"Simplest things last longest.
The microbe outlived the mastodon."

James Thurber
"Good Women of Orlon"

Mindful learning 2020

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Abstract

        A mathematical metaphor for the power teaching prototype, P=fm expresses interactive factors that might characterize 21st Education given President Obama's "Blueprint for Reform: Reauthorization of the Elementary and Secondary Schools Act." That is the more global perspective taken in this occasional paper. The factors become Ellen Langer's mindfulness theory, Harvard Project Zero Research Center's teaching for understanding framework, information literacy, and Howard Gardner's MI approach as well as his quintet of minds for the future. These factors interact to design and deliver student-centered instruction now and in the decade to come. On the local side, an ethnographic story explores the inquiry what counts as mindful learning? The story takes readers inside a future bent, writing/thinking intensive "Theories of Learning" seminar at Edward Waters College. Factors of the power-teaching prototype, thus, become contextualized in an exploration of mindful learning with students in real time. Based results from the Langer Mindfulness Scale, research papers on new paradigm perspectives about learning and GRE-like final written examinations, most students demonstrated mindful learning.

        Math enables simple descriptions of complex relationships. P=fm is one such idea. Let P represent the power teaching prototype, a new paradigm model in ongoing refinement drawn from Theory U research. Let f stand as a factor of 21st Century instruction with three levels (teaching for understanding, information literacy and Howard Gardner's five minds for the future). Let m symbolize Ellen Langer's three decades of research on mindfulness theory and its implications for teaching and learning. So put, a set of interactive factors can be explored as a mathematical metaphor.

        The power teaching prototype aims at generating mindful learners in a world class, national public school system from now through 2020. That is the more global perspective implied in President Obama's "Blueprint for Reform: Reauthorization of the Elementary and Secondary Schools Act." More locally, a specific question derives from eight weeks worth of coded ethnographic fieldnotes for an undergraduate seminar. Translated into an inquiry for reflection about a spring 2010 Theories of Learning seminar at Edward Waters College (EWC) in Jacksonville, Florida: what counts as mindful learning?

Teaching for Understanding in the f factor

Ellen Langer's Mindfulness theory stands alone in the equation but, also, is embodied in the other levels of the "f" factor. Teaching for understanding, for example, requires using Harvard University Project Zero (PZ) Research Center's TFU framework for instructional design and Howard Gardner's MI approach based on his landmark multiple intelligences theory for delivery. These two "new paradigm instructional design theories," as Charles Reigeluth calls them, are pointless without mindfulness.

In using the teaching for understanding framework of PZ to design the "Theories of Learning" seminar, the professor had to connect a statement about rigorous instruction from the EWC strategic plan with clear understanding goals and performances of understanding. For each of the five headings of Project Zero's TfU framework (generative topic, throughline, understanding goals, understanding performances, and ongoing assessments), the professor selected or created the content, thus "creating new categories" in the sense of Langer's mindfulness theory."

Take "generative topic." Tina Blythe, one of the authors of the TfU framework, says the title of the design must connect the interest of the students with the interest of the teacher. "Teachable Intelligence 2054" served as the generative topic for the prototypical seminar at EWC. The professor wanted students to develop a futuristic bent, thus, connected the course to 100 years after Brown versus Board of Education, 1954. With an eye on tomorrow's schools, students learned about new perspectives on learning. These perspectives included theories of intelligence from Howard Gardner 1983, Robert Sternberg 1985, Ellen Langer 1989, David Perkins 1995 and brain research up to the present. These theories joined at the crossroads of a view that says unlike the 100 year old view of unchanging intelligence as an IQ score, remaining stable from cradle to coffin, human intelligence can be taught. With teaching, coaching, parenting, and experiences, human intelligence can improve significantly over time.

Or take "throughline," the second of the five features in TfU. Says Peter Senge, MIT professor and author of the acclaimed fifth discipline framework for learning organizations: "All learning integrates thinking and doing." By selecting Senge's idea as a throughline for the seminar, the professor offered students in one sentence a century worth of beliefs: learners construct knowledge from effort (from Dewey to Piaget to Sternberg).

Or, finally, take "understanding goals," another feature of TfU. In the EWC seminar syllabus the understanding goals were as follows: (1) learners will understand new paradigm perspectives about theories of learning (2) learners will understand how to synthesize ideas with specific research based strategies. In Langer's view, these cases of selecting or creating information for the features of Harvard's TfU framework would exemplify "creating new categories."

