A New Leadership Curriculum: The Multiplication of Intelligence

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Abstract

The authors propose a new model of leadership for the clinical setting. The authors' research suggests that there is latent intelligence inside business and educational organizations because many leaders operate in a way that shuts down the intelligence of others. Such leaders are classified as "Diminishers." In the clinical setting this behavior creates a hidden curriculum in medical education, passing on unprofessional patterns of behavior to future physicians. Other leaders, however, amplify intelligence, produce better outcomes, and grow talent. These leaders are classified as "Multipliers." The authors suggest that Multiplier leadership should become the standard leadership practice in medical schools. Case studies of a Multiplier and a Diminisher are presented and illustrate the positive effect these leaders can have on medical education and health organizations.

Is it possible that some of our smartest faculty and physicians have a diminishing effect on the intelligence of their teams? Like many skills, medicine is best learned by observing and emulating the physician–teachers in practice. But while our students are watching attending physicians and senior residents, is harmful, collateral learning occurring?

A Tale of Two Teachers

Douglas,* a medical student, recalled a surgical rotation under the direction of a top surgeon. This physician called all the shots and appeared to believe that the residents and medical students existed solely to execute her orders. When others put forth alternative ideas, they were met with derision. Douglas recounted learning next to nothing during the two-week rotation. Perhaps he learned the most from watching a team perform disastrously poorly in a straightforward trauma case.

Douglas recalled that the resident assessed the patency of the patient's airway and then evaluated the lungs themselves. He reported that breath sounds were absent on the patient's right side, suggesting pneumothorax. The surgeon dismissed this because of the noise level in the room. When the resident protested, suggesting that they penetrate the chest wall with a needle to relieve the pressure, the physician ordered him to "Move on!" The resident next assessed heartbeat. It was too fast, consistent with pneumothorax. The surgeon, however, was convinced this increased heartbeat was due to intra-abdominal bleeding and ordered the junior resident to evaluate the abdomen. The students and others in the room were uncomfortable that pneumothorax was so quickly dismissed, but did not know what else to do, as the surgeon would view any dissenting voice in a trauma situation as insubordination. As the junior resident evaluated the abdomen, the senior resident noted that the patient's windpipe was moving over to the left, another sign of a possible pneumothorax. The surgeon, standing at the abdomen, flicked her glance up towards the patient's neck and said, "I don't see anything; get a chest X-ray to prove it." The senior resident, exasperated, ordered the X-ray. But just as the X-ray machine left the room, alarms sounded, the patient's blood pressure was zero, and his heart had stopped. Unable to shock this rhythm, the team proceeded with CPR and medication, both to no avail. The chest X-ray was uploaded shortly after the patient expired and showed tension pneumothorax.

Not only did this physician shut down intellect on her team but she also taught the other senior residents to do the same. Douglas explained, "I dreaded working with my team as this attitude rubbed off on the more senior members." Chief residents began mocking interns and students who in actuality put forth reasonable ideas. Douglas's knowledge languished, forcing him to catch up on the next rotation.

The physician was surely brilliant, but not brilliant enough to compensate for an entire team that was not allowed to think and contribute.

Diminishers of intelligence

When leaders rely too heavily on their own intelligence, they can easily underuse the full genius of their team. People learn that it is easier, and safer, to let the head surgeon or attending physician do the thinking. These leaders become "Diminishers" of intelligence.

Diminishers are costly to organizations in terms of both economic and medical outcomes. Why? Because they waste the talent and intellect of others working around them and they make unilateral, limited decisions. In researching the books *Multipliers: How the Best Leaders Make Everyone Smarter*[1] and *The Multiplier Effect: Tapping the Genius Inside Our Schools*,[2] one of the authors (L.W.) found that these leaders get less than half of their team members' intelligence and capability—48% on average across industry and 40% in educational institutions, where she studied over 150 and 400 leaders, respectively.

*Names of medical students and physician have been changed in all cases to protect confidentiality.

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The Multiplier physician–teacher

On the other side of the spectrum are leaders who use their intelligence to amplify the intellect and capabilities of the people around them. These are the leaders who inspire their teams to stretch themselves and surpass expectations. These leaders use their own knowledge to make everyone around them smarter and more capable. These leaders are "Multipliers."

