Values-Congruent vs. Values-Artifact Leadership: How are they Different?

Abstract

With leadership being the topic of many conference presentations, we see more and more institutions saying they are 'values-driven.' They have signs and literature and business cards informing the public that they are 'values-driven' so it must be true; their leadership style surely must be authentic.

But before we think about changing an organizational culture to attain an authentic, values-driven culture, upper management must examine its own values and codify them by using some form of validated instrument. When we exemplify those values, and ensure congruency in our own artifactual, espoused and actual values, then we're ready to raise authenticity in our company. Congruency between words and actions demonstrates authenticity. This is especially true with regard to the immense safety responsibilities shouldered by project engineers and safety managers. When a safety professional's behavior is manifested because it's the right thing to do, it reflects authentic leadership and not just literature and business cards. This authentic leadership leads to authentic values-driven culture.

The values-driven culture is essential for safety because the safety professional or project engineer is not omnipresent to the workers to direct every behavior. Every individual must become a leader. Authentic leaders can exist at all levels of an organization; a forklift driver does not need the title *CEO* or *foreman* to manifest his actual values in voluntarily instructing a new employee in the virtues of inspecting the truck's brakes every day whether the rules require it or not.

Organizational leaders, including those directly responsible for safety, must act congruent to their artifactual and espoused values to foster values-driven culture. Organizational research conducted over the past twenty years by Schein[1,2] or Ott[3], for example suggests that any mis-match between espoused values and values-in-use among organizational leaders causes morale problems because employees see that what is professed is not what we actually do. As Hannah[4] points out, authentic leaders are continually under some level of scrutiny.

The question for educators is how to teach leadership to future safety professionals and project engineers. There appears to be a mismatch between what educational institutions claim and what employers receive as new graduates. However leadership has been taught for years in schools like the military academies with an all-encompassing model of development. Most safety professionals and project engineers will not come from the military academies and must have a model based on classroom experiences. This paper reviews the relevant sociological and psychological research associated with values-in-use leadership, and offers a model for classroom leadership development. There is limited data to demonstrate validity of the model, but promising feedback from students.

Leadership

If there is one recognizable and fast-emerging topic at engineering and safety-related conferences in the last decade, it must certainly be the topic of leadership. Just a quick Internet search shows millions of hits for *engineering leadership* or *safety leadership*. In fact, industry itself is sometimes replacing *manager* with *leader* as in *project leader*. But merely changing the title because *leader* sounds like a person who will *do the right things* and not just *do things right* doesn't validate what the person actually does. A safety leader on a construction site may actually be a leader in name only, or worse, exhibit what has been called *toxic leadership* which puts his or her needs above those of the organization and its members.

Academics are no better than industry when it comes to confusing leadership-in-name-only with understanding what and how a leader actually does. The American Society of Mechanical Engineers surveyed 68 academic department chairs about communication, ethics and leadership knowledge and skills among their graduates. Only 20 percent of these academic chairs considered their students' skills to be weak. Yet Donnell et al., reported to the American Society for Engineering Education:

> "Unexpectedly, a parallel survey of industry representatives found almost opposite results, with only 9 percent considering communication, ethics and leadership skills of recent mechanical engineering graduates to be strong and 52 percent of those same students to be weak. Given these results were gathered from 68 mechanical engineering department heads and more than 1000 engineers and managers [currently working in industry] , a disparity clearly exists between the communication, ethics and leadership skills we are teaching to engineering students and what industry expects our students to know."[5]

Donnell, et. al., suggest that academic engineering departments think they are supplying leadership and ethics content but their industry counterparts who hire our graduates seem to think otherwise.[5] Clearly, there is a disconnect somewhere.

In the same way that the use of the word *paradigm* departed the scientific domain and entered the boardroom and print media in the 1990s the use of *culture* has become popularized in roughly the same time frame. Edgar Schein, a former professor at the MIT Sloan School of Management, is the best known researcher in the area of how an organization's culture predicts its leadership, and in his book, *Organizational Culture and Leadership,* Schein suggests that there are ways to understand organizational culture and how, by extension, an organization's leaders act with regard to its culture.[2]

Schein defines culture as, "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems."[2] Using Schein as a guide, a culture then is nothing more than a collection of habits and values which are created as a byproduct of reaching the organization's goals, and then passed on to subordinates who are members of the unit. Large organizations have complex cultures because the organization is heavily layered. A mom-and-pop business also has a culture, albeit smaller and less complex and it develops in the same way: habits and values are manifested in work practices and interactions in and outside of the

organization, and subsequently, the organization's leaders reflect its culture, and then pass them along to members both explicitly and tacitly.

