

AMERICAN CONGRESS OF SURVEYING AND MAPPING

Investing in Survey Training for your Staff

Why you cannot afford to not train your staff

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2/20/2009

ACSM Annual Convention Salt Lake City February 2009

Abstract

Too often we've heard Surveyors utter the phrase "I can't afford to train my staff." Actually the opposite is true. These days a surveyor cannot afford to not train their staff. Technological advances in the field and office and increased competition from less traditional data providers require a surveyor to make a conscious effort to increase the abilities of their personnel. A well trained staff is not only more productive but also more motivated and less likely to look for opportunities elsewhere.

Presenter Bio

Robert J. Mellis is a Professional Land Surveyor licensed in Florida. Mr. Mellis has 30 years surveying experience performing boundary, topographic, control, design and construction surveying activities. He's currently employed by Bentley Systems Inc. where he works as a Solutions Engineer, responsible for helping to develop new methods and technologies of integrating different software applications to streamline work processes. He is a certified instructor in Microstation, Bentley Civil and Geospatial products.

State of the Industry

These days the profession of surveying is facing many challenges it did not face in the past. Rapid advances in technology combined with “profession creep” from nontraditional suppliers of survey type data are forcing surveyors to reevaluate their position in the marketplace. Boundary and right of way surveyors together with design and topographic surveyors are facing competition from GIS practitioners, photogrammetrists and the emerging LiDAR technology. Construction surveyors are being marginalized by new techniques in model building and machine grading. Combine this intrusion of traditional survey practices with the fact that less and less people are entering the profession.

Surveying is a business. As much as we all love this business and that is why we decided to stick with it, it is still a business. That means we are in this business to make enough money to provide a decent living for ourselves and those we employ. The astute surveyor will find ways to expand their market and increase their profitability by expanding their technological abilities of not only themselves but their staff.

Advancements in Technology

Advancements in technology, both in hardware and software have made it easier for less skilled people to accomplish the same tasks, which required greater skill and education than in the past. Or at least we are led to believe by the marketing efforts of hardware and software manufacturers. While some of these claims are true to a point, what it has really done is create a class of “pseudo technicians”. I refer to these people as “pseudo technicians” because they know what buttons to press to generate the desired results, yet are totally unaware how these results are achieved. This lack of awareness of how results are achieved makes it impossible for them to distinguish between acceptable results unacceptable results. It also leaves them unable to determine why they have achieved unacceptable results and thus take corrective actions. At the very least this causes work to be redone and at the far end of the scale leads to large liability payouts for the survey businessman.

What Business Benefits are Derived from Training

There are multiple benefits derived from developing a comprehensive training plan for your staff.

- A.) ***Well trained staff are more flexible and more capable of adapting to changes in responsibilities.*** The staff member that is capable of performing more than one task or small group of tasks gives the employer / supervisor more options when scheduling project work. It allows one to keep and maintain productivity despite losing a staff member. What if you have only one person skilled in drafting ALTA Surveys and you lose that person due to illness, vacation, relocation, etc.? Do you stop performing ALTA Surveys? If so, what about ongoing projects? Having the ability to move staff around depending on workflow allows the employer supervisor to adjust their staff depending upon labor requirements. In many cases when times are slow in one area, you can move less busy people to a more demanding project and thus maintain productivity or even increase productivity to manage a deadline change.

- B.) ***A well trained staff makes fewer mistakes.*** We've already shown how a well trained staff can increase your productivity, but it can also save you money by making less errors in their work, or catching others errors before it's too late. How many times have you had to send a crew back to the job, to either pick up additional information or redo work that was either incorrect or questionable? How often does work have to be redone in the office because it is incorrect or incomplete? Think about all the times this has occurred and ask yourself how many of these times could have been prevented had your staff been better trained. Staff that has had adequate training for their position make less errors because they know what is expected, the importance of checking their work, how to check their work and how to check and resolve questionable results in their work. People will make mistakes, this is human nature, but you as an employer / supervisor can limit these mistakes by insuring your staff is adequately trained.
- C.) ***The more your staff can do the less you have to do.*** How many times have you wished for more time to market your business, but were unable to be cause you had to spend time doing tasks your staff should be doing? Have you ever regretted sending a job out the door where you feel you did not provide the proper review and oversight? Are you able take a vacation? If the answer to either of the first two is "Yes" and the third one is "No", then think about finding a way to free yourself up to train your staff to do the tasks you are currently doing so you can be doing the tasks you feel you should accomplish. The more your staff can do the less you have to do, freeing you up to attend to the tasks you should be attending to. Whether it be marketing, billing, client relations, providing adequate supervision and review of work, or just plain taking time off to recharge your won batteries, you need to find the time and the best way to do that is to have a staff that can fill in your absence.
- D.) ***A well trained staff is more motivated and less likely to look elsewhere for work.*** Numerous labor studies have shown that a "feeling of worth" is a big if not bigger motivating factor in employees as monetary remuneration. Investing in an employee's education is one of the best ways to show an employee that they are valued. Additionally, increased abilities will lead to increased responsibilities leading to a greater feeling of worth for the individual. Employees who feel their employer values them are less likely to look elsewhere for work, even when times may be slow. The company has shown faith in them and a loyalty to them that they feel they are obligated to repay. Granted there will always be employees who are mercenary and will leave for what they perceive to be greener pastures at the first opportunity. These types of people should be identified during the hiring process and avoided at all costs.
- E.) ***Having a well trained staff makes it is easier to promote from within.*** Having the ability to promote one of your staff members to a higher position has multiple benefits to the employer. First, is that usually you can promote a person for less money than you can hire one from the outside. Second, it rewards the employee for hard work and sends a message to other employees that hard work will be recognized and rewarded. Third and maybe most importantly, you know what you are getting with an employee where you promote from within. When you bring in someone from the outside, you are not always certain whether or not this person will live up to their resume. You're also uncertain on whether or not this person will fit in with your existing staff. And finally you do not have to spend time training this person in the standard procedures used in your company. By promoting from

