



How Formal and Informal Training Complement Lifelong Learning for Professional and Personal Growth

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Introduction

Dofasco, located in Hamilton Ontario, has been in existence since 1912 and is Canada's most successful steel producer with approximately 7,000 employees. Dofasco has created and fostered a learning culture by providing some of the most progressive training programs in the industry, investing over \$15 million a year in skills development and training.

The Dofasco Essential Skills Program was created in 1997 to provide learning opportunities for employees in the areas of reading, writing, computers, and other essential skills in the workplace. Over 400 employees have participated to date. Onsite classes are offered to meet the needs of the workers. Participation is voluntary and open to all employees in the company. Participants volunteer one hour per class and get paid for one hour. The progress of the participants is kept strictly confidential between the participant and the instructor. The instructors are adult literacy instructors from community literacy agencies in the Hamilton

area. Depending on how many classes run in a term there can be between three and five instructors.

There are two 12-week semesters offered each year: one in the fall (September to December), and the other in the winter (February to May). Most of the classes run once a week. The reading and writing class runs twice a week as this program is designed to assist participants with low literacy skills and more intense instruction has proven to be beneficial. Class sizes range from four to six employees in the reading and writing class and 12 to 15 in the computer classes. An instructor/tutor manual was developed in 2004 by team of instructors to streamline the course outcomes. This document also outlines assessment procedures.

The Essential Skills Team – a team of Dofasco employees that includes human resource representatives, managers, and other interested staff – run the program. The Human Resources Coordinator, who provides corporate consistency to the program and acts as the liaison with business units and external providers, oversees the program.



Community partnerships are a key component of this program. As mentioned, the instructors are contracted through community literacy agencies. As well, the regional literacy network – the Adult Basic Education Association (ABEA) – acts as the workplace broker for the program. In this capacity, ABEA assists Dofasco to select instructors. ABEA provides the initial placement assessments to ensure that employees are accessing appropriate classes. The initial placement assessment includes information about the employees reading, writing, speaking and listening, and computer skill levels using the Ontario Literacy and Basic Skills (LBS) Levels. Certain levels are required for different classes. For example, an employee must be at LBS 3 Computers in order to participate in the intermediate computer class. An outside evaluator is also involved to visit all of the classes and provide feedback to the Essential Skills Team as to the quality of the program, as well as any recommendations for improvements. These partnerships continue to strengthen the program to ensure optimal training opportunities for Dofasco employees.

Formal training is of course important to Dofasco in order to create opportunities for continual development and growth. However, there are many other learning opportunities that are more informal such as health and safety meetings and consulting co-workers about work tasks that also contribute to employee efficiency and growth both professionally and personally.

The interplay between formal and informal training

Participants in this study were selected because of their commitment to continuous learning offered through the formal training courses of the Essential Skills Program. However, all of these same participants also learned informally at the workplace through various methods. It would seem that there is a strong link for those employees who seek out formal training, and continue their learning informally outside of the classroom. Such employees see the value of investing in lifelong learning and continual development – both on a professional level and also on a personal one. This investment and desire for growth is best encouraged by praise. As Joseph put it, “What I do is the best I can and I like to know that I’m doing a good job.”

Formal training

Formal workplace training is defined by structured courses or programs related to a worker’s current or future job that involves a trainer and some form of recognition upon completion (Adult Education Training Survey, 2003). Examples of formal training include programs such as the Dofasco Essential Skills program. This program offers specific courses, and curriculum, and there is a completion certificate given to all employees who participate at the end of each term. Other examples of formal training that are offered at Dofasco include apprenticeship training, and short term programs such as WHMIS and CPR/First Aid.



After indepth interviews with three participants who also kept a learning journal for four weeks, and two instructors in the Essential Skills Program I found that employees engaged in formal training primarily to increase their on-the-job skills. Employees want to increase their reading and writing or their computer skills in order to perform better on the job – whether that be to complete a report more accurately and efficiently, or to use e-mail effectively. As a result, employees have a feeling of overall wellbeing as they increase their competency and comfort levels with specific skills that they can use on the job. As well, employees increased their skills for use at home such as searching the Internet or in the community when using the computer at the library. Interviewees talked about their increased performance at work and in the community in the following manner. One worker said,

“I benefit a lot from these courses. I am more comfortable reading and writing. This course makes my job way easier for me to do. It benefits me when I’m doing reports and all the reading I have to do.”

Another worker believed that,

“this course has improved the way I talk to people because I’m thinking more about what I’m saying. Part of my interest in the course was business oriented because there is so much more to computers than just e-mail and reports – it’s another form of communication. The skills I’ve learned from the course are not so much related to my job because my job is primarily physical, but it has helped me relate

to other people. I can help others learn what I have learned.”

