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A Primer on Lean for School Leaders: Are You Wondering What To Do About Teacher Evaluation?

by Shannon Flumerfelt, PhD, and JJ Villarreal, EdD

This article is the first in a series of three designed to introduce elementary school leaders to a world-class leadership philosophy ***and*** methodology known as lean. In this first article, lean is defined and then applied to the State recommended appraisal system called Texas Teacher Evaluation and Support System (T-TESS).

T-TESS, the Texas teacher evaluation system, is new legislation that may present challenges to elementary leaders. T-TESS is a high stakes evaluation system and it is critical that it is implemented with fidelity. Some important questions school leaders have posed for T-TESS include:

1. How will I manage teacher thinking, fears and expectations (both positive and negative) in order to produce dynamics for school improvement about T-TESS?
2. How can I better understand, collaborate and communicate what T-TESS entails to create a positive and improving professional culture?
3. What should I do to deploy T-TESS with fidelity?

Simply put, as a leader, you must select some principles and strategies to guide you as you deploy T-TESS. There is a world-class set of leadership practices, known as the Lean Performance Management System, that may well benefit you (Womack, Jones & Roos, 1990). While lean is used in all types of leadership roles, in recent years much emphasis has been focused on applying lean to education specifically (Womack, 2006; Todd, et. al 2001; Stedinger, 1996; Flumerfelt & Green, 2012; Flumerfelt, Kahlen, Alves, Siriban-Manalang, 2015; Arnold & Flumerfelt, 2012).

In this article, the application of lean in education is called **Lean for School Leaders**. Superintendents, principals, faculty, Boards of Education and state Departments of Education have been working to learn how to use Lean for School Leaders. Through these applications and others, it has been found that lean ignites work to be done by improving both the processes for work and the results of work (Lean Enterprise Institute, 2007). Further, the pace of work is also impacted whereby the work can be done either incrementally or rapidly in sprint cycles. All work is conducted based on respect for people by engaging various lean teams in problem identification, testing and solution. This is known as the continuous improvement cycle. Lean for School Leaders is supported by long-standing research conducted in all sectors including healthcare, finance, manufacturing, government and non-profits (Burton & Boeder, 2003; Bicheno, 2008; US-EPA, 2007). And now, educational leaders are learning to benefit from lean as well (Flumerfelt, 2012; Alves, Kahlen, Flumerfelt & Siriban-Manalang, 2012).

In total, Lean for School Leaders is a large method (with up to 50 tenets and tools), whereby administrators can select any combination of one or more strategies, depending on the situation. To give you a sense of what is possible when using Lean for School Leaders, Table 1 provides three examples of how selections and decisions are made by aligning a lean tenet with a lean tool in order to start or support the continuous improvement cycle.

Lean for School Leaders is not hard to learn. In fact, if you read Table 1 on page 2, you are likely intuitively using some aspects of it in your current leadership capacity. For instance, you may have figured out the most impactful agenda items for faculty meetings, the easiest way for parents to schedule appointments to see you, or the safest list of To Do's for field trips. Through trial and error, you are likely conducting some form of continuous

Table 1. Examples of Lean Tenets and Tools

Lean Tenet: What am I interested in?	Lean Tool: What should I do about it?
I need to comprehend the complexity of a system, with contributing and secondary problems to better identify the major barriers and intended outcomes.	I should work with a Lean Team to create an *Ishiakawa* or *Fishbone Diagram* showing relationships and hierarchies of problems, along with desired outcomes in a system.
I need to figure out if a proposed change is worth implementing.	I should work with a Lean Team to create a *Value Stream Map* showing what my critical stakeholders experience from the proposed change against what they value most in the process by mapping those steps, showing flows of work, and analyzing process step metrics.
I need to make sure that I have planned comprehensively for an initiative.	I should work with a Lean Team to ensure that *5W1H* is completed (What, Why, Who, When, Where, How) as an aligned system.
I need to figure how to foster best instructional practices in my building.	I should work collectively to complete a 5S cycle (Sort, Set, Shine, Standardize, Sustain) so that best instructional practice is embedded in my school.

