

Innovation in Healthcare—A Journey

Suzanne T. Anderson, President

Becker's CEO/CFO Roundtable 2019

Virginia Mason Health System



- Integrated health care system
- 501(c)3 not-for-profit
- Two hospitals
 - Virginia Mason Medical Center, Seattle
 - Virginia Mason Memorial, Yakima
- 40+ medical clinics
- Graduate Medical Education

- 1,100+ physicians
- 8,400+ employees
- Two philanthropic foundations
- Bailey-Boushay House
- Benaroya Research Institute
- Virginia Mason Institute

Our Innovation Journey



strategic plan with patient at the top & four Strategic Pillars

- Declared VMPS as our management method Directed creativity implemented

- Defined creativity and innovation
- Innovation training began
- Moonshine Laboratory established



-Measuring Innovation Culture dimensions -Innovation training for VMPS Certified Leaders

- Promoting
 Innovation
 added to leader
 curriculum
 - Concerted efforts to integrate innovation into VMPS Competency Guide Innovation Grant Program



- "Know Me" work begins
- Moonshine Challenge
- Implementation Effectiveness A3
- Therapy Car created



- Idea Central created
- First Innovation Expo

2016



- Engaging Frontline Staff with VMPS RPIW
- Virginia Mason Memorial team exhibits at Innovation Expo

History of Firsts..

1920-

2002

2002 2003

2004

2005

2007

2006

2008

2009

2010 / 2011

Created

Innovation

2012

2013

2014

2015

2018-2020

2017

 Paul Plsek becomes
 VM Chair of Innovation

- Began Culture of Innovation work and executive training Innovation target setting & "Voice of the Future" in goal development process

process
- Formation of
Innovation
Leadership Team
(ILT)

