

Moving Manufacturers to TeamTime

Phase 3 TeamTime – Training in Lean Manufacturing

Canadian Manufacturers & Exporters BC Division and Teleflex Canada



Operations production leaders show they have mastered the small group Round Robin in this photo from a session reflecting on what they have learned from TeamTime, February 2004.

Project summary

TeamTime is a model of training that combines Lean Manufacturing content and Continuous Improvement (CI) methods with supportive experiential learning in work teams. The goal of TeamTime is inclusive participation in change at work. TeamTime is a project of Canadian Manufacturers & Exporters (CME) BC Division and Teleflex Canada with workplace education consultant Tracy Defoe. In March 2003, the model, sample materials, enabling materials for teams and a first draft scorecard to capture the impacts and return on investment in TeamTime training were completed.

The goal for *Moving Manufacturers to TeamTime* was to take TeamTime to the next level by creating the supporting elements for dissemination. While we prepared for a launch, we continued to improve the materials and the model, and to develop a persuasive understanding of the power of supporting teams with inclusive CI learning. Results and products of this project, *Moving Manufacturers to TeamTime*, include the launch of TeamTime and the supporting elements to do so, including materials, resources, pilot TeamTime trainer training, conference presentations, and this report on the project.

1.0 What were the objectives of the project?

The objective of *Moving Manufacturers To TeamTime* was to take TeamTime to the next level by preparing for TeamTime's launch outside the pilot companies and creating the necessary supporting elements for that wider dissemination: the relationships, resources and people to move TeamTime forward through the Canadian Manufacturers & Exporters (CME) BC Division.

2.0 How successful were we in achieving this objective?

We were successful in achieving this objective. Our evaluation criteria is simple: we have established relationships to make TeamTime a program available to CME members and started to make them aware, completed and published training resources including the Modules and the Facilitator Notes submitted with this report, and introduced TeamTime to leaders from CME member companies and received their written and oral feedback. In addition, through this project we experimented with three different ways to train potential TeamTime trainers and received written and oral feedback through questionnaires, open-ended questions and interviews. We have also observed and kept notes of our progress during the project.

Our activities to achieve our objective followed our plan. We completed supporting elements for dissemination. These include

- A. revising, improving and producing marketable versions of core modules and materials in print and digital forms
- B. revising and reprinting the TeamTime Facilitator's Notes to match the service, support and training approach of our launch
- C. developing communication and outreach material about TeamTime, including an internet presence on the CME web pages
- D. establishing relationships between the partners and the elements to support TeamTime administration.

Throughout the project, we worked on the challenge of training others to lead TeamTime learning. We completed several activities toward this as outlined in our plan.

- E. We extended training trials across different groups and with alternate trainers inside Teleflex Canada where TeamTime was originally developed. We presented introductory Train the Trainers within a few weeks of beginning the project to first time and returning facilitators who successfully presented at a company-wide TeamTime Training Day October 31st 2003. We evaluated this activity and its return on investment through written feedback and company scorecards.

- F. We also worked with new trainers at Teleflex Canada to apply the TeamTime model to learning Six Sigma, which is a set of data driven tools for improvement that many companies use to accelerate lean change. Understanding Six Sigma thinking requires abstract numeracy and drawing meaning from data. This is a shift from most of Lean Manufacturing which relies on document literacies for communicating production metrics, for example. Having new trainers learn about TeamTime and the model by developing new material is close to our original train-the-trainers method, but this time, with so much material for comparison, and the Facilitator's Notes and the model, learning by doing in this way was faster and easier than ever.
- G. We experimented by training one outside trainer on one partial module during Training Day through a co-training method. In one long day, the trainee and Tracy Defoe delivered the same half-hour session, a modified *What is Lean / Continuous Improvement all about?* twelve times to groups of 10-18 people. At first the trainee participated, then watched and asked questions, then co-facilitated and finally lead several sessions on her own. The lengthy debriefing of this experience was important in describing the model, and in determining how production leaders from CME companies could learn to understand and facilitate TeamTime.
- H. We consulted the companies with TeamTime experience about our dissemination model through interviews. Their strong opinions changed our plans for training trainers.
- I. TeamTime hosted one 2-halfday workshop for seven potential TeamTime trainers from a variety of backgrounds including lean manufacturing, workplace education, labour-based workplace education, and trainers familiar with licensed workplace training. This group provided on-going feedback throughout the workshop, and written comments and follow up feedback to TeamTime. Their sessions also provided an opportunity to invite TeamTime developers back together, and they also commented on their experiences and the impacts they have seen.

