

The Science of Learning and the Art of Teaching

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Abstract

Effective teaching may involve scientific understanding of learning processes, but the creation of engaging and rich learning experiences is more art than science. This presentation focuses on some key aspects of the art of teaching today's students, including specific techniques for tapping into student passions, empowering students to stay focused and balanced, shifting from lecture-intensive to learning-focused class sessions, and using new technologies to connect student learning to course content and life goals. Participants will explore course contracts and strategies for redesigning activities in support of a learning objective and share strategies for artfully managing student learning.

The Science of Learning

In *Making It Stick*, Brown, Roediger and McDaniel (2014) review studies about learning strategies and offer these suggestions for changing teaching practice to respond to empirical assessments of the learning process:

- Space out your practice so that memory traces are “strengthened, given meaning, and connected to prior knowledge” (p. 49);
- Interleave your practice so that different skills or areas are mixed and part of the training is to distinguish the differences;
- Vary your practice to apply concepts in different situations and improve ability to transfer learning from one situation to another;
- Focus on developing discrimination skills by avoiding “massed practice” (focus one area at a time, longer cramming sessions) and using interleaving and variations to enhance “conceptual” vs. “factual” knowledge.

While these are useful ways of looking at how information is best retained, the science of learning also needs to recognize that teaching is an art form, which variously includes intuition, creativity, passion, reflection and laying fallow.

Teaching as an Art

There are elements in the teaching process that do not involve retention of facts or concepts, and are often difficult to capture under “course learning objectives.” Quotes to reflect on:

“The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires.”
— William Arthur Ward

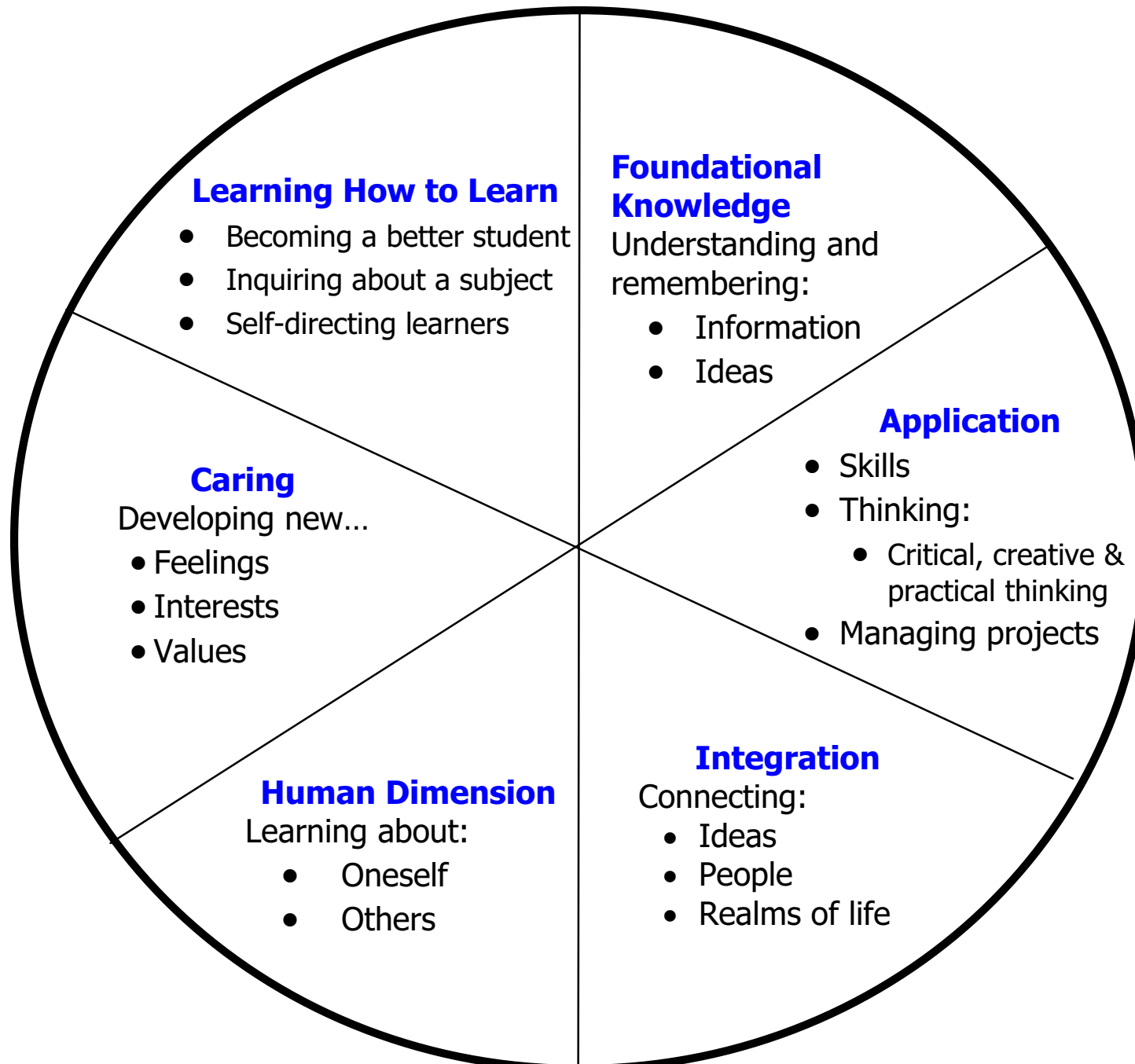
“True teachers are those who use themselves as bridges over which they invite their students to cross; then, having facilitated their crossing, joyfully collapse, encouraging them to create their own.”
— Nikos Kazantzakis

