw Community College to develop the associate degree program.

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APPENDICES

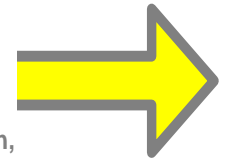
**Graduating Class
Supervisor Leadership Programs
May - August 2000**

Evaluation Data

Supervisor Leadership Programs

First Graduating Class May - August 2000

(Graduates represent Plant Operations departments: Building Services, Grounds & Waste Management, Parking & Transportation, Plant Administration, Utilities & Maintenance Services)



Karl M. Altenbernt	Foreman I, Plant Hospital Maintenance	Larry R. Lange	Foreman I, Construction & Arch Trades
Valerie Amo Cassino	Executive Secretary	Charles A. London	Foreman I, Zone Maintenance
David B. Anderson	Design Engineer III, Energy Management Office	Daniel J. Mahler	Foreman I, Plant Hospital Maintenance
Gary E. Anderson	Foreman I, Plant Hospital Maintenance	John A. Mccallum	Foreman I, Electrical & Sheetmetal
Rockey C. Bennett	Foreman I, Construction & Arch Trades	David D. Miller	Administrative Manager I
Michael V. Bodary	Administrative Assistant II	Lee A. Miller	Foreman I, Electrical & Sheetmetal
William J. Bolgos	Maintenance Supervisor, Zone Maintenance	Gloria J. Newman	Service Supervisor I
Apollos N. Bulo	Staff Development Assistant	Catherine M. Newton	Secretary III, Construction & Arch Trades
Terry L. Burmeister	Foreman I, Construction & Arch Trades	Lawrence A. Niemi	Stores Order Assistant
Kristopher E Carlisle	Foreman I, Plant Hospital Maintenance	Frederick B. Palm	Service Supervisor I
Mark A Cornwell	Senior Horticultural Asst.	Ronald C. Parrish	Foreman I, Plant Hospital Maintenance
Frances Coulter	Service Foreman II	Marvin D. Pettway	Forester
Diane M. Delatorre	Administrative Manager I	Randolph O. Ramsey	Foreman I, Electrical & Sheetmetal
Richard E. Eathorne	Foreman I, Construction & Arch Trades	Doris R. Rodziewicz	Administrative Assistant II
Lisa M. Engel	Senior Accountant	Thomas V. Rumble	Foreman I, Construction & Arch Trades
Gary L. Ernst	General Foreman, Mechanical Systems	Dale E. Schaedig	Coordinator, Construction & Arch Trades
Randolph J. Fink	Foreman I, Construction & Arch Trades	Denise K. Schroeder	Senior Horticultural Asst.
James D. Good	Foreman I, Zone Maintenance	Rebecca S. Seiser	Administrative Associate I
Gilbert A. Grobbel	Administrative Assistant II	Howard L. Staples	Foreman I, Construction & Arch Trades
Paul N. Guttman	General Foreman, Construction & Arch Trades	Richard Steiner	Manager , Plant Administrative Services
Lowell J. Hanson	Business Manager III, Plant Hospital Maintenance	Ronald G. Sweeney	Foreman I, Zone Maintenance
Gunter F. Hilberer	Foreman I, Mechanical Systems	Anna M. Tobias	Staff Development Assistant
Linda F. Hawkes	Senior Horticultural Assistant	James W. Vibbart	General Foreman, Maintenance Services Admin & Engineer
Joseph C. Iott	Foreman II, Electrical & Sheetmetal	William F. Welch	Foreman I, Construction & Arch Trades
Robert K. Johnson	Service Foreman II	James R. Williams	Service Foreman I
Timothy G. Kennedy	Programmer Analyst II, Energy Management Office	Frank R. Wooten	Electrician
Cecile Lamb	Service Foreman I		
David A. Lammers	Electrician		