Conferences and the CME committee structure provided opportunities to present TeamTime and raise awareness of workplace literacies, the puzzle of participation and TeamTime as an answer to how to pull together learning, lean and teams. Our activities in this area include:

- J. Two conference presentations
- K. Presentations and demonstrations to CMEBC Lean Leaders Board and the Continuous Improvement Through Teams Special Interest Group
- L. A half day introduction to TeamTime for CMEBC staff and coordinators.

As to the factors that influenced the success of the project, we would choose to highlight these. The Steering Committee, as a sounding board and as a place of partnership greatly influenced the success of the project through guidance, management and support and at the same time, changes in the membership and in the attention members could give to the project presented problems. The turnover in Steering Committee membership during this project was unavoidable as one member left the company and one other changed job responsibilities. In some ways, bringing along new people as we have done before, and seeing the project through new eyes were factors in our success. Similarly, the range of materials and supporting elements undertaken presented their own challenge: we were trying to accomplish a lot. TeamTime is more flexible, more useful and just more real because it is not too simple, and the other side of this, of the challenge the complexity of the project, is a factor in its success.

3.0 What were the changes made during the project and the reasons for them?

We made one significant and one small change to the project. We had planned to do a fairly simple train-the-trainer workshop and then endorse or license internal (CME member company) and external (consultants or other) trainers who would be able to deliver TeamTime modules. Our experiences with one outside trainer at Training Day and with developing in-house trainers at Teleflex Canada caused us to rethink this strategy. The suggestion that on-going interactions with Tracy Defoe as TeamTime curriculum designer and lead developer added the most value to the learning experience held sway, and we re-thought our launch from preparing and offering a set of materials and an opportunity to become familiar with how they should be delivered, to a more service-oriented plan. This change caused us to interview CME member company representatives about what they wanted from TeamTime and to refocus our workshops and introductory training. It also led us to a launch plan through the CME Consortia companies that is more likely to be successful, and guaranteed to develop the capacity of many people to appreciate workplace literacies and learning.

The smaller change made during the project was to the timeline. Our proposal was for a September 2003 to March 2004 time period. This was adjusted to October 21 2003 to May 30 2004 at the time of the grant approval. In the end, we asked for a one-month extension to June 30 2004 to accomplish our train-the-trainers introductory workshops and to be able to meet with the CME leadership committees to complete our launch plans under this project.

4.0 What have been the impacts of the project?

This project is unusual in that it aims to start a program and create support for its ripple across Canada. It is perhaps too early to describe impacts or major changes at the sector level just yet. In our proposal we looked to the following impacts and they have all been achieved during this project.

1. A launch version of TeamTime materials and the method, workshops for workplace literacy and lean facilitators, print and digital material, web pages or other support for training people to lead TeamTime and a plan for integrating TeamTime methods and awareness of workplace literacies into other CME training.
2. A group of business leaders and others such as workplace educators and workers with experience with TeamTime who can attest to the business imperative of inclusive workplace education.
3. Reports describing the goals and activities of the project and lessons learned will be made available through the CME. A copy will be added to the [National Adult Literacy Database \(NALD\)](#).
4. Presentations for business and education conference audiences.

TeamTime is anchored in a social practice view of literacies in the workplace. It focuses on meanings, and has the work group or team as the learning focus. Lean Manufacturing and Continuous Improvement demand continuous change. One worker who has been a participant and a facilitator for TeamTime told the people who came to our outside train-the-trainers workshop that:

“We have had to absorb so much change, and learn so many new things. There is no doubt in my mind that TeamTime has increased our abilities to do so, and is one of the reasons we are still working here and that these jobs have not left Canada.”

Given our goal to move manufacturers to TeamTime, perhaps interest among the CME community to try the program is a good indicator of impacts of this project. At least four CMEBC consortium companies that have seen a presentation on TeamTime have expressed interest in getting going as soon as we are ready. Most encouragingly, a Manitoba CME consortium has invited TeamTime to do workshops for their lean trainers, and people who do other kinds of training in manufacturing are asking to learn about TeamTime so they can apply the model to their technical training.