-Lean Idea
System
launched
-Efforts to
recognize staff
and spread
ideas

- Began implementing Experience-Based Design

Formalized Moonshine process -Experience-Based Design improvement and training

- Co-design events and focus groups

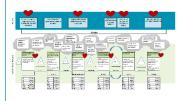


- Patient-family Partner Program established

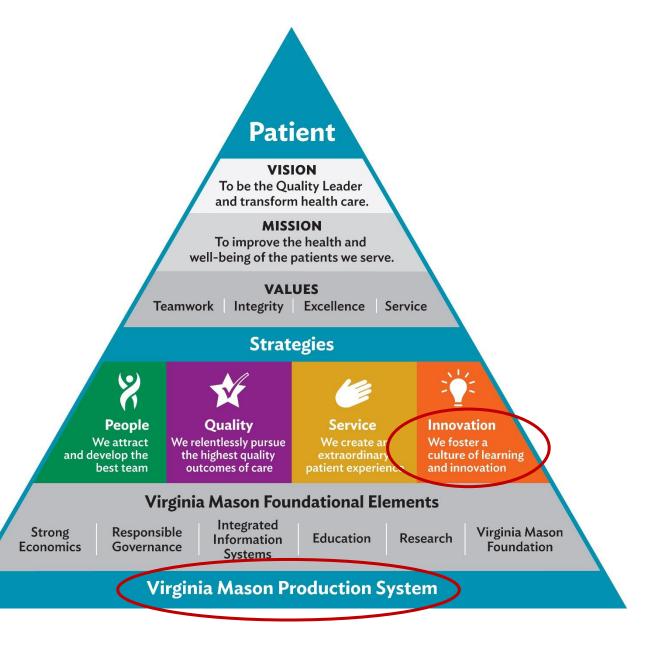
- Healthcare Marketplace Collaborative



 Patient/ Family Partners required for all RPIWs



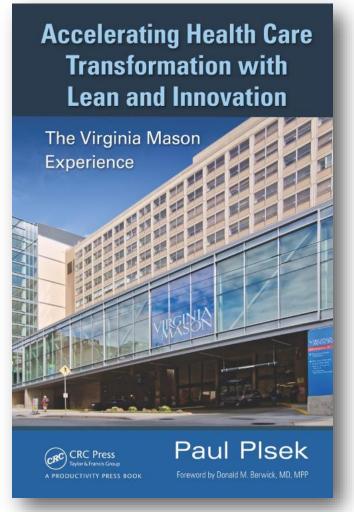




Paul Plsek Chair of Innovation, VMMC



Consultant, Author and Developer of DirectedCreativity™

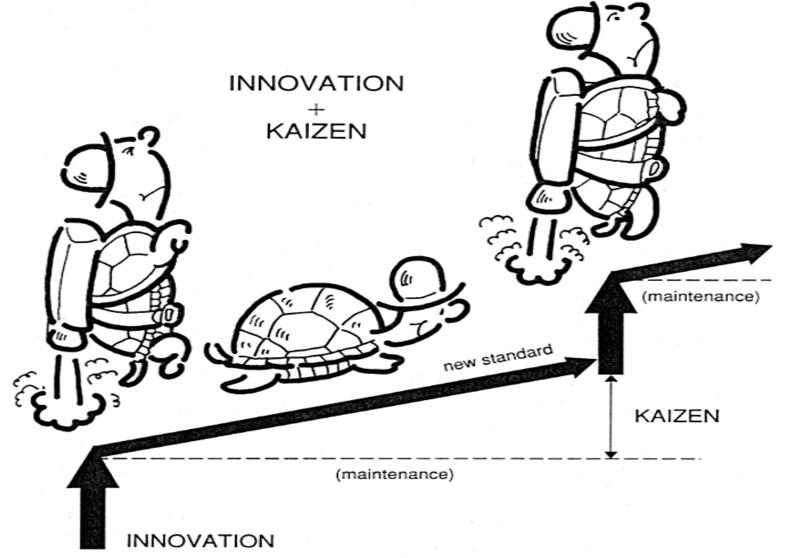


Shingo Prize for Research in Operational Excellence, 2014

Virginia Mason Innovation Definition:

Directed Creativity
Implemented

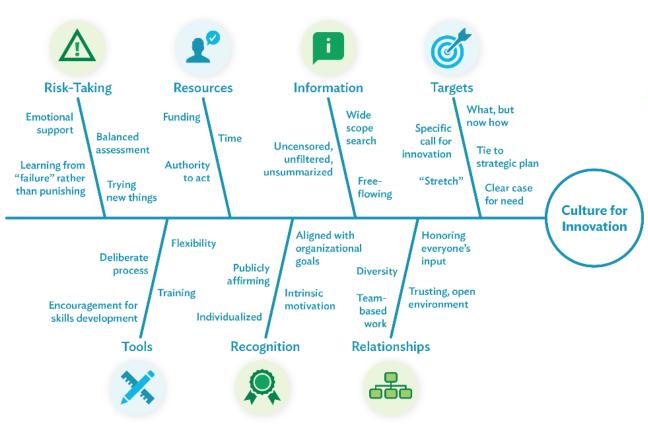
Innovation and Kaizen (Continuous Improvement)



Source: Adapted from Masaaki Imai, Kaizen (McGraw-Hill, 1986), p. 27.

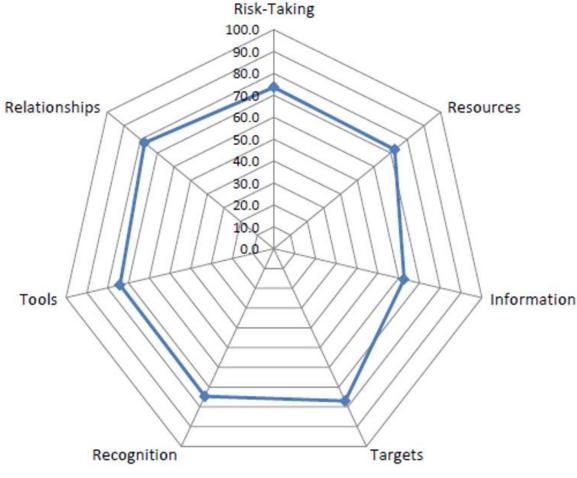
Innovation

Dimensions of a Culture of Innovation



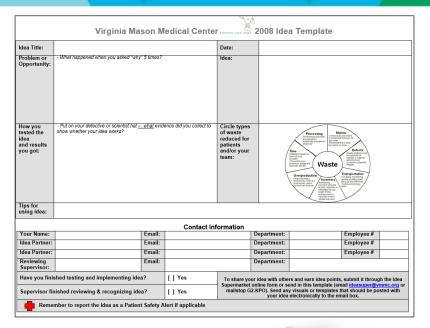
Plsek P, Maher L. Creating The Culture For Innovation. 10th European Forum on Quality Improvement in Health Care; 2005 Apr 13-15; London.