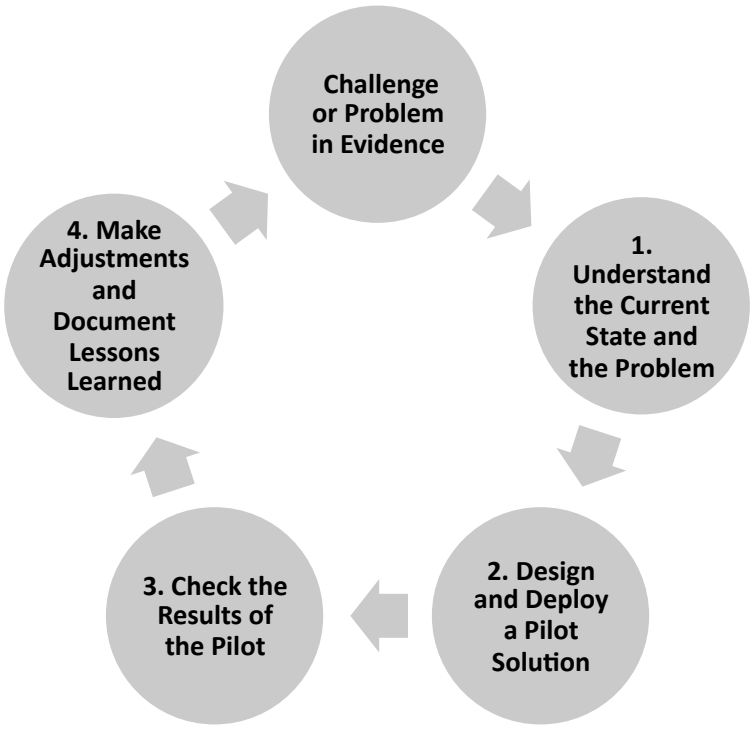


Figure 1. The Continuous Improvement Cycle

improvement by making positive changes when problems surface. Lean for School Leaders can put you a notch above by providing a more definitive approach than enjoying success through problem correction (Shewhart, 1934). As you can see from Table 1 on page 2, specified work tools are used that explicitly scope out and define problems at the root cause, allow for deployment of tasks for improvement, assess success and make small or large corrections to get even better results or processes. These tenets and tools all flow into the overall continuous improvement cycle. It is possible with lean to avoid making the same or similar mistakes by giving you a chance to analyze and understand the dynamics, processes and results of success and of failure. Also, Lean for School Leaders has the advantage of providing visual management techniques to bring clarity to data walls, communiques and documentation. In short, educators are finding that using Lean for School Leaders improves both the journey and the results of school improvement. One superintendent described Lean for School Leaders as (Flumerfelt & Soma, 2012, p. vii-viii):

> This philosophy of lean helps me to make sense of everything. It also brings a formal language to express internal notions I have had my whole professional career about trying to improve.

So, let's assume that when you deploy the first round of T-TESS, you encounter some problems. Lean for School Leaders is a system that will better enable you to solve those problems through a continuous improvement cycle or two. Figure 1 on page 2 provides a depiction of the cycle of continuous improvement.

The continuous improvement cycle is also known as the Plan-Do-Check-Adjust cycle (Deming, 2000), containing Steps 1-4. Each Step requires an allocation of your time and effort. So an easy way to think about the continuous improvement cycle is to divide your time and effort equally among the four steps: 25% to Plan, 25% to Do, 25% to Check and 25% to Adjust. Just "Doing" is not continuous improvement. Problems must first be studied and understood (Plan) so that practice is informed and focused (Do). Further, it is critical to ensure that after Planning and Doing, the work of reviewing results (Check) and making refinements (Adjust) all occurs. Many times, school initiatives falter or fail because the last two steps of the continuous improvement cycle do not commence. This often happens when the Plan and Do steps are considered as project completion, when they should be considered as project testing. Once a solution is tested, through Check and Adjust, there may be a need for another full cycle or two of Plan-Do-Check-Adjust. This happens until project completion is attained. Continuous improvement, therefore, does take on a work-by-design approach, and it means that both project management and project results will be managed. For each step in the continuous improvement cycle, there are many lean tenets and tools that can be used.

One example of a lean tenet and tool can be used for T-TESS challenges and problems is presented next. There could potentially be many choices of lean tenets and tools to use for solving any T-TESS issue. Keep in mind that Lean for School Leaders is not a prescriptive approach. This means that as a knowledgeable and experienced Lean School Leader, you will have a "quiver full" of strategies to use as you learn more and more about it. In order to demonstrate how Lean for School Leaders works on a basic level, one specific lean tenet and tool package is presented as you might use it for T-TESS, focused on the Plan and Do steps of a continuous improvement cycle.

So, let's assume that you have this tenet in play:

> "I have a need to comprehend the current paradigms my teaching staff hold for T-TESS."

This means that you could select this lean tool as,

> "I should work with a Lean Team to create a **Current State Concept Map** of T-TESS Teacher Perceptions so that I know what the significant misperceptions and correct understandings are and their relationship to teacher performance."

This tenet and tool combination are described in more detail as:

The Tenet: I have a need to comprehend the current paradigms my teaching staff hold for T-TESS. This will help me to:

-understand the essential ideas, paradigms held and promoted by teachers;
-describe the hierarchy and relationships of essential ideas and paradigms to better conceptualize teacher behaviors and inform my decision making.
-help my building to refine and/or improve essential ideas, paradigms held by teachers about T-TESS.

The Tool: Current State Concept Maps of Teachers for T-TESS. This will help me and my building to:

-visualize and comprehend the current state of essential paradigms and ideas held by various stakeholders and their impacts on the school to inform actions.

In creating a **Current State Concept Map,** there are two recommendations to consider using if they are available to you:

1. Use all qualitative and quantitative data (surveys, interviews, anecdotes) to inform your work and avoid bias
2. Either work with a task force or Lean Team to develop the Current State Concept Map or vet your Current State Concept Map with a focus group from the school community

Figure 2 on the right is an example of a Current State Concept Map of Teachers for T-TESS.

