



The Art of Learning *project* A W. W. Norton Initiative

**The Teacher's Guide to
The Art of Learning** By Josh Waitzkin





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A Note about The Guide

The Book Study Guide for Teachers is a series of questions and exercises designed to give you a launching point for your work with *The Art of Learning*. Whether you are probing this material on your own or collaborating with other educators, we hope it will help further your self-awareness and guide you toward the development of concrete teaching strategies that further student performance and growth.

We encourage you to make this work your own by focusing on the content that is most relevant to you and your colleagues. As always, we are here to support you—please don't hesitate to contact us.

Enjoy!

Sincerely,

The JWF Team



INTRODUCTION

INTROSPECTIVE DISCUSSION

1. Has public acknowledgment of your performance ever caused you to lose your special connection to a pursuit, or caused you to compromise your approach to it? If so, what were the circumstances? Were you distracted by the attention you received or did you find that you had been valuing it more than the actual practice?
2. If the limelight did not derail your pursuit of excellence and growth, did something else? What? How was your pursuit dampened?
3. What has come along or what have you sought that has restored, entrenched, or redirected your approach to your hobby or work when your passion has been dampened?
4. Do you ever document your specific approaches and the challenges (psychological and otherwise) you encounter? How do you go about this documentation? Do you, for example, keep a journal?
5. Have you ever purposefully tried to be a beginner at something with the intent of experiencing the value of launching into a pursuit with a clean, fresh slate? Why or why not? If you have intentionally started a pursuit from scratch, what prompted you to do so and what did starting anew feel like?
6. Have you experienced the impact and value of knowledge you've internalized through devoted learning and practice? How did that impact manifest and what did it feel like?
7. Josh describes arriving at a sense of the deep connection that exists between seemingly distinct pursuits—Tai Chi, chess as well as other fields of interest. Have you ever perceived a similar beneath-the-surface bond between subject areas that, at face value, seemed entirely separate from one another? If so, describe the nature of the connection and how you were able to utilize this understanding. What do you think allowed you to perceive this interconnectedness and operate in a way that enables you to apply your understanding of the principles underlying one field to another?



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8. Have you thought about your own learning process? What is your approach to learning? Are you, for example, more of an auditory, kinesthetic or visual learner—or some combination of these?

TEACHING INSIGHTS AND STRATEGY

1. Do you feel that the process of learning is something that can be taught?
2. Do you feel that you are teaching your students how to learn and not just teaching them information pertaining to a discreet subject area?

PART I: THE FOUNDATION

CHAPTER 1: INNOCENT MOVES

INTROSPECTIVE DISCUSSION

1. Josh writes about his early and immediate attraction to the chessboard. Have you ever felt an instantaneous connection to a subject or field of endeavor? Have you experienced a “calling” for something? Describe this experience and what you did to follow up on this interest.
2. What were the early obstacles to your pursuit?
3. Did you have one or more mentors to nurture your passion and skill set? Talk about them.
4. How did your mentors or teachers “set you straight” when it came to your own stubborn pursuit of wrongful ideas or refusal to learn new ways?
5. Do you think your unique learning style or personality was squelched or supported when you were being instructed? Think about this question with regard to a variety of subject areas.



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6. Do you feel you had an honest relationship with your instructors with regard to praise and critique? Were compliments and criticisms you received constructive and conducive to continued learning?
7. How would you describe your teachers' manner during instruction sessions?
8. Do you think you have found a balance between winning or achieving a high score and keeping passion alive? Describe the nature of the balance that was struck for you.
9. Were you emotionally prepared for “wins” and “losses” in your academic or extra-curricular pursuits? For the struggle for excellence? How—or how not?

TEACHING INSIGHTS AND STRATEGY

1. How do you teach others *new* ways to approach a given subject? What do you do to get them on track if they are clinging to an ineffective approach and not progressing?
2. Do you tap in to and preserve the natural voices and learning styles of your students while teaching them? Do you allow students to express their personalities through their pursuit of the subject(s) you are teaching? How do you do this? In what ways do you feel you thwart their natural bents?
3. Do you culture a spirit of query and debate in the classroom? How do you go about doing this?
4. What is your own approach to the assessment of work and performance in the classroom—is it both honest and constructive? Why or why not?
5. Describe your teaching style and classroom demeanor. How do you think your students would describe your teaching style?
6. What sort of balance do you strike between test scores and learning for your students? What do you do to stimulate interest in the subject you are teaching beyond the reward of a high mark?