“I never teach my pupils, I only attempt to provide the conditions in which they can learn.”
— Albert Einstein

“I'm more interested in arousing enthusiasm in kids than in teaching the facts. The facts may change, but that enthusiasm for exploring the world will remain with them the rest of their lives.”
— Seymour Simon

In his *Taxonomy of Significant Learning*, Fink identifies a variety of potential areas for significant learning. Note that only one part of the wheel is focused on the retention of facts and information.

THE TAXONOMY OF SIGNIFICANT LEARNING



Topics in the Art of Teaching

Scaffolding for Distracted Minds: Guided and Staged Inquiry

In my class the conversion process began with creating a series of queries that students answer (“discover!”) by using the readings and online resources. The benefit of a course framed by questions and sets of vocabularies is that the questions can be framed in increasingly reflective and creative ways.

Guided Inquiry does not require lots of training, classroom technology, or extensive instructional design sessions. This innovation works for a single day, one-off class exercise or as a consistent pedagogy throughout the course. Figure 1 is one example of a playsheet and I usually offer one per course module (this one is compressed with several combined into one to save paper). Sometimes a playsheet will be finished in one class session, but more likely it will frame discussion and activities across two class sessions. The online version of this course has 17 modules, each with the playsheet provided first, then resources, then a video reviewing the playsheet, followed by discussion questions and activities and sample quiz questions (that closely follow the playsheet content but also provide lots of application questions).

The playsheets are developed by chunking out content nuggets into a series of questions or challenges in a Word table, and are generally used in three ways:

- 1) Handed out in class to work in groups or individually for 15-20 minutes followed by a clarifying and confirming 15 minute review session to see how well they identified concepts and issues (often followed by several Youtube or media applications and examples);
- 2) Handed out to groups or individuals with the expectation they will develop an extended application and each make a 90-120 second presentation followed by discussion ; and
- 3) Used to record video modules that function, in a 24X7 accessible Youtube Channel, as a review of the “discovered” information on the playsheet.

Playsheets, the students soon discover, empower them to use their technologies for their own learning, engage them about the quality and reliability of their information, and make excellent study resources.

Staged Inquiry, as a scaffolding strategy, creates a sequence of playsheets that gradually ramp up the critical tasks to move from remembering through understanding toward applying, evaluating and creating. A compressed playsheet (Figure 2) illustrates this progression, which occur over the course :

- Information retrieval from the readings
- Information retrieval from readings and internet
- Information retrieval from internet, assessment of source
- Information retrieval including examples
- Information/source analysis to evaluate claim
- Critical concept development with examples
- Critical claim to competing forms of support
- Selection and development of critical claim

Lecturing, in today’s classroom, often invites inattention and distraction. But communicating the content is of course critical, so that students really need a vocabulary and a framework they can apply clearly. Based on my experience, remembering and understanding of class concepts is greatly improved when students get a chance to discover but are given specific areas, guidelines or terminologies to use. This approach has been received favorably in the predominance of qualitative responses and the reflective writing exercises culminating the course.