Culture is not a mysterious and unknowable part of social or work life. Rather Schein sees organizational culture as an overt expression of behavior that is altogether rational, measureable and predictable. This is useful in any study of leadership because if we can measure behavior through its appearance and expression, we can predict what will happen when those variables change. One of the central tenets of Schein's work is this: a group's leaders are most likely to influence the group when it says it values, in fact, what it does value. Anything else gives a confusing message that for project engineers or safety managers can have serious consequences. When a project engineer or safety program manager has subordinates at a building construction site exposed to hazards on a daily basis, this becomes crucially important. What those leaders say and do must match. A project engineer may say, "We have a safety program that requires fall protection under all conditions," but he may look away once in a while when workers do not use a fall harness. In that case, his stated values are not congruent with his actions. To the worker, the message is that 'safety is optional.'

Schein's main message is that an organization's culture is dictated by the values held by its leadership – the *actual values*. The culture can't be bought or copied from a book somewhere; more importantly, to be congruent, the values must show, sound like and represent exactly what leadership says they are. If the organization is authentically values-based, all actions must be dictated by those same values embraced by its leadership. If, 'safety of employees comes first,' or, 'respect for each individual,' is a core value, then the company's actions, words and daily work are always held in the white light of scrutiny. The following are attributed to Schein:[2]

1. *Artifactual values* are those that can be seen on business cards, t-shirts or sometimes on letterhead. Even saying something as simple as 'safety first' suggests that an organization is driven by the concern for its individuals, but this visible artifact may be the limit of its actions. An artifactual value is necessary but not yet sufficient to represent an organization or its leadership as values congruent.

2. *Espoused values* are the organization's stated values and rules of behavior. It is how the members represent the organization both to themselves and to others. When a company makes a public statement or adopts a policy in its employee manual, for example, about not discriminating on the basis of religion, it is making a public declaration of its values.

3. *Values-in-use* are those which are so engrained in both an organization's culture and workforce that the manifest themselves as basic assumptions of doing business. Such an organization must have artifactual values and espoused values first, and then make these routine, through consistent actions of its leadership. When those become so second nature as to be reflexive, they rise to the level of values-in use, with its leaders' actions being congruent. What they say matches what they do. Table 1 summarizes this hierarchy of values.

Table 1. Schein's three levels of values

LEVEL	VALUES	APPEARANCES	AUTHENTIC
Level One	**Artifactual values**: What people *say* they value or *how* values appear You *see* that aspect of culture but it might be all for show and no real action	Example: Company logo with a green cross embedded in the logo or a catch-phrase on workers' hart hat	These artifacts of a culture- - even when they are positive and uplifting - - are not necessarily congruent with actual values
Level Two	**Espoused values** or stated values: You *hear* this aspect of culture but it might be all talk and still no action	Example: Policy stating "no tolerance for drug use at work"	Not clearly congruent with actual values but could still be authentic
Level Three	**Values-in-Use**: You *live* that aspect of culture; this leader "walks the walk and talks the talk". These values exist as *basic assumptions* of the organization and its leadership	Example: stopping an unsafe act or condition without being told to do so Working safely is engrained and reflexive	This is values-congruent and authentic leadership regardless of the person's resume or title in the organization

Used with permission from CRC/Taylor and Francis Group, New York.[6]

In Crandall's 2006 book, *Leadership Lessons from West Point*, Sean Hannah reflects somewhat tongue in cheek about 'spotlight Rangers.' These are young Army Rangers-in-training who do and say exactly the right thing when the instructor is around, but who act irregularly otherwise. The spotlight Ranger represents true Ranger values only when the spotlight is on him, but as Hannah says, he is soon found out, rejected through peer-evaluations and washed out of Ranger school.