Evaluation Data



SUPERVISOR LEADERSHIP PROGRAMS *evaluation of programs* **1999**



Overall Evaluation of Programs

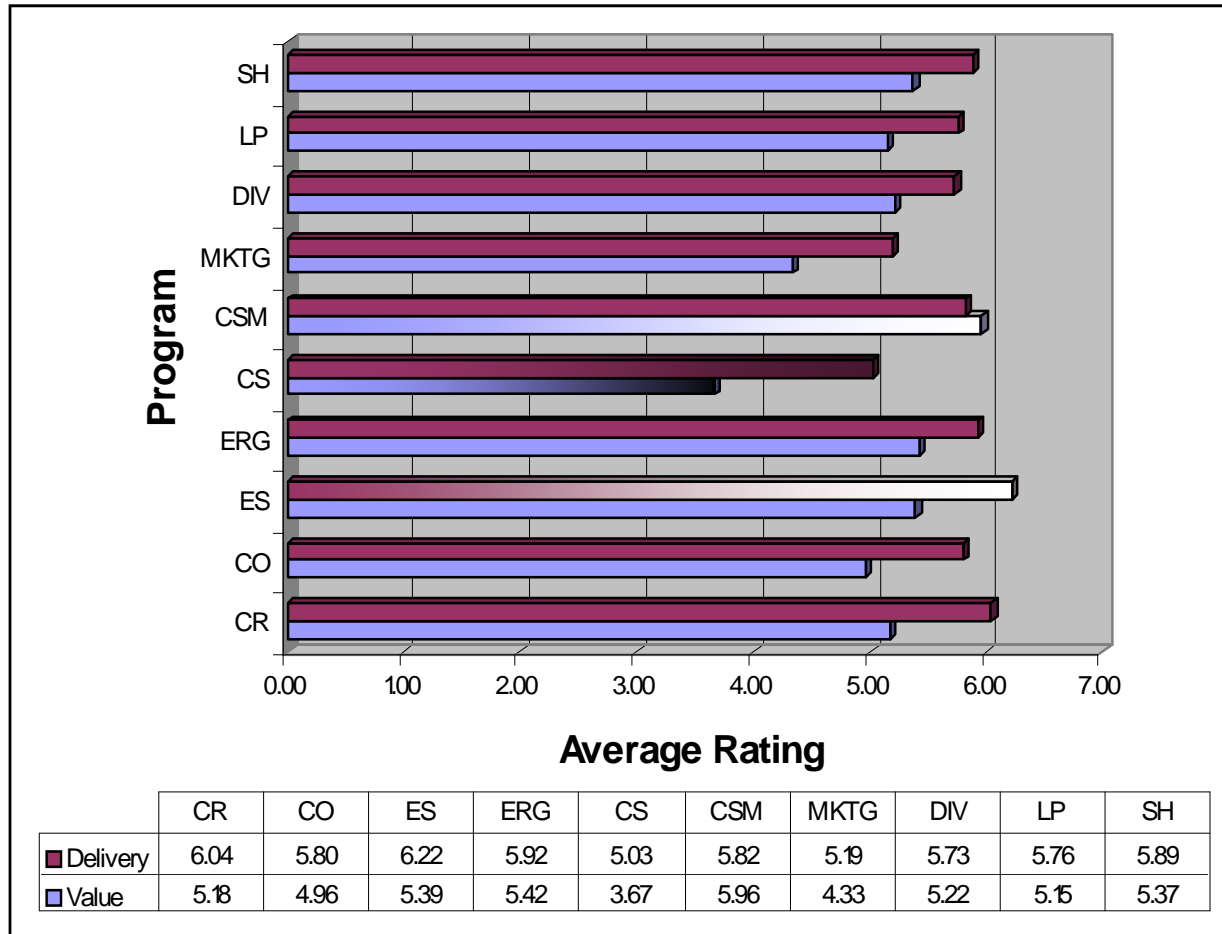
All programs (n=300 respondents)

RATING SCALE

1 = very low



7 = very high



SH = Sexual Harassment
LP = Law and Policy
DIV = Diversity 2007
MKTG = Marketing
CSM = Customer Service Marketing
CS = Customer Service
ERG = Ergonomics
ES = Employee Selection
CO = Coaching
CR = Changing Role