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7. Are your students emotionally prepared to do the work necessary for learning and growth? Describe the emotional states that you encounter in your students that either hinder or further their progress.

CHAPTER 2: LOSING TO WIN

INTROSPECTIVE DISCUSSION

1. Consider your level of confidence in various areas of your life and how it has changed over time. Has it been conducive to your success or impeded it? How?
2. What are your thoughts regarding the question that Josh posed to himself after losing his first big tournament: Is there “worth outside of winning?”
3. Do you take regular breaks from your daily routine? Are these restorative for you and do they give you a new and more creative perspective on the issues and situations you face?
4. Josh describes the critical importance of his parents in his life. Who in your life has provided essential emotional support through ‘thick and thin’ and how did/do they extend this support?
5. Josh came to a recognition that his commitment to the game of chess went beyond ‘fun’; he “responded to heartbreak with hard work” rather than quitting. What has been your typical response to extreme challenge and loss?

TEACHING INSIGHTS AND STRATEGY

1. Are your students’ levels of confidence furthering or hindering their progress? Discuss the importance of a balanced, even-keeled sense of confidence to progress in the classroom and on the playing field.
2. Do your students have people in their lives who provide sustained emotional support? Elaborate on your perceptions regarding effective support strategies.



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3. Josh talks about the importance of ‘fun’ in his study of chess. Do you try to inject a sense of ‘fun’ into your students’ lessons? How do you go about doing so?
4. Talk about the range of your student’s responses to loss in competitive situations and to unsatisfactory scores or grades. How can you cultivate in them a desire to persist and push harder when they become dispirited? How can you avoid pushing too hard?

CHAPTER 3: TWO APPROACHES TO LEARNING

INTROSPECTIVE DISCUSSION

1. Josh poses this question at the beginning of the chapter: “If ambition spells probable disappointment, why pursue excellence?” What is your answer?
2. Do you hue to an *entity* or *incremental* perspective of your own intelligence?
3. In your life, have you been willing to leave the comfort of the known and familiar to pursue growth experiences that involve risk and discomfort? Are you willing to draw wisdom from every experience—both good and bad?

TEACHING INSIGHTS AND STRATEGY

1. Do your students seem to adhere to an *entity* or *incremental* theory of intelligence?—Consider different students. Do you find yourself in a position of having to reverse the *entity* views they have of themselves?
2. Have you noticed that bright kids with an *entity* approach fare less well than less bright students who have an *incremental* approach to learning?
3. Consider the language you use in the classroom in response to student performance. Are the ways in which you talk to students and motivate them more in keeping with an *entity* or *incremental* theory of intelligence?



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How might you change your comments in order to cultivate an incremental approach to learning in your students and foster an approach of hard and devoted work over the long term?

4. Are your students more inclined to reach for immediate results rather than undertake a path of prolonged effort? How can you teach them that setbacks and mistakes hold lessons that show us how to succeed?
5. After a test or assignment is graded and handed back to the student, is there a follow up of any kind? What are your ideas for follow up that can direct them along the 'incremental learning' pathway?

CHAPTER 4: LOVING THE GAME

INTROSPECTIVE DISCUSSION

1. Do you express your personality through your pursuits? Discuss how you do this and the ways that certain of your pursuits do not allow your personality or natural approach to come through, if such is the case.
2. Discuss the factors (for example, passion, fear of failure, a desire to win and succeed at accomplishing goals) that motivate your actions in different areas of your life.
3. Do you try to put everything on the line and give 'your all' to your pursuits? Or, do you offer up less than 'your all'? Do you ever use the philosophy that 'process matters more than results' as an excuse to *not* invest the most you can in the process?
4. Do you believe that competition and pitting yourself against an opponent with equal or superior skills promote learning and mastery? Why?

TEACHING INSIGHTS AND STRATEGY

1. Discuss how you can cater to a student's unique personality and thereby engage his or her passion while teaching your subject.