Ellen Langer's three decades of research on mindfulness and mindlessness has been discussed in 11 books and greater than 200 articles. At the core, her mindfulness theory says mindful people (1) welcome new ideas, (2) create new categories, (3) hold more than one perspective, (4) see context and process, (5) reframe situations and (5) see the familiar and the novel. Applied to the design of instruction for a college seminar, mindfulness theory becomes mindful teaching with an eye on mindful learning.

Langer's mindfulness theory plays a major role on the delivery side of teaching for understanding as well. The professor for the spring 2010 Theories of Learning seminar at Edward Waters College used Howard Gardner's MI approach—another one of Reigeluth's new paradigm instructional design theories. Each class followed a three part format that increasingly became student centered as students personalized research about new paradigm theorists or topics while participating, concurrently, in learning labs aimed at both experiencing strategies for learning and delving deeper into a landmark new paradigm idea such as Jean Piaget's reflecting abstraction model. The "point of entry" for most classes included fieldnotes summarizing previous sessions and setting the refined understanding goal. Often, a strategy such as a College Board "quick write" allowed students to respond to a critical thinking question that tapped prior knowledge or a strategy such as responding with thinking routines to set the table for examining texts. Quick write strategies became verbal-linguistic points of entry that encountered key concepts in understanding goals.

With the point of entry behind, students encountered a powerful analogy to extend core concepts. Then for multiple representations, students often practiced a form of cooperative learning to explore the understanding goal. Such student centered activities as "think-pair-share, "partner reading," and group reflection deepened understanding of core concepts.

In contrast to three features of Gardner's MI approach in a single class, the Piaget project offered point of entry, powerful analogy, and multiple representations over three weeks. Their understanding goal was to compare a glass globe and a painting with the elements of Piaget's reflecting abstraction model.

During the point of entry, represented in a booklet created from power point slides, students completed a think pair share—cooperative learning strategy to examine Piaget's reflecting abstraction. They used two thinking routines drawn from newer ideas in Langer's mindfulness theory (What's familiar? What's novel?) to study a table summarizing Piaget's reflecting abstraction model. (See figure 1.)

Piaget's reflecting abstraction model

Piaget	Plain English	Systems level	Model Case Glass globe	Model Case Annie Lee's painting "The Teacher"
Empirical Abstraction	Seeing the concrete	1st order	Properties in ball	Properties in the painting
Reflecting Abstraction	Thinking about the concrete	2nd order	Glass, hard, round, size of a tennis ball, about five pounds of weight, two shades of blue	Oil, canvas, primary colors, shapes, lone human figure
Reflected Abstraction	Seeing the abstract	3rd order	Transparent blue takes the shape of continents on Earth; darker blue takes the shape oceans	Shapes and colors become objects in a class room with the words "I quit" written on a blackboard a lone figure, slumped in a chair is a female teacher
Metareflection	Thinking about the abstract	4th order	Lands and seas connect as one Earth similar to the "Earth Rise" photo in Al Gore's "Inconvenient Truth"	Teacher appears defeated, but may come back the next day; eventually, she may become a great teacher

figure 1

Then, students engaged a partner reading game. One partner read aloud a passage from Piaget's introductory chapter to *Studies in reflecting abstraction* and thought aloud (posing questions, making comments, sharing insights etc.) while the other partner read silently and thought silently. They switched roles back and forth until both samples of Piaget's voice were read.

Piaget's voice one

- "To abstract any property whatsoever from an object, such as its weight or its color, the knowing subject must already be using instruments of assimilation (meaning and acts of putting into relation) that depend on sensorimotor or conceptual schemes. And such schemes are constructed in advance by the subject, not furnished by the object." (Piaget, p30)
- "However, these schemes are only instrumentally necessary for empirical abstraction. Empirical abstraction does not range over the schemes themselves; it aims only at the data that remain external to them. The facts are the content; the knowing subject's schemes merely embody the forms that make it possible to grasp that content." (Piaget, p30)

Piaget's voice #2

"By contrast, 'reflecting' abstraction ranges over those very forms and over all of the subject's cognitive activities (schemes of coordinations of actions, operations, cognitive structures, etc.) Reflecting abstraction separates out certain characteristics of those cognitive activities and uses them for other ends (new adaptations, new problems, etc.). It is 'reflecting' in two complimentary senses. First, it transposes onto a higher plane what it borrows from the lower level (for instance, in conceptualizing an action). We will call this transfer or projection a reflechissement. Second, it must therefore reconstruct on the new level B what was taken from the previous level A, or establish a relationship between the elements extracted from A and those already situated in B. This reorganization that is forced by the projection will be called a reflection in the strict sense." (Piaget, P30)

Piaget, J. (2000). *Studies in reflecting abstraction.* Philadelphia: Taylor and Francis Group.