5.0 Highlights and achievements

- Completing the materials and exceeding the expectations of the customer group was the real achievement of this project. Steering Committee members and lean leaders from CMEBC Consortia companies who have seen the materials and the Facilitator's Notes, and the members of the committees who have had presentations on TeamTime, are all enthusiastic about learning how to build participation through shifting the learning paradigm in manufacturing.
- On October 31st, we conducted a large trial of TeamTime materials and new internal trainers through a company-wide Training Day at Teleflex Canada. We learned from the ways the trainers followed the method and used our materials, from their questions and the ways they customized their sessions. Shirley Elliot, Continuous Improvement Team Coordinator from Columbia Plastics Ltd, was the first volunteer TeamTime Trainer trainee from outside Teleflex. She spent the day with TeamTime consultant Tracy Defoe helping to deliver parts of *What is Lean Manufacturing all about?* twelve times to groups of 10-18 people. This was a beginning step in training trainers for TeamTime. Feedback from participants rated the training experience and the novice trainers very positively. This feedback is in [Appendix One](#) of this report.
- November 13, 2003 Tracy Defoe and Paul Hansen, Director of Employee Services for Teleflex Canada and member of the TeamTime Steering Committee, made a 30 minute presentation to the Business Council of British Columbia's conference *Raising the Bar: Advancing Workforce Literacy*. They both stayed to participate in the one and a half day conference in Vancouver and were part of enlarging the discussion from skills deficits to assets, and literacy to literacies.
- December 10, 2003 Tracy Defoe made a presentation about TeamTime and the CME Teleflex Canada Model for learning Lean Manufacturing at the Workplace Learning Conference in Chicago Illinois USA. The 90-minute session included a presentation about TeamTime and the model, and a chance to try some hands-on materials. The attendees included manufacturers, labour partners and educators who are working in workforce education / manufacturing. Feedback rated the presentation as "very good" and "excellent" and two attendees have made contact since to learn more about our progress.
- We have extended the model from learning lean and teams to other kinds of specialized learning with the lean theme. New teams of machine operators have been using TeamTime learning in Autonomous Maintenance Teams at Teleflex Canada. Implementing this aspect of Lean allowed us to try TeamTime in new groupings and work with new meeting 'captains' and mentor new trainers. We have also applied the method to learning the concepts that underlie a program of improvement tools called Six Sigma. Using participative methods and pull to explore the meanings of ideas like variation, normal data, capability and control extended our work with document literacy to meaningful numeracy, where numbers, and patterns of numbers are used to communicate meanings.

- Tracy Defoe interviewed ‘customers’ to learn about what they want from TeamTime. This resulted in ideas for new reference material for production workers, and an increased emphasis on service as part of our dissemination planning.
- Informal dissemination activities are on-going, and included a meeting with the CME Manitoba Training Coordinator about TeamTime that has led to planning a fall workshop in Winnipeg for lean manufacturing leaders.
- The Steering Committee met eight times during the project and applied a project management model to Moving Manufacturers to TeamTime in order to better coordinate and manage the many elements of the project and to follow best practices.

6.0 Recommendations

What would we recommend to another group interested in a similar project? Our project greatly benefited from research into literacy and literacy learning in Canadian workplaces now published as *Reading Work: Literacies in the New Workplace* by Mary Ellen Belfiore, Tracy A. Defoe, Sue Folinsbee, Judy Hunter and Nancy S. Jackson. That research helped provide a framework and a grounding for understanding the kinds of literacies in work culture that TeamTime aims to advance. Integrating learning, work concepts and team processes is complicated and we would recommend building on research, or taking the time to see and study a workplace or an industry before undertaking learning that is trying to change them.

In this project, we learned and applied project management practices that were useful not only in tracking the project, but in focussing the Steering Committee on the need for, and the results of the project. We recommend a similar process to other groups, especially where there are multiple demands, or issues that are hard to understand.

