

The Importance of Workforce Development: Why it is critical & A few ideas to help you get started.



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At the 2022 Western Regional Survey Conference, multiple panels focused on brainstorming the best ways to train and support employees using workforce development and this is an abstract article based on these discussions.

It's common knowledge in the surveying profession that new talent is hard to find. That's why in addition to attracting new talent, we need to be focused on another critical task: keeping existing talent.

Keeping existing talent doesn't just mean retaining your existing staff roster for decades. It means keeping employees in the world of surveying and not losing talented individuals to related trades or industries such as construction and engineering.

The recent downturn was particularly damaging to surveying because we didn't necessarily lose licensed surveyors. Instead, we lost an enormous chunk of the ecosystem that supports surveying: the technicians and all of the other bodies who help us do our work on a daily basis.

Workforce development is the effort of engaging, supporting, and further educating existing employees. When most of today's land surveying firms are made up of less than five employees and another huge number have less than nine employees. The more that employees feel supported in both the short term (such as current project demands) and the long term (such as opportunities for advancement and growth), the more likely they will be to stay in your company and in the profession.

Undertaking workforce development can take many forms, and there are many tools already at our disposal. At the 2022 Western Regional Survey Conference, multiple panels focused on brainstorming the best ways to train and support employees using workforce development. Here are the major strategies that were discussed.

Types of Training



Perhaps the biggest undertaking of workforce development is training. The word "development" implies learning new skills and improving the status quo.

Does your company currently offer training to develop employee knowledge? If you have to think about it, you probably have to improve it.

The first step is simple but critical: *schedule time for it.*

It's all too easy to acknowledge the importance of training in theory, but refuse to make time for it in practice as more time-sensitive daily demands arise.

One survey company mentioned that their administrator plans the entire year of training in advance. She sends out calendar invites for all training sessions in January, so it's set in stone and there is no room for surprise conflicts. In other words, the training comes first, and everything else is scheduled around it, meaning it's impossible to put off.

Training should also be diverse in nature, as not everyone learns in the same way. Taking tests is far from the only way to learn. Good workforce development is more about investing time in learning, in all of its many diverse forms. Below are a number of training opportunities to consider.

Onboarding training

Onboarding new employees is a prime time to train them in a wide variety of topics and procedures.

Every company is unique, so onboarding may be an ideal time to not just onboard them to how your company works, but to introduce employees to skills valuable to your specific workplace.

For instance, a new field crew employee has probably never seen a legal description in their life, but it could be a skill that your office finds meaningful to have as a survey technician.



When employees are equipped to succeed in your specific work environment, they'll be empowered to know they're doing their job well. If you can provide training that lets new employees succeed from the start, you'll be getting off on the right foot.

Cross-training



Once employees get a handle on their own role, cross-training can be a valuable training effort for many reasons. In fact, cross-training can be done for almost any employee, at any stage in their career. A deeper understanding of how the company works as a whole can only help people have a greater appreciation for their coworkers and perform their jobs more efficiently.

Do you allow your office staff to go into the field? Have you ever had field staff come into the office? It can be an illuminating experience that enriches the knowledge of your employees.

For example, your field staff can recognize the issues that they can face on a job site because they do it every day. But office staff may be fairly ignorant of job site operations. There's often a big communication gap between the office and the field. Cross-training can help bridge that gap.

Cross-training within both field and office roles is also valuable. For example, what happens when someone goes on vacation? Is there someone else at your company who knows how to pick up the slack? When you only have one person trained to do something, you're setting yourself up for painful situations.

One fun idea is to get creative with your office seating.

One employee described starting as a field employee before he got pulled into the office. He never moved desks, so he stayed in the "field" section of the office. Then, a new GIS hire was also placed in the field section of desks due to space issues.

It ended up being an incredible opportunity. Office, field, and GIS team members could all collaborate and problem-solve in real-time. The GIS employee had two surveyors sitting right next to him, so he learned how to do his job well. It's a good argument for mixing up your seating and putting different employees together so that cross-training can happen naturally.

Safety Training

Safety is a non-negotiable type of training that should occur on a regular basis in your office.

The surveying profession is guided by countless safety measures like wearing steel-toed boots and conducting safety checklists. But not everyone follows these best practices.

While employers are responsible for ensuring workplace safety, employees are also accountable for following standard procedures and employing common sense while on the job.