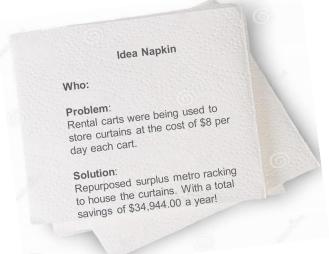
Innovation Portal



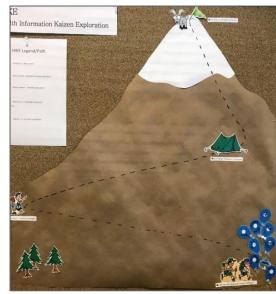
*The wider the opening, the better.

Staff Idea System Develop Idea Pipeline













Seven Levels of Change

Doing the right things. Level 1 Effectiveness, focus and working on priorities. Doing things right. Level 2 Efficiency, standards and variation reduction. Doing things better. Level 3 Improving, thinking logically about what we are doing, listening to suggestions. Doing away with things. Level 4 Cutting, asking why we do this, simplifying and stopping what doesn't really matter. Doing things other people are doing. Level 5 Observing, copying, and seeking out best practices. Doing things no one else is doing. Level 6 Being really different, combining existing concepts, asking "why not?" Doing things that cannot be done. Level 7 Doing what is commonly thought to be impossible, questioning basic assumptions, breaking the rules, being a little crazy.

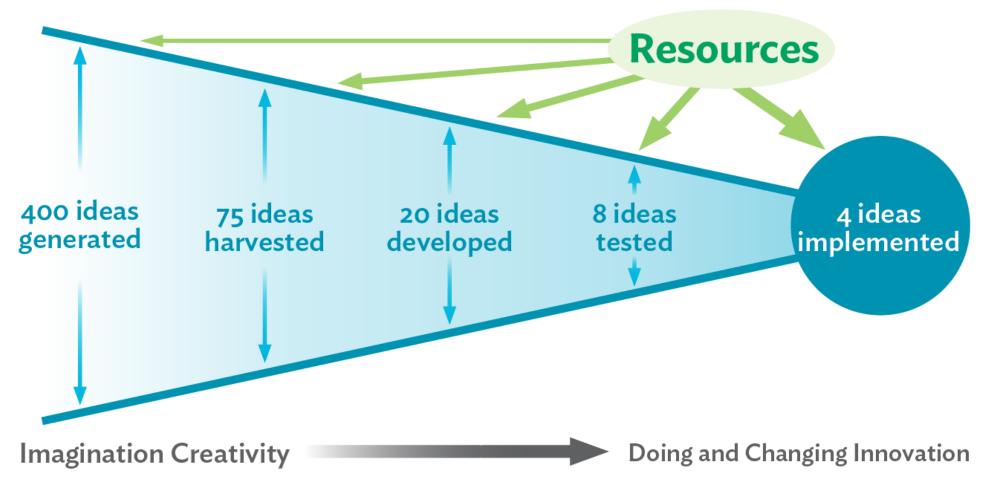
Adapted from R. Smith, The Seven Levels of Change: Different Thinking for Different Results, 3rd ed.

Breakthrough Innovation

A VM-led idea or unique adaptation in healthcare that:

- 1. Breaks mental models (achieving level 5 "doing things other people are doing" if adapted from outside health care, level 6 "doing something no one else is doing" or level 7 "doing something that can't be done" of the Seven Levels of Change) AND
- 2. Has the potential to make a significant impact or change to an important goal in an urgent time

Innovation Creative thinking concepts and tools



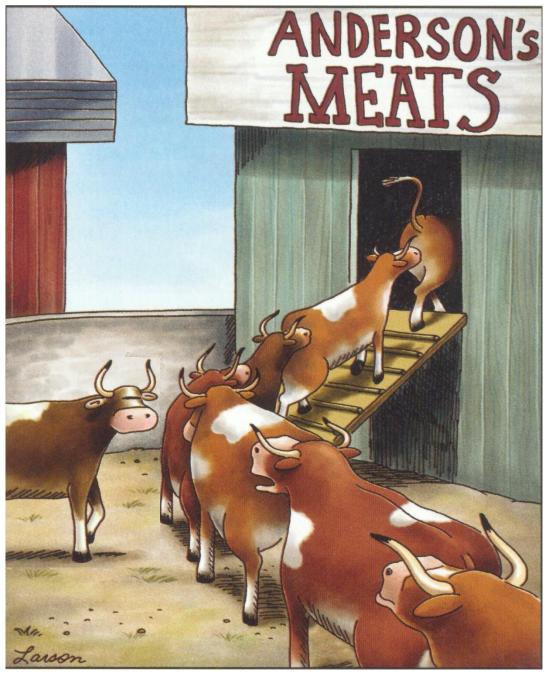
Plsek PE. Creativity, Innovation and Quality, ASQ Quality Press, 1997.