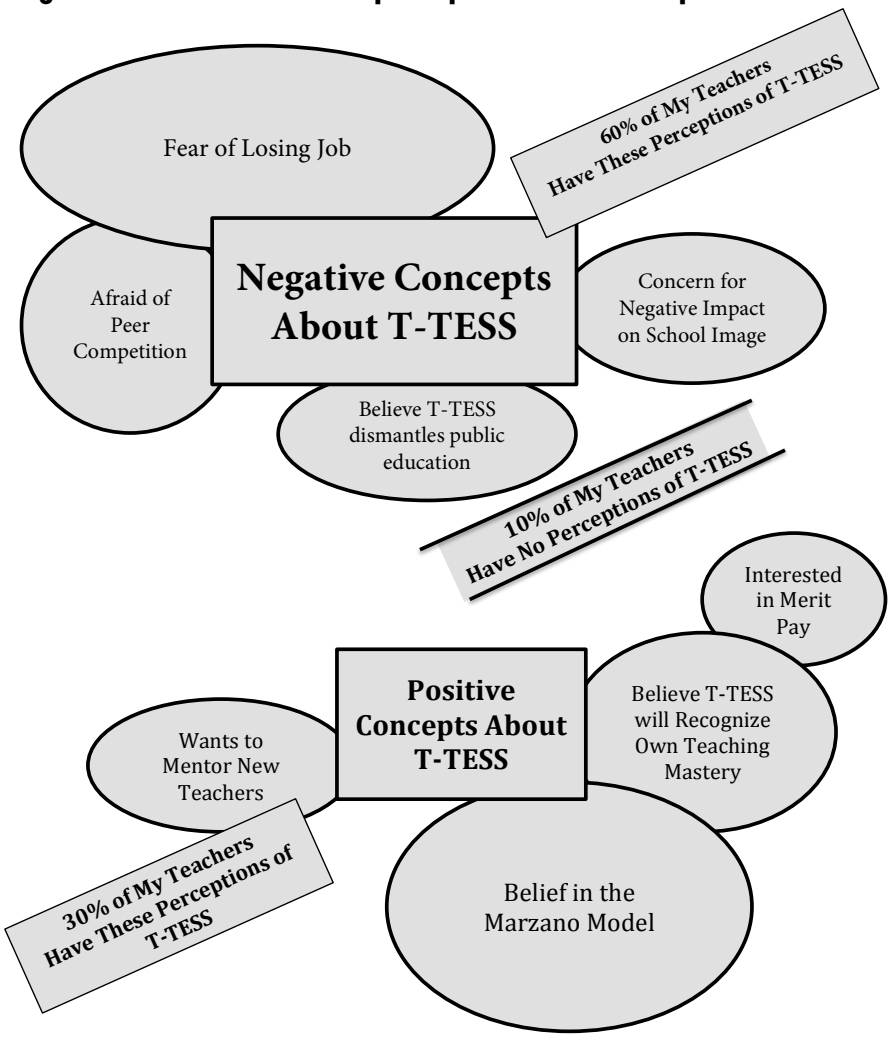
The Current State Concept Map highlights the following information about teacher perceptions about T-TESS:

1. There are more negative ideas than positive ideas about T-TESS
2. The negative ideas are supported by a hierarchy of interrelated paradigms, namely:
   -Fear of Losing Job, supported by Fear of Peer Competition
   -Belief that T-TESS is a part of a conspiracy to dismantle public education
   -Concern that poor teaching results will tarnish the school's image
3. The positive ideas are supported by a hierarchy of interrelated paradigms, namely:
   -Belief in the Marzano model supported by personal interests in getting recognition for excellent pedagogy, interest in mentoring and in the potential for getting merit pay.

Notice that this Current State Concept Map does not highlight or embarrass individuals. It simply presents a visual representation of what is in play in terms of what teachers are thinking. It is not possible to ignore the current state. Ignoring the current state typically makes things worse. So, when you put together this current state concept map, it should help you to better comprehend the current state (Plan). In turn, this comprehension should inform your decision making (Do). In short, you can use this lean tenet and tool combination so you can make decisions about how to begin to improve the culture and climate of teacher evaluation in your building, completing the first two steps of the continuous improvement cycle, Plan and Do.

Once the Current State Concept Map is reviewed as the first continuous improvement Plan step, it can then be used to create improvement strategies as the second continuous improvement Do step. For example, since the Concept Map provides importance, hierarchy and relationships of various teacher perceptions of T-TESS, you are now specifically informed about what this looks like. You understand the current state and the problem or problems in the current state (Plan). You can

Figure 2 Current State Concept Map of Teacher Perceptions of T-TESS



then derive your leadership choices as to what to do next (Do). For example, Table 3 below shows an Implementation Chart of what this could look like.

This Implementation Chart provides a clear set of ranked issues surrounding T-TESS and corresponding strategies that are designed to address the shortfalls and to leverage the benefits in the system that are evident in the Current State Concept Map. Once implemented, you would complete the continuous improvement cycle by using other lean tenets and tools, such as kaizen or data defect audits and benchmarks, to complete the remaining two steps, Check and Adjust. Depending on the scope of the problem you are dealing with, two or more rounds of continuous improvement may be needed. That may be the case with this T-TESS situation. At some point, you will decide the system or process has been improved enough and you will sustain the solution at that point.

Again, all of this is a generic example and it is not intended for duplication for you. This example was designed to demonstrate how lean tenets and tools can be used by you to produce an actionable solution or set of solutions to enable successful deployment of T-TESS, with a particular emphasis on how to start the continuous improvement cycle with Plan and Do. So, you will have to decide if the tenets you hold around T-TESS would result in the selection of the Current State Concept Map tool. And if they do, then you can create your own Current State Concept Map and analyze it to create strategies with accountability in an Implementation Chart. You would apply the continuous improvement cycle, and use the Current State Concept Map and subsequent Implementation Chart to complete the Plan and Do steps. When the current state is understood correctly, future actions can be planned and carried out. To complete continuous improvement through Check and Adjust steps, you read that you would review your results from Do (Check) and then make changes where needed and note lessons learned (Adjust).

Table 3. Implementation Chart of T-TESS Improvement Strategies

Ranked Concept Map Item	Improvement Strategy	Point Person(s)
#1 Fear of Losing Job Supported by Fear of Peer Competition	-Provide regular communication on "Rules" of T-TESS -Share examples and models of what successful teachers do -Provide data on job loss statistics -Use school data wall to highlight benchmarks of instruction and success	-Principal -PD Support -Legislative Liaison and Professional Organization Newsletters
#2 Belief that T-TESS Dismantles Public Education	-Set up kaizen sessions for problem solving	-Lean Teams or PLCs
#3 Concern for Negative Impact on School Image	-Conduct community focus groups to determine impact of T-TESS results on school perception	-Superintendent and Principal -PTO support
#4 Belief in the Marzano Model Supported by Belief T-TESS Will Recognize Own Teaching Mastery, Wants to Mentor New Teachers, and Interested in Merit Pay	-Reinforce research base of model through weekly updates -Conduct book studies on teacher evaluation and best instructional practice -Engage school improvement teams to review data and deploy standardization steps for best practice	-Principal -School Improvement Team
#5 No Concern about T-TESS	-Use formal and informal conversation to understand these teachers' perceptions through an Ishikawa diagram	-Principal and Lean Team

In this article, you have read about what Lean for School Leaders means generally as the application of the continuous improvement cycle using team-based work to identify, test and solve problems. And you have read about how to specifically apply one lean tenet and tool combination to better inform your decision making around T-TESS. The Current State Concept Map and Implementation Chart are methods for getting started in the first two steps of continuous improvement, Plan and Do.

