# THE LEARNING System

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EVERY EDUCATOR ENGAGES IN EFFECTIVE PROFESSIONAL LEARNING EVERY DAY SO EVERY STUDENT ACHIEVES

# **GROUP SMARTS**

Elevate collective intelligence through communication, norms, and diversity

# By Valerie von Frank

avvy leaders gather the best and the brightest to make decisions.
Why, then, are decisions not always the

Some teams may not be operating with maximum intelligence. Scientific theory is beginning to explain what makes teams tick, and it seems that teams, too, have an intelligence of their own that is independent of the individual intelligence of the members. In other words, adding up the talent of each individual member doesn't necessarily total the team's ability to perform.

"We thought individual intelligence (of each group member) would play a larger role," said Anita Woolley, assistant professor of organizational



behavior and theory at Carnegie Mellon University. "We're finding that has a very low relationship to how the team will do as a whole."

# SOME GROUPS ARE SMARTER THAN OTHERS

Woolley and her colleagues wanted to find out whether collective intelligence existed. If so, is it measurable? Is it stable over time? Is it a predictor of a group's performance? It is.

The idea of collective intelligence "has been swirling around in different guises for quite a while," Woolley said, from studies of animal behavior to more recent studies of systems in computer science.

Nicholas Christakis and James Fowler described how

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# Ground professional learning with outcomes

he journey to effective professional learning begins with knowing where you're going. This is a truism, but it doesn't mean all school system leaders use it to guide their decisions and actions. In many school systems, professional development is such a routine activity that it rolls on from one year to the next, subject to little scrutiny or reflection. It's easy for education leaders to take it for granted. They may even lapse into assumptions about the purpose and results of professional

learning, without pausing to examine its outcomes or whether they address current needs.

This is why the seventh of Learning Forward's Standards for Professional Learning emphasizes the importance of outcomes. The six standards that precede it work in tandem to achieve the optimum results of professional learning — higher levels of performance by educators and their students. Developing the professional learning building blocks the six standards describe, and putting them in place, is no easy task, but the effort will be for naught unless it is

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Professional Learning Policy Review: A

Professional Learning Policy Review: A Workbook for States and Districts is available at www. learningforward. org/publications/ implementingcommon-core.

informed by the Outcomes standard. To put it another way, conscientiously and effectively addressing the first six standards requires grounding them in the seventh.

There is no better example of this

than many school systems' current focus on implementing the Common Core State Standards. As the Outcomes standard makes clear:

"With student learning outcomes as the focus, professional learning deepens educators' content knowledge, pedagogical content knowledge, and understanding of how students learn the specific discipline. Using student learning outcomes as its outcomes, professional learning can model and engage educators in practices they are expected to implement within their classroom and workplace" (Learning Forward, 2011).

Because Common Core language arts and mathematics standards call for higher levels of student learning, they implicitly require new learning and higher levels of performance by the students' teachers. Curricula and pedagogy that educators considered adequate in the No Child Left Behind era will not suffice. Students will not perform at standard unless their teachers learn how to align their curricula and instruction to the Common Core or other rigorous college- and careerready standards. That is the outcome that should be driving professional learning in school systems committed to Common Core standards implementation.

Though the outcomes are clear, school systems face major challenges in achieving them. If up to this point a school system's professional development has been unfocused, weak, and unaccountable, it will be difficult to overcome these ingrained bad habits

of practice. If a school system has operated professional development at the margins, supporting it with minimal financing and providing it with limited time, school board members may resist recommendations for investing greater resources.

However, the Common Core standards also provide an opportunity. School systems can choose a new path. They can begin now to develop professional learning that prepares teachers to meet the challenges of rigorous content standards. Fortunately, Learning Forward has produced a valuable resource that can help — *Professional Learning Policy Review: A Workbook for States and Districts.* 

The workbook provides clear, practical, step-by-step guidance for how school systems can critically review and analyze their current professional learning policies and practices. For school system leaders who want to get serious about professional learning to enable educators and students to meet the high performance outcomes inherent in the Common Core State Standards, a policy review is how to begin.

# REFERENCE

Learning Forward. (2011).

Standards for Professional Learning.
Available at www.learningforward.org/standards/outcomes.

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# High-quality professional learning takes systemwide support

orking with the board to develop a vision and goals is the first step of articulating a framework to guide schools. A systems approach and design builds from that vision and goals.

Professional learning on each campus is based on that vision and goals. Our instructional specialists and coaches spend one day a week in our central office collaborating and working within their own community team, but for the most part they are working on campuses because that's where they're most needed, where the teachers and administrators are.

One of our system's four goals is quality professional development. In order to achieve that, we have to provide the structure. To pursue performance, we make professional learning part of our daily, embedded operations and routines. Professional learning has to be consistent and of quality.