Hannah further notes:

> "[Authentic leaders] are highly aware of social cues and followers needs, expectations, and desires. This awareness allows them to react to their environment and make certain aspects of their true self more salient than others at any time. What is critical here is that they bring to any situation part of their true self but not a false self. This nimbleness results in what psychologists term a working concept that is adaptive and responsive to situational cues and is situation specific, yet is a subset of their true self."[4]

Authentic leaders, Hannah goes on, are pretty much always under some sort of scrutiny but things will quickly "come crashing down should an [authentic] leader lapse or be uncovered as

pseudo-authentic."[4] (p. 92) The once-authentic leader has a difficult, even impossible, time recovering. One of the most important steps for values-congruent authentic leadership development is to become self-aware. Then the leader will be more prepared for every interaction with subordinates and peers to act and speak according to the artifactual and espoused values.

Leader development model

This leader development model is the basis for the educational model described later. As Figure 1 shows, self-awareness assists with establishing core values and consistently acting in accordance with those values demonstrates congruency and authenticity. The authentic leader then helps establish an authentic culture.

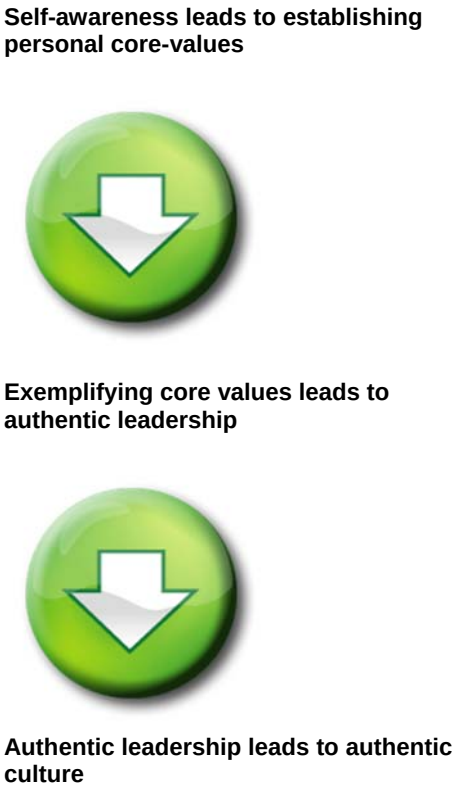

Figure 1. Self-awareness eventually leads to authentic culture
Used with permission from CRC/Taylor and Francis Group, New York.[6]

How do we become self-aware?

The process of identifying our own values can be a formal or informal process. In the engineering college at one university, the freshman orientation course includes a segment with the Myers-Briggs Type Indicator (MBTI), which is a long-used indicator of personality preferences. Those personality preferences indicate how an individual may react to stimuli and can be analogous to values in that the observed behavior comes from internal dispositions. Faculty begin their discussions of engineering ethics here and base the discussions on self-identified individual values. It is worth noting how engrained the use of the MBTI is in this country: West Point also provides the MBTI to its incoming plebe classes each year.

Less formal methods of identifying values can include a person having a pivotal experience - an epiphany - in which a worker or family member, even self, is involved in a close call. Sometimes the pivotal experience is not much more than finally recognizing first-hand that smoking is associated with lung cancer, for example, and this epiphany is enough to change a person's own behavior forever and cause them to stop smoking. The same could go for use of seat belts and a host of other first person experiences that result in behavior change. In identifying values, there is no one system that works best for all people. Whether it is a spiritual realization, a formal assessment of preferred responses such as the MBTI, or a near miss at the factory, the individual *voluntarily decides* upon the behavior change.

Exemplifying core values

Does it matter if leaders say one thing and do another? In safety, it does. Project engineers often end up managing all or part of the safety function. Safety professionals coordinate carefully with the project engineer on material selection, equipment purchases, scheduling, pre-engineered designs, discipline and so forth. Any inconsistency between these coordinating leaders' messages can have devastating consequences. If these are incongruent, subordinates can see through inconsistent behavior, and worst of all, people can die. Figure 2 is an example of a failure of cultural values.