Many participants sought out training on their own, in contrast to it being suggested or encouraged by a supervisor. Gabe, a computer class participant, commented, “I took this course because I need to work to improve my skills on the computer for the work I do like writing updates and reports about machines and writing e-mails”. This type of motivation and regular attendance in the classes is very much related to success, according to the instructors. Delivery modes are also important. Due to the fact that classes are made up of employees with various employment backgrounds, skill levels and first languages, it is important to individualize the program and give as much one-to-one and peer support as possible. As one instructor commented,

“I run a modularized program so the program is customized for each person. The first half of the lesson is generic but the second half of the class is always project based.”

Participants in the program prefer explicit instruction and close guidance when learning. As indicated by the workers’ responses on the Effective Lifelong Learning Inventory (ELLI), many participants do not know what to do when they get stuck while learning and this can be frustrating. It is important to them that their instructor works with them to help them learn in a variety of different ways with one-to-one instruction. Gabe noted, “To learn, I prefer one-to-one”. Similarly, Joseph added, “I learn best when I get a lot of guidance when I’m having difficulty.”



Formal training for those workers interviewed was seen as a very positive activity that helped them gain skills both professionally and personally. The participant's view of the training was more positive if they received encouragement and support from their supervisors such as assistance in covering off shifts, or just as general interest in how the employee was doing in the course.

Informal training

Informal workplace training is defined by the Adult Education Training Survey (2003) as learning with little or no reliance on pre-determined guidelines for its organization or assessment and undertaken with the intention of developing job-related skills or knowledge. From the different data sources in this case study it seems clear that informal learning is the continuous everyday learning that takes place on the job or elsewhere. It is purposefully sought out and occurs with a specific need in mind. Workers gave the following examples: safety meetings or other training events, asking a colleague for assistance with a new task, or seeking out new information from a manual or the Intranet which is used at Dofasco through the Dofasco network.

Trigger events

Specific needs and purposes seem to act as trigger events. Participants engaged in informal learning to increase specific job skills, for

communication purposes, to gain new information, and for work-related safety reasons. Results from the ELLI suggest that employees need to be interested in what they are learning. Some employees also commented that they needed to learn informally to better understand work tasks and be able to complete their job duties correctly. Gabe explained, "I ask if I don't understand something – for example I will ask what a part does on a machine." In the same light, Joseph mentioned,

"I do a lot of informal activities to develop my job skills. I have sought advice from my boss. I ask him questions to see if what I'm doing is right on the job. We have one issue going on right now that I have to keep track of ... I want to make sure to do the right thing for that problem."

As can be seen, these employees use informal learning to enable them to keep pace with an ever-changing workplace.

Participants also talked about the importance of informal learning as a way to increase their ability to communicate using technology. All of the participants mentioned that learning how to use e-mail was a very important way of sending and receiving information from other workers. Steven commented,

"I do use e-mail at work to e-mail my boss. I send updates, virus alerts, notes related to health issues, etc. I also e-mail the HR representative occasionally about something that might be related to what she's working on that she could pass on to others."



Similarly, Joseph reported,

“I send e-mail back and forth from other guards and the boss pretty much everyday. We use e-mail for general correspondence, health and safety information, road closures, and problems with theft.”

Likewise, Gabe went on to say,

“I send e-mails to co-workers about what to do the next day and what type of work is needed. I also get e-mails about jobs to be done and things to be picked up.”

All of the participants felt that learning to increase their technological skills was critical for their day-to-day work. Computers were also used to gain information needed for the job. Joseph reported that he learned to use the “Intranet for looking up [ID] numbers, and getting various pieces of information like Dofasco news and weather.”

Finally, all of the participants that were interviewed stated work-related safety as an important trigger for informal learning. This type of learning takes place during their regular safety meetings, but also on the job site where specific safety information is sought out. Joseph noted,

“I also have a lot of meetings such as safety meetings on different issues inside and outside of Dofasco for example, wearing safety glasses, wearing your hard hat, safety issues at the gates, and floors coming up.”

In the same way, Gabe explained,

“We also have safety meetings for all maintenance staff. In these meetings we learn about when to lock a machine, how to watch where you step and safety procedures. And every first Friday of the month my crew has a Tool Talk session where we talk about safety issues on the job.”

Steven commented about asking safety questions on the job when he said,

“I ask questions about safety to make sure that my co-workers and myself are protected. There are so many ways that we can get hurt so I want to learn all that I can. At some point I might come into a dangerous situation that has happened before and I want to know what I’m not supposed to do. I do attend safety meetings about things that might happen around the job site and at home.”