We provide time for teachers to work in teams to plan curriculum, instruction, and assessment. They look at student activities, resources, lesson plans, the effectiveness of lesson plans, how the lesson plans connect with our curriculum guides, and the quality of the connections — all of those pieces are intertwined throughout the year. Each school has set a structure for the staff's own professional learning, and even though the schools have different schedules, they all build in professional learning time using a late start time once each week for students.

All staff establish a professional

development plan based on their own school data and they work together on that for the year. They continually disaggregate data, looking at the data from all angles to analyze strengths and weaknesses to adjust teaching strategies.

At the school level, Learning Forward's Learning School Alliance

is a central piece as well. Sometimes in smaller districts like ours, you don't have access to national or worldwide perspectives. You can't bring in speakers and the latest and greatest. The quality of and access to resources provided through the alliance and its network of schools are

great. The other complex piece is that being involved in the alliance builds capacity and teacher leadership that filters into the school. In addition, we can compare ourselves with other schools doing similar things to see whether we're on the right track. It builds in a lot of support and assurances.

The staff's daily professional development in school is directly connected to their students and their

learning goals and outcomes. Each school uses its professional learning time differently, but individual goals are always connected to district goals.

High-quality professional development takes systemwide support. Leaders make professional learning decisions with support from the central office's curriculum depart-



High-quality professional development takes systemwide support.
Leaders make professional learning decisions with support from the central office's curriculum department. Instructional coaches help align the many pieces. Central office also helps align all of the pieces from the campuses and supports the professional development from teachers to administrators.

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Leigh Wall is superintendent for Sante Fe (Texas) Independent School District.

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humans are social beings with group intelligence. "Social networks," they wrote, "can manifest a kind of intelligence that augments or complements individual intelligence, the way an ant colony is 'intelligent' even though individual ants are not, or the way flocks of birds determine where to

fly by combining the desires of each bird" (2009, p. 26).

So what can research tell us about raising a team's intelligence? Effective teams are not made up of the organization's rock stars. To form the best teams, create groups with good communicators, enhance those skills, and make sure members have a variety of backgrounds, according to experts.

But Woolley and her colleagues went a step further. A group's ability to perform well on a task can be measured, they found. The researchers discovered that they could predict how well a group would be able to perform a task based on measured performance of prior tasks such as brainstorming, decision making, and visual puzzles (Woolley et al., 2010). The group's collective ability on one set of tasks predicts how well members perform another task.

Woolley and colleague's research also found that group member satisfaction, motivation, and group cohesion don't necessarily contribute to high-performing groups (Woolley et al., 2010).

So what can research tell us about raising a team's intelligence? Effective teams are not made up of the organization's rock stars. To form the best teams, create groups with good communicators, enhance those skills, and make sure members have a variety of backgrounds, according to experts.

# **HOW DO YOU RAISE THE GROUP'S IQ?**

Improving the group's ability to communicate will raise its collective intelligence, Woolley said. Woolley found that teams formed with more women than men had higher collective intelligence, but that group interaction tended to be different in those groups. She said participation was more equal.

"On average, women tend to score higher than men on skills related to social perceptiveness," she said, but only because understanding what others are thinking or feeling is important to group dynamics and creating a smarter group.

Cornell University biologist Thomas Seeley famously studies honeybees' decision making as scouts bring information back to the colony to make decisions about where to locate a new hive. The scouts make their case in a persuasive dance, and as quorums form and more bees become convinced, they begin to cluster until the whole group comes together in a democratic decision on a location. Woolley

points out that the hive makes a suboptimal decision when the signal stops traveling across the honeybees if just one bee breaks the communication trail.

"Fundamental to collective intelligence is the ability of the group to make the best use of the information that can be brought to bear on their work from all members of the group and so communication is fundamental to that," Woolley said.

"Two people can be saying the same thing, but if one person is communicating more effectively, it's actually going to have more of a benefit for the group," she continued. "There are some groups where people are saying smart things, but it's not finding its way into the group's work."

Creating a collaborative team begins with having clear goals and expectations, setting norms, understanding different roles group members can play, clarifying the group's decision making authority, and creating focused agendas, writes Robert Garmston in *Unlocking Group Potential to Improve Schools* (Corwin Press, 2012).

According to Garmston (2012, p. 71), higher-performing groups are created by:

- Ensuring that group members carefully consider information from one another as potentially useful.
- Allowing equal input from every member.
- Using dialogue a free flow of ideas that build on one another's thoughts.
- Allowing constructive critiques that offer concrete ideas for an improvement of a process or idea, never about or judging an individual.