Finally, returning to the whole class, students reflected on what they learned about Piaget's reflecting abstraction model. They addressed a set of questions. What did we learn today? What surprised you? What more do you want know?

Additionally as a powerful analogy, they examined a photograph of a kindergarten student encountering an activity in which she constructed an array for 4 x 4 from 16 pieces of candy. The students saw how this deceptively simple activity was part of the child's demonstration of all four levels of abstraction in Piaget's model. First the properties of the candy creating the concrete array were empirical abstraction. The child then colored a word processed graphic of a 4 x 4 array to illustrate reflecting abstraction: the rows of four colored squares plus four colored squares plus four colored squares plus

four colored squares corresponded to the concrete array made from candy. Next, the child created an equation: 4 x 4 = 16. That represented reflected abstraction, two removed from the concrete candy array. Lastly, the child wrote the numbers for four square. That was metareflection in Piaget's sense. Still at the level of metareflection, she could generalize that if 4 x 4 equaled 4 square, then 5 x 5 equaled five square. Still at metareflection, she would later understand that any number can be multiplied by itself over a range of powers.

The "powerful analogy" for college learners assured that some concrete or semi concrete activity illustrated an essential concept of the understanding goal. The photograph represented a visual spatial analogy extending the point of entry. A few class sessions before the Piaget Project had begun, students in the seminar had taken turns examining a glass globe about the size of a tennis ball but heavy as a paper weight. When each student had had a turn examining the glass globe, the professor discussed it in terms of Piaget's reflecting abstraction model. That activity served as a bodily-kinesthetic and visual-spatial analogy for Piaget's reflecting abstraction model as well as preview for the project. The glass globe analogy would show up again in the project as an assessment of understanding during the multiple representation feature of Gardner's MI approach. Additionally, students later compared the glass globe to Annie Lee's painting of a teacher along the lines of Piaget's reflecting abstraction model.

In Gardner' MI approach, "multiple representations" included abstract activities designed to deepen understanding of essential concepts. Take the case of the Piaget Project, students used the professor's SQS (scan, question, synthesize) system of studying to encounter the full text of Piaget's introductory chapter for his book of studies at the Center for Genetic Epistemology. Over two class sessions, students scanned the text to see how Piaget organized his thinking, wrote questions with David Perkin's knowledge as design method of critical thinking, and used Robert Marzano's comparison matrix to synthesize core ideas about the reflecting abstraction model. They made their thinking visible on old-fashioned huge post-its because the computer system and LCD screen in room 202 Hatcher Stewart stayed broken all semester in spite of several requests for repairs. Reframed the lack of classroom technology meant an opportunity to use what John Naisbitt once called "high tech and high touch." The professor brought a 2010 MacBook Pro for a high tech presence in the classroom and to compliment the high touch activities.

To measure their capacities for transferring ideas from the comparison matrix to another text, students had to compare the glass globe and Annie Lee's painting of a teacher along the lines of each of four levels of reflecting abstraction. From the perspective of Gardner's MI approach, the SQS study system was primarily verbal linguistic whereas the glass globe and painting represented visual spatial intelligence within the context multiple intelligences theory (nine intelligences from which to create activities). From the perspective of Langer's mindfulness theory, students primarily "created new categories." Some students even "welcomed new information" and "held more than one perspective."

From the perspective of Robert Marzano's similarities and differences research based strategy for improving student achievement, students identified items for effective comparison, the glass globe and painting. Then, they identified characteristics, in this case, Piaget's four levels of abstraction. Lastly, they identified similarities and differences for each of the levels of abstraction in the globe and the painting.