Figure 2. "Just this one time will be OK."
Photo: G. Winn, 2015

Failure to exemplify: Levels of leadership dysfunction

The generalized safety mission of an organization is the direct responsibility of a professional safety manager or project engineer, and often both are jointly responsible. This latter relationship is often seen on construction sites where many contractors and subcontractors are busy every day pouring concrete, digging utility trenches, delivering materials, and many other tasks. A failure to act congruent to artifactual or espoused values by all leaders is a *Level 1 Leader Dysfunction.* A *Level 1 Dysfunction* suggests the pervasive culture is not congruent with the artifactual and espoused values. An example would be that the safety manager and project engineer might allow a laborer to work in an eight foot deep excavation without a trench box or shoring even though these same supervisors will say that they value safety and want to protect their personnel resources. That disconnect is an obvious: the safety manager and project engineer do not exhibit values-consistent behavior, and the message is inconsistent with the artifacts (such as a 'Safety First' sign near the headquarters trailer). Nobody is enforcing the rules; it's ok to ignore them.

Worse and more confusing to the employees is the situation we're calling the *Level 2 Leader Dysfunction* where either the safety manager or the project engineer does not exhibit values-consistent behavior even though they must work together every day. In this case, one or the other supervisor will let unsafe conditions or unsafe behaviors slide. One or the other will look away, for example, when a contractor knowingly lifts a set of trusses or steel beam without a

safety latch on the boom-weight ball. Result: the load can come crashing down on workers nearby if the trusses or beam gets bumped.

A *Level 2 Leader Dysfunction* is just like the child that asks the other parent for permission when the first parent refuses. Not only is the message mixed but the child can become manipulative. When the subject is safety, a *Level 1 or 2 Leader Dysfunction* can mean the difference between life and death, and in safety, there are no do-overs. That's why when an organization's leader just says they are values driven without examining his or her own motivations and then making safety reflexive, not optional, the ultimate meaning can be confusing. Further, all layers of leadership within the organization must strive to act congruent to the artifactual and espoused values, otherwise *Level 2 Dysfunction* will appear and open loopholes with dire consequences. The message to the craft worker is that it's OK to overlook the rules once in a while because the boss or someone in the chain of command does it.

Authentic leadership leads to authentic organizational culture

If the organization's leadership acts values congruent, the expectation of the craft worker is, 'Lock and tag out this hydraulic system even when the boss isn't around to check. It's the right thing to do.' An authentic culture is essential for organizational and even personal survival when it comes to safety. That culture rests on authentic leaders who demonstrate every day that their actual values are congruent with their artifactual and espoused values. However, many newly graduating safety professionals and project engineers will quickly be thrust into that leadership position. Therefore educational programs must at least start the process of development within their students.

Implications for the classroom

Teaching a self-assessment of values which leads to authentic leadership sounds like an important part of any engineering or safety management undergraduate education, particularly with regard to worker safety. It is not coincidental that both the National Society of Professional Engineers (NSPE) and the American Society of Safety Engineers (ASSE) have an almost identical first-canon: *the professional engineer [or safety leader] will hold paramount the safety, health, and welfare of the public*. Given these similar professional missions, both the young project engineer and safety leader must be exposed to a study of professional ethics while still in school. If we are going to teach about leadership as is the current trend, the undergrads should also be exposed to the self-awareness, values and the culture continuum of Schein or others.

However, it is fairly recognized in academic circles that ABET (formerly and perhaps more descriptively called the Accreditation Board for Engineering and Technology) and its commission for the related sciences including safety management, ASAC (Applied Science Accreditation Commission) are not prescriptive about how much to teach ethics and how to measure it. The ABET ASAC General Criterion 3, student outcome f is, "an understanding of professional and ethical responsibility."[7] As Barry and Ohland suggest, among other authors who have comments on this topic, "Even after multiple cycles of ABET accreditation, many engineering programs are unsure of how much curriculum content is needed to meet the requirements of ABET's Criterion 3.f"[8] Note that while ABET itself prefers the use of

performance-based objectives in subparts a-k which it require for accredited schools, "an *understanding* [emphasis added] of professional and ethical responsibility," (part 3.f) is sufficient.

Barry and Ohland conclude, in part, that, "The primary impact of this study is that it dispels the myth that more courses or course time on professionalism and ethics will necessarily lead to positive engineering education outcomes. Much of the impetus to add more curriculum content results from a lack of conclusive feedback during ABET accreditation visits."[8] And somehow we engineering and safety educators must figure how to measure a student's understanding, and also determine how much time-on-task to provide, even though such studies are inconclusive.

