

DEVELOPING THE TRUE KNOWLEDGE WORKER

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Abstract:

Dr. Deming's representation of "profound knowledge" as the cornerstone in an overarching management philosophy places significant demands on both workers and leaders. As Deming explains in *The New Economics*, there are four parts to the system of profound knowledge: appreciation for a system, knowledge about variation, theory of knowledge, and psychology. What he does not explain is how to develop such workers.

Similarly, Peter Drucker made the case decades ago that the "knowledge worker" was the future of industrial power in the developed world. He further argued that the development and management of such workers requires a different leadership philosophy – a philosophy that sees such workers as assets that are in continuous development. Drucker's understanding meshes well with Deming's yet Drucker also does not fully explore how to develop such workers.

Drawing on examples such as *Moneyball* author Michael Lewis' exploration of the secret power of NBA star Shane Battier to help the Houston Rockets simply win games, this paper explores not only the skills and knowledge required for a true profound knowledge-worker but the dispositional and moral requirements – the habits of mind and heart that are part of the profile.

Introduction

Dr. Deming and Peter Drucker clearly had complimentary visions of the future of management and the future of work. Both men shared a commitment to the humanization of work and business. Famously, both men also disagreed strongly a core tenet of management: management by objectives, although the extent to which they saw each other on different sides of this argument is not clear. A cursory view of Drucker's work suggests that he saw Deming and total quality management as a re-instantiation of F.W. Taylor's scientific management, which strikes this author as surprisingly limited viewpoint from such an insightful philosophic mindⁱ. It is also possible that Drucker viewed Deming as a key rival over the methods that would determine the future of management.ⁱⁱ

However, the thinking of these two giants of modern management converges on the question of what must be true for the development of a new breed of workers and leaders to be successful in transforming the workplace of the future. Drucker wrote, in very Deming-like language, that “Continuous innovation has to be built into the knowledge worker's job” and, further, that “Continuous learning and continuous teaching have to be built into the job”.ⁱⁱⁱ Drucker argued that the firm of the future must consider knowledge workers to be assets, not simply expenses, although he likely would not have been pleased with how this concept was applied to company valuation prior to the Dot-bust market implosion of 1999-2001.

Similarly, in the *New Economics*, Deming presented his conception of “profound knowledge”, a philosophical and moral stance as much as it is a mental model and theory. He argued that the difference between leading, managing, and working without profound knowledge and working with such an orientation is “discontinuous” – it is not simply adding more knowledge, but a fundamental shift in paradigm. It is through development – specifically through the development of an appreciation for systems, variation within them, and for human psychology – that workers and leaders will gain the profound knowledge necessary to change systems for the better.^{iv}

Both Drucker and Deming emphasized the critical importance of continuous learning. Without learning, and the continuous pursuit of self-improvement, both would likely have said modern management is doomed. Furthermore, Deming explicitly and Drucker implicitly suggest that it is not simply adding more knowledge but a different way of seeing the world, a different set of habits, and a different set of values that is important. Where both are relatively silent is on the methodology for such development, although both make suggestions as to what a curriculum for the “true knowledge worker” might look like. This paper will explore in more detail the implications of their stances on continuous learning, and suggest that there are several important examples of the dispositional, moral, and intellectual requirements for the leader and worker of the future.

Habits of the Mind

Drucker wrote in his seminal book *Management* that the knowledge society demands an “educated” person and that the “educated person will have to be trained in *perception* fully as much as in *analysis*.”^v The thrust behind his characterization is that the knowledge society demands and will increasingly demand an adaptable person – leaders and workers capable of moving between different cultures and

different sub-cultures quickly and easily on a variety of organizational venues. For Drucker, the educated person is a practical inter-disciplinarian; someone that is intellectually grounded in theory but not divorced from the practical implications of theory across a wide variety of knowledge areas.

Similarly, Deming could be said to have held two things most dear in terms of the proper education of a modern manager: knowledge regarding variation within systems, and an understanding of human psychology. The practical application of the understanding of variation within a system is the intellectual ability to avoid mistakes such as those illustrated most beautifully by his glass bead game. The practical application of human psychology understands how to motivate, inspire, and provide feedback. Deming saw these two knowledge areas as inseparable.^{vi}

The intersection of their ideas regarding these “mental habits” and their associated development could be summarized as follows: the “new”, knowledge economy requires *educated* people, workers that not only have deep technical knowledge but the breadth of knowledge across a variety of disciplines related to human performance. It is not enough to be well-trained, if well-trained is understood as limited to having the ability to do a limited set of tasks correctly. Indeed, the danger of simply being “well-trained”, according to Deming is an inability to appreciate the system from a vantage-point outside it. An educated person is capable of questioning a system, while a well-trained person may be precisely the sort of person *least* likely to do so. Peter Senge's famous “Beer Game” demonstrated this conclusively in the area of technical supply chain knowledge.^{vii} The most “expert” managers almost always performed the worst when confronted with a bullwhip supply problem.