Finally, from the perspective of Howard Gardner's five minds of the future, students engaged the disciplined mind, synthesizing mind, and creating mind. In all, students in the Piaget Project during the second half of the semester engaged Gardner's point of entry, powerful analogy, and multiple representations over a three-week period instead of their more accustomed single class session. Best of all, they engaged Langer's mindfulness theory in the service of learning.

What counted for mindful learning not only included their verbal responses in reflections and inquiries, but the intellectual products created served as examples: self generated critical thinking questions about a chapter and Marzano's T-chart to organize notes, Marzano's comparison matrix as a graphic organizer/cognitive map to facilitate the creation of similarities and differences--all demanded mindful learning. But mindful learning itself is contextualized by mindful teaching. The final field note (week of April 5, 2010) illustrated the interaction between design and delivery of a course that fostered mindful learning increasingly.

Theories of Learning
Psychology 421
Fieldnotes the week of 5 April 2010

Last week, we summarized the progress made on our personalized research projects. Some of us got "just in time" information about a few papers published in ERIC. Certain papers seemed to fit selected theorists and new paradigm topics. We reviewed the value of the research question as a guiding light for the whole project and recognized that a research question can change as the researcher gathers more information. For example, at the start of the semester, the professor's research question was as follows: How might students at Edward Waters College learn disciplinary ideas mindfully now and in decades to come? That question set up the power teaching prototype as a framework for designing and delivering instruction in the Theories of Learning 2010 seminar.

With rigorous intellectual standards implied in the Edward Waters College strategic plan in mind, the entire seminar, then, has been exploring that question with the teaching for understanding framework used to design a course drawn on Harvard University's performance based view of understanding and Howard Gardner's MI approach (based on his landmark multiple intelligences theory) which framed every class session with a point of entry, powerful analogy, and multiple representations. Information literacy has been modeled and encouraged repeatedly even in the face of semester-long broken classroom technology. Howard Gardner's five minds for the future has guided assessments and the culture of the classroom with particular attention to the disciplined mind, synthesizing mind, and creating mind. Respectful mind and ethical mind have been in the background throughout the course and highlighted when needed as "just in time information." Finally, Ellen Langer's mindfulness theory has been the soul of the course. It has guided an effort to teach and learn mindfully. In all, the power teaching prototype synthesized a set of factors that might characterize new paradigm education. If it worked well, the power teaching prototype embodied mindful learning and teaching.

With this prototype made explicit (P=fm) as well as implicit (the deep structure of the course), new information came from systematic observations of student works including the graded mid-term assessment—comparing Elisabet Sahtouris's new model of global science and Ellen Langer's core ideas of mindfulness theory. Also, because the professor used Otto Scharmer's Theory U as ongoing advanced action research, new information about Langer's theory has become part of the exploration of the starting block question (How might students at Edward Waters College learn disciplinary ideas mindfully now and in decades to come?). Thus, participant observations summarized in weekly fieldnotes combined with literature reviews of Langer to create a new research question: What counts as mindful learning?

In the final set of class sessions for April 2010, we will gather selected observations of performances of understanding. Each one will shed light on what counts as mindful learning because each assessment demands creating new categories, holding more than one perspective, welcoming new information, and seeing the familiar and the novel- some of the core ideas of Langer's mindfulness theory. For each student, the Piaget Project will have become an investigation into how that student learns mindfully by creating new categories about reflecting abstraction. For the professor, the Piaget Project becomes an investigation in how to teach mindfully by creating activities and assessments of mindful learning Vis a Vis performances of understanding. Likewise the research paper and GRE-like final examination measure understanding and tell what counts for mindful learning. Additionally, we will all take the Langer Mindfulness Scale to compare our mean score with the mean score of the norm. In sum, the three way assessments will count as evidence of mindful learning.

So the design and delivery of instruction required paying attention to possible performances of understanding including ones that might count as mindful learning. Most central to these dual dimensions of teaching for understanding were student works.

Relying on observations of student performances of understanding, the MI approach required fine-tuning each class to deliver instruction that met student needs while keeping an eye on thought demanding tasks such as writing effective comparisons. In summary, the design and delivery of instruction that fostered both mindful learning and mindful teaching comprised the "teaching for understanding" level of the "f" factor in P=fm.