Creative Thinking Involves



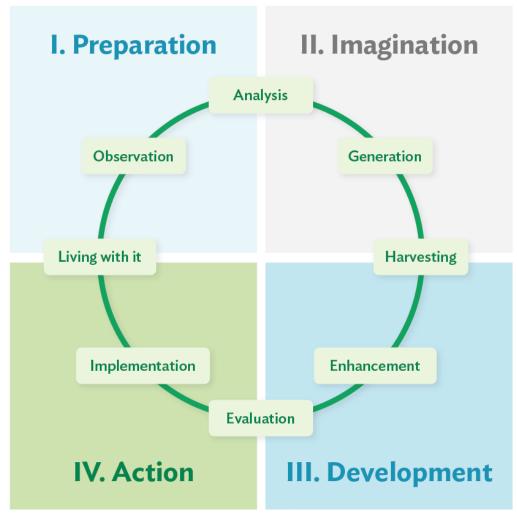






"Hey! You! ... No cutting in!"

Directed Creativity Cycle



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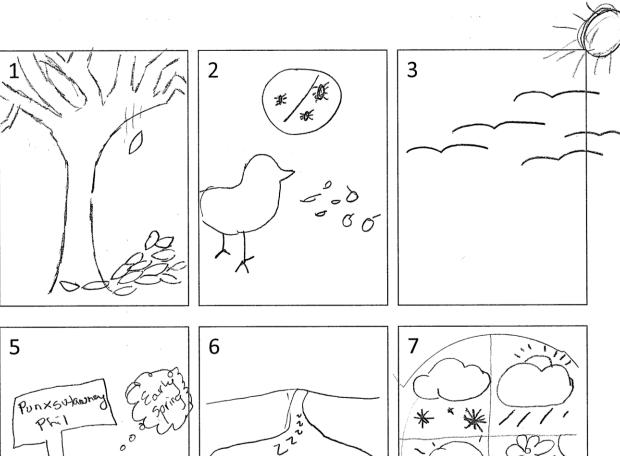
© 2019 Virginia Mason Institute

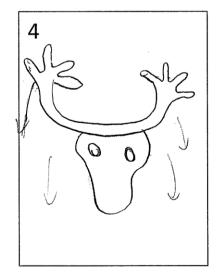
Example Innovation Tools

- 3P / Innovation / Visioning Sessions
- Experience-based design Co-design
- Other tools for use as a part of VMPS
 - 7 Ways
 - Word Play
 - Six Thinking Hats ™
 - Be Someone Else