The possibilities are great for Lean for School Leaders to be helpful to you as you work on systems and processes large and small. This was the first lesson in your Lean for School Leaders primer.

Authors

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Dr. JJ Villarreal is Superintendent for Rockwall ISD. He has worked to understand and "translate" Lean Management thinking into the field of public education management. In addition, he has spent many hours researching the principles of the Toyota Production System (TPS) promoting the concept of Respect for People and continuous improvement to employees.

Dr. Flumerfelt will present the webinar "Lean Essentials for School Leaders" on September 7 during Lunch & Learn. Visit www.tepsa.org.

References

Alves, A. C., Flumerfelt, S. & Kahlen, F.-J. (in press 2016). *Lean Education: current body of knowledge-what, who, when, how and why.* New York: Springer Publishing.

Arnold, A. & Flumerfelt, S. (Spring 2012). Interlacing mission, strategic plan and vision to lean: Powerful DNA for change. *Journal of Scholarship and Practice* (9)1, p. 26-47.

Bicheno, J. (2008). *The lean toolbox for service systems*. Johannesburg, South Africa. PICSIE Books.

Burton, T. T. & Boeder, S. M. (2003). *The lean extended enterprise: moving beyond the four walls to value stream excellence*. Boca Raton, FL: J. Ross Publishers.

Emiliani, M. L. (2008). Standardized work for executive leadership. *Leadership & Organization Development Journal*, 29 (1) pp. 24–46.

Flumerfelt, S., Kahlen, F. J., Alves, A., Siribang-Manalang, A. (2015) *Lean engineering education: Driving content and competency mastery*. New York: ASME Press.

Flumerfelt, S. & Green, G. (2013). Using lean in the flipped classroom for at risk students. *The Journal of Educational Technology and Society* 16(1), 356-366.

Flumerfelt, S. & Soma, P. (2012). *Lean essential for schools: Transforming the way we do business*. Destin, FL: Charactership Lean Publishing.

Flumerfelt, S. (2012). *Lean essentials for school leaders*. Destin, FL: Charactership Lean Publishing.

Flumerfelt, S. Kahlen, F. J., Alves, A. C. and Siriban-Manalang, A. (2015). *Lean engineering education: Driving content and competency mastery*. New York: ASME Press.

Lean Enterprise Institute. (2009). *Womack on Lean management*: A live video seminar [video recording]. Cambridge MA: Lean Enterprise Institute.

Shewhart, W. A. (1934). Statistical method from the viewpoint of quality control. (W. Edwards Deming). Washington, D. C.: The Graduate School, Department of Agriculture.

Stedinger, Jery R. (April 1996). Lessons from using TQM in the classroom. *Journal of Engineering Education*, 85(2), pp. 151–156.

Todd, Robert H., Red, W. Edward, Magleby, Spencer P. & Coe, Steven (July 2001). Manufacturing: A strategic opportunity for engineering education. *Journal of Engineering Education*, 90(3), pp. 397–405.

U.S.-EPA (2007). *The Lean environment toolkit*. United States Environmental Protection Agency. Available from: http://www.epa.gov/Lean/environment/toolkits/environment/resources/LeanEnviroToolkit.pdf, [accessed 21 February, 2012].

Womack J. P. (2006). Lean thinking for education [online]. LEAN/LAI EdNet Meeting.

Womack J. P., Jones D. T., & Roos D. (1990) The machine that changed the world: The story of Lean Production. New York: Free Press.

Examples of Lean for School Leaders Clients

Flumerfelt, S. (2014-present). Indiana Department of Education Lean Seminars, Workshops, Applications. Indianapolis, IN.

Flumerfelt, S. (2010-present). Traverse City Area Public Schools Lean Seminars, Workshops, Applications. Traverse City, MI.

Flumerfelt, S. (2015). Clintondale Community Schools Lean Seminars, Workshops, Applications. Traverse City, MI.

Flumerfelt, S. (2014). Traverse City Intermediate School District Lean Workshops, Applications. Traverse City, MI.

Flumerfelt, S. & Green, G. (2014). Peel School Board Lean Seminar. Toronto, Ontario.

Flumerfelt, S. (2014). Introduction to Lean for School Leaders. Southlake Carroll Independent School District. Southlake, TX.

Flumerfelt, S. (2012). Introduction to Lean for School Leaders. Temple Independent School District, Temple, TX.

Flumerfelt, S. (July 31, 2015, 7:15am). Canadian Broadcasting Corporation [radio interview]. Is lean appropriate for schools? What are examples of lean in schools? What is the ROI on lean consultancy for the tender? Saskatchewan.

Flumerfelt, S. (invited, March 2013). Improving mental models for higher education reform. *The Oxford Roundtable*: Oxford, England.

Flumerfelt, S., Kahlen, F. J. Alves, A. (Invited/Paid Workshop Facilitator, October 25-26, 2015). Managing for system complexity. INCOSE Great Lakes Regional Conference 9. Independence, OH: INCOSE.