This should not discourage educators or future employers. There is plenty of evidence that authentic leadership can be taught and successfully adopted. An example is the several public and private military colleges in the United States. There young men and women from across the country are molded into leaders of character to serve the common defense. Figure 3 relates the successful realization of that authentic culture from one author's experience.

"I recall an incident as a cadet where I noticed a dollar bill that had been accidentally dropped on the ground. That happens routinely on college campuses. The remarkable thing was the highly polished low quarter shoes walking right past it. West Point is one of the few places where someone could drop a dollar bill in a crowded common area and go back hours later to find it still lying there. That cadets will shine their shoes when no one is watching is an indicator of the congruent values that help the cadets refrain from picking up a dollar they didn't drop."

-J. Slagley, USMA 1993

Figure 3. Are values-in-use related to shined shoes?

We suspect that it isn't any easier to teach about leadership and values than it has been to teach about ethics. However, here is an educational model being implemented to attempt it at a public university.

Here is a simple algorithm we have drafted for teaching leadership and values as part of an engineering or safety curriculum. It is based on the fact that project engineers and safety professional will have subordinates who are watching their behavior very closely, and, especially among the younger subordinates, who are looking for role models. It is further based on the assumption that the undergrad will have limited exposure to ethics and limited practical work experience, although good advantage can be made of the internships or other practical experiences.[9] The algorithm follows:

1. The honor code. The curriculum algorithm starts with something positive and upbeat, and it will surprise your students the first time you suggest it. It is a challenge to act in the best interests of yourself and your workers. You can use a tried and true honor code like the thirteen word version used for over a hundred years at West Point: *a cadet will not lie, cheat or steal or tolerate those who do.* Having an honor code for self and subordinates provides a place to have discussions about right and wrong and it begins in the classroom and extends to the family and the workplace. Surprisingly, we thought that students would think a discussion of an honor code to take to the workplace would be corny or geeky. On the contrary, the students universally found it compelling quite because they relate that nobody talks much about this stuff.

2. The discussion of professional ethics including what a profession is and what a professional does. Undergraduate textbooks are replete with case studies on ethics so this part is not especially taxing to prepare.

3. Writing policy that includes early socialization on honor, trust and values-consistency. Students don't know how to write policy anyway, so this is a good place to consider drafting simple policies that include statements of core-values. This suggests clarifying both internally and externally exactly what we stand for. In the workplace, if a new-hire is typically assigned to a mentor, the mentor should explain the organization's honor code and core values

4. A clear self-assessment of personal values. You can use the well-known Myers Briggs,[10] but you can also use a much simpler but just as effective assessment tool called Real Colors,[11] which like the MBTI requires trained administrators. It is true that the assessments do not pin down values, but they often allow an individual to consider their own preferences and begin to question their underlying values and the congruency of their values to behaviors. There are many more similar assessment tools, and they should be administered as early in the semester or new-hire process as possible. One of the classroom topics here can be conflict resolution and contract negotiations among dissimilar personality types.

5. Modeling the desired behaviors means using the faculty member as a both educator and model for values congruency. The faculty member, and later the project engineer and safety leader, talk about the honor code, about taking personal responsibility, and about bringing those values home to a family. This isn't resume-based, but entirely based on credibility of key faculty or company personnel. Here we would include discussion of *Level 1* and *Level 2 Leader Dysfunctions*.

6. Storytelling and guided journaling give the student, faculty member or invitee a chance to tell in class about a time when values-consistency meant something important to him or her. Maybe it meant not taking home the prize at the 4H barn because the ultimate prize winner cheated—when the instructor asks, 'Which person do you want to be?' there may be nervous joking at first but not for long. The best stories are not moralizing or paternalistic. When the discussion eventually gets more somber and turns to a summer work experience where a leader whom the instructor respected told a worker to, "use the

fall harness or we'll both go home," students typically get remarkably serious: that's not the answer they expected: "Why would we both go home?" they will ask (Because we both failed, that's why.) . Journals are created and kept in private and aren't turned in. Both of these only extend the day-to-day class discussion in an effort to make honor, trust and values into assumptions, not aberrations.