These employees considered safety paramount and continually learn about safety issues in order to avoid being injured on the job. In sum, they have various reasons and trigger events that prompt them to learn informally on the job. The reasons focus on the need to increase their job skills, for communication purposes, to gain information, and for work-related safety reasons. This type of learning enabled them to be more confident, competent employees.

Types of informal learning

Informal learning, for these participants, took on many forms such as asking advice from either a co-worker or supervisor; using the



Intranet; observing other co-workers performing tasks; consulting books and manuals, and problem solving skills to understand a new way of doing a particular job task. All of the participants cited situations where they consulted a co-worker or a supervisor about a job task or even to get advice around an issue at home. Joseph commented that he asked a fellow worker that was more knowledgeable about computers how to navigate for information. Gabe tapped into a co-worker on several occasions to learn how to install two hoses together and how to refill a grease system. He also sought advice from the same co-worker on how to change a Lincoln pump in the coal handling area as well as the best way to grease chains in the gas alleys. Steven also recalled asking his supervisor questions regarding an aspect of their safety procedures. Employees also consulted each other about learning things outside of the workplace. Steven commented that he “asked a colleague about something to do with [his] furnace” and also asked someone “about [his] house and how to do certain repairs.” All of the participants had various instances of asking for advice or guidance, which suggests that this is an ongoing and frequent practice.

The Intranet was used by the participants on many occasions as a learning tool in everyday work as well as to look up needed information. Joseph reported that he used the Intranet to send and receive e-mails, as well as to look up names and to file reports. Gabe used the Intranet weekly, performing tasks such as e-mailing his boss to ask him “how the pump was working,” to check the weather, classifieds, and his own e-mail account. Participants used technology, and more specifically the

Dofasco Intranet, regularly as a tool for informal learning.

All of the participants also used observation skills to learn on the job. Joseph commented that he observed a fellow employee working on the computer to modify a procedure. He said it this way, “I watched a fellow worker working on [a] gate... to try to fix the operation of the open and closing of the gate.” In another situation he observed an “officer showing a security officer ... how to use the back tank for fires.” Similarly, Gabe reported the use of observation skills on several occasions. He watched the pipe fitters put a pump together, a co-worker check the gearbox level, and another co-worker bend tubing for the door machine. Steven commented that he “sometimes take[s] notice if something happens that [he] wasn’t expecting.” For example, if there is a new drilling technique he’ll observe the technique and the procedures. Observation is a very important and consistent way to learning informally for these participants.

Workers also consulted books and manuals to learn new information in order to complete their job tasks. Joseph consulted the dictionary regularly to get the correct spellings for words he needed to write down. Gabe frequently consulted manuals as part of his job. For example, he often used a work order binder and a work instruction outline. Steven used phone books and safety data sheets for chemical handling. These participants consulted various print materials regularly in order to learn information for specific job tasks.

Finally, participants used job problem solving skills to teach themselves a new or different



way of completing a regular job task. Based on the responses from the ELLI, these employees had a need to work out job problems for themselves. Steven taught himself a different way of cleaning up machines to prevent accidents by watching others and adding this information to his own knowledge base. A security officer showed Joseph how to use the logbooks on the computer, which he practiced through the trial and error method. Gabe tried to grease a coupling in a different way by observing the pipe fitters. He increased his knowledge about specific bends and measurements by being shown how to do it and then trying it out himself. This seemed to be the best method for him to learn the new task. The use of problem solving skills and self-teaching methods along with observation were techniques used by the workers.

Overall, employees reported various types of informal learning that they engaged in on a regular basis such as asking co-workers or supervisors for guidance, using the Intranet, observing others doing certain tasks, consulting books and manuals, and using personal troubleshooting techniques. All of these types of informal learning allowed the participants to gain new skills and become more efficient and knowledgeable on the job.

Concluding thoughts

Companies certainly benefit when their employees are well trained. Traditionally, the way to ensure this was through formal training opportunities. However, workplaces should be encouraging and rewarding not only participa-

tion in the formal training but also the plethora of informal learning activities that happen daily on the job. It is important for companies to foster a culture of lifelong learning and support their employees to continually develop on the job through both types of training. In this way, employees will feel valued and competent, and workplaces will benefit from a highly skilled workforce. As can be seen from this case study, both formal and informal training was very important to the participants. They valued lifelong learning in many forms and saw a link between their efforts and successes on the job and at home. In other words, these employees invested in their own growth on a continuous basis and took pride in being part of the workplace culture.

References

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