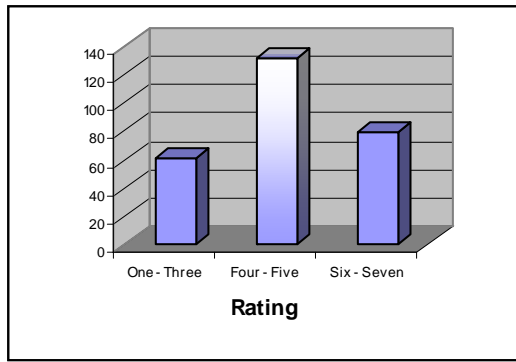
Value of the Program

All programs (n=300 respondents)

1. I had a strong desire to attend this training program

Range: 1-7

Average: 4.59



Value Q1	
One - Three	63.00
Four - Five	146.00
Six - Seven	88.00

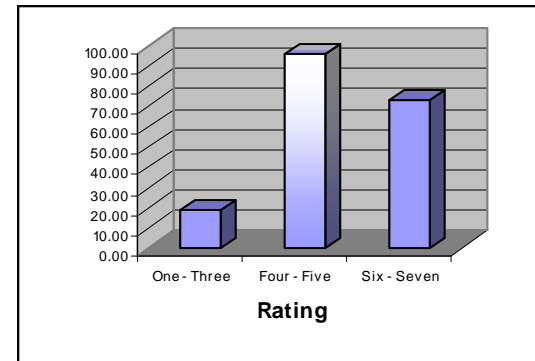
RATING SCALE

1 = very low 7 = very high

3. I have acquired new knowledge and skills that are applicable to my job

Range: 1-7

Average: 5.45

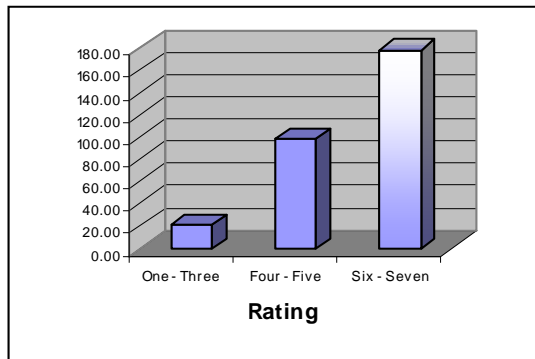


Value Q3	
One - Three	19.00
Four - Five	96.00
Six - Seven	73.00

2. The training was valuable to me

Range: 2-7

Average: 5.55



Value Q2	
One - Three	21.00
Four - Five	98.00
Six - Seven	178.00

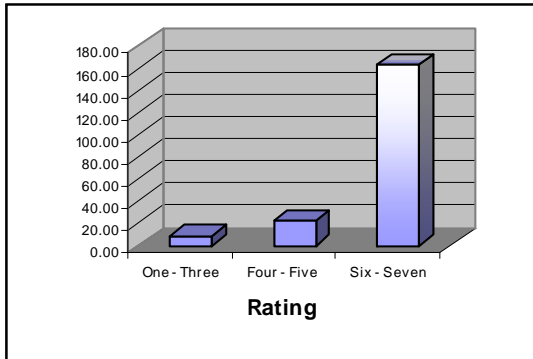


Delivery of the Program
All programs (n=300 respondents)

RATING SCALE

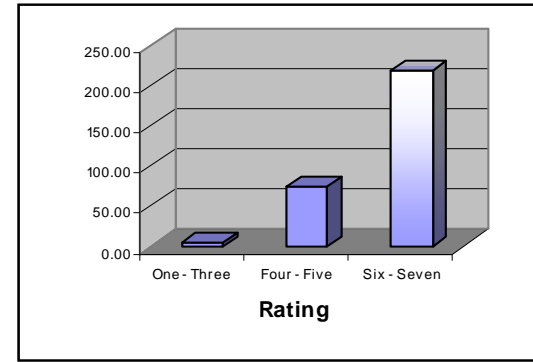
1 = very low  7 = very high

1. **The program met its stated objectives**
 Range: 3-7
 Average: 5.54



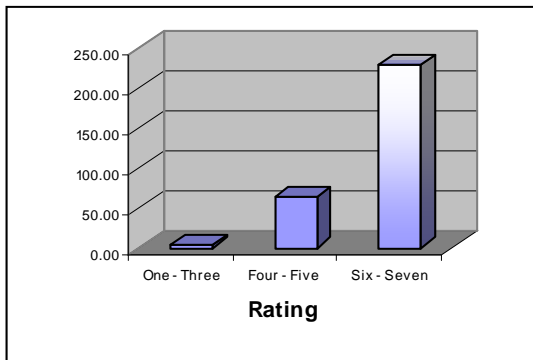
Delivery Q1	
One - Three	9.00
Four - Five	23.00
Six - Seven	163.00