Importantly, their engagement generally avoids student use of mobile technology to escape the talking head, and given the chance to show their knowledge of contemporary examples, and to evaluate the credibility of the information they use, they respond very well. It is worthwhile ordering the experiences to build on skills toward increased creativity. Starting with a simple retrieval of information from the textbook, the ultimate destination is for the students to identify a topic, compile a critical vocabulary, and provide examples or a mock-up of some kind of creative artifact, all with little or no guidance from the instructor.

Figure 1. Comm 300 History of Rhetoric Playsheet

Browse to: <http://humanities.byu.edu/rhetoric/silva.htm>

Objectives:	
1. Recall key figures of classical times and explain how they perceived and developed the art of rhetoric;	
2. Summarize the central concepts of classical rhetoric, including definitions, types of proof, branches of discourse, and the rhetorical Canons.	
Working Vocabulary: Sophists, Plato, Aristotle, Artistic Proofs, Ethos, Pathos, Logos, Types of Discourse, Deliberative, Forensic, Epideictic, Canons of Rhetoric, Memory, Arrangement, Invention, Delivery, Style	
Who were the Sophists and what did they do that impacted the development of Rhetoric?	
What were important philosophical ideas they taught?	
What did Plato think of the Sophists, their occupations, and their relationship to Truth?	
How did Aristotle define Rhetoric?	
What is an artistic form of proof and what are the three major artistic proofs?	
What three genres, or branches of discourse, did Aristotle discuss, and how do they have power in modern times?	
What are the five canons of Rhetoric? Is there an easy way to remember them?	
In what ways does our history as a discipline impact our understanding of communication and critical analysis today?	

Figure 2: Compressed Playsheet (Illustrates Staged Inquiry)

<p>How does Foss define ideology?</p>	<p>Information retrieval from readings</p>
<p><i>Hegemony</i></p> <p>How does Foss define hegemony? How does Gramsci define hegemony? (encyclopedia.jrank.org) What are key differences between these definitions?</p>	<p>Information retrieval from readings and internet</p>
<p><i>Legitimation</i></p> <p>How does Wikipedia define political legitimacy? Do you trust this definition? Is it useful? Why or why not?</p>	<p>Information retrieval from internet, assessment of source</p>
<p><i>Marginalization</i></p> <p>In the context of a dominant American ideology, give two examples of marginalization.</p>	<p>Information retrieval including examples</p>
<p><i>False Consciousness</i></p> <p>This source claims that poor people voting for Republicans is an example of false consciousness. Do you agree? Why or why not?</p> <p>http://wiki.answers.com/Q/Can_someone_give_you_an_example_of_False_consciousness</p>	<p>Information/source analysis to evaluate claim</p>
<p><i>Naturalization</i></p> <p>Identify three critical concepts that emerge from Sexton's discussion of how media naturalizes certain beliefs. Give an example of a movie that illustrates these concepts.</p> <p>http://voices.yahoo.com/media-enjoyment-as-naturalized-ideological-viewpoint-1913974.html</p>	<p>Critical concept development with examples</p>
<p>Benetton has created controversy through their latest ad showing world leaders kissing. Examine a few of the ads and identify two arguments in support and two arguments against this ad campaign. How is ideology involved?</p>	<p>Critical claim to competing forms of support</p>
<p>Today's topic involves how rhetoric supports ideology and power. How can this be true? Identify three relevant important concepts and give an example that illustrates different aspects of today's topic.</p>	<p>Selection and development of critical claim</p>

Reflective Self-Development: A Bridge to Life-Long Learning

It is critical that students become mindful about their own continuing education. For many years I have used various forms of contracts and agreements in teaching my courses. This can become somewhat cumbersome in processing and negotiating, but is premised on a simple idea: *Making decisions to choose and shape learning experiences based on an honest reflection of goals, skills, strengths and weaknesses can create stronger life long learners.*

The Self-Development Plan is what Bowen, in *Teaching Naked*, calls a cognitive wrapper. It is a self-reflective process that starts with existing skills, capacities and challenges, invites identification of goals and objectives, and then connects all of these to how learners will actively shape their learning experiences to get the most out of the course for their vision of the future.

I have in various iterations of my course contracts provided substantial choice among different options for assignments. A critical paper might offer options for a comparison of web sites, an analysis of an ad campaign, a visit to experience public decision-making of some kind, and an ethos evaluation of competing organizations. Learner choices reflect passions, interests, knowledge and skill gaps, and learning styles. Preliminary contracts can be revised as reality sets in.