The truth is that surveyors perform work that often puts them at risk. Working in roadways, handling equipment, and time spent outdoors can result in accidents or injury if you're not careful. Sometimes companies take a proactive stance on safety, and sometimes they don't.

At the chapter levels of an Association, it used to be more common that we would hire safety experts to come and provide presentations. It's a practice that we should pick back up.

Safety training can also connect back to the importance of cross-training. For example, one survey firm works with Right of Way agents who are often called upon to go out in the field. The Right of Way agents often borrow a company vehicle to drive to job sites.

It's important that such staff know things like:

- What type of vehicle to check out
- Where to park
- What footwear is appropriate
- What conditions to expect on the site
- What to be aware of and watch out for

For example, many surveying employees quickly learn the phrase "leaves on a tree are not TP." It's a humorous phrase, but in the winter, there are no leaves on poison oak stalks. An unsuspecting and untrained employee may not recognize it and walk right into it.



Others may not be aware that on many construction sites, there are "all-road" directions that may change periodically. Job site awareness and safety refreshers are always helpful.

As a side note: I will have an entire article devoted to Safety coming out in an upcoming Nevada Traverse this year and it will hit on this topic in more detail.

Expert Presentations



You don't always have to do the heavy-lifting yourself when it comes to training. What better way to train your employees in specific topics than to bring in the experts?

Many of your local vendors can conduct excellent training. In addition, consider contacting a groups like Monsen Engineering, Allen Instruments, or even Frontier Precision, who have training materials ready to go for their own employees and would gladly be hired to share it with your team.

Many vendors have many resources and skilled presenters, some of whom are even licensed land surveyors.

One surveying company that has about 50 employees and 10 field crews has regularly hired an outside safety consultant to start conducting monthly safety meetings. It's worked out well for them and ensures that topics are relevant and fresh. Special topics have included confined space work and other topics.

Internal presentations

Another equally effective idea is to assign employees to do presentations.

This has the benefit of sharing internal knowledge and improving employee communication skills at the same time. When you set up such programs to be safe and non-threatening, it can result in great content and participation.

About 10 years ago, one survey company set up a program where on the first Tuesday of every month, employees could come to work one hour early and learn from an employee in another department. They noticed that employees were excited and energized because they could now do their jobs better. For instance, the company's surveyors pretty much knew how to layout a septic system, or knew why you needed to get more topo on some roads. But to hear it from an engineer with a different perspective changed their mindset.



You'd be surprised how much knowledge you already have internally that isn't tapped into to its fullest potential. And when you ask someone like an engineer or project manager to share their insights, they get to enjoy being put on a pedestal for a moment and feel like a valued expert.

Another company started a program called "Paycheck Problems." Every payday, they have a meeting where they've assigned one employee to discuss a surveying problem. It happens like clockwork every two weeks and creates an atmosphere that values training, learning, and problem-solving abilities.

A former BLM employee described how they would hold regular cadastral technical sessions. One week every month, they would bring everybody into the office together and everyone would put together some sort of presentation on either a job they've worked on that had a particular specialty or even do a mini-research project digging into the manual or past court cases.

Life Skill Training



It is also important to remember that your employees are people. They have interests and concerns that are not strictly survey-related. It can be fun and helpful to also provide training on company benefits or even life skills.

One Surveyor recalled how their favorite former employer held trainings on topics like personal finance, how to buy a diamond engagement ring, and how to change the oil and properly maintain your car.

Other companies have annual trainings with their benefits administrators to refresh employees on their benefits package and go over any updates. Financial presenters explain the benefits of a

401k and urge everyone to contribute to get the free employer match.

Such topics provide holistic value to employees that help them beyond the office environment and aid in their personal growth. Such gestures also show that you care, and are wanting to invest in them as human beings.

Mentoring Mondays

Another done-for-you training opportunity that all surveyors should know about is the Mentoring Mondays program. It's exactly what it sounds like: every Monday, attendees from anywhere in the country can join a Zoom call and hear a presentation from an expert on a topic related to surveying.

The program is meant to fill the gap for smaller companies with five or fewer employees who have less opportunity for formal training programs and mentorship opportunities.



When you from within the surveying industry, your opportunities for knowledge sharing become even richer and more diverse.