3. **I understood the concepts when the program was finished**
 Range: 2-7
 Average: 5.95



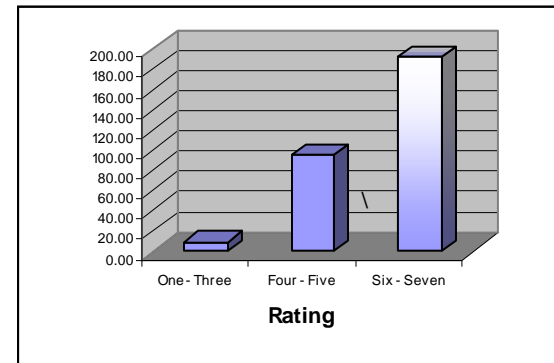
Delivery Q3	
One - Three	5.00
Four - Five	75.00
Six - Seven	218.00

2. **The instructors demonstrated thorough knowledge and understanding of the subject**
 Range: 5-7
 Average: 6.04



Delivery Q2	
One - Three	4.00
Four - Five	64.00
Six - Seven	229.00

4. **Presentation and class activities were well organized**
 Range: 2-7
 Average: 5.76

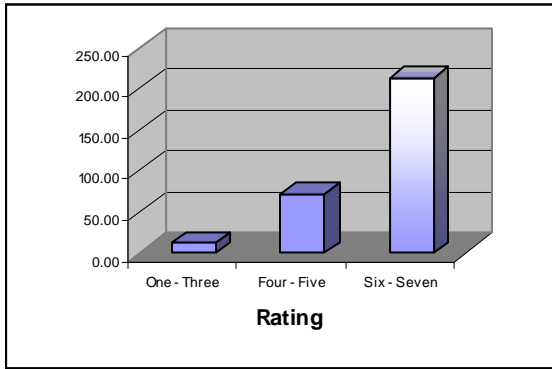


Delivery Q4	
One - Three	9.00
Four - Five	95.00
Six - Seven	192.00



Delivery of the Program
All programs (n=300 respondents)