My Development Plan (Confidential with Instructor)

Step 1 self-assessment. Step 2 goals and personal course objectives. Step 3 course assignment and strategy decisions.

Step 4 agreement and launch...

Self-Assessment (go with first impressions, short answers or dashed points)

1. What are your tech skills?

I feel mostly like a novice ___ I know a few things pretty well ___ It clicks. I'm familiar with a wide variety of tools ___

Check whichever you have some experience with... circle those you have proficiency:

- Word processing Mobile apps Social networks/Facebook Social media (Twitter, Blogging, Pinterest...)
- Image work/Photoshop Data and Charts/Excel Presentations/PowerPoint/Keynote/Prezi
- Desktop Publishing (Flyers, Brochures) Audio Production Web Development Programming
- Vector Graphics/Illustrator Video Production Digital Animation/3D Game Development
- Telemeetings/teleconferencing Group productionware Specific corporate/business work system

Other(s): _____

2. What are your communication skills (circle)?

As a friend or partner:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent
As a listener:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent
As a presenter:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent
As a writer:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent
As a designer/artist:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent
As a group member:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent
As a leader:	Strong/Confident	Good	Fair	Weak	Varied/Inconsistent

Your strengths as a communicator:

Your growing edges/areas for improvement as a communicator:

3. What are your creative talents and interests?

4. What are your work/life/media experiences?

I haven't worked very much ___ I have worked some in a few places ___ I've had many different jobs ___
What have you learned so far about yourself as a worker?

Lived mostly in one place/one culture ___ Experienced varied U.S. areas/cultures ___ Sustained international/intercultural ___
Rarely use different media together ___ Regularly 2- or 3-track media streams ___ Multiple info streams constantly ___
Mostly digital consumer/user ___ I've done a few media projects ___ I constantly produce and upload media content ___

5. What are your strengths and weaknesses as a learner?

I'm a strong motivated learner ___ I can do it if I'm interested ___ I struggle to learn ___
I stay focused and manage my time ___ I get distracted but still get things done ___ I'm mostly in a fog ___

Rank these (1 is best, 6 is worst) in the order that they *help you learn* class material best, and circle the ones *used most*:

___ Videos with images and explanations

- ___ Taking lots of notes and reviewing them
 - ___ Reading and highlighting material
 - ___ Working with others to study and review
 - ___ Actually doing something with my hands
 - ___ Seeing someone else do what I need to know
- What about you helps make you effective in taking classes?

What about you makes it difficult to be a strong learner?

6. How balanced is your life?
 By the numbers... circle one (very balanced, pretty even keel) 1 2 3 4 5 6 7 8 9 10 (very crazed, chaotic, stressed)
 Where and why do you feel out of balance (work/play, self/others, inner/outer, family/friend, information/assignment, time/space)?

Goals and Objectives

7. What are some of your passions? What gives your life meaning, or gets you in a zone?
 What would you share to spark change in society?

8. What are your future career and life aspirations?
 -What did you always want to be growing up?

-How do you see yourself making your way in the world?

-What would you hope never to have to do in your career choices?

9. What do you want out of this class?
 -What is your level of motivation? (Excited, purposeful) 1 2 3 4 5 6 7 8 9 10 (We'll see...no idea yet)
 -How do you think this class might help you toward your life goals? Please imagine...

-What do you really need from the instructor for you to be successful?

-What do you need to do to make yourself successful?

-What do you bring to the table to help the instructor and other learners in this class?

Course Experience and Assignments

10. What assignments are particularly important for you develop important skills for your future plans?

11. How do you plan to address your strengths and weaknesses as a learner for this course specifically to get the most you can out of sharing this experience?

Agreement and Launch...

Learner

- If I am struggling with the class or with assignments, I will communicate with the teacher even if I am embarrassed or late so that the learning experience can still end up positive.
- If I have ideas or examples that might be useful to understand concepts and develop skills in the class, I will share them as best I can.
- I will treat others with respect, and will strive to be ethical and clear in all my instructor and class communications.

I agree that I will plan to address my weaknesses and use my strengths as a learner, that I will do my best to use the knowledge and the skills from this class to develop my passions and my prospects for a rewarding career, and that I will contribute to this unique and lively community during our journey together.