Implicit in any conception of an educated person is this disposition to question – intellectual curiosity. An educated person demonstrates her education in what questions she asks, as much as what answers she gives. Interestingly, both Deming and Drucker call into question traditional authority structures so many times providing a useful citation is both impossible and unnecessary. At the core of their understanding of good management is that it is shown in the ability of the manager to provide reasoned direction for the system. A manager is only as good as his ideas and his ability to marshal others to solve common problems. A strong manager, for both Deming and Drucker, is one that is not only intellectually curious but encourages such curiosity in others.

Through a commitment to intellectual curiosity in general, the educated person will forever be in pursuit of Drucker's “continuous innovation” and “continuous learning” and Deming's rich understanding of continuous quality improvement as most directly demonstrated in his 14 Points for Management. The pursuit of such things will be as much about the educated person's moral stance on life, as it will be about a goal. In this, despite their seeming disagreement on goals and objectives, Deming and Drucker would likely agree that the moral force of a commitment to betterment is both a reasonable “objective” and simultaneously the sort of thing that would be ridiculous to have as an “objective” or a “slogan”.

Habits of the Heart

Knowledge and associated intellectual habits are not enough. Neither Deming nor Drucker give us much in the way of advice regarding what sort of *human being* the well-educated business person of the future must be.

Some clues can be found, however, in the manner in which both thinkers expressed their ideas. In keeping with the concept of a liberally-prepared, educated person, Peter Drucker demonstrated his commitment to humanism and breadth throughout his own writings. Beyond simply being intellectually curious, which does not necessarily lead to any moral commitment, Drucker emphasized through all his works that there is responsibility – integrity of purpose -- behind the goal of self-development. The *point* of continuous learning is not actually the knowledge gained, but the discipline of striving for improvement. Furthermore, the point of acquiring knowledge is not to lord it over others, but to use it for the betterment of others.

Drucker thus captured the essence of what continuous quality improvement of self must involve. As for Deming, there is no endpoint of improvement of self as there is no endpoint improvement of process.

Deming is less direct regarding “habits of the heart” of the new worker, but much can be teased out of his formulation of the 14 Points.^{viii} The requirements to “drive out fear”, “remove barriers ... to pride of workmanship”, and set examples through leadership as opposed to slogans or exhortations show us the sort of person Deming had in mind for a leader in the “new economy”. Such a leader would be courageous, collaborative, mindful of others, kind, and humble and other things.

Where Deming perhaps showed some discomfort – or at least his Midwestern, Puritan-rooted sentiments – is his avoidance of explicitly naming what should be a component of any leader: care. Instead, he references the importance of “psychology” in so far as one must understand human nature in order to work well with others. As research into sociopathy has demonstrated, an understanding of human psychology does not in any way guarantee caring about others. Yet it is the actual caring about others that translates knowledge of others – what we now call emotional intelligence – into moral action. And, it is abundantly clear that W. Edwards Deming was a caring person himself.

We might say that in so far as the required disposition or habit of mind for the true knowledge worker is caring about knowledge (or intellectual curiosity), the required habit of heart is caring about people (or empathy). The true knowledge worker does not contain his inquiry into abstractions, technical knowledge, and skill development but expands his ever-seeking curiosity into his own moral action and the impact of his action on others.

There are courageous people, kind people, and caring people that are seemingly born with such dispositions. What is important about the true knowledge worker, in both Deming and Drucker's formulation, is that such virtues and character traits (“habits of the heart”) are an extension of the commitment to self-inquiry, self-improvement, and an all-ranging curiosity. The knowledge worker does not accept the argument that we cannot really develop our capacity to care, or to show courage – that we are born with such character and either have it or “don't”. The “self” and “others”, like knowledge in general, is territory to-be-explored with as much zest as any understanding of statistical variation.

Deming and Drucker may not have explicitly taken their argument this far, although they might now, equipped with the emerging work on emotional intelligence.^{ix} It is, however, an important extension of the sense of continuous education, development, and quality improvement found in their work.

A Contemporary Exemplar

Sometimes, the best exemplars of a concept are found in the least likely of places. Michael Lewis, author of *Moneyball*, wrote an article in the *New York Times* on Houston Rocket's forward Shane Battier. Entitled "The No-Stats All-Star", the piece is part biography of Mr. Battier, part investigation of how this player of comparatively average talent for the NBA simply and effectively helps his team win.^x What shines forth in Lewis' exceptionally rich piece are exactly the habits of mind and heart that Drucker and Deming would point to as the essence of what they believe the worker (or leader) in the new economy must demonstrate.

Battier clearly does not relish the limelight. Readers that are unfamiliar with professional basketball have likely never heard of Shane Battier. Even NBA fans may only know his name in passing, although Lewis' article may have changed that. He is unassuming, yet driven. He is unselfish in his work ethic, but committed completely to the performance of the system (i.e. winning games for his team). He appears, on the surface at the very least, to be a man also deeply committed to self-development and self-inquiry. He was chosen by a sport periodical as the 7th "smartest" athlete in professional sports, cites his interest in helping youth develop leadership skills, and majored in religious studies at Duke.^{xi} It would seem to be a stretch to at least guess he is a caring person, based on his activism and community involvement – involvement which in Battier's case would appear to be more about interest than publicity.