Information Literacy in the f factor

Information literacy was the second level of the "f" factor. According to the American Library Association's 1989 Presidential Report, information literate people could locate, evaluate, and create information. These too would be empty without mindfulness. Students in the theories of learning course wrote original research papers. They created new categories about new paradigm theorists or topics (Piaget, Vygotsky, Brunner, Gardner, Sternberg, Langer, Hilliard, Perkins, brain research, human intelligence and evolution, teaching for understanding, future of learning etc). In order to conduct research, each student selected a theorist or topic, created a research question, and designed a research plan. Then, each one reviewed literature using multiple digital devices for gathering information including ProQuest, Thompson Gale, and ERIC. They conducted an investigation to explore the research question with first hand data. For example, by taking the Langer Mindfulness Scale (LMS) each one learned about his or her own degree of mindfulness.

In summary, Langer might have said they "welcomed new information" and "created new categories" all along, leading to a set of final assessments. Learners created word-processed, research papers in APA style. They had to locate information in digital devices such as Internet searches with research data bases, author or university web sites and online articles. They evaluated the worth of information uncovered. They created word processed information in the end. They practiced information literacy—locating, evaluating, and creating information. Information literacy, in brief, extended teaching for understanding.

Gardner's five minds for the future in the f factor

Learners, in addition to experiencing teaching for understanding and practicing information literacy, engaged Howard Gardner's disciplined, synthesizing, creating, respectful and ethical minds. Howard Garner's quintet of minds for the future comprised the third, and final, level of the "f" factor in P=fm. Of course, Langer's mindfulness theory saturated each of the five minds.

Gardner argued that given complex global problems our Earth now encountered, we needed people who commanded five minds. These minds drew from "welcoming new information." These required "holding more than one perspective." These demanded "creating new categories as well as "seeing the process and context." The five minds for the future encouraged people to make novel distinctions as well.

In the instance of the theories of the learning course, learners practiced "synthesizing minds" with strategies such as Robert Marzano's similarities and differences, comparing two ideas or perspectives. The mid-term in class essay, for example, required comparing core ideas of Elisabet Sahtouris's global science model and Ellen Langer's core ideas from mindfulness theory. On the one hand, learners examined core ideas such as (1) the universe is living; direct human experience is important, cosmic consciousness resides within all living things; and (4) truth in science is not absolute. On the other hand, learners examined Langer's core ideas. Again, mindful people (1) welcome new information, (2) create new categories, (3) hold more than one perspective, (4) see process and context, (5) reframe situations and (6) see the familiar and the novel. Mid-term essays compared contrasting new paradigm representations for similarities and differences along the lines of characteristics both items shared. Students examined Elisabet Sahtouris's new paradigm model of science and Ellen Langer's core ideas from mindfulness theory. But they also encountered Gardner's "synthesizing mind." Additionally, students practiced the disciplinary mind and creating mind as well as the ethnical mind and respectful mind.

Future History of levels in the f factor

Each level of the f factor had already established a place in human history and would likely be with us tomorrow. From the early days of Homo sapiens, perhaps 195,000 years ago, how to use a given tool had to be taught well. Neanderthal children, for example, had to learn how to slay big game for survival. Understanding how to use a Nook, Kindle or I pad to download e-books and meet other information literacy needs might be key to survival tomorrow. Reading texts might have required an information literate population yesterday, but creating texts might mark information literate people tomorrow. Having minimum capacities to understand science and other disciplines, connecting ideas to make sense of the world, creating new ideas for the betterment of others, accepting those people and ideas different than one's own, and inventing high quality, honest intellectual properties of use to self and others marked a few schools of yesteryear but must mark most schools tomorrow.

As Howard Gardner argues, people of the future must know the disciplines needed to solve the complex set of global problems that Duane Elgin, Al Gore, Lester Brown and many others tell us we now face. These problems not only include ones of deep ecology (restoration of coral reefs, reduction of fossil fuel emissions, recovery from oil spills, widespread use of obvious renewable energy and exponential use of less obvious renewable energy such as the human imagination) but redistribution of resources so that poverty need not arrest two to three billion people tomorrow. These problems include how to grow human knowledge about Earth and space into wisdom. These problems include how to develop a space economy to expand human well being on Earth. These problems, when reframed, offer opportunities to help Homo sapiens evolve into what Peter Ward calls "Homo futuris."

Students of tomorrow's schools must connect ideas within and across disciplines, increase innovation, respect people of contrasting skin tones, customs and languages; and, engage work that is honest and of high quality. Five minds for the future demand attention in the power of now.