Name: _____ Signature: _____ Date: _____

Instructor

I agree to treat every learner fairly and with respect, and to do my best to support and develop _____ in learning and applying ideas and skills to further their interests, passions, careers and life choices.

Name: _____ Signature: _____ Date: _____

Jedi Mind Tricks: Mindfulness by Another Name

Students fairly regularly demonstrate their lack of practice at staying focused. They have trouble completing reading, exhibit great difficulty planning, starting and polishing papers, and often disengage from extended discussions. Much of this, particularly the lack of focus, can be traced to habits of “continuous partial attention,” with learners generally immersed in an environment of multiple concurrent streams of information, leading to positive reinforcement for quick scan and dipping behaviors. For stimulus junkies, mobile devices are great temptations, and with an upside of accessible rich learning resources, they nonetheless provide challenges for instructors trying to create communal focus. *Faculty have some responsibility to help students develop the capacity for mindfulness and focus, which will be important mental habits as they evolve into their career(s), relationships, and life goals.*

Students are often skeptical of meditation techniques, of mindfulness practice, and of anything that requires them to do “nothing” when they feel they must be doing something, many things, all at once. The Pew Forum report of the 2007 Religious Landscape Survey found that while 43% of adults 30 and older found time to meditate weekly, that number dropped to 26% for those aged 18 to 29. (Religion in the Millennial Generation, <http://www.pewforum.org/2010/02/17/religion-among-the-millennials/>).

My experience is that many are open to experiences that they see have relevance to their lives, but they are often skeptical about the ultimate value of time invested in being rather than doing. *I frame many of my focus and mindfulness practices as Jedi mind tricks to tap into the ethic of self-improvement and help explain some of the power of different practices.*

Improving oneself, and finding ways to cope with stress, with self-doubt, and with adversity, is simply something that you can choose. You don’t have to be a Jedi Knight, or even need to have seen any of the Star Wars movies, to know that becoming a better person involves effort. With some practice and attention, these Mind Tricks can help with little issues now and with challenges and accomplishments over the larger and longer course of your life. Strange practice, this learning is!

1. Jedi Mind Trick: Breathing by Numbers

-Why use it? Sometimes worries and concerns (deadlines? Challenging assignments? Relationship struggles?) make you unable to concentrate or think. Sometimes multiple media streams keep us scanning from one distraction to the next, preventing us from spending time on one idea or project. This Mind Trick helps provide focus and calm.

-What you will do: Use numbers to count deep breaths in and out (simple, huh?)

-Why it works: many yoga and meditation disciplines start with focusing on the breath, in part because your body automatically takes care of breathing, so when you begin to notice it and focus on a regular pattern, the mind has something to do other than flicker and wander to your distractions and concerns. The mind’s panic/fear response can also be controlled by mentally focusing on and slowing the body’s responses (heart rate, rapid breathing).

-How to start:

1. Try deep, two-stage breathing. Sit or stand straight but not stiff, and notice your regular breathing pattern and how your breath rises and falls in your chest (feel rib cage expanding and contracting). Now try to “breathe with your belly,” letting your stomach (lower lungs) flex out as you inhale and exhale shorter breaths. It is often difficult to stay in this lower breath mode because most Westerners learn to breathe with their chest and ribcage. Now try putting the two together: Inhale filling the lower level first, then let the chest expand and “top off the tank.” The exhale doesn’t have to be similarly controlled, but you do want to feel like you have emptied most of your lungs before inhaling. Keep up the 2-stage inhale and full exhale.

2. Now, while your body is in a calm and relaxed mode, find your “breath numbers”. After a full exhale, using your own slow count, count how long it takes you inhale a deep, 2-stage breath (for me, this is a 4: 2-count for belly, 2-count to top off the chest). Take another deep inhale, then slow count how long it is comfortable to hold that deep breath without feeling desperate or pushed to take another breath (for me this is a 3). Take another deep inhale, hold, then slow count how long it takes you to exhale until your lungs are pretty empty (for me this is another 4, but it may not match your inhale number). Finally, after a full exhale, count how long you can hold your lungs empty without feeling duress (without air, psychologically for me this is a 2 before I start to gasp). My Breath Number with unstressed body at rest is 4-3-4-2... what’s yours? Feel free to compare, but don’t expect to have the same breath number as a

<i>My Breath Numbers</i>	
Inhale 2-stage:	_____
Hold:	_____
Exhale:	_____
Hold:	_____

professionally trained singer or athlete!