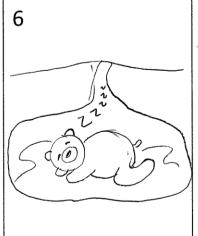
The 7 Ways

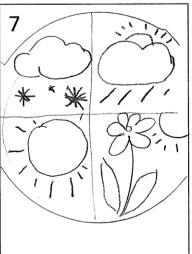
The 7 Ways That nature forecasts



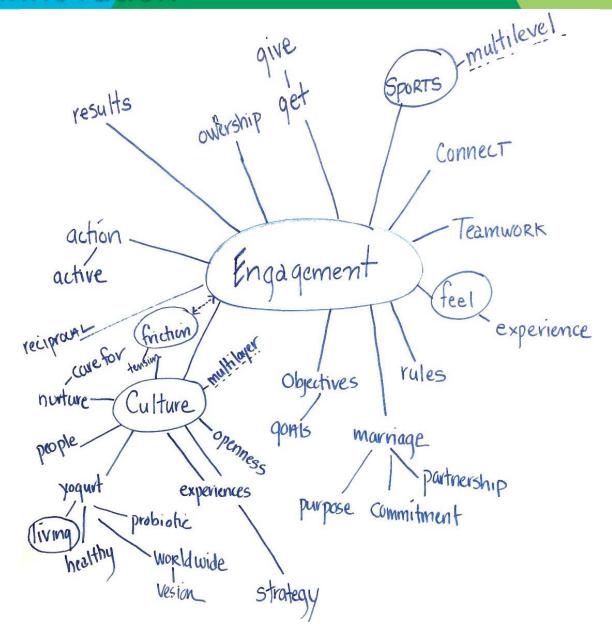




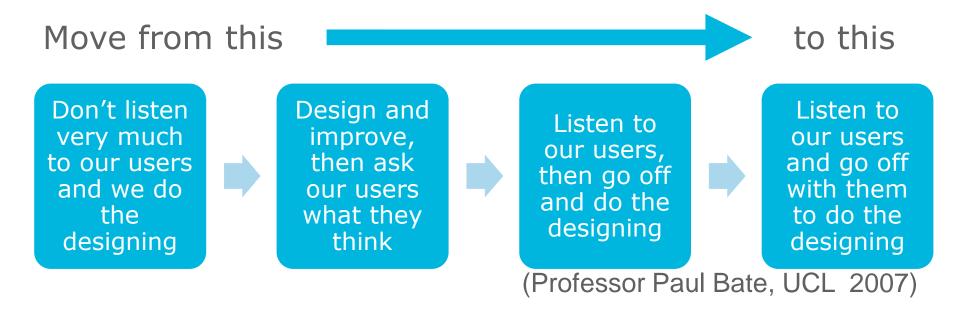




Wordplay Creativity and innovation



Breakthrough Innovation: The Vision of Customer Involvement



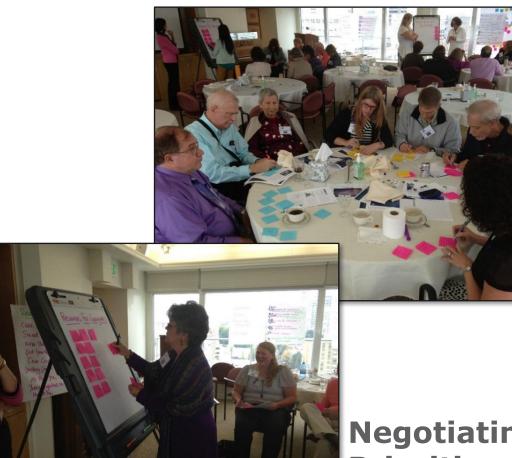
- Become an organization that routinely listens to and deeply understands customers' experiences
- Co-design better services through an active partnership with patients, family and staff

Co-Design = Side by Side = Shoulder to Shoulder

Group Discussion



Idea Generation



Negotiating Priorities

The Impact of Co-Design

Patients and Families are Making a Difference Across Virginia Mason

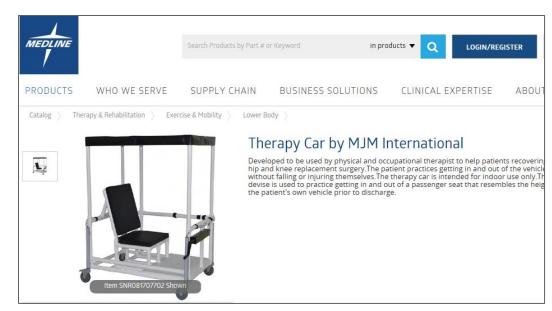


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Moonshine

(aka: bootleg, skunkworks, prototyping)

- A fast and inexpensive way of testing a concept or trialing an idea before purchasing.
- We use moonshine and prototyping when a supply or piece of equipment doesn't exist that meets our unique needs or if it is not cost effective



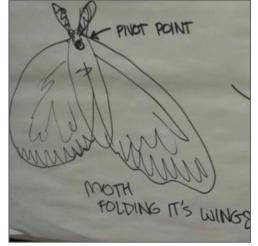


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Innovation Expos, Challenges Recognition and relationships

Goals:

- Provide increased exposure and recognition to Virginia Mason innovators and their projects.
- Uncover innovations happening around the organization, including projects with high potential for adoption in other VM locations.













Annual Innovation Expo

Moonshine Challenge

2019 Innovation Expo

You're Invited to Attend!



The event will kick-off at 10:45 a.m. with Floyd Talk:

Life Hacks for Well-Being by Valerie Black

Open house format exhibits will begin at 11:15 a.m.