The psychological safety in that last point is essential to high-performing teams, researchers say, and something that leaders have to work to create.

Researchers studying how cardiac surgical teams learned to use new technology quickly evaluated 16 teams that adopted the new practices quickly and effectively (Edmondson, Bohmer, & Pisano, 2004). Given the hierarchy that exists in the operating room, how did the surgeons create a sense of team that allowed other surgical staff to feel psychologically safe in potentially pointing out mistakes? According to the Harvard researchers, the surgeon/leaders had to repeatedly tell the team members that they had been selected not only for their skills but because they could provide valuable insights.

The researchers found that high-level management support, the status of the surgeon in charge, and formal reflections were not essential. (Reflecting during the process of learning *was* helpful.)

# **SELECTING A SMART TEAM**

Interestingly, the surgeons pointed out to the team members that they had been selected for their ability to

Continued on p. 5

Continued from p. 4 contribute insights.

Research on what contributes to a smart group shows that the best group diversity is not based on intelligence, racial, ethnic or cultural diversity, but on differences in backgrounds and life experiences (Page, 2007). Selecting all members of middle class backgrounds, for example, although of different races, still may create a similar perspective from those gathered and they may bring a similar set of ideas to the table. When group members have different sets of mental tools, the group decision making process is less likely to get mired and more likely to result in a different way of looking at the problem.

When group members are too similar, the group often is not high-performing, according to Garmston, because it is susceptible to groupthink, "that inability to hear different voices and perspectives (that) is the downfall of intelligent decision making" (2012).

Page outlined different dimensions of diversity:

- Cognitive differences in perspectives (different ways of representing situations and problems);
- Interpretation (putting things into different categories and classifications; for example, one individual might be a principal, a parent, a coach);
- Heuristics (different ways of generating solutions);
- Ways of approaching problems (analyzing a situation and looking for themes).

(in Garmston with von Frank, 2012, p. 73)

"A study from Northwestern University found that including a mix of veterans and newcomers in the group led to greater creativity and better solutions," write Garmston and von Frank (2012). "A second factor in success was including a few experienced people who

had never worked with one another before." Woolley said it is important that leaders train groups to be aware of how subtle and even unconscious power and status issues can create unequal participation and take steps to compensate for that unevenness.

Knowing that groups have an intelligence factor, just as individuals do, is the first step in beginning to understand that they can be made smarter—with work.

Leaders can make sure groups are developing group intelligence, just as they look to individual professional learning.

"A group's collective intelligence determines the group's ability to engage in complex cognitive work that results in improved outcomes," write Garmston and von Frank (2012). "Groups, particularly groups that develop their collective intelligence, are a tremendous force both for change at the individual level and in the ability to affect organizational issues. Developing group intelligence does not hap-

# To facilitate effective organizational teams:

- Make sure one person is not doing all the talking.
- Create a psychologically safe environment in which people feel comfortable admitting mistakes.
- Leave power and status at the door.
- Actively teach group members effective communication skills.

— Anita Woolley, assistant professor of organizational behavior and theory at Carnegie Mellon University

pen by accident. It is deliberate, planned and constructed. As a group becomes smarter, the individuals within the group also gain wisdom."

# **REFERENCES**

Christakis, N.A. & Fowler, J.H. (2009). Connected: The surprising power of our social networks and how they shape our lives. New York: Little Brown.

Edmondson, A., Bohmer, R., & Pisano, G. (2004). Speeding up team learning. Harvard Business Review on teams that succeed. Boston, MA: Harvard Business School Publishing Corp.

Garmston, R.J. & von Frank, V. (2012). Working together, we can produce genius. Finding Common Ground:

> Education Week blog. Available at http:// blogs.edweek.org/edweek/finding\_common\_ ground/2013/02/working\_together\_we\_can\_ produce genius.html

Garmston, R.J. with von Frank, V. (2012). Unlocking group potential to improve schools. Thousand Oaks, CA: Corwin Press.

Page, S. (2007). The difference: How the power of diversity creates better groups, firms, schools, and societies. Princeton, NJ: Princeton University Press.

Woolley, A. W., Chabris, C.F, Pentland, A., Hashmi, M., & Malone, T.W. (2010). Evidence for a collective intelligence factor in the performance of human groups. Science, 330(6004), 686-688.

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# **Creating norms**

This activity enables a team to develop a set of operating norms or ground rules.

**Preparation:** Before the meeting, write the list of norms at the bottom of p. 7 on a sheet of chart paper and post on the meeting room wall. In addition, refer to the handout on p. 7 and create six more posters, one for each category:

TimeListeningConfidentialityDecision makingParticipationExpectations

Place these posters on the meeting room walls as well.