More than any set of attributes, Battier shows what must be true of a knowledge worker: *he is a student of his own work and he is a student of his own life*. Lewis explains how Battier dives into statistics on performance in a way that would even put a smile on Dr. Deming's wizened face. He studies in extensive detail his opponents' patterns of behavior. He is usually called upon to defend the best player on the opposition, and he informs himself to the best of his ability in how to do so. He plays a physical game as much with his head as his body. He focuses attention on process, not outcome and is devoted to the work of ensuring "quality" of process. He is passionate about his work, but detached about outcomes he cannot control both on the court and off the court.

Conclusion

The example of Shane Battier, eloquently presented by Lewis, provided this author with the missing core concept regarding the development of knowledge workers. Deming and Drucker convincingly argue that the knowledge worker and managers in the knowledge economy must be, in essence, "Renaissance" people. They are educated in a holistic way – grounded in both the hard disciplines of business, and the soft disciplines of human behavior. They are disposed, like all good Renaissance-people to intellectual curiosity and are not afraid of tough questions. They are disposed and driven to self-mastery and the constant and continual improvement of their abilities and the system around them. They are committed to self-development not only in the areas of intellectual growth, but in the areas of emotional intelligence. They care.

The example of Shane Battier, if we accept it as a prototypical example of what "good" looks like for both Drucker and Deming's conceptions of educated workers, also points to developmental strategies. In order to help foster not only the intellectual abilities required, but the habits of heart and mind – the moral commitment to "betterment" – the knowledge worker must learn to make his own work a subject of inquiry and study and himself a subject of inquiry. It is not enough to do a "good job" or "be a good person". A true knowledge worker is invested in ongoing critique and understanding of what "doing a good job" means in his or her domain of practice and what "being a good person" actually means.

Unfortunately, all too many modern organizations do not seem to want workers that inquire. Inquiry can create friction between ranks of authority. Questions in general are often misunderstood as calling authority into question. A well-trained, yet fundamentally uneducated worker performs tasks but does not question. This was the perfect worker for Henry Ford, a century ago. It may still be the ideal worker for many modern organizations.

Real self-inquiry is also not generally encouraged, in this author's experience. Rare is the leader that openly puts his own behavior out to scrutiny and even rarer is the senior executive that does so. The maxims of "showing doubt shows weakness" or "confidence equals strength" appear to be as popular in contemporary business as they were in Ford's day. We will leave half of the equation of educating the true knowledge worker unsolved if we do not make our organizations places where self-doubt, caring, and the courage to be *uncertain* is as valued as the courage to be directive, certain, and action-oriented.

It is all-too-evident to this author that contemporary American society is struggling with how to be educated, in general. Despite heightened awareness by politicians and educational critics of American schools losing pace on sciences and critical thinking, no one seems willing or able to enact systemic change. There often appears to be a general distrust of "the educated" in popular media and in the public eye.

Against these forces, it is indeed challenging to provide environments where true knowledge workers can thrive and develop. Organizations wishing to create the right environments for true knowledge workers must ensure that all workers have the opportunity to study the business they are in – to make their organizational systems and practices a subject of real inquiry, not simply didactic and transactional training. This requires management that is willing to be transparent, inclusive, and invite inquiry, critique, and dialogue. True knowledge workers will flock to such organizations, and commit themselves fully. The curriculum for development is not only an interdisciplinary curriculum that includes an understanding of both "hard" and "soft" knowledge, but one that uses the study of "self" and the in-depth study of the business practice as the foundation of the curriculum. It invites and fosters continuous improvement by inviting and fostering mastery of all kinds within the community of practice.

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- i Peter Drucker, *Management* (Revised Edition) (New York: Collins), 2008, pp. 194 & 198.
 - ii John Byrne with Lindsay Gerdes, *Business Week*, November 28th, 2005.
 - iii Peter Drucker, *Management* (Revised Edition) (New York: Collins), 2008, p. 200.
 - iv W. Edwards Deming, *The New Economics for Industry, Government, and Education* (Cambridge, MA: MIT Press), 1993.
 - v Peter Drucker, *Management* (Revised Edition) (New York: Collins), 2008, p. 520.
 - vi W. Edwards Deming, *The New Economics for Industry, Government, and Education* (Cambridge, MA: MIT Press), 1993.
 - vii Peter Senge, *The Fifth Discipline: The Art & Practice of the Learning Organization* (New York: Doubleday), 2006.
 - viii W. Edwards Deming, *Out of the Crisis* (Cambridge, MA: MIT Press), 1982.

ix Daniel Goleman, *Emotional Intelligence* (10th edition), (New York: Bantam), 2005.

x Michael Lewis, "The No-Stats All-Star", *New York Times*, February 15, 2009.

xi *The Sporting News*, September, 2010.