3. In Action: When your mind is frazzled, frayed, or frantic, focus your attention on your breath and begin slowly counting in and out: Full, 2-stage breath in, hold, full exhale, hold, repeat at least 2 min.

4. Caution: For people not used to taking in so much oxygen, or such a full exhale, you may sometimes feel light-headed or a little dizzy like you are hyperventilating. If you experience this, stay focused on your breath but back off from huge inhales and exhales.

5. Final thought for this Jedi Mind Trick: Breathing is such a primary, autonomic and constant part of our body that we rarely think about it. Focusing on the breath can help calm the mind and set aside the chaos and concerns of the moment, but it also can bring you back to first principles, to who and what you are as a human and as a person. That can be extremely valuable and worth cultivating.

2. Jedi Mind Trick: Shifting Levels in the Screen Room

-Why use it? Everyone struggles with seeing how their projects fit together, with paying attention to both the details (paper and reference formatting?) and the larger structure (thesis, outline of major ideas and implications?). This flow back and forth between examples and larger claims, between rough ideas and a cohesive project, between formatting details and a final polished product, is where many experts locate their creativity. Developing the capacity to “shift levels” can be an invaluable professional and personal tool.

-What you will do: Using mental pictures and controls, switch back and forth between a larger panorama and small details

-Why it works: Brain research has proven that visualization can improve performance and effectiveness at new or difficult tasks without actually physically performing the act. The documentary “Hack my Brain” on the Science Channel showed demonstrable and measurable improvements in skill levels using nothing but visualization. A mental model can provide the kind of imaginative power that enables your mind’s eye to see things in startling different ways.

-How to start:

1. Sit comfortably and close your eyes or focus on a blank surface or a point about 10 feet in front of you.
2. Prepare to listen by coming into the “now”, and mentally muting your digital stream.

“You are sitting in a comfortable chair... yes, this is a fantasy! You are sitting in the center of a screen room. The room is not like a home or movie theater with a screen at the front. It is a Screen Room and all of the walls, the ceiling, and if you want it, even the floor are screens. How cool is that! Right now they’re kind of translucent white. A nifty control pad is suspended in the air a little bit above your right knee, in reach of your hand, big enough to see but not blocking your vision, and you actually don’t need your hand, all you need to do is see the control buttons and sliders, and think “click,” or “slide”. There is a roller ball suspended above your left knee which allows you to rotate whatever sphere you are in. To your imaginary fingers it feels solid and spins freely as slow or as fast as you like. Enough! We have reached the Screen Room! A steady but inviting green lighted button glows on the control pad. See it... Click it.

Whee! The stars are everywhere! All different shapes of galaxies, and everything is so startlingly clear because there are no city lights. It’s like a planetarium but all around you! You are literally floating in space. The default setting of the Screen Room is the universe. The cool part is you are always at the center! Before you go any further, if you feel more comfortable with a floor, look at the control pad and select the floor radio button. If you feel better floating, have another sip of your beverage and we’re ready to go.

Rotate the wheel slowly until you see a bright galaxy shaped like a spiral. If you spin the wheel fast, you might get disoriented. On the pad are two sliders... nice big ones. One goes forward and back, one goes in and out. Push forward fast and bring that galaxy hurtling toward you. See the spiral much bigger, now you’re inside the spiral, streaking closer to clusters of stars... there’s big red, and little white, and oh! One just blew up! The view from here is fantastic... celestial fireworks of the mind! Push it slower as we approach a smaller yellow star, it looks like there are planets around it! Push farther into the yellow sun, and as you get closer and closer, see the solar winds coming fiercely off of the surface, and see a large flare reaching out into space. Adjusting the track ball, now push the IN slider to take you deeper into the sun, below the surface (remember, you are in a Screen Room!), now push hard on the slider to bring you right into the center and smaller and smaller until you are literally at the center of a hydrogen atom about to collide and fuse into a helium atom. You can see how at that moment, the hydrogen atoms collide and release a massive surge of energy, which flows out toward the surface of the sun. You are looking at the primal process that created the atoms and metals that help form your body. Whether or not you believe in a Creator, there is always something awe-inspiring about the beauty and wildness of our existence.