Flumerfelt, S., Alves, A. C. and Kahlen, F.-J. (2014). Lean engineering education: The DNA of content and competency Mastery. *Proceedings of the 2014 IIE Engineering Lean and Six Sigma Conference, Lean Educator Conference*, September 29-October 01, Orlando, FL.

Flumerfelt, S., Kahlen, F. J. Alves, A. (Invited/Reimbursed Workshop Facilitator, 104 enrolled, August 2, 2015). Introduction to managing complex systems. *ASME 2015 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*. Boston: ASME.

Flumerfelt, S. & Levantrosser, D. (Invited Speaker, June 2009). *Change management for training and development webinar*. Southfield, MI: ASTD Regional Meeting.

Flumerfelt, S. (Designer, 2015). *Lean leadership minor*. Organizational Leadership, Oakland University. Rochester, MI.

Flumerfelt, S. (Designer, 2015). *Lean leadership graduate cognate/professional certificate program*. Organizational Leadership, Oakland University. Rochester, MI.

Flumerfelt, S. (Presenter, April 26, 2010). *Lean thinking live webinar for North Iowa superintendents* [online]. Destin, FL.

Flumerfelt, S. & Doman, M. (Presenter, April 16, 2010). *Lean thinking live webinar II*. Pawley Learning Institute, Oakland University, Rochester, MI.

Flumerfelt, S. (Presenter, April 9, 2010). *Lean thinking for Iowa schools webinar.* Pawley Learning Institute, Oakland University, Rochester, MI.

Flumerfelt, S. & Doman, M. (Presenter, March 26, 2010). *Lean thinking live webinar I*. Pawley Learning Institute, Oakland University, Rochester, MI.

Flumerfelt, S. (Presenter, March 2010-December 2010). *Lean thinking webinar.* Pawley Learning Institute, Oakland University, Rochester, MI.

Flumerfelt, S. (Invited Speaker, February 2010). *Lean thinking for schools.* Houston, TX: Region 4 Education Service Center/Leadership Fusion, Houston.