Round Table Tuesdays is another opportunity run by the Indiana YSN group. Geared towards those new or entry-level to the profession, the monthly meetings are not limited to SITs or PSs, but rather aim to provide value to technicians and field crews as well. Speakers and topics are primarily focused on Indiana, but all are welcome to join.

Other resources like, Kent Groh's Geoholics podcast, and the Surveyor Says podcasts are all additional resources to consider. It's amazing what you can learn from even just recorded podcasts.

One surveying team downloads the newest podcasts and listens to them in the truck on the way to and from the job site each day. It's certainly a better and more productive use of "windshield time."



This new program just started up in May 2022 called Wisdom Wednesdays and the background behind it is to be a book club with a round table discussion about each chapter of our "land surveying bibles." The program will be starting off with one of our bibles called Evidence and Procedures for Boundary Location. Be sure to follow all of the social media accounts for the programs listed above.

Conferences

A final obvious training resource is promoting attendance at your state association conferences. Encouraging your younger field staff to come and engage in conferences can work wonders to increase their knowledge and perspective of the profession.

Conferences are naturally well-organized, feature expert speakers, allow for stimulating discussion, and get your employees out of their normal routine to see the bigger picture of the surveying profession.

As a standard theme moving forward, all state conferences would be wise to have a technician track in order to be more inclusive and get rid of the pressure to become a professional land surveyor if that's not their goal.



It's true that conferences can be pricy to attend with all the travel and paid time off to attend. So when it's not always feasible, why not send one or two people who would benefit the most, and assign them to present back to the rest of the company on what they learned?

CST & Part 107



In addition to training, there are other ways you can help support employees to envision and enrich their careers.

If your surveying employees are getting serious about the next step in their professional lives, educating them on the CST track can be a valuable move.

The CST allows employees to embark on a series of smaller exams that will potentially culminate in them taking the more difficult FS and PS exams. The CST is a valuable training ground that will require them to come up with a structured study plan.

The FAA Part 107 is another option.

To support employees interested in the CST, Part 107, or other exams, you can create a support system such as a Saturday study group for employees.

Set Goals

To help motivate employees from the inside out, you also need to demonstrate that you're there to help learn and support their professional goals. Doing so will help to illuminate the paths available to employees, and help you as an employer to connect with them on a deeper level.

Some of your younger employees may not be sure what goals to set, while other employees will be vocal and ambitious about their goals. It's important to help employees imagine where they want to be several years down the road, and then chart a path that empowers them to get there.

For goals to be successful, you should have employees write them down formally and revisit them at least once or twice per year. Break down big goals into more incremental parts to make progress seem less overwhelming.

If an employee wants to be a licensed surveyor, have them start with CST level one and then work their way up.

Salary is always a great motivator. You can provide employees with six-month goals that are tied to \$2/hour incremental raises, for instance.

Inspiring stories can also help them understand the type of career change that is possible—such as how you went from \$5.25 per hour to owning a land surveying business by doggedly setting your own goals and pursuing them.



Create Feedback Loops



Understanding how they are performing in real-time each day can also help employees improve their skills and analytical thinking.

How often are you taking the time to provide feedback on daily performance? When you ignore the same small errors over and over, you do a disservice to your employees versus when you constructively take time to call them out.

For example, one surveying company found that their engineers would tend to design things that didn't make a lot of sense when they were staked out on the ground. So they started doing something new: when a new job would come in for the field crew to tackle, they would identify the engineer who designed it and bring him or her to the job site. Then, they would have the engineer personally stake it out—in this case in the 105-degree Fresno heat.

When wondering why the staking was so hard, it would become clear to the engineer that their design needed to be improved. Thanks to the job-site feedback, the next design was much better, and the one after that was even more improved.

This type of educational feedback helps employees understand not just what they need to do, but why. It empowers them to take on the next project with more confidence, anticipate the needs of the client and their teammates, and provide a better internal product overall.

Consider starting by having your field staff come into the office to draft up the topos that they just shot, in order to improve the way the field staff operates for the benefit of the office staff. It will make employees do better in the field by helping them understand what, why, and how they're shooting certain things.

Learning from mistakes is critical and will help employees understand how to make the right decisions and avoid the wrong ones—avoiding potentially costly mistakes in the process.

Hone Communication Skills

An underrated skill that you can encourage employees to develop are communication skills. In many instances, the very first contact that landowners have within a given project is with the Surveyor. If communication starts off on a sour note, the chances are that interaction will impact the whole project.