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2. Do you set up short-term goals for your students while also guiding them to pursue a long-term process? Discuss the value of balancing a long-term learning process with short-term goals and effective ways of achieving this balance.
3. How can you foster a healthy atmosphere of competition in your classroom or on the playing field?
4. Conceive and practice feedback responses that can help students internalize a process-first approach that also allows them to relish and clearly understand the nature of their interim wins.
5. Discuss this quote from the book: “Growth comes at the point of resistance. We learn by pushing ourselves and finding what really lies at the outer reaches of our abilities.” How can you motivate your students to meet challenges with maximal effort and stretch themselves beyond their sense of their own limits?

CHAPTER 5: THE SOFT ZONE “LOSE YOURSELF”

INTROSPECTIVE DISCUSSION

1. How have you handled unexpected disruptions, both large and small, in your life? Were you able to go with the flow and stay on track or did the disruptions cause you to snap and/or lose focus? How did the disruptions feel at the time they occurred and after? What is your reaction these days to distraction?
2. Discuss the concept and examples from your own life of ‘making sandals’ when presented with an obstacle—coming up with an internal solution to a challenge that results from intelligent preparation and cultivated resilience, rather than the use of force or other ways of making the external world yield to you.
3. Josh says that the solution “does not lie in denying emotions, but in learning to use them to our advantage.” What does this mean to you?
4. Josh adds: “When uncomfortable, my instinct is not to avoid the discomfort but to become at peace with it...My instinct is always to seek out



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challenges as opposed to avoiding them.” Do you share his instincts? How can you build up such ‘muscles’?

TEACHING INSIGHTS AND STRATEGY

1. How do your students respond to distraction? Consider a variety of responses.
2. How might you help your students cultivate focus and mental resilience so that they can stay on track (without denying their natural reactions) when faced with disruptions, whether environmental, psychological, or physical?
3. How can you help your students build up these sorts of ‘muscles’, bearing in mind Josh’s comment that ‘this type of internal work can take place in the little moments of our lives’?

CHAPTER 6: THE DOWNWARD SPIRAL

INTROSPECTIVE DISCUSSION

1. What does the phrase *being present* mean to you?
2. Josh talks about the importance of regaining presence and clarity of mind after making a serious error, so as not to spark a cascade of additional mistakes and obstacles. Have you ever experienced a downward spiral in your own life? Give examples. What do you think caused that spiral?
3. Josh explains the importance of presence in this way: “When we are present to what is, we are right up front with the expansion of time, but when we make a mistake and get frozen in what was, a layer of detachment builds. Time goes on and we stop.” Discuss the concept of being unable to progress by virtue of being emotionally attached to an occurrence that has already passed.
4. Josh writes that one can regain clarity of mind when it is being swept away by ‘being present’ and mentions some simple strategies, such as taking deep breaths or splashing cold water on one’s face. What are your strategies for being present?



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5. What have you done to either prevent a significant downward spiral in your own life or stop one that was already underway in its tracks?
6. Discuss your reactions to and thoughts about Josh's comment: "The distance between winning and losing is minute, and moreover...there are ways to steal wins from the maw of defeat."
7. Do you have an attachment to perfection in general or in some areas of your life? If you do, talk about the nature of this attachment.

TEACHING INSIGHTS AND STRATEGY

1. Do you see in some students what Josh describes as "a brittle dependence on the safety of absolute perfection or duplication"? How does this dependence and the resulting brittleness manifest?
2. Have you ever participated in or witnessed in your students a process whereby an error "triggers fear, detachment, uncertainty or confusion that muddies the decision-making process"?
3. Talk about students who have demonstrated a capacity to move past their errors and other obstacles in their lives. What are their shared characteristics and their unique strategies for staying present and progressing?
4. How can you help your students prevent or exit a chain reaction of errors and mishaps?