Our algorithm isn't perfect and it's hard to assess except on simple administrative check-offs. In addition, the instructor may be familiar and comfortable with engineering or safety content, but quite uncomfortable with discussions of ethics, values and honor codes. It's also going to be difficult to create performance-based objectives to meet any sort of ABET requirement as an extension of Criterion 3.f (understanding ethics). In our limited experience with an experimental class, graduate students are surprisingly interested, willing to read course materials extensively and have provided encouraging feedback.[12] We have limited concrete data demonstrating success beyond the classroom at this point, but there are plans to assess the impact of the algorithm.

Summary

The literature suggests that while academics endeavor to teach professional ethics, there is a disconnect between the effort they say they put forth, and the results measured by industry. In addition, ABET does not give much guidance about how much time should be spent on criterion 3(f), while some study results show that more time on task does not lead to, positive engineering education outcomes. Maybe we just back off - but then we consider the issue of safety: safety as a human moral imperative; safety for workers as a compliance and business continuity consideration; and safety as an issue of total health for the worker, the family and the community.

Because these young professionals will surely lead subordinates, and probably soon after graduation, they must know how destructive values-inconsistent behavior will certainly be to missions which include the simple human moral imperative, compliance and business continuity requirements, plus community and family imperatives. Leaders may act with every artifact and every espoused value in place such as company logos, printed windbreakers and company-branded truck paint jobs. But unless the leader has done a careful assessment to become self-aware of his or her motivations, strengths and weaknesses, he or she cannot expect to lead those subordinates with consistency. The once-authentic leader has a difficult time recovering from public inconsistency, if he or she can recover at all.

Knowing the limitations of the model we propose, we nevertheless have some early experience to suggest that engineering students actually appreciate that they will soon have subordinates who will watch their behavior(s) carefully. Barring empirical results that show anything other than our experimental course is extremely popular, these students have shown that they will rise to the occasion of discussions of honor codes; writing values-consistent policy, doing self-assessments, finding and becoming role models, and storytelling. The results are certainly promising.

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Bibliography

[1] Schein, E.H., "Organizational Culture and Leadership, 2nd Edition," Jossey-Bass, San Francisco, 1992.

[2] Schein, E.H., "Organizational Culture and Leadership," Vol. 356, John Wiley & Sons, 2006.

[3] Ott, J.S., "The Organizational Culture Perspective," Dorsey Press, Chicago, 1989.

[4] Hannah, S.T., "The Authentic High-Impact Leader," in Crandall, D., *Leadership Lessons from West Point*, Jossey-Bass Inc Pub, San Francisco, 2006, 88-106.

[5] Donnell, J.A., B.M. Aller, , M. Alley, and A.A. Kedrowicz, (2011)."Why Industry Says that Engineering Graduates Have Poor Communication Skill: What the Literature Says." American Society for Engineering Education, Louisville, KY, 2011.

[6] Winn, G.L., "Practical Leadership Skills for Project Engineers and Safety Managers," CRC/Taylor and Francis Group, New York, (in press).

[7] ABET, "ABET ASAC General Criterion 3. Student Outcomes," http://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-applied-science-programs-2016-2017/#outcomes, Accessed 28 Jan. 2016.

[8] Barry, B.E., and M.W. Ohland, "ABET Criterion 3. f: how much curriculum content is enough?" *Science and Engineering Ethics*, 18(2), 369-392, 2012.

[9] Winn, G., B. Giles, & M. Heafey, "Maximizing the Value of Internship Opportunities for Safety Management Graduate Students in the Appalachian Region," *ASSE Professional Conference and Exposition*, American Society of Safety Engineers, 2012.

[10] The Myers & Briggs Foundation, "MBTI Basics," http://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/, Accessed 28 Jan. 2016.

[11] NCTI, Inc., "Real Colors," https://www.realcolors.org/, Accessed 28 Jan 2016.

[12] Winn, G.L., A. Williams, and M. Heafey, "A Research-Based Curriculum in Leadership, Ethics and Protocol for Safety Management and Engineering Students," *ASSE Professional Conference and Exposition*, American Society of Safety Engineers, 2013.