Designed to illustrate the role of the instructor in workplace education, this paper describes the educational strategies employed in a communication and collaboration class given by an Alpena Community College (Michigan) workplace education director at a small automobile parts manufacturing plant. First, the qualities of workplace instructors are discussed, indicating that they need to be flexible since they work in non-academic environments, responsive to company needs, and creative. Then, the theoretical background to the course developed at the automobile parts plant is provided, indicating that it was designed around the "Principles for Successful Management" by W. Edwards Deming. Following a list of management and worker goals for the course and the objectives developed by the instructor in response, the instructor's log for the eight class periods of the course is provided. The log describes the initial skepticism of the group, the strategies used by the instructor, and students' responses to exercises. Suggestions for quality improvement developed in the course are also provided. Finally, concluding remarks describe the benefits of communication and collaboration in the workplace classroom, including the sense among students that the class is for them when they create the class agenda, the emphasis on process in learning, and the direct applicability of lessons learned to the workplace environment. (ECC)
State Literacy Resource Center

"Literacy, Society and School"

Central Michigan University
Mt. Pleasant, Michigan
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Communication and Collaboration:

The Role of the Teacher in the Workplace Classroom

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(Opening remarks)

As one who started out as an instructor in a workplace education project, I have a personal understanding of the challenges workplace instructors face. These men and women are on the frontline in a foreign environment, often without much precedent or bureaucracy to shield them and their hard-earined reputation as quality educators. As administrators and policymakers, we are committed to doing more than just giving adult learners a second opportunity to fail, but the bulk of the responsibility for achieving success falls upon these instructors, who must translate our high-minded prose into lessons that work.
Workplace instructors need to be flexible, responsive and creative. The lecture format does not appeal to most adult learners in the workplace, nor does theory-based instruction. Adult learners prefer group discussion on issues of importance to their personal or professional lives, pertinent problem-solving models, and plenty of two-way communication.

A key characteristic of adult learners is that they want to work on what they want to work on, not what the instructor wants to teach, so the instructor should not rush to impose a syllabus on the group or feel too tied to an outline. A non-traditional approach works best. Ask questions. Let the students have some control over the curriculum. Give them a sense of ownership by respecting and building upon the knowledge - which is considerable - they bring to the workplace classroom. Emphasize to the students that the class is for them, for their benefit, and that you are there primarily as a resource person and facilitator.

Ultimately, adult learners will judge the success or failure of a workplace class on whether or not at least some of their individual goals were met. If they come away with something meaningful from the time they spent in class, they will pass that on to their co-workers. If they don't, the project may be quickly doomed by word of mouth.

As an administrator of a national workplace research and development project, I'm always on the lookout for good instructors. What I look for is maturity, commitment, a willingness to listen, a pragmatic and persistent approach to developing curriculum, high standards, respect for the complexity of the lives of adult learners in the workplace, sensitivity to politics and privacy, and people who are not inclined as a first response to say, "That hasn't been done before; it won't work." Good workplace instructors figure out how to make it work. They are the true heroes in this process.
Theory:

The focus of this research is on writing across the curriculum and how this process approach to instruction factored into a set of workplace classes called Communication and Collaboration. The company where these classes were taught was a small manufacturer of heat-treated parts for the auto industry. Barriers to effective communication had been building for many years and had begun effecting morale and productivity. During the needs assessment process, both management and workers agreed that a class in problem-solving might be a way to get both sides communicating in a productive manner. Neither workers nor management felt the need for classes in other basic skill areas, such as reading or math. They wanted specifically to get to the root of the communications problem and if possible to devise mechanisms that would buffer these conflicts should they arise after the classes were over and the instructors were gone.

Our theoretical basis for instruction derives from sources such as W. Edwards Deming's "Principles for Successful Management," Rena Soifer's "The Complete Theory to Practice Handbook of Workplace Literacy," "Literacy at Work" by Jorie Philippi, "Toward Literacy" by Jean Brown, and "Evaluating Workplace Literacy Programs" by Larry Mikulecky and Paul Lloyd.
Deming is the man many credit (or hold responsible for) the rise of the Japanese in the auto industry worldwide. He was one of the early pioneers of statistical process controls, which was a system for quantifying every step of the manufacturing process and ensuring that quality could be frontloaded into the early stages of manufacturing rather than the conventional system of inspecting for defects when manufacturing was complete. Deming’s ideas were not agreeable to the auto executives of the post-war era and so he took them to Japan, where they flourished. In the latter stages of his career, Deming wrote extensively on the need for management to encourage problem-solving among the employees and to place decision-making power in their hands. GM’s Saturn project is the prototype of the Deming model.