CHAPTER 7: CHANGING VOICE

INTROSPECTIVE DISCUSSION

1. Has your passion for and sense of connection to a pursuit ever changed midstream? What led to this change?



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2. How would you describe your natural voice? Have you ever experienced impediments to the expression of your native leanings and disposition? Discuss these.
3. Josh describes developing a method of study “that made chess and life begin to merge in my being.” Have you ever experienced a murgence of pursuit and life through study?
4. Josh says he “had to figure out how to release myself from baggage” in order to make his new knowledge manifest on the chessboard. Have you ever analyzed your own behavior/performance on the basis of your underlying psychological status? If so, were you able to see the connections between your broader life and the behaviors and decisions related to your particular pursuit?
5. Here is an exercise to support your understanding of the relationship between performance and psychological status: Think back onto this past year (or go back further if it feels useful) and in two columns, list the five or 10 errors in judgment or process that come to mind. In one column, list professional mistakes, and in the other, lapses in your personal life. Detail these from both a technical and psychological perspective. Do you notice any patterns? Now, repeat this exercise, but this time list your successes. Describe the patterns behind your best personal and professional plays from both a technical and psychological perspective. What have you learned about yourself through your pursuits and the approaches you have taken to engaging in and managing them?
6. Josh turned his weaknesses into strengths by cultivating an awareness of the nature of his difficulties and employing simple strategies for alleviating the stress they inflicted. What methods do you/can you employ to resolve emotional issues that hinder your personal performance?
7. In this chapter, Josh calls his method of probing his thought process and feelings “numbers to leave numbers”. Through his analysis he was able to achieve a deep level of clarity and understanding. Have you had experiences of being able to make decisions and take actions on the basis of knowledge that is so deeply internalized it appears to be unconscious? If so, cite one or more examples.



TEACHING INSIGHTS AND STRATEGY

1. Have you witnessed a midstream change in your students' passion for and sense of connection to a pursuit? What do you think led to this shift?
2. Can you draw direct lines between glitches or gains in your students' performance and their apparent emotional/psychological status? Give examples. What psychological barriers do they bring to bear on their learning process and academic and/or sport performance? How can you help your students understand the connection between their emotional life and their learning and performance? How can you help them address the mental baggage they carry?
3. Do you think your students learn about themselves through their academic- or sports-related activities? How can you shape the learning process in your classroom to foster student self-awareness?

CHAPTER 8: BREAKING STALLIONS

INTROSPECTIVE DISCUSSION

1. Discuss the importance of approaching the learning process with a child's lighthearted love of discovery and fearlessness. Do you recall ever having adopted this attitude during your teenage or adult life? Did you think it unleashed your learning process and your performance?
2. Josh states that it is "critical to integrate new information in a manner that does not violate who we are. By taking away our natural voice, we leave ourselves without a sense of gravity to balance us as we navigate countless obstacles along our way." What is your 'natural voice'? Have you ever had it compromised while learning something new?
3. Josh says that "in most everyday life experiences, there seems to be a tangible connection between opposites," and goes on to demonstrate how one reality can foster appreciation of or insight into the opposing reality. Have you had the experience of perceiving connections between entirely disparate subject areas or circumstances? What fueled your own intuitive leaps?



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4. Have your own learning processes struck a balance between personal creativity and technical awareness?

TEACHING INSIGHTS AND STRATEGY

1. In what ways do you support or impede a child-like approach to learning in your students?
2. Do you give consideration to your students' unique dispositions and learning styles when teaching them new information? How do you adapt your teaching methods to cater to the different learners in your classes and support their distinctive approaches to creativity?
3. With which of the two teachers Josh describes do you resonate? Why? Do your school and district support your preferred approach to teaching? How or how not?
4. How can you foster in your students an ability to see the connections between different topics or scenarios and make the sorts of creative leaps we associate with genius?
5. Discuss the two methods for “breaking a stallion” that Josh presents: One breaks the spirit of the animal and tames it into submission. The other is about guiding “the horse toward doing what you want to do because he wants to do it,” thereby preserving its unique character. Which approach do you typically apply in your classroom? Why? If you are not applying the second approach, how might you do so?
6. How can you help your students strike a balance between personal creativity and technical/informational know-how?



PART II MY SECOND ART

CHAPTER 9: BEGINNER'S MIND

INTROSPECTIVE DISCUSSION

1. At the beginning of this chapter, Josh makes reference to the *Tao Te Ching* and Laotse's inward focus—an emphasis on an “underlying essence as opposed to the external manifestations.” He perceives the connection between this emphasis and his own search “for the flow that lay at the heart of, and transcended, the technical.” Do you resonate with his notion that the assimilation and application of information involves transcending its concrete characteristics?
2. Consider and discuss times in your life when you have chosen or been asked/forced to undertake an entirely new pursuit. For Josh, “learning to crawl” made him feel as the world was being lifted off his shoulders. What did your experience(s) feel like?
3. Josh also speaks about how becoming “physically introspective” changed his world and how valuable it was to have “an internal mechanism with which to deal with external pressures.” Have you or are you now taking action to become more aware of your physical status and ease your mental stresses? How are you doing this? Do you, for example, exercise regularly?