Flumerfelt, S. (Featured Speaker, October,

2009) *Lean thinking for advancement services.* Association of Advancement Services Professionals (AASP) Summit 2009--Reach for Innovation, Chicago, IL.
Flumerfelt, S. & Saunders, R. (Invited Speaker, August 2009). *Lean thinking for advancement services*. Oakland University, Rochester, MI: Association of Advancement Services Professionals Webinar.
Flumerfelt, S. (Invited Speaker, April, 2009). *Lean thinking for schools.* Kingston, Jamaica: Conference for the Consortium of Jamaica, the Caribbean and Latin American Schools.
Flumerfelt, S. & Soma, P. (speaker, October 8, 2012). *Transforming the way we do business.* Thompsonville, MI: Michigan School Business Officials Facilities Conference, October 8, 2012.
Flumerfelt, S. & Soma, P. (invited speaker, January 17, 2012). *The lean journey of a CFO/COO.* East Lansing, MI: Michigan School Business Officials Financial Strategies Conference, January 17-18, 2012.
Flumerfelt, S. (Invited Speaker, January 2011). *Lean leadership in education.* Michigan Lean Consortium.
Flumerfelt, S. (Invited Speaker, May 2009). *Lean practices for higher education.* Rochester, MI: 2009. Public Universities Conference.
Flumerfelt, S. (Presenter, June 20, 2011). *Lean thinking for schools.* Macomb Intermediate School District Summer Leadership Academy.
Flumerfelt, S. (Designer, Trainer, October-December, 2010). *Lean professional certificate program and train the trainers.* Muskegon, MI: Reeths-Puffer School District.
Flumerfelt, S., Maxfield, R. & Smith, J. (Facilitator, February 13, 2009). *Oakland University: Educational leadership department retreat: Lean thinking.* Rochester, MI.
Flumerfelt, S., Brockberg, K., Brown, W., & High, S. (Designer, Lead Trainer, September 2008-February 2009). *Lean professional certificate program.* Muskegon, MI: Reeths-Puffer School District.
Flumerfelt, S., Brockberg, K. and Brown, W. (Designer and Supervisor, January 2009) *Introduction to lean thinking for community colleges* (Half-Day Seminar). Clinton Township, MI: Macomb Community College.
Calvo-Amodio, J., Flumerfelt, S. & Hoyle, C. (2014). A complementarist approach to lean systems management. P*roceedings of the International Society of Systems Sciences,* July 2014, Washington, D.C.
Kahlen, F.-J,. Alves, A. C., Flumerfelt, S. & Siriban-Manalang, A. B. (2014). Supporting engineering professional practice with content and competency. *Distinguished Lecturer Presentation, 4th Industrial Engineering and Operations Management Conference*, January 2014, Bali, Indonesia.
Alves, A. C., Kahlen, F-J. Flumerfelt, S. and Siriban-Manalang, A-B. (2014). The Lean Production multidisciplinary: from operations to education. Proceedings of International Conference of Production Research Americas (ICPRAmericas), July 31 to August 1, Lima, Peru.
Siriban-Manalang, A. B., Alves, A. C., Kahlen, F.-J. & Flumerfelt, S. (2013). Lean Engineering Education: bridging-the-gap between academe, industry and society. in 14th Asia Pacific Industrial Engineering and Management Systems (APIEMS) Conference 2013, December 03-06, 2013, Cebu, Philippines.
Kahlen, F.-J., Flumerfelt, S., Alves, A. C., & Siriban-Manalang, A. B. (2013). The möbius strip of lean engineering and systems engineering. P*roceedings of the ASME 2013 International Mechanical Engineering Congress & Exposition (IMECE2013)*, November 15-21, 2013, San Diego, California.
Flumerfelt, S., Alves, A. C. & Kahlen, F.-J. (2013). What Lean teaches us about ethics in engineering. *Proceedings of the ASME 2013 International Mechanical Engineering Congress & Exposition (IMECE2013)*, November 15-21, 2013, San Diego, California.
Alves, A. C., Flumerfelt, S., Kahlen, F.-J. & Siriban-Manalang, A. B. (2013). Comparing engineering education systems among USA, EU, Philippines and South Africa. *Proceedings of the ASME 2013 International Mechanical Engineering Congress & Exposition (IMECE2013*), November 15-21, 2013, S. Diego, California, USA.
Alves, A. C., Kahlen, F-J, Flumerfelt, S. & Siriban-Manalang, A.B. (2013). Lean engineering education: Bridging-the-gap between academy and industry. Best Poster Award, presented in the *International Conference of Portuguese Society of Engineering Education (CISPEE)*, October 31-November 2, 2013. Minho, Portugal.
Alves, A. C., Kahlen, F-J, Flumerfelt, S. & Siriban-Manalang, A. B. (2013). Lean engineering education: bridging-the-gap between academy and industry. In First *International Conference of Portuguese Society of Engineering Education (CISPEE)*, October 31-November 2, 2013. Minho, Portugal, Society cispee13_Submission40.
Flumerfelt, S.; Siriban-Manalang, Kahlen, F. J. (2012). Are agile and lean manufacturing systems employing sustainability, complexity and organizational learning? *The Learning Organization (19)*, 3, p. 238–247.
Flumerfelt, S. & Banachowski, M. (2011). Understanding leadership paradigms and improvement in higher education. *Quality Assurance Journal*, 19(3), 224-247.
Flumerfelt, S. (invited, April, 2013). Value stream map to understand reality. *Government Finance Review*. Chicago: Government Finance & Operations Association.
Amen, H., Flumerfelt, S., Halada, G. & Kahlen, F. J. (Invited, March, 2012). Systems by design: [Crowdsourcing Project]. *Mechanical Engineering.*
Amen, H., Flumerfelt, S., Halada, G. & Kahlen, F. J. (Invited, December, 2011). Complexity and consequence: [Crowdsourcing Project]. *Mechanical Engineering.*
Hillberg, P., Flumerfelt, S., VanTil, R. & Tierney, J. (2011). E*ducation lifecycle management: Applying 21st enterprise architecture to K-20 education.* Whitepaper.
Flumerfelt, S. (Invited, Spring 2011). Has your budget been reduced lately? Create and relate. *Pawley Institute of Lean Thinking for Schools Weblog*.
Flumerfelt, S. (Invited, Fall 2010). Problems with the commons? *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (May 2009). Is it overproduction to herd cats? Give stakeholders what they want. Pawley *Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (April 2009). Culture is a cash cow: Using a new mental model. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (March 2009). Act like a CSI detective: Go to gemba. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (February 2009). To change or not to change: That is the Question. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (January 2009). Budget crises in schools. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (October 2008). Lean transformation. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (August 2008). Who is lean? *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. & Brockberg, K. (July 2008). Lean Learning Mileposts. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. (Invited, July 21, 2008). Lean thinking for schools: Learning to identify value and eliminate waste. *Education Report*, Guest Editorial.
Flumerfelt, S. & Brockberg, K. (June 2008). Stages of becoming lean. *Pawley Institute of Lean Thinking for Schools Weblog.*
Flumerfelt, S. (invited speaker, September 28, 2011). *Four emerging curricular and instructional management strategies in engineering education.* Hong Kong: 2011 International Leadership Summit, American Society of Mechanical Engineers.
Kahlen, F. J., Flumerfelt, S., Siriban-Manalang, A., & Alves, A. (November 11-17, 2011) *The benefits of teaching lean.* Paper Presentation for the Proceedings for the Annual International Mechnical Engineering Conferences Exposition. Denver.
Flumerfelt, S. (invited panelist, November 2010). *Lean thinking: What it is and how to teach it.* Proposal for Invited Panelist ASME IMECE 2010 Conference, British Columbia: Van Couver.
Flumerfelt, S. (Designer, Lead Trainer, November 2008). *Introduction to lean thinking for schools (Half-Day Seminar.)* Clinton Township, MI: Macomb Intermediate Schools.
Flumerfelt, S. & Brockberg, K. (Designer, Lead Trainer, October 2008). *Introduction to lean thinking for schools (Half-Day Seminar.)* Waterford, MI: Oakland Schools.
Flumerfelt, S. & Brockberg, K. (Designer, Lead Trainer, August 2008). *Introduction to lean thinking for schools (Two-Day Seminar.)* Muskegon, MI: Muskegon Chamber of Commerce.
Smith, H., Flumerfelt, S. & Mich, M. (Co-Designer, Co-Facilitator May 2, 2008). *Lean workshop*. Rochester, MI: Clerical-Technical Group, SEHS, Oakland University.
Flumerfelt, S. & Brockberg, K. (Designer, Lead Trainer, March 2008). *Introduction to lean thinking for schools (Two-Day Seminar.)* Ann Arbor, MI: Washtenaw ISD.

Effective Tools for Using Social Media

by Ronald Williamson, EdD and Barbara Blackburn, PhD

It's easy to dismiss social media as a fascination of young people but to do so minimizes one of the fastest growing trends in technology. The Pew Internet and American Life Project recently found that 75% of teens have access to a smartphone and only 12% have no cell phone (Lenhart, 2015). The same study found that 92% of teens report being online every day and another found that 75% of their parents use social media regularly (Duggan, Lenhart, Lampe & Ellison, 2015). Social media tools have become the way for a school or business to quickly and efficiently disseminate information. Because of the almost universal access to social media across all demographic groups it often reaches people that traditional forms of communication miss.