That could even be why President Obama's administration has been conducting a major make-over of No Child Left Behind. Our nation needs every child to be put ahead, and on March 2010 the Department of Education released its re-authorization of the Elementary and Secondary schools act to make top schools a priority in our nation. With its call for national "world class education," "Blueprint for Reform" might shape our nation's schools up to 2020.

What counts as mindful learning?

Likewise, Edward Waters College President Claudette Williams facilitated the creation of a strategic plan to reinvent the institution as a 21St Century site of higher education. Within that context, the power teaching prototype played a role in reinvention. In particular, Langer's mindfulness theory added value to P=fm--a third generation prototype aimed at synthesizing a few ideas about the future of learning. One of Langer's eleven books, *Power of mindful learning,* exposed seven myths of education and replaced them with instructional approaches that might increase mindful learning now and in decades to come.

Silently emerging from her discussion, however, is the following: How does mindful learning work beyond the shores of Harvard? A disproportionate amount of research on mindfulness theory and its implications for learning rests in the hands of Langer, her graduate students at Harvard University, and her colleagues. She favors experimental design and so leaves out the possibilities of qualitative designs that explore more complex questions not limited by controls, yet serving as ones often high in ecological validity. Additionally, because the research on mindfulness seldom steps outside the golden box that is Harvard—*US News and World Report's* 2010 top school in our nation--another perspective might prove valuable. Again, what counts as mindful learning?

Final assessments in the theories of learning seminar at Edward Waters College, one of 105 historical black colleges and universities in the United States devoted to refining talent for our future nation, might disclose some information about mindfulness in learners beyond the feet of John Harvard's statute. Originally established in 1866 to educate former slaves, EWC has been reinventing itself for 21st Century Education. The future bent, writing/thinking intensive theories of learning seminar recalls what Ellen Langer said in her book connecting mindfulness and health: the "psychology of possibility." The fact that one explicitly new paradigm course exists means another can be created. It is now possible.

However, to the point of this occasional paper, the theories of learning final assessments (LMS results, research papers on new paradigm theorists or topics and GRE-like final writing examinations) exemplify Langer's "creating new categories." They are representations of mindful learning, and, thus, tell what counts.

Conclusion

This year Edward Waters College did not make the list of top 100 colleges and universities in the 2010 *US News and World Report's* annual rankings. But students in Theories of Learning 2010 encountered Ellen Langer's measurement of mindfulness as a psychological trait. The Langer Mindfulness Scale (LMS) is a self report instrument measuring mindfulness (personal outlook) as a total score as well scores for four dimensions of the scale: (1) novelty producing, (2) novelty seeking, (3) engagement and (4) flexibility. The norm for LMS was based on a sample of six college classes in New England. The norm was 108 with a standard deviation of 13. Results from the administration of the LMS with a sample of 13 out of 22 students in the Theories of Learning Seminar (Psy 421) on 20 April 2010 in room 202 the Hatcher Steward Building at Edward Waters College ranged from 132 to 96. The mean score was 114.7, greater than Langer's college norm. Additionally, four students scored between one and two standard deviations above the mean. In a seminar using the power teaching prototype (P=fm) as a framework to foster mindfulness, these results from the LMS count as evidence.

Along with results from the research papers rated with Marzano's rubric for effective comparison and the GRE-like final examination of critical thinking rated with the two GRE writing rubrics, a picture developed about what mindful learning in a spring 2010 seminar with students who came to college from high schools often embedded in poverty zones. The course ended with the following distribution of final grades.

Distribution of Final Grades

A	B	C	D	F	
7	6	7	0	2	
N=22					

figure 2

That meant most of the students were mindful learners. They wrote personalized research papers in APA style and engaged a GRE like final. Rubrics guided the assessment of these performances of understanding, thus, making the value of the student work more visible. But the assessments, also, addressed the inquiry. What counts as mindful learning? That inquiry had surfaced in a college seminar featuring specific factors of 21st Century education: (1) Ellen Langer's mindfulness theory, (2) Harvard Project Zero Research Center's teaching for understanding framework as well as Howard Gardner's MI approach, (3) information literacy and (4) Howard Gardner's five minds for the future. P=fm. A new inquiry can be written on the scrolls of time. How might a global education system on planet Earth foster mindful learning now and in decades to come?

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