Why attend?

- To support Virginia Mason innovators' amazing work
 - · To vote for People's Choice Award
 - To enter to win prizes
 - To see who wins the Bi-Annual Innovator Award
 - To learn and be inspired

For more information contact VMMC.Kaizen Promotion Office@virginiamason.org



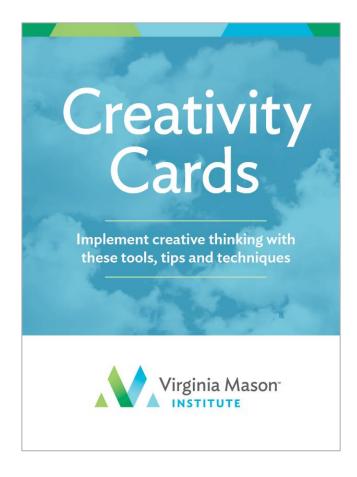
Exhibits

- Growing Kaizen Hearts Andy Baylor, Ingrid Gerbino, and Shelly Powell

 Using fun and interactive workshops to spread the VMPS mindset
 - Using fun and interactive workshops to spread the VMPS mindset, demystify tools and techniques and empower Primary Care teams to make local changes that improve the patient and staff experience.
- Ballistic Gel Tissue-Mimicking Phantoms Rubal Penna Developed in the department of Radiology, this is a demonstration of ballistic gel phantom prototypes that simulate soft tissues when imaged with ultrasound. They allow operators to practice needle guidance for targeted biopsies. Creative phantom inclusions mimic a variety of pathology including breast implants, cysts, gall bladder stones, and tumors.
- The Biomimetic Spine for Surgical Planning, Simulation, and Education JC Leveque, Raj Sethi, Anna Wright
 Several synthetic spine models were created using three-dimensional (3D) printing technology. Because these models accurately mimic individual patient's anatomy, surgeons can use them to practice and potentially change their surgical approach prior to surgery.
- Improving Inpatient Glycemic Management Lynn Benz and Alexandra Zaremba
 Improving glycemic control for inpatients by scheduled blood sugar testing, correctional insulin and meal delivery within a one hour cycle time for patients with diabetes.
- Having Each Other's Backs Doris Miguel and Kiley Nelson Decreasing the potential for on-the-job back injuries related to bending and squatting during pulling and stocking of commonly used medications in our RxStations.
- How to Make Documentation Fun Julie Pattison, Barton Smith, and Lisa Woodley
 Improving patient quality of care and reducing the worker burden of work come together through improved auto text navigation and quality.
- Electronic Check-In Daniel Bae, Amy Pearson, Cheri Nelson, and Chikako Ryan
 Collaboration in Bainbridge between the lab personnel, leadership team and Versus lead to the development of a shared document creating an electronic line for the lab to use to prioritize and manage work.
- Digitizing Patient Questionnaire for Improved Reporting Steve
 Bunin
 An application to collect required patient reported outcomes pre- and post

An application to collect required patient reported outcomes pre- and post - procedure that is linked to the Cardiology Cardio Vascular Information System which uploads directly into the cardiology database. This replaces paper forms, eliminates scanning, and saves administrative time.

Free Download



Wordplay

When to Use:

- Early, when the topic area is still being defined
- · Whenever you feel jargon or "usual thinking" has set in
- · When you want to engage more analytical thinkers

How:

- Start with the issue or topic as normally stated. Pick out a
 specialized word or overly specific word and ask what it
 means. What other words and concepts does it trigger?
 What are synonyms or other ways of explaining this word?
 (If you're stuck, pretend you're from Mars and have no clue).
 Play with the word for a few minutes only, and then move on
 to a new word. Afterword, ask what new connections or
 ideas are surfacing that could help with the issue at hand.
- Select a noun at random. This works best after explaining mental valleys and the need for attention, escape and movement. Just throw the random word out there and say, "What does that make you think about? What concepts or images emerge? What attributes and features are associated with the word? Now what ideas does that give you about our topic?" Stress no judgment and the desire for seemingly wild thoughts.

When you can't think of anything else to do to get creativity started, introduce a random noun.

Cultivate breakthrough ideas and teach people how to implement them. VirginiaMasonInstitute.org

For a free download, visit: www.virginiamasoninstitute.org/creativity-cards



Each Person.
Every Moment.
Better Never Stops.