within, you can maintain your productivity as your existing employees will be already familiar with company policies, procedures and existing clients.

F.) ***What if I have employees who don't wish to expand their knowledge and abilities?***

A valid question. In some cases you may have employees who are comfortable in their current position or feel they are too old to learn new skills. This is where you as a supervisor have to decide if this person is worth keeping. I'm not advocating letting a person go simply because they are happy to remain where they are. However if the time comes when people have to be let go due to economic reasons you may wish to consider these people as more expendable than other staff who have shown a desire to improve their abilities. In some cases you may actually be able to keep this person in their niche if they are good and productive employees. Overtime they may change their outlook when they see other employees benefitting from improving themselves and change their minds.

How to go About Developing a Training Program

Unfortunately a majority of surveyors have bought into the belief that investing in more modern equipment can increase their productivity. Equipment alone will not suffice in expanding ones technical abilities. There needs to be an equal if not greater expansion in the individual's abilities. This can only be accomplished through education, either practical or formal.

Education can and should always be included in the supervisory component of everyday work. Rather than just telling an employee how to do something, it should be explained why you want it done a certain way. There are other ways you can provide educational opportunities without affecting productivity.

- A.) ***Reimbursement for tuition at local colleges and universities.*** Do you include reimbursement for tuition outlays by employees as part of your benefits package? If you do not, consider adding this as an incentive for employees to take classes at a local college or university. Of course the class should be relevant to their work, or towards a degree in field that would be beneficial to the company as well as the student. Incentivize good performance by basing reimbursement on the final grade. For example an "A" would receive 100% whereas a "C" might receive anywhere from 50 -75% reimbursement.
- B.) ***Reimbursement for correspondence or internet access courses.*** The incentive could be the same as above, based on grades and relevancy to the benefit derived.
- C.) ***Paying for continuing education Seminars.*** This can be done by either sending a group of employees to a seminar or even having the presenter come onsite, perhaps on a weekend or evening. Very often you can get generous discounts for large groups. Consider combining your attendees with those of one or more firms in your area to reduce costs.
- D.) ***Have in house training classes given by employees.*** You can make use of the knowledge and skills of your own employees by having them impart that knowledge to other employees. Once again this can be done in the evenings, weekends or other off peak times to limit the affect on productivity. You can also bring in people from other firms, perhaps setting up an exchange where you train some their employees and they train some of yours.
- E.) ***Makes use of any opportunity to cross train.*** If the office staff is slow, you can move them out in the field or to another department perhaps. Same for your field crews, if weather or business creates a slow down, perhaps you can move them inside and

have them see what happens to their data once it's collected and delivered to the office.

- F.) ***Make every day a training day.*** You should never miss a chance to impart some knowledge and wisdom to your staff. As mentioned previously, don't just tell them how to do the work, tell them why they are doing it that way. Sometimes it's even better, to just assign them a task and let them figure it out for themselves. You would be surprised how often they come up with a solution to a problem, often times one you might not have considered previously.

Summary

Every day time frames change to a more compact situation than the last project you worked. All your clients want their work done yesterday. Technology continues to change a rapid rate, forcing employers and supervisors to develop a staff that is smaller and more flexible than in the past. The best way to accomplish this is to make sure your employees know they are expected to continuously improve upon their levels on knowledge and experience. A shrinking workforce demands that you develop your employees and earn a return on the investment in time, money and energy you have spent on them. In return you will find you have developed a flexible and dynamic work force able to adjust to changes in the situation quickly and efficiently. You will also have developed a sense of loyalty and good will among your employees, enabling you to keep the most productive and attract the best and the brightest when the time comes to hire additional staff.