Good communication doesn't mean that you need to know everything about every project. It just requires a general level of good articulation so that you represent your firm and profession well.

One Surveyor told a story of a staking project that was intended to lay out alternative routes to a proposed highway project. The final route had been decided, but mapping out alternatives was a requirement. A landowner saw the staking in action and came out of their home to ask what the surveyors were doing. One of them said, "we're doing survey work for a highway project that is going through here. Which house is yours?" He told the homeowner that the centerline of the highway was going to go right through their property.



While most examples of poor communication aren't so severe, it's clear that coaching on communication is valuable.

Another surveyor who worked for BLM described how the senior Surveyor he was working under was instructing him on how to talk to public landowners. The older Surveyor would explain in detail why he approached conversations with landowners in specific ways.

Then, when the younger Surveyor was out on his own talking to prickly landowners, he was able to be deliberate and thoughtful about how he explained things to them.

Honing communication skills can take the form of mentoring, but you can also encourage public speaking training such as Toastmasters.

If you want to set a positive example, don't be afraid to jump in by enrolling yourself. One Surveyor signed up for a 4-week boot camp in order to set an example for his staff. Even more mature professionals can benefit from going out of their comfort zone and facing the critiques of programs like Toastmasters.

Treat Your Staff with Respect



Finally, one of the best ways you can impress your staff is by treating them like human beings and respecting the unique dynamics of their lives.

Many of us grew up in an era of putting hard work before everything else. But the demands of the modern world have changed, and so have modern worker expectations.

Setting the right professional expectations about work-life balance can help employees feel like they don't have to do it all—they can balance the demands of a sick child or personal obligations with their work.

You'd also be surprised what employees will share with you if you give them an opportunity to open up. For example, one Surveyor noticed he had an employee struggling to get to work on time every morning. It turns out that his family only had one car. He solved the problem by letting the employee use a company truck. It took an incredible burden off of the employee, and showed that his employer cared.

Today's workforce wants to feel valued and have an element of being autonomous. Why not let employees head home from the job site, and email their data back to the office via VPN? As long as you get the results that you need, it may be less critical that all work happens from the confines of the office.

Competitive pay is also important, but remember that it's less about pure salary and more about overall compensation. If you offer a full suite of benefits, communicate the value of those to employees. Everything from fitness budgets to charitable donations makes up the total compensation package. That said, be sure to conduct annual salary increases and raises that take into account inflation and the rising cost of living.

There are many factors that can help develop our existing workforce, and they are all things that can be implemented in our individual surveying businesses to varying degrees.

If nothing else, remember that employees want a mentor and guide who will pass on their expertise. When we ensure that knowledge is shared and employee voices are heard, we can rest assured that we will retain the current generation of surveyors who are already under our care.

One more side note: I will have an entire article devoted to Servant Leadership in an upcoming Nevada Traverse this year and it will hit on this topic in more detail.

About the Author



Trent Keenan, PLS, WRS, CFedS. Trent's surveying career started when he was 19 and now spans over twenty-five (26) years, including ten (10) years in the public sector working for a large utility company, and fifteen (16) years in the private sector, with 14 of the 16 years being the President / Founder of Diamondback Land Surveying. He has served through all officers positions of both the Southern Chapter and State Association of NALS (Nevada Association of Land Surveyors), received the Meritorious Service Award for NALS in 2013, and was honored as the NALS Surveyor of the Year (2015) as well as receiving the NALS Von Schmidt Award in 2021. He is a past-President of NALS (2015), Current, Editor of The Nevada Traverse Publication (NALS), Current Secretary/ Treasurer for the WestFed (The Western Federation of Professional Surveyors) Board and current Director from NALS, Current Treasurer on The Nevada Land Surveyors Education Foundation Board (NLSEF), Current Vice President on the Southern Nevada Chapter of the NALS, Moderator/ Facilitator/ Founder of Mentoring Mondays for the Land Surveying Profession as well as Wisdom Wednesdays, and a proud sponsor and brand ambassador for Get Kids Into Survey (GKiS). He is currently licensed in 5 Western States (Arizona, California, Nevada, Utah & Washington). He is also a Certified Federal Surveyor and a Nevada Water Rights Surveyor. He has been an active board member in NALS since 2007 and a regular member since 1997.