**Supplies:** Chart paper, sticky notes, pens/pencils.

Time: Two hours.

# **Directions**

- Indicate to the team that effective teams generally have a set of norms that governs individual behavior, facilitates the work of the team, and enables the team to accomplish its task.
- **2.** Point out the sample norms that are posted in the room. Point out the other six posters and the questions that are posed on each poster. *Time: 15 minutes.*
- **3.** Recommend to the team that it establish a set of norms:
  - To ensure that all individuals have the opportunity to contribute in the meeting;
  - To increase productivity and effectiveness; and
  - To facilitate the achievement of its goals.
- **4.** Place a pad of sticky notes on the table and give every person the same kind of writing tool. Ensure that all sticky notes are the same color.
- **5.** Ask each person to reflect on and record behaviors they consider ideal behaviors for a group. Ask them to write one idea on each sticky note. *Time: 10 minutes.*
- **6.** Invite the team members to place their ideas on the charts at the front of the room. Ask them to refrain from discussion while doing so.
- 7. Read each norm that has been suggested. Allow time for group members to discuss each idea. As each recommended norm is read aloud, ask the group to determine if it is similar to another idea that already has been expressed. Sticky notes with similar ideas should be grouped together. Time: 30-45 minutes.

- **8.** When all of the sticky notes have been organized, assign two individuals to work together to write the norms suggested under each heading. In some cases, there may be only one norm; in others, there could be several. Use the worksheet on p. 7 to record these norms. *Time: 30 minutes*.
- **9.** Read each of the proposed norms aloud to the group. Determine whether the group can support the norms before the group adopts them. You could ask for a thumbs up to indicate support or find another way for each team member to indicate to the team his or her willingness to abide by these ground rules. *Time: 30 minutes*.
- **10.** When the team agrees that it will abide by this norm, the facilitator writes the norm on a new sheet of chart paper with the label "\_\_\_\_\_\_ Team Norms." Leave that poster in the team's meeting room for future meetings.
- **11.** The facilitator should also transcribe the norms onto an 8½-by-11 sheet of paper and make copies to distribute to all team members.
- **12.** The facilitator should review the meeting norms at the beginning of each meeting to ensure that participants are regularly reminded about the agreements they have made to each other.

# When establishing norms, consider:

# TIME **DECISION MAKING** When do we meet? How will we make decisions? Will we set a beginning and ending time? Are we an advisory or a decision-making Will we start and end on time? body? Will we reach decisions by consensus? How will we deal with conflicts? Proposed norms: Proposed norms: LISTENING How will we encourage listening? How will we discourage interrupting? **PARTICIPATION** How will we encourage everyone's Proposed norms: participation? Will we have an attendance policy? Proposed norms: CONFIDENTIALITY Will the meetings be open? Will what we say in the meeting be held in **EXPECTATIONS** confidence? What can be said after the meeting? What do we expect from members? Are there requirements for participation? Proposed norms: Proposed norms:

# **SAMPLE NORMS:** We agree to ...

- Meet only when there is a meaningful agenda.
- Start and end on time.
- Allow everyone to contribute an agenda item.
- Post the agenda before the meeting.
- · Avoid interrupting others when they are speaking.
- Dress comfortably but appropriately.
- · Have healthy refreshments.
- Have a different facilitator and recorder for each meeting.
- Differentiate between brainstorming and discussion.
- · Address only schoolwide issues.
- Express disagreement with ideas, not individuals.
- Feel responsible to express differing opinions within the meeting.

- Maintain confidentiality regarding disagreements expressed during the meeting.
- Reach decisions by consensus.
- · Listen respectfully to all ideas.
- · Conduct group business in front of the group.
- Conduct personal business outside of the meeting.
- Silence all cell phones during meetings.
- Avoid checking for or sending text messages or e-mail messages during meetings.
- Avoid personal grooming (brushing hair, applying makeup, cleaning fingernails) during meetings.

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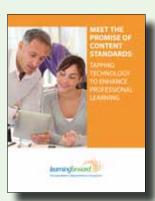
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# New resource on technology and Common Core implementation

MEET THE PROMISE OF CONTENT STANDARDS: TAPPING TECHNOLOGY TO ENHANCE PROFESSIONAL LEARNING

ore stakeholders are turning to technology to advance the professional learning required to support new standards and evaluation systems. Yet how

technology is used will determine its potential to influence educator practice and results for students. This brief outlines how technology can enhance professional learning, offers examples of how technology is being used to meet the demand



generated by Common Core standards, provides guidelines for selecting and using technology as a resource for professional learning, and identifies common challenges and ways to avoid them.

> Available at www.learningforward. org/docs/default-source/commoncore/ tpltappingtechnology.pdf