Because Multipliers look beyond their own genius and focus on extracting and extending the genius of others, they get more from their people. People reported that Multipliers received between 70% and 100% of their capability, with an average of 95% in industry and 88% in educational institutions—over two times what the Diminisher leaders got from their teams.[1,2] In effect, a Multiplier would double the available intelligence on a team compared with a Diminisher working with the same team. Wiseman and colleagues[1] refer to this as the multiplier effect.

This research was conducted by asking successful professionals (nominators) to identify two leaders: one around whom hard, complex problems got solved and another who had the opposite effect. Nominators rated the leadership practices of each leader on a five-point scale and then estimated the percentage of their own intelligence and capability that was being used by each leader. These data were aggregated to determine the levels of intelligence used by each type of leader and the behaviors that distinguished the Diminisher and Multiplier leaders.

It was in this research that we heard from several medical students, one of whom described the diminishing physician portrayed earlier, and another who described the profound effect a multiplying attending physician had on him.

Sunir described Dr. Kelly as "the best leader I've seen in medicine. He never let his ego get in the way." Dr. Kelly asked direct, pointed questions that explained very precisely what was needed from the team. Without giving up control, he clearly stated the limitations of what he and the team knew in a given situation and what data they needed to gather. Any idea that was not contrary to known data was tested, regardless of its source. When someone posited a theory that was incorrect, he depersonalized the miscalculation and related an anecdote when he made a similar mistake during his training. He turned potential errors into an opportunity to teach everyone.

Dr. Kelly's practice reflected his belief that everyone taking care of the patient, the attending physician, house staff, nurses, and patients themselves were part of the health care team. He understood that trainees were there to learn to be independent, competent physicians and needed practice being so.

Sunir was deeply imprinted while observing a team performing skillfully under Dr. Kelly's leadership. A patient unexpectedly went into ventricular fibrillation arrest, calling for defibrillation. However, this patient weighed approximately 500 pounds, making it difficult for the current to reach the heart. Dr. Kelly asked the junior residents to deliver the shock. Meanwhile, he was already discussing with the more senior residents what the next step would be if this usual procedure did not work. When the first shock failed, the team already had a plan in place. They rolled the patient over to place one of the conducting pads on his back, which would create the shortest distance to the heart. Simultaneously, Dr. Kelly was formulating a plan with the senior residents. The students observing overheard Dr. Kelly acknowledge that he did not know what to do if this approach was unsuccessful and ask, "Who would know what to do?" The senior resident recommended contacting cardiology, which they did. The cardiology fellow identified a complicated technique involving two defibrillators set up to give two shocks near-simultaneously. The attending quickly directed the team to assist the fellow, the double strength shock was given, and the patient's heart began to beat again.

Sunir reflected:

> Under this particular attending, I was given more responsibility for my patients than at any other time in my training. I was carefully guided, but not dictated to. Like a master teacher, he took me to the threshold of my *own* understanding and then helped me find the next logical position and take the step.

The Hidden Curriculum in Medical Education

Learning wrong instead of learning right

The aim of medical education is to teach the skills and professionalism physicians need to treat disease, promote health, and work well with others. The acquisition of this professionalism relies heavily on the apprenticeship model in which trainees learn to emulate their teachers. It relies on the attitudes and behaviors of teachers displayed in the learning environment.

Unfortunately, and not infrequently, teachers display lapses in professionalism and often lead by knowing it all and doing it all. When this occurs repeatedly, the formal curriculum of professionalism recedes into the background and a covert, *hidden* curriculum emerges. This hidden curriculum dominates the learning environment, and if trainees consistently observe a lack of professionalism, they begin to emulate and display it as they begin their own practice as physicians and medical leaders.

Multiplying right instead of teaching wrong

Trainees who should copy Multiplier behaviors are at risk of copying Diminisher behaviors learned in the hidden curriculum. What added value does the Multiplier framework bring to the clinical educational setting? Why not simply promote and ensure professionalism in the learning environment, while decreasing and preventing lapses in professionalism? The Multiplier framework brings added value in at least two ways. First, it provides concrete descriptions of "good behavior" for leaders operating at the individual, team, or organizational level.

