Nano Tools for Leaders® are fast, effective leadership tools that you can learn and start using in less than 15 minutes—with the potential to significantly impact your success as a leader and the engagement and productivity of the people you lead.

**GOAL**

Harness constraints and analogies to unlock new solutions to old problems.

**NANO TOOL**

Traditional brainstorming, as coined by Alex Osborne in the 1950s, asks participants to consider any and all ideas that might solve a problem. While blue-sky, no-limits thinking has several benefits, the drawback is that leaders often, paradoxically, get stuck. They encounter challenges like the “curse of the blank page,” not knowing where to start because they can start anywhere. They may also face the “Einstellung effect,” a phenomenon whereby the easy recollection of familiar solutions can block their ability to think of new ones.

This has led some to (erroneously) believe that generating solutions is best left to people who are naturally creative. The good news is that there are tools that can help one become much better at generating new ideas. The even better news is that using these tools does not involve extensive training or attending workshops. In fact, one tool developed at Penn Medicine's Center for Health Care Transformation and Innovation is a simple card game, and the “secret sauce” it teaches is how to leverage constraints and analogies. The Accelerators in Innovation game has teams of players use accelerator cards to create new kinds of solutions with questions such as “How would you solve postpartum depression if you operated like IKEA?” and “How might you tackle long emergency room wait times if you were Warren Buffet?” The solutions are then applied to problems presented on challenge cards while trying to avoid monkey wrenches from their opponents. After rapid-fire pitches, the judge determines each round’s winner.

**ACTION STEPS**

1. **Make sure you are solving a problem.** Don’t solve for how to implement a solution. A classic example involved a design team brought in to figure out how to increase access to incubators. The issue is that the solution was already baked in (increase access to incubators). The team spent some time reframing the problem to focus on the true issue: ensuring that newborns are kept at a safe temperature, especially when delivery occurs in places with little or no access to electricity. Reframing to focus on the actual problem opened the team to entirely different solutions.

2. **Leverage analogies.** Having to pull ideas out of thin air can be difficult and stressful. Analogies force us to consider other options or perspectives we may never have thought of, or thought of and dismissed. They cause us to ask ourselves “What is good about this other solution and how might it be applied to solving the problem I’m facing?” Examples include:
a. **Companies:** Think about successful companies and how their strengths could be applied to your problem. For example, IKEA is phenomenal at clearly explaining to people with limited background knowledge and literacy how to do something. So how might IKEA go about explaining post-op care to knee replacement patients?

b. **Personas:** Similarly, try using personas. Mary Poppins is renowned for making an unpleasant experience a delightful one. Mr. Rogers is known for his commitment to leveraging the kindness of neighbors. Darth Vader’s approach to getting things done is a ruthless level punishment for those who fail. Regardless of whom you choose, you can use the strengths or philosophies of these characters to inspire ideas. How might Mary Poppins improve adherence to physical therapy regimens? How might Darth Vader?

3. **Leverage constraints.** Constraints are, unintuitively, another great way to force new thinking. Some options are:

   a. **Deletion:** How might you solve a problem if you were forced to delete a crucial (but perhaps onerous or costly) step of the process? Great examples are “How might tollbooths collect fees without a human there to do it?” (FastPass) or “How might people get their rental car if there was no line to wait in?” (Hertz Gold).

   b. **Design for extremes:** How might you solve the problem if you had to solve for extreme use cases or extreme targets? For example, what would it take to screen 100 percent of eligible patients for colon cancer? How might you reduce civilian traffic fatalities to zero?

   c. **Real-world issues:** Apply real-world constraints that have thrown a monkey wrench in your plans for past ideas. For example, how might you create a new marketing campaign that must be successful for consumers who do not speak English? How might you build a new product to launch on time even if multiple team members take a sabbatical or parental leave?

   d. **Delight:** Focus on solving for how to make your solution delightful to users. This isn’t about making something silly or fun. It’s about surprising your users in a manner that unexpectedly accomplishes something for them.

4. **Push for volume.** An additional benefit to Penn Medicine’s **Accelerators** card game is that it encourages multiple rounds to hear multiple ideas. When thinking of solutions, push for volume in your initial rounds. You’ll soon “use up” the ideas that come to mind easily and be forced to consider more creative or audacious alternatives.

5. **Don’t take yourself too seriously.** Another key component of generating ideas while playing a game is that it allows for laughter and a sense of play. This mindset can foster creativity and an atmosphere of psychological safety for sharing ideas.

**HOW ONE LEADER USES IT**

Rebecca Trotta, PhD, director of the Center for Nursing Excellence at Penn, leveraged this tool in developing a new program to support older adults after hospitalization. Her challenge was to build a service that could provide intensive at-home support. Despite an existing evidence-based protocol, there was concern that patient acceptance of this support would be low. Many folks are simply exhausted after being in the hospital and don’t want someone in their home. Using the constraint of solving for “delight,” Trotta and her team came up with the idea of delivering home meals to these patients and their caregivers.

While it might appear as a frivolous and seemingly useless expense, it turned out that after spending days (and sometimes weeks) in the hospital, patients came home to fridges that were empty or full of spoiled food. Providing them with a meal ensured they had adequate nutrition. More importantly, though, the meals showed a sense of caring and thoughtfulness that went well beyond patients’ expectations. It built a strong sense of trust that paid dividends in drastically increasing the acceptance of home services compared to baseline.
CONTRIBUTOR TO THIS NANO TOOL

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ABOUT NANO TOOLS

Nano Tools for Leaders® was conceived and developed by Deb Giffen, MCC, director of Custom Programs at Wharton Executive Education. Nano Tools for Leaders® is a collaboration between joint sponsors Wharton Executive Education and Wharton's Center for Leadership and Change Management. This collaboration is led by Professors Michael Useem and John Paul MacDuffie.