Challenges of Social Media

As teens increasingly use social networking sites there is growing evidence it may promote inappropriate behavior. The National Crime Prevention Council (2010) found that 11 percent of students between ten and seventeen admitted to participating in some kind of cyberbullying.

Promoting Responsible Use

Schools need to work to promote responsible use of the Internet and social media sites. They should also be concerned about student use of these sites off-campus because involvement has the potential to negatively impact the school and its students. But stopping access or banning use of smartphones and tablets doesn't really work. Increasingly, schools want students to use these devices for classroom instruction and to access rich and engaging instructional materials.

There are several steps for dealing with the use of social media.

Steps to Deal with Social Media

1. Develop a clear policy with a focus on educationally valuable use of the Internet. Effective policies are supported by curriculum and professional development. Teachers should be expected to have students use the Internet only for high quality, well-planned instructional activities.
2. Implement a comprehensive program to educate students and their families about online safety and responsible use.
3. Develop a plan to monitor Internet use at school.
4. Have appropriate consequences for inappropriate use of the Internet or social networking sites. Include administrators, school counselors, school psychologists, and school resource officers in developing and monitoring the plan.
5. Engage families in monitoring Internet use. Since most use occurs outside of school hours it is critical parents understand the importance of monitoring their children's online activities and how to respond when inappropriate use takes place.

Socializing Safely Online

OnGuard Online (https://www.consumer.ftc.gov/articles/0012-kids-and-socializing-online), a service of the Federal Trade Commission shares these tips for parents about safe social networking. The guidelines are also important for adults who use social media.

Tips for Parents

- Understand what information should be private.
- Use privacy settings to restrict who can access and post on you and your child's website.
- Be clear you should post only information you are comfortable with others seeing.
- Remember once you post information online, you can't take it back even if you delete it from your own device or account.
- Know how your kids are getting online and whether they are discussing or engaging in bullying and/or sexual talk online.
- Tell your kids to trust their gut if they have suspicions or are uncomfortable about something online.

Social Media as a Form of Expression

When social media is used at school the legal guidance is clear about

Excerpted from: Williamson & Johnston, *The School Leader's Guide to Social Media* and Williamson & Blackburn, *The Principalship from A to Z, 2nd Edition.*

how principals can respond. Use of school computers, facilities and school servers can be regulated. But when social media tools are used off campus, they may or may not, be regulated by the school. Schools cannot regulate the vast majority of off-campus expression by students.

But when expression off campus impacts the operation of the school by disrupting the educational process, school authorities can intervene. The key is whether there is an actual disruption, not whether adults think there might be a disruption or find student expression distasteful.

When we talk to principals they almost always talk about texting, a commonly used form of social media among students and adults. When used for harassment, to cyberbully, or to engage in sexting or to disrupt class, intervention may be required. But remember courts have voided policies and student discipline if the speech is just unpleasant, insulting or offensive.

Cyberbullying

Cyberbullying has become a major problem. Common Sense Media (2010) reported that 29% of children 10-17 years of age had been cyberbullied, and 52% knew someone who had been cyberbullied. The most common definition of cyberbullying is repeated, unwanted, aggressive behavior over a period of time using the Internet or other forms of social media. Cyberbullying has serious consequences for those bullied. Students bullied online are more likely to use alcohol or other drugs, be suspended from school, have attendance problems or experience emotional distress than those not bullied (Ybarra, Diener-West & Leaf, 2007).

What School Leaders Can Do

- Determine if the incident occurred on or off campus.
- If off campus did it cause a disruption at school?
- Document the impact and address the issue.
- Ensure your school has a policy on cyberbullying and penalties are clear.
- Educate students and families on responsible use of the Internet and social media.

Seven Reasons to Pay Attention to Social Media

1. **It Builds Relationships** – Creating relationships is vital for leaders. Social media is an effective way to build support among your stakeholders.
2. **It's About Customers** – Parents and employees often come from a different generation, one that wants to work differently and to be involved in the educational process. Social media is a way to engage them in the life of your school.
3. **They're Already Talking** – Check out various online sites. People are already commenting about your school and about your leadership.
4. **Listen as Well as Share** – The principal is responsible for maintaining the school's image. Use social media to interact with parents and community. Use it to both hear from them and to share information. It can provide a way to detect rumors and allow you to respond quickly.
5. **You'll Be Well Received** – Almost everyone we've talked with reports the positive reception they get from having a blog, a Twitter feed or a school Facebook page.
6. **It Builds Community** – People commit to things they care about. As we described earlier, the public is less trustful of schools. Social media promotes community by inviting people to be part of the conversation.
7. **It's Here to Stay** – While the forms of social media continue to change the evidence is that our use of the tools will only accelerate. Increasingly the expectation is that schools stay connected to their families and their community. Social media is the tool. (Adapted from: Porterfield & Carnes (2010), AASA Online)

Positive Aspects of Social Media
Although there are challenges that arise with social media in schools, there are also ways that social media can positively impact the school community, including:

- Communication
- School Safety
- Productivity
- Professional Learning
- Instruction

Social Media as a Communication Tool

The online presence for many schools has moved beyond the traditional school website. It now includes a Facebook page (www.facebook.com), a Twitter account (www.twitter.com), blogs by teachers, principals or the superintendent, and YouTube (www.youtube.com) and Flickr (www.flickr.com) for sharing videos and photos about school events. Some schools have even developed an iPhone app (http://www.apple.com/webapps/) for their school. The sites frequently share calendar information, student handbooks, school news, access to the school's web site, and photos and videos.