We have previously recommended that other groups hold in check their optimism when estimating times. Our greatest setback, the loss of Ruth Farrell, was impossible to foretell and delayed the beginning of this dissemination preparation project for six months at least. What put us back to work on it was more than a desire to honour her work and ours with completion. The people who had helped develop TeamTime wanted to see it out there. The companies who had some experience with it wanted more. It was the ground work that we had done in sharing early versions and draft ideas that made it necessary to finish this project. So, we recommend that other groups risk sharing their best ideas before they are all polished up and finished. You never know when you will need a big network of supporters.

7.0 Materials of Interest

- ✓ TeamTime modules including
 - Why are we doing TeamTime training?
 - What do customers want?
 - What do customers and stakeholders want?
 - How do we connect customers, metrics and goals?
 - What is a storyboard?
 - Where do our products go?
 - How does TeamTime learning work?
 - What is Lean / Continuous Improvement all about?
 - What is adding value?
 - What do we mean by waste?
 - What do we mean by pull?
 - How does information flow?
 - How do materials and process flow?
 - How do we make improvements?
 - Why do we need teamwork?

- ✓ TeamTime Facilitator's Notes
- ✓ Sample feedback and scorecard forms
- ✓ TeamTime posters and supporting material

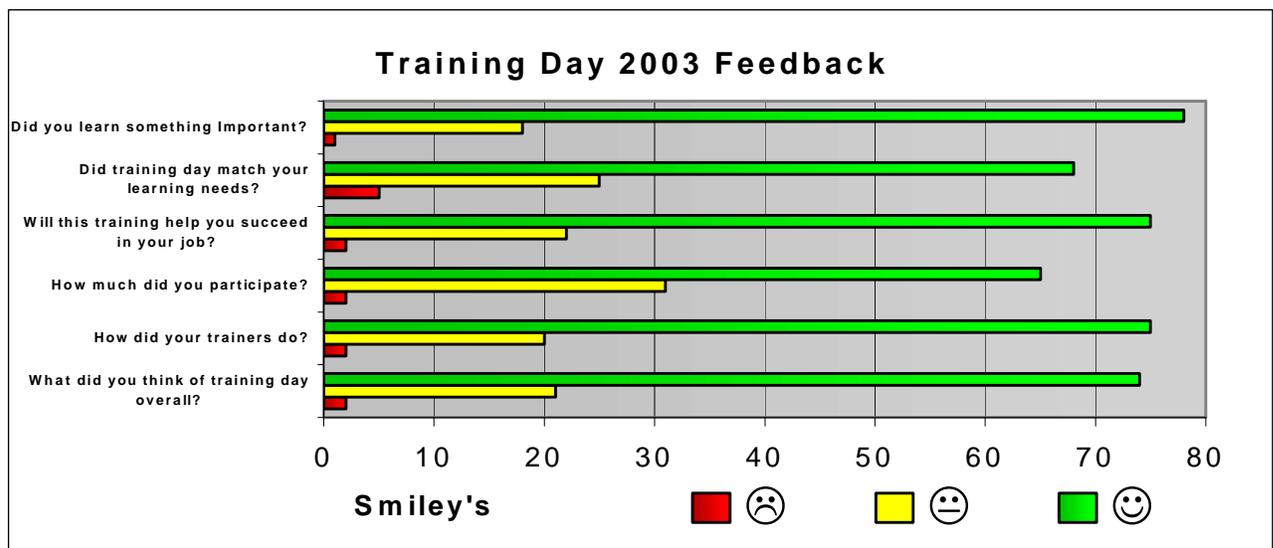
Appendix One: Sample Feedback

2003 Training Day Replay

Did you enjoy our Training Day for 2003? I know I did, and in talking to others, I found most of us enjoyed the day. Most of us also learned something important that we can use. We learned about our products, we learned about our processes, and most importantly, I think we learned a little more about each other and about ourselves!

Training can be fun. Training Day gave us the opportunity to have some people practice their training skills, sharing their knowledge with others and experiencing the satisfaction that comes from giving something of yourself to others. We are proud to be able to put on Training Day with Teleflex people and use mostly our own Team Time materials. For our learning participants, it was an opportunity to experience and learn about aspects of Teleflex that maybe before Training Day, we knew very little about.

This was the second year that Teleflex has put on a full day of training for the production personnel. Lessons learned in 2002 were applied to improve the process and the session content for this, our second year. We believe that this year's event was more effective than last year. As we are an organization committed to continuous improvement, we asked for your feedback at the end of the day and many people provided it for us. The chart below shows the feedback you gave us. As you can see, the overwhelming majority gave it a "Smiley" face!