Traditionally, professionalism in medicine has been largely centered on the physician–patient dyad. Professionalism for a physician is now also about good team behavior, "interprofessionalism," and good leadership at the top. The Multiplier Physician–Teacher is a master of these other types of professionalism. Appendix 1 details the core behaviors that distinguish Multipliers and Diminishers, including those in the clinical educational

setting. Within a team, the Multiplier Physician–Teacher would:

- Foster a harmonious environment that requires people's best thinking and work (e.g., the Liberator)
- Encourage optimal clinical decisions through meaningful and respectful information exchange among team members (e.g., the Debate Maker)
- Give people recognition and praise for good clinical and financial outcomes (e.g., the Investor)
- Define opportunities that cause people to stretch their thinking and behaviors to meet these organizational goals (e.g., the Challenger)
- Be mindful of organizational vision, mission, and values and of his or her role as a physician, as well as the team's and the trainees' roles in achieving goals for quality, safety, reputation, and fiscal soundness
- Recruit top talent and use people's capabilities fully in addressing the organization's most complex challenges (e.g., the Talent Magnet)

The strength of the Multiplier framework in this context is making behaviors that are relevant to a Multiplier Physician–Teacher explicit. It also makes clear that our leaders at the top and middle of our health organizations are also teachers of professionalism and have a role in creating the learning environment and the *official* curriculum.

As in real estate, where value is influenced by "location, location, location," professionalism is determined by "behavior, behavior, behavior." If the behavior of the official curriculum is not displayed, the hidden curriculum becomes the dominant learning factor, and our medical schools will produce diminishing leaders, despite their best intentions.

Building Multipliers Across Medicine

At the Association of American Medical Colleges (AAMC) annual meeting in November 2012, Darrell G. Kirch, MD,[3] AAMC president and CEO, painted a picture of Multiplier leadership in medical schools and teaching hospitals when he declared:

> With nearly two million exceptionally talented and committed individuals, imagine what we could accomplish if more of us began to work as Multipliers. What creativity and innovation could be unleashed? What problems could be solved? Most important, what progress could we make toward improving the health of those we are privileged to serve? In our hierarchical world of medicine, moving from the Moses to the Multiplier model of leadership could be the game changer.

After detailing the AAMC's efforts to provide the development programs to translate this model into a reality, Dr. Kirch[3] concluded with

> I think we are finally acknowledging that leadership no longer represents a special gift or power held by a select few. Instead, it is a relationship between committed people. It becomes an opportunity for all of us at any level.

To make this vision a reality, we need to excise the hidden curriculum created by diminishing leaders. We need to create role models who, like Dr. Kelly, use their knowledge and expertise to tap and develop the knowledge and capabilities of medical students, interns, and residents. These leaders must display skills in asking the right questions, asking for evidence, fostering dissenting views, and cultivating a professional learning environment. When this is the norm, teams of residents and trainees are prepared to perform at their fullest in emergency situations.

Clayton Christensen, Harvard Business School professor and author of *The Innovator's Dilemma*,[4] observed,

> We need leaders who can make an entire organization smarter and embolden other physicians, nurses and health care professionals to solve problems, especially now when our schools and universities must solve problems for which they were not built.

At a time when our health care systems are taxed with doing more with less, we cannot afford for medical schools to operate on only a fraction of the intelligence inside them. The medical academy must teach that the critical leadership skill is not personal knowledge but, rather, the ability to tap into the knowledge of others. Medical schools must teach the multiplication of intelligence as the *real* curriculum and cultivate a generation of physicians and medical faculty that tap into our hidden reserves of intelligence and unleash it against our biggest challenges.

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2 Wiseman LLA, Foster E. The Multiplier Effect: Tapping the Genius Inside Our Schools. Thousand Oaks, Calif: Corwin; 2013.
3 Kirch DG. From Moses to multipliers—the new leaders for academic medicine. President's address at: Association of American Medical Colleges Annual Meeting; November 4, 2012; San Francisco, Calif.
4 Christensen CM. The Innovator's Dilemma. New York, NY: HarperBusiness; 1997.

Appendix 1

The Five Disciplines of Multipliers*

Diminishers	Multipliers
The Empire Builder	*The Talent Magnet*
Hoards resources and underuses talent	Attracts talented people and uses them at their highest point of contribution
The Tyrant	*The Liberator*
Creates a tense environment that suppresses people's thinking and capability	Creates an intense environment that requires people's best thinking and work
The Know-It-All	*The Challenger*
Gives directives that demonstrate how much they know	Defines an opportunity that causes people to stretch their thinking and behaviors
The Decision Maker	*The Debate Maker*
Makes centralized, abrupt decisions that confuse the organization	Drives sounds decisions through rigorous debate
The Micromanager	*The Investor*
Drives results through their personal involvement	Gives other people the ownership for results and invests in their success

*For tools for leading like a Multiplier, see www.multipliersbooks.com.