

Online Learning and Distance Learning in the Manufacturing Industry

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Online Learning and Distance Learning are important topics relating to training of employees at Ridge Tool Company where I am employed. As new individuals have been hired into the company, the company is now requiring a set of training goals each individual must have completed. Within the Manufacturing Industry, companies are required to train their employees to retain ISO certifications. Specific requirements are set for each company that they must adhere. The requirements are set not just for the employees within the company's home country, but for all countries business is conducted. In the Elyria headquarters, employees who are involved with the PLM (Product Life Management) process are required to be trained on how to use the technology systems, but also how their job affects the entire life management cycle. The goal of the training is so products can be produced quicker and be maintained quicker. Employees can do their jobs better and faster.

Having been in my current position since the beginning of 21012, one of my roles is that to train employees on the PLM process, as well as how to use the technology systems. Many of the employees are located in Elyria, Ohio, but many others are located globally. I have been tasked with creating a training system that can be used by all employees required to use the system. Besides Elyria, currently, employees are being trained in other locations such as Cluj, Romania, Mumbai, India, and Shanghai, China. As the decision for other locations becomes aparant, additional training will be determined at that time.

The Online Learning and Distance Learning portions of our training program are used not only by the training given globally, but also by the individuals located in Elyria. The tools that are being used or being designed for use include: video conferencing (two-way), Online Learning, Interactive Message Board (SharePoint), Videos, Email, Instant Messaging, and Phone Calls. All employees have used these tools in ongoing learning for their jobs. There are definite pros and cons of each of these tools that I use in my training.

Video conference is typically not required for those individuals located in the Elyria offices. This tool is used primarily when training the groups located outside of the Elryia offices within the US and all of the locations globally. Recently, we have been working with Romania and India. The engineers located in these locations are not brand new to manufacturing, but are brand new to the company. We are working to train all of the individuals to our processes

and how they need to complete their tasks. When we use the video conferencing, we also will employ Online Learning and a presentation format. Prior to the video conference meetings, documentation is created that will allow them to see step-by-step how training will be accomplished. This concept is very effective when trying to training individuals not physically located in our home-base location. We can see everyone and using computer hook-ups, walk through the training with them. Due to technology constraints, the students of the sessions typically only have one computer with which to receive the training that I am projecting. I am a very hands-on type of instructor. I like to be in the room with the students, making sure they are walking through the steps with me, and making sure if they are confused or behind that everyone stays on topic with the training. Because these students are so far away, with budget constraints, this is the only form of training we can provide that will allow me to see their expressions and hope they understand the training we are providing.

Regarding the documentation, as we are developing the training documentation, we are building a site to house all of that documentation. With the use of the SharePoint software that was built by Microsoft Corporation, we will have the documentation housed in a central location. Types of documents will include the full, blown-out training programs used to train all of the employees. This will also contain the smaller training documents for the smaller tasks each person completes. The site will also have a discussion area, letting individuals from the different departments to interact and self-learn between each other their tasks. At the same time, the discussion area will be moderated by myself. This will give my team the opportunity to find out what other topics the learners want/need to know so we can develop other training and answer questions posted on the board. The site will also ultimately contain a training schedule and video training. The downside of the site? The individuals need to be responsible enough to access the site regularly and post questions as needed. This may become difficult with everyone's working schedules.

Video training is the next topic. Currently not developed yet, the goal is to enable recording of all training being designed. This will allow each employee who attends training in any of the formats allowed an opportunity to review training they attended. With the Online Learning/Video Conferencing portions of our training, we will video tape the training through

the use of Microsoft LiveMeeting. The videos will be reviewed and saved to the SharePoint site, allowing all students the ability to review them in the future. As this concept is newer in our overall training goals, cons to the video training have not been conceptualized.

Emails, Instant Messaging, and Phone Calls all seem to work out similarly. Emails being the best of the three options, a student will call, instant message, or email, asking a question(s) about their issues. Email gives me the capability to answer their question specifically, and allows me to add screen shots and step-by-step instructions how to come up with the answer they needed. The con of email is that the person does not want a drawn-out answer to their problem. If they have called or instant messaged me, they just are looking for the answer. In my way of making sure they understand HOW the answer is found, I will email them the response in the form of training. Most individuals retain the email that I have given them while a few others do not even read the full email. For myself, the downside is that I spent the time crafting the email that might be sent to someone who does not appreciate what is being sent to them.

Phone Calls are the most difficult to process from students. They will call, asking an issue that they need addressed. Often, I am able to quickly answer their questions, but a number of times, I cannot address their questions quickly. On the other hand, if I am trying to work with the student over the phone and give them the process in which they need to be on a specific screen with their computer, if they do not process my steps quickly enough, the process over the phone can become muddled, where the student may be 3 steps behind.

All of these tools and others are employed every day in this manufacturing industry company. Training has become better globally through the development of training that everyone can use. Those who are located in the home offices can use the online learning that has been developed for all locations just as those employees who are located internationally can use them as well. With all of this training, the goal is that everyone works better and quicker within the process. Those of us managing the process and the technology systems have seen a change for the better in the time taken to process life management processes.

Tool	Used By	Pro	Con
Video Conference	Students Globally	Students and Instructor can see each other when instructing and askin questions	Not really sure if students understand what the instructor is trying to teach
Online Learning	All Students	Students can complete training at own pace during their own timing	Have the students been able to apply what they have learned from training in their every day tasks
Interactive Message Board	All Students	Allows students to access documentation created by instructor when needing to brush up on tasks assigned	Instructors not sure if the students have reviewed documentation
Videos	All Students	Allows students to re-view training that was delivered to watch the steps being performed from training	Instructors not sure if the students view the videos
Email	All Students	Allows instructors to create pointed documentation to one or a few students	Not all students will read the email in its intirity
Instant Messaging	All Students	Allows students to ask instructor one-on-one questions and receive immediate feedback/training knowledge	Geared toward one person and typically not saved to be used by others
Phone Calls	Students Locally	Works like Instant Messaging	Works like Instant Messaging