Your website is often the first place families go to for information about your school. Increasingly families rely on your social media accounts, as well as your website, for current, up-to-date information about things like school closings, lunch menus, and school activities. Regardless of the tool you use to communicate online be sure to use the five important tips below for encouraging families to return, again and again, for information.

Social Media and School Safety
Social media outlets have also become useful during a crisis and can be used as part of your school's school safety plan. In 2011 when tornados devastated Joplin, Missouri and Tuscaloosa, Alabama, the school districts used social media as the primary means of communicating with families and staff. Often, it was the only way. Their social media tools allowed them to locate students and families, share information about school openings, bus routes and relocated classrooms.

Social Media as a Productivity Tool

There is a whole set of social media tools that can be used to improve productivity. Let's look at a few of our favorites.

Productivity Social Media Tools
Scheduling Meetings
Our favorite tool, because it's free, is Doodle (www.doodle.com). Use it to identify potential meeting times and invite participants. It provides an easy-to-read report once people respond to the invitation.
Enhancing Collaboration
A wiki is a combination of a website and a place to post, revise, and edit work. Ron likes to use wikis when he works with groups. What's most powerful is that a wiki allows groups to collaborate on planning and implementing projects without having to constantly meet. Mem-

Five Tips to Encourage Parents to Visit Your Online Content

1. Keep it fresh and original. Updated content is critical and fresh—original content brings them back.
2. Know your audience. Provide content that is relevant to the audience and choose stories and information that meets their needs. Use a human, personal voice when writing content.
3. Make it easy to navigate. Name pages and content accurately so it is easy to find. Routinely check links to make sure they work and include a search box so visitors can easily locate information.
4. Use a clean, simple, professional design. First impressions are important. So, pay attention to the look of your site. Use bullet points to improve the layout and avoid use of too much text.
5. Expand using links. Include links that take visitors to additional content. You may link to your school's feeder schools or to information on college admissions.

From: Williamson & Johnston, *The School Leader's Guide to Social Media*

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bership in the wiki can be controlled and the wiki keeps a record of any changes made by members. Our favorite is Wikispaces (www.wikispaces.com). There is a free plan for K-12 schools that is also free of ads.

Maintaining Meeting Records
We like Meeting Diary (www.meetingdiary.com) as a way to keep online records of meetings we've attended, along with the agenda and a summary of major decisions.

Social Media for Building Connections and Professional Learning

Several social media tools can support your own professional learning and connections. They include sites like LinkedIn (www.linkedin.com) to create a professional profile and build connections to others in your profession and to professional groups. It's important to separate your professional profile from your personal or family profile on Facebook.
We also encourage you to consider creating your own Personal Learning Network (PLN). It's a way of using the Internet and social media, to manage your own learning and to organize the information you receive. PLNs are not new. Often they are just networks of professional contacts but with social media it's possible to add experts, and colleagues, from around the world to your network. Google has a set of tools for creating your own personal learning network (http://sites.google.com/site/buildingapln/).

Social Media as an Instructional Tool

Social media has also emerged as a powerful tool for teaching and learning. Any discussion of its use is out-of-date before it is published. But what's important to recognize is there is incredible digital social media technology that can be used to fully engage students, and to provide teachers with access to rich content for their classes.

Schools have begun to capitalize on the advantages of social networking. The possibilities are limitless and the examples grow daily.

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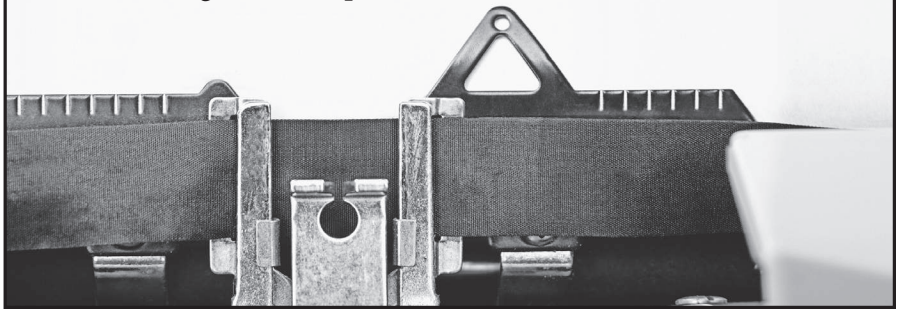
Call for Papers
The University of Texas at Tyler Department of Educational Leadership & Policy Studies seek submissions for *Diversity, Social Justice and the Educational Leader.* The journal seeks to explore relevant issues that impact educational leaders and teachers who serve linguistically and culturally diverse students. For additional information about the journal as well as submission guidelines, please visit **www.uttyler.edu/elps/dsjel**.



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Sample Uses of Social Media for Instruction

- Teachers use YouTube videos in classes, or ask students to create videos and post them on YouTube for others to access and critique. The Flat Classroom Project (www.flatclassroomproject.org/New+Projects+0910) is one example. On this site educators developed social-networking sites for use in class or for assignments to be completed at home.
- Some classes create their own web page and use it to create classroom community, share information or recognize student accomplishments.
- Teachers can have students create fake Facebook pages for story characters or historical figures. Other students can comment on the status updates.
- Students can demonstrate understanding of content through a Twitter feed. Use a specific hashtag and ask students to tweet the most important points during the lesson or while working on their homework. The feed can be used the following day as a review of content.
- Create a blog to expand literature circles. For example, two classes from different schools can read a book, and use the blog to write their responses to the text.

A Final Note

It is easy to focus on the negative aspects of social media but we encourage you to look beyond those and consider the way social media has changed communication, access to information, and our own personal and professional learning. Social media technology is a transformative tool, one that is here to stay.

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