Rena Soifer is from Eastern Michigan University. A literacy specialist, she worked at a local Ford plant in 1984 setting up a work-based basic skills education program for the UAW. Her principles for successful workplace education places emphasis on (1) the whole-language approach, which says that instructors and instruction should be responsive to learners’ backgrounds, language and interests; and (2) collaborative learning, which postulates that we are all on learning journeys, workers and teachers alike, and that we have much to learn from each other.

Jorie Philippi’s research into workplace literacy indicates that adult learners do much better when
they can see that the curriculum has clear application either to their personal or professional lives. Ms. Philippi calls this functional context curriculum, and it has become the basis for much the theory underlying curriculum development in the field.

Jean Brown's "Toward Literacy" has application in the workplace classroom, especially her premise that writing is a process rather than simply a product. Her development of writing to learn, the idea that writing creates new connections that leads to new learning, is very useful as is her advocacy of journals as part of a portfolio assessment process.

Mikulecky and Lloyd, both from the University of Indiana, have collaborated on a useful resource that examines ways in which workplace literacy projects may be evaluated. Among other cogent observations, Mikulecky and Lloyd write that the impact of most workplace education programs must be evaluated over time looking at areas such as changes in learner attitudes toward lifelong learning, family literacy and community involvement, instead of just looking at standardized test scores or generic company productivity measures.

Observations:
Jungquist's goals for this project:

(1) Create a climate and a structure for employee initiative;
(2) Allow the men to identify company-specific problems and work on ways to solve these problems;
(3) Promote a forum for dialogue between workers and supervision;
(4) Demonstrate management commitment by supporting the process and providing the workers release time to attend class.

Worker goals for this project:

(1) Break down communications barriers;
(2) Focus on problem-solving, not finger-pointing;
(3) Building cooperation between management and supervision;
(4) Getting co-workers to understand/care about what other people in the plant are doing.

Our objectives in response:

(1) Focus on improving critical thinking skills by examining the communications process, especially as it relates to the sender-message-receiver chain;
(2) Integrate basic communications skills into this company-specific agenda through collaborative writing, journals, writing across the curriculum and student voice.
(3) Consider how our pedagogy meets the express needs of these adult learners and their workplace;

(4) Establish structures that will sustain employee involvement after we have finished here;

(5) Measure longitudinally and in depth both the short and long-term impact of these problem-solving classes on productivity at Tawas Plating.

Notes:

Based on a reading of Mikulecky and Lloyd's Evaluating the Impact of Workplace Literacy Programs, here are the productivity indicators we will track over time:

(1) Company performance  
(2) Product quality  
(3) Employee involvement  
(4) Duration and impact of problem-solving models developed in class  
(5) Learner attitudes toward lifelong learning and family literacy issues.
I arrive early and get briefed by Jungquist. It's going to be a challenging group, he tells me, because these are key people in this plant and they have a long history of conflict and skepticism about company motivations. The seven people I have in class basically run the plant: they are responsible for production, shipping & receiving, lab testing, quality control, and waste water treatment. They have to learn to do with each other more productively, Jungquist told me, and that's where I'd like to see us begin.

I begin with the Hawkins diagram. They agree with some grumbling to try it. Steve goes first, illustrating one-way communication. Then John volunteers, illustrating two-way communication. They respond with a challenging mix of indifference and skepticism as if to say, "What does this prove?"

Next I ask them to write how they can improve as communicators and how communication in the plant might be improved. Bob gets hung up on writing it down. When I ask why, he tells me that he associates all writing with getting "written up," which is a negative report on some work-related issue that ends up in the worker's file - eight write-ups and the worker is subject to termination according to the contract - and so he hates writing and refuses to put anything down on paper. It's hard to get them to focus on how they might improve as communicators. They want to point the finger instead. As I move around the circle, it's clear that they seem to be saying that there's no use in continuing on, the class is doomed to failure. There's no communication in this plant and there never will be.

So I let them vent. But as they do, I'm thinking about how to get them past this point as the goal for next time.

5/27/93

I come prepared with an article out of the Free Press on Lopez and his legal troubles with GM. It goes over well, sparking some discussion on communications breakdowns that a couple of the men bring back to their own work situations. It led neatly into what I wanted them to do today - describe
what they do on the job and the pressures involved. My objective here was twofold: I want them to get a idea for what the other person's job is; and I want them to get used to listening.