We also asked for your comments. Some of the positive comments we received were:

- Worth it for product / company / business knowledge
- Training Day was worthwhile. Learned a lot of new things about the products
- It was worthwhile for me. Again.
- Yes, we should do it again!
- All of the presenters were exceptional
- CI part is a good one because I can learn more things about the importance of improvement

Some of the opportunities to improve that were pointed out included:

- Arrangement needed to be improved during start time
- Too much information too fast. Try to do less, and cover more in depth in fewer areas
- Organize it better next time.

Overall, we feel that Training Day offered real value to our Employees, to our Trainers, to the Company and ultimately, to our Customers by helping to create a more knowledgeable, informed and committed workforce. We also want to thank everyone for their support on Training Day, for their participation and for providing feedback that we can use to improve events such as this in the future.

Terry Eady, Training and Safety Coordinator, printed in the FlexTimes Newsletter, November 2003

Feedback from our Trainer Trainees

“I feel holding the sessions at Teleflex and having their employees involved added a lot of value for the people in the group that may not have been exposed to manufacturing or to lean. I was most impressed by the way you can get people to reveal their circle of knowledge in a safe and open way.”

“ Having been the president of manufacturing companies, I can see the ‘push’ form or training was predominant. I am anxious to implement ‘pull.’

“When I was invited to attend, I wasn’t sure what relevance this could have for me personally because the training I have done was more technically delivering curriculum and this seemed random and disjointed. Things are much clearer now and I am interested in pursuing this method further.”

“I feel clearer on the concepts, process, objectives and tools you’ve used to design and implement TeamTime.”

“Everything was explained very clearly, facilitated smoothly and wonderfully role-modelled. I noticed several times that you said, “This isn’t rocket science,” and I think this greatly down-plays your vast experience of a) adult education and b) TeamTime and learning at work... The fact that this is a transformational culture-changing program is important to me.”

“Seeing what was being manufactured and meeting people who work here made the whole approach more meaningful...I enjoyed all the interactive activities and I love the TeamTime Building Participation in teams booklet. It is so cool.”

Feedback from our Canadian Manufacturers & Exporters members

“TeamTime is something we need more of at my company.”

“I found the perspective on learning that you shared with our Special Interest Group to be very useful. We all struggle to stretch ourselves this way without any expertise in learning or literacy or ESL. Tools that make interaction and participation easier, that’s something I don’t mind having.”

“I have asked our president to look at TeamTime for our company. I hope we will put someone through to be our internal trainer. Thanks for coming out to talk to us and demonstrating your methods.”

“It’s taken a long time for this to come to us, but the care and testing you have done shows. We want to get going, and we think this will change the way manufacturers train their workers, and the way they think about learning.”

Feedback from our last development and piloting

“Many people know how to do SPC, but they don’t understand it. Even though I thought I knew about this, I learned a lot.”

“Managers just look the number and walk away. Do they need this training? I don’t know what they know, or what they understand. Mostly they seem to be looking at just one number, so yes, I think everyone should review these math concepts to understand what numbers mean around here.”

“Last year in TeamTime we were really focussed on communication, learning and document literacies, but this time we really got into data, and how people draw meanings from numbers. I feel like we are going deeper into educational issues for workers everywhere and getting closer in knowing how to teach, watch and work with this kind of numeracy.”

Appendix Two: Sample forms, posters and tools

The TeamTime Modules and the Facilitator's Notes *Building Participation in Teams* are supplemented with forms, posters and tools such as these. These are not bound with the modules but drawn on as appropriate. As selection was filed with this report, but is not available on NALD. This Appendix included the following:

- ✓ I know self-check
- ✓ I can teach self-check
- ✓ TeamTime scorecard for managers and leaders
- ✓ Who is leading you?
- ✓ Find someone who
- ✓ Observing groups checklist
- ✓ Silent challenges
- ✓ Working plan tool
- ✓ Checklist for first visits
- ✓ Sign in form
- ✓ TeamTime feedback form
- ✓ Waste poster
- ✓ Learn and Remember poster
- ✓ Learn and Remember bar graph poster
- ✓ Recommended supplies for CI teams
- ✓ What if we get stuck?