5. Communication was clear
 Range: 2-7
 Average: 5.88

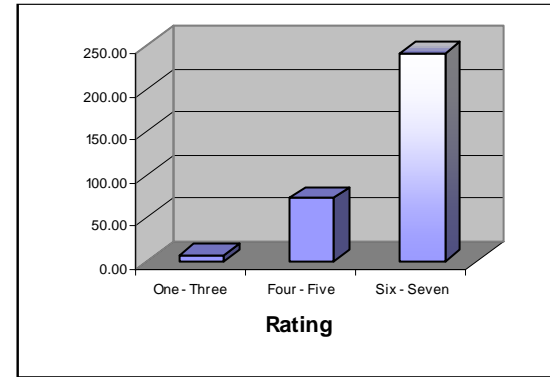


Delivery Q5	
One - Three	12.00
Four - Five	71.00
Six - Seven	213.00

RATING SCALE

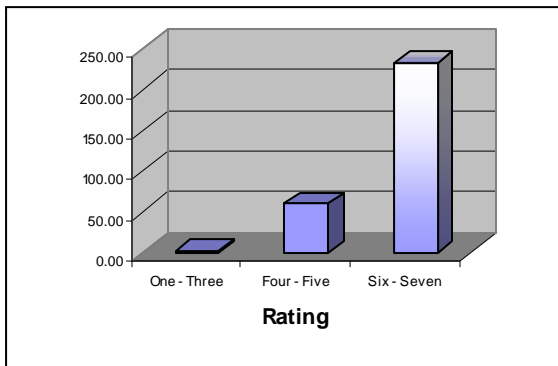
1 = very low 7 = very high

7. Instruction was responsive to individual concerns
 Range: 2-7
 Average: 5.97



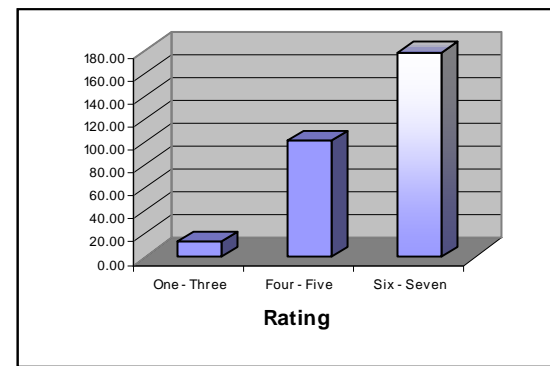
Delivery Q7	
One - Three	6.00
Four - Five	73.00
Six - Seven	241.00

6. Participation was encouraged
 Range: 2-7
 Average: 6.11



Delivery Q6	
One - Three	3.00
Four - Five	60.00
Six - Seven	233.00

8. Instructional methods were used that facilitated my learning
 Range: 1-7
 Average: 5.65



Delivery Q8	
One - Three	13.00
Four - Five	101.00
Six - Seven	178.00

Qualitative Program Feedback

1999

Changing Role of the Supervisor

Φ I found these valuable: dialogues, interacting with others, the exchange of common needs and concerns, learning about the departments future goals and learning to solve problems from each other.

Coaching

- Φ It found useful...
- the enforcement of how important it is to listen to others, not only the voice in your head,
 - the two-minute challenge
 - the video, which was especially good.

Creating a Work Environment Built on Shared Values

- Φ The most useful parts of the seminar were...
- Redefining values
 - Reinforcement of people values
 - Discussion of people values and how it correlates with business values
 - Business values department
 - How to apply this to the organization

Customer Services Marketing

Φ I learned how to market my department more effectively, how to define customer types based on information needed and how to develop marketing strategies.

Customer Service Skills for Plant Operations Managers and Supervisors

- Φ It was most useful to do the individual activity.
- Φ I found hearing about everyone else's problems that are similar across departments, but still different, and how they responded and reacted, (group teaching), most valuable.
- Φ Communication is the ultimate problem avoidance tool.

Employee Selection Process

- Φ I have learned how to develop good interview questions and techniques of the applicant screening process.
- Φ How to select the best qualified people for the job.
- Φ How to conduct the most fair and comprehensive interview methods
- Φ How to ask effective open-ended questions
- Φ I would like to write a General Foreman's guide for interviewing.
- Φ I plan to use this training during the next hiring process I'm involved in.
- Φ I have learned how to focus questions on applicant's skills related to the job requirement
- Φ This program shows that "qualifications" need to be reengineered to reflect the real needs of the job. We need to set up "customer service" segment as a priority.
- Φ A practical and most useful program Thank you

Law and Policy in Plant Operations

- Φ I gained a great deal of new information from good reference material and lectures by very knowledgeable people. Reacquainted with these references and resources was very valuable.
- Φ I gained more insight into FMLA.

Problem Solving/Decision Making

- Φ It taught me how to better assess problems, gave me a new viewpoint on data collection and provided a system to effectively analyze and quantify decisions.
- Φ I really am glad for the excellent tool to take back to the workplace and the teamwork activities.
- Φ I will be able to incorporate the problem analysis and decision analysis right away.
- Φ The workshop broaden my knowledge about solving problems and how to make effective decisions.
- Φ The concept learned had already been in our daily routine, only that we're not fully aware of what we are doing. At this juncture, it throws more light and consciousness into what I will be doing everyday. For example, I can always ask, "What can go wrong?"

Sexual Harassment

- Φ I will apply what I have learned by monitoring the environment in my workplace and intervening where appropriate.
- Φ Act preemptively; do not wait for a complaint to determine that a hostile environment exists.
- Φ Part of the program will make its way into my shop meeting.
- Φ I will personally be more aware of my actions to assure I lead by example.

Strategic Marketing in Plant Operations

- Φ I have learned how marketing can assist my department to improve its function and outside perception, along with the interactive part where we had a discussion across departments. It was very helpful to hear the ideas of others.

Workplace Diversity

Φ It was helpful and valuable to hear the comparisons of different ideas from a variety of people in open discussions of these very sensitive issues.