I find this fascinating, workers talking about their jobs. As they described their work I asked questions, inviting the others to fill in the details. What resulted was a fast-paced interactive ninety minutes that loosened their tongues and got their minds working. I could see their skepticism fade as they began addressing some of the issues that have caused the communications problems in their workplace, and it was especially interesting to see them begin to brainstorm possible solutions to the problems that plague them.

Owen came up after class. He said he was skeptical at first, but he liked what he'd seen so far.

6/1/93

Jack mentioned Deming last time, so I bring in his 14 principles for management. I show this to the group as I set up the laptop computers, figuring on introducing some basic computer skills as we work through a group discussion on Deming's approach. After leading them through a software tutorial that shows them how to use the computer, I ask them to compose a couple paragraphs on Deming's principles of management on the computer.

It's fascinating watching them work. The hourly men really seem to like dealing with the computer. They forge ahead, make mistakes, and start over with no remorse. The two management representatives in class proceed methodically, following directions and asking questions before making a move that might be a mistake. The lab workers take the middle road and pick up the technology quickly. The main production man, on the other hand, is visibly spooked by the machine. I doubt that he's ever worked on a keyboard before.

6/3/93

A good class, the best so far. I printed out the comments on Deming that they'd inputed into the laptops, then put together a page of feedback, emphasizing the positive but asking some hard questions, too. As I handed the papers back to them, the room was silent for at least ten minutes
as they read with greedy interest. I began to wonder if I'd seriously erred by making their comments open and available to the rest of the group. When they finished reading what the others had written, they turned to what I had to say, giving it the same scrutiny. More silence. I wondered if I'd challenged them too hard.

But then Jack turned to a comment I'd made about what he'd written, a phrase about breaking down barriers. In my feedback I wrote, "I absolutely agree. But how is this done?" That's the question, Jack said. So I turned it back to them: How is that done?

They took the issue and ran with it. For the next hour, they came up with thoughts and ideas related to this central theme - almost jumping each other at first but gradually settling into a productive dialogue. It was fascinating to witness. Several times emotions threatened to get out of hand but they held it together after I broke in and told them that because they kept interrupting each other, nobody was listening and listening is a key component of communication. They seemed to digest that as advice worth considering, then went back to the point with renewed consideration for hearing the other guy out.

Some politics emerged, which I won't go into here. At the tail end of class, I went into the left-brain, right-brain stuff to bring closure to the group discussion. They left happy and excited and so did I.

6/8/93

The class took a giant step forward today. The assignment from last time - what makes a good listener - seemed to finally liberate them. Listening seems to be a concept they are eager to embrace because I noticed for the first time how tender they've become about not jumping each other. Owen and Jack - the management reps - were the first to see what I was trying to do in bringing the class together, but now the others see it as well and everyone seems to have bought into the notion that we are pioneers here and there's a real opportunity to make a change for the better.

I brought the skunk along and before we turned to the centerpiece of our work together - the list of suggestions for quality improvements that the men will present to Kevin at the end of the last class - I asked if they'd rather work ahead or be tricked. Trick us, John replied quickly. So I brought out the skunk and we spent fifteen minutes on the lesson. John got it first, followed by Jim. Those two strike me as the sharpest guys in class, judging by how quickly they've learned how to run the laptop computers.
The last thing we did was a consensus assignment. They really bought into, Bob especially. Bob’s transformation has been startling. Though I told Kevin after the first class that often the most resistant learners make the most progress, I was far from sure in my own mind that Bob wasn’t going to sabotage the class for himself and the rest, which he has the capability of doing because he has a strong, opinionated personality and an aggressive presence. I’m not sure what the turning point was for Bob; it may have been the computers because they piqued his interest and allowed him to channel his thoughts - "touchy-feely stuff" - to the others through the machine. Bob is a bright guy with a suspicious mind. You’re not going to dump on him and tell him it’s raining. As he pointed out: "I’m a hog farmer; I know all about which way shit runs."

I’m really beginning to enjoy these guys; I sympathize with their problems. They do a hard, boring job for very little money. Still, they take a lot of pride in their work. They want to do a good job. As we put together this list of suggestions for quality improvement, I think we are working through some of the issues (which Jack called barriers) that have made their work lives miserable for a long time.