You can come back to default mode any time. Now on to business. On the control pad is a drop-down menu. Select it and then scroll down the list. Notice there is a small + button where you can add more topics and projects. Select Paper 1 for Comm 300, and push forward. Whoa! Everything is blurred white and black. Pull the slider back. The paper comes into focus. Wow, it says A on it... nice work! As you rotate the track ball, different parts come into view, all the way from the beginning of the idea to the final copy as

of now: class playsheet notes, speech research notes, outline of ideas, rough thesis, supporting main points, examples for each main point, quotes and analysis for the examples, words arranged in sentences that flow in paragraphs that flow in sections that make some larger claims, some final implications, specific citations for every source, a list of references, a corrected list of references, a proofread version, a final version.

Particularly focus on the outline...select that and push IN. See how each of the main points is making an argument or a claim. There are subpoints under each main point that use familiar vocabulary from the readings, in fact it looks like you got an A in part because your subpoints on Ethos use terms like character and competence, which support your main claim about how the speaker used Ethos and then your larger point about whether the speech was effective. At the level of the outline, you can rearrange the main points so that the whole paper starts to make an overall argument. Roll over to the thesis statement, and bring it closer. You see the thesis taking the general flow of your main points, and the topics of each main point, and then relating those to your final claim about the effectiveness of the speech. All in one sentence... cool! Scroll through the paper and see how each quote or reference is cited (see the funny quote marks with the page number for each quote!), then zip to the back and see how each citation has a specific reference, all listed alphabetically and in the right format.

Enough Black and White for now! Pull the slider OUT and use the track ball to locate your favorite band in concert, in color, up close. Unknown to the audience and the band, you are hovering invisibly above the middle of the 5th row. By the way, the speakers in the Screen Room are great! It's like you are really there.

Take a moment to enjoy as they play your favorite song. Then turn off the control pad power button and rejoin us!"

3. Jedi Mind Trick: Stop Hating People and Your Life

-Why use it? Hatred often fuels itself in a senseless cycle: Hating someone or something frequently means you spend energy fantasizing revenge, karma, and other paybacks, or spend lots of mental time worrying or suffering miserably about things you often can't control. This gives the person or the thing you hate more power over you, since you are using up precious time and positive energy going over and over situations again, which means you hate them even more for being able to continually mess up someone's life and your feelings. The way to break the cycle is to infuse your thinking with a positive chant, recognizing the value of experience and difficult people in making you the person you will be, and find a way to turn your attitude and feelings toward the light.

-What you will do: Silently or verbally recite a specific chant, telling yourself how you choose to away from hate

-Why it works: You believe, or agree with, what you hear repeated frequently. The music industry knows this and that's partly why individuals and organizations can create and change the kind of music and song that people think sounds good. Play it often enough, and it will become popular (with some exceptions!). It probably won't work with changing physical things ("This isn't a speeding ticket!"), but with mental states and responses, verbally repeating things can have a powerful impact.

-How to start:

Relax a little bit in your body if you can, perhaps a deep breath, or tighten and then relax your muscles.

Pick a chant (or find a loving kindness meditation online, or make up your own), chant for a full couple of minutes before clearing your mind and doing something else.

Chant 1 (tied to breathing, but naturally, not forcing each phrase to be a full breath):

When I breathe in, I breathe in peace

When I breathe out, I breathe out love

The Art of Teaching Starter Kit...

<p>Think of an inspiring and a nightmare teacher you have had. What were their qualities?</p>	<p>Great teacher:</p>	<p>Poor teacher:</p>
<p>Select a course, and identify critical learning that you hope takes place that does not involve retention of facts and concepts. Is this learning easier or harder than drilling for recall?</p>	<p>Learning beyond factual content:</p>	<p>Easier or harder than facts?</p>
<p>Select a course, and identify the most complicated and difficult learning objective for the students. Then identify 3 or 4 “parts” or steps for gaining this objective... number those parts by some linear or logical order.</p>	<p>Difficult Learning Objective:</p>	<p>Component Elements (# these for order)</p>
<p>Identify three ways you can draw student attention to their learning process. How can/do you create habits of mind that improve life-long learning skills?</p>	<p>Three ways to increase self-reflection about the learning process:</p>	<p>Instilling life-long learning habits?</p>
<p>In your average classroom, identify three ways that students are distracted from the learning process. What strategies do you use to focus their attention on the learning?</p>	<p>Distractions:</p>	<p>Focus techniques:</p>