6/10/93

The most interesting thing about today’s class came near the end. With about 20 minutes left, Bob lit out on a statement on the paper (the write-ups). Jack answered it and the rest of the group began filling in. For ten or fifteen minutes, it was like I wasn’t even there. They were able to do what they need to do, which is talk to each other and listen, without needing me to mediate and referee their differences. It was a dramatic example of the power and pertinence of a problem-solving approach with adults in the workplace. Then Bob suddenly turned to me and for the first time, he asked: "Well, what do you think? How bad are we?"

We moved from there into working on the cover letter for the list of quality suggestions. "Does this say what you want it to say?" I asked them. "Take some time and look at it."

So they did. On the last part, dealing with the write-ups, they did some especially good editing. Watching them work, it struck me once again how adults in the workplace, even if they are low-skilled in all the traditionally measureable ways, are generally very astute editors when the material pertains to them - or better yet, has been generated by them. It was a pleasure watching them work.
Today's lesson is finishing the cover letter to Kevin, who will attend next time. This collaborative writing is a problem-solving exercise, though I don't think the men think of it in those terms. Working at the flip chart as the men generated ideas, I heard them work through concepts of tone, flow, audience, message, transitions, and conclusion.

On their minds now is where do we go from here. Do these classes die right now or will other people get to go through them, too? They all agree that everyone needs to go through. I wonder how much of that feeling is based on their assessment of plant problems and how much is a positive personal recommendation for what they got out of class.

Last class. Kevin comes in to discuss the list the class generated on quality improvement suggestions. This is potentially a volatile arrangement because he could easily interpret these suggestions as personal attacks on his management style. But Kevin did a very good job. He tried hard to relate to these men, none of whom share his background or education, telling them that list was very helpful and definitely a step in the right direction. He could see that considerable thought had gone into the list and as he went down it item by item, I could see that he was looking for areas of agreement. The men could see it, too.

Then Kevin said to them: "Should we keep going with this? Are we getting anywhere?"

"Yes," the guys said. "Let's keep it going. We're just starting to get somewhere."

Then Bob said: "Well, what about us? Are we going to have to sit here on idle while everyone else takes their turn going through? That's no good. We want to keep this thing going."

"Good point," I replied. "What do you suggest?"

"Let's go an hour or so before the next class. Give us some direction, then bleed us off'n it."

So that's just what we did.
6/8/92
Communications 080
Suggestions for Quality Improvement

(1) Take fifteen minutes in the morning and talk. It would solve a lot of problems. We need to get back to the quality circles.

(2) We need to break down barriers between departments. One way this could be done is by forming cross-functional teams with one person from every department that met once a week or so.

(3) We need to be more conscious of the message we're sending. Separate parking spots and shirts for managers creates a status barrier.

(4) We need to spend more time on training. Pair new guys with experienced workers whenever possible. There needs to be some incentive for experienced workers to train new guys.

(5) Production leaders need to be consulted on quotes.

(6) New guys are afraid to ask questions.

(7) Trainees shouldn't be put on the line the same day they start.

(8) Allow workers to police themselves more. Workers know better than anybody who's not pulling their share of the load and can apply peer pressure on slow workers.

(9) Why run the machines so fast when they are only half-loaded?

(10) The trust factor is missing. Workers perceive management as not following through. Both workers and management need to take time to listen to each other. It's just gotta be done.
(11) The write-up forms shouldn't be used as punishment. The paper does the wrong thing. It creates barriers.

(12) Report forms on machines look too much like write-up forms. Maintenance can feel they've been written up by someone when really all that's happened is that a worker is reporting a machine failure. There needs to be a separate form, color-coded perhaps.

(13) Too many write-ups. "We need to sit down and talk about it before the paper." Discuss the problem first to determine if you need the paper.

(14) Safety should come first. Hazard movies are good, but safetymen should demonstrate what the hazardous materials can do in a production setting and where they are located.
June 17, 1993

Dear Kevin,

We would like to thank you for the opportunity to participate in Communications 080. We feel that the class has helped us with communication. Being able to freely express ourselves amongst our co-workers has helped us understand the problems we really have. We hope that it will help us all solve future problems.

The first day, we did a demo that was an eye-opener. It showed us how good of listeners we were or weren't, and how well we conveyed our message to someone else. As we continued, through the use of computers we learned how to work together. By the end of class, we all agreed that communication is the key to solving problems and removing barriers.

We came up with a list of ideas we would like you to consider. We feel that working together on these ideas will help improve production and quality. Thanks again for the opportunity to participate in this class.

Sincerely,

The Communications 080 class:

Instructor: Don MacMaster
Conclusion:

Communication and collaboration works well in the workplace classroom for three main reasons. First, allowing adult learners to set the agenda contributes to an overall sense that the class is for them, has been created by them, and that the instructor functions primarily as a facilitator to help keep them focused on their goals and objectives rather than as a dispenser of wisdom with a syllabus to cover. Second, communication and collaboration encourages a process approach to learning, in which learning how to learn and making new connections is given precedence over rote learning and the memorization of detail. Third, the lessons that communication and collaboration foster in the classroom have direct application in the workplace where the transferability of basic skills across a wide range of tasks and scenarios is often a key factor in determining who gets promoted and who gets let go.

Extensive observation and instructor journal entries record a pattern of behavior that supports communication and collaboration in the workplace classroom. Writing across the curriculum, which is using writing as a learning tool in a setting where writing traditionally is not taught, has proven to be an excellent mechanism for allowing workers an entry point to think about taking responsibility for their own learning. The real hope here is that the brief
taste of customized education that we deliver in the workplace will somehow take hold in these men and persuade them to seek the knowledge they need on their own, develop an attitude of lifelong learning, and become better able to maneuver their way through the downsizing of the American dream.

Also, with all the talk of education reform swirling about the political landscape, it is reassuring to know that our customers, who are the adult learners and their employers, value this interactive approach. Teaching in the workplace gives instructors a good barometer for what has worked in the traditional classroom and what has fallen by the wayside. Adult learners in the workplace say this: no longer can we assume that we are producing student knowledge by requiring them to synthesize our work in our words; we need to listen to and use the student voice to guide and drive an individual’s learning journey. As teachers, they say, we need to be constantly asking ourselves: "Who is this for and why are we doing it?"

The process approach inspires learning in the workplace classroom, our research has shown, not only among the workers but within the instructional staff and administration as well. When we admit that we’re learners too, we model the strongest aspect of the process approach: learning is a journey, not a destination.
Have you ever thought you had the proverbial "tiger by the tail" one day just to have it turn around and bite you the next? Maybe I did not truly believe I had the "tiger by the tail," but I did believe I had a pretty good grip on it. One day I noticed my grip was slipping and when I had some serious conversations with Don MacMaster from Alpena Community College, I realized help was needed. He approached me with some ideas for in-house continuing education that could take place at our facility. We agreed on a time frame, but needed to arrive at a consensus on the subject matter.

Surveys were distributed among all the company team members to determine what their needs were. I assumed computer skills and math skills would top the list. They were important, however, we heard other voices during the survey. Voices telling us of the need to re-educate ourselves with respect to basic communication skills that would allow communication between all facets of our organization. Therefore, the decision was made to have Don (and later Dr. Richard Lessard) come to our facility to instruct us on workplace problem solving.

Our company had quietly arrived at a juncture where we needed a major overhaul. The extreme pressures to compete in a global economy, reduce the cost to our customer while accelerating quality standards and staying ahead of today's strict environmental laws had suddenly meant we were too busy to communicate with each other. We were taking each other for granted. We assumed everybody else in the organization explicitly understood the pressures each of us were under and we became angry and frustrated when team members did not act as we saw fit. "Just in time" inventories meant that our customer's sudden rise in production or dwindling inventory quickly became our problem. Our management turned around and handed that "problem" to the production workers. But, whom did production have to hand it to? Each other? Their families? Management? I believe it was a mix of all three. If the company was viewed from the outside, it appeared to be flourishing. Deliveries were made on time to our customers and the quality of the work was second to none. On the inside a gap in communication was expanding, frustration was high and morale was low.

The classes are a tremendous success with management and production participating and working together. Each has learned that others have a voice that needs to be heard and that their concerns and ideas are important. If we can tap into the concept of cooperative thinking, the possibilities are endless. We extinguish the flame of this type of communication, and we have lost one of our most valuable assets. We can not survive in today's economy as a divided work force. If we continue to fight each other, we have nothing left in ourselves to fight the real "enemy" — our competition.

By evaluating the obvious indicators in any business we should be able to quantify the success of this training. I am very confident that the results will be exciting. All the achievements, which are numerous, made by these classes are born of the input by each class member, Don MacMaster, Dr. Lessard, Alpena Community College and the governmental agencies that provided the funding.

Thank you for helping us!