TEACHING INSIGHTS AND STRATEGY

1. Josh portrays William Chen's teaching style as “understated” with much of his subtle instruction going unnoticed. How would you describe your own teaching style and your students' reactions/responsiveness to it?
2. Chen is said to have sent the message: “If I can do it, you can do it.” Do you think you convey a similarly humble message to your students? If not, why? If not, how could you go about broadcasting this take—or reinforcing it? What do you think your students' response would be to such a shift?



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3. Consider the Tai Chi perspective that “if there is tension in one place, the mind stops there.” Identify the sorts of obstructions to mental fluidity that you encounter(ed) in yourself.
4. Do you think the concept of “if there is tension in one place, the mind stops there” has relevance to learning in general? To your students’ learning success? How can/do you go about removing such obstructions?
5. Josh talks about how readily his classmates missed out on rich learning opportunities because of distractions and lack of focus. He talks about Tai Chi as an “exercise in awareness”. Talk about the importance of *awareness* to learning.
6. How can you help your students become more aware of the relationship between their minds and bodies and help them connect, as Josh did, disparate elements of their being? What in-class or out-of-class physical practices can you give them that can help them cope with their mental stressors?

CHAPTER 10: INVESTMENT IN LOSS

INTROSPECTIVE DISCUSSION

1. Josh talks about having to unlearn his “current physical paradigm” before learning the body mechanics of non-resistance involved in the practice of Tai Chi Chuan Push Hands. Have you ever had to unlearn something entrenched in order to make progress in a new, or even, an old pursuit? Cite examples.
2. Josh writes about how giving up a current mind-set in order to progress is tantamount to “needing to lose to win”. Allowing oneself to stay pliant and submit to the training and learning process without reverting back to old habits is a matter of “investing in loss.” Have you ever taken on learning that has involved casting off old approaches, taking on new ones, and not resisting the inevitable difficulties and discomforts of doing so? Talk about occasions in which you have done this and what your experience of the process and results felt like.



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3. Josh viewed his vulnerability and the pain he endured in practice as *opportunities* to master its nuances. How have you handled your mistakes on tests, assignments, in life? Have you been accepting or fallen prey to your ego? Did you forge ahead, try to learn from your errors, and continue to give your tasks your all? Or did you shrink back?

TEACHING INSIGHTS AND STRATEGY

1. Discuss the range of your students' typical responses to learning unfamiliar subject areas—from resistance to non-resistance; from fear of releasing old habits to a complete willingness to do so; from holding on to a need to be always right or perfect to a willingness to make mistakes, analyze them, and grow. Talk about how their various stances impede(d) or fuel(ed) their progress.
2. Discuss this quote: “Great ones are willing to get burned time and again as they sharpen their swords in the fire.” How can you cultivate in your students a willingness to learn from their mistakes and continue to fully invest in ongoing learning rather than give up or only work in a half-hearted way?

CHAPTER 11: MAKING SMALLER CIRCLES

INTROSPECTIVE DISCUSSION

1. How would you describe your approach to information these days? Are you a skimmer, flitting from one source to another, skirting along the surface and absorbing many shallow bits of knowledge? Or do you spend time diving deeply into just a few sources of information? What do you think the ultimate impact of your approach is on your own learning process?
2. What is your reaction to Josh's preference for depth over breadth? Do you share his perspective that one must “plunge into the detailed mystery of the micro in order to understand what makes the macro tick”? Why or why not?



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3. Josh took a step-by-step approach to learning Tai Chi, sequentially mastering each set of fundamentals, absorbing the feeling that attended each stage, and then building on the prior phase of mastery to reach a new level. How do you go about building your personal knowledge base? Do you work at discovering the principles/axioms underlying techniques or concepts and then aim for deep internalization? What are your strategies for deeply internalizing knowledge?
4. Josh says “depth beats breadth any day of the week, because it opens a channel for the intangible, unconscious, creative components of our hidden potential.” Discuss this notion as it relates to your understanding of your own creative bursts and inspirations—mentally review your most significant accomplishments and seeming leaps of understanding and inspiration; track what you think enabled you to arrive at these.

TEACHING INSIGHTS AND STRATEGY

1. Talk about your students approach to absorption of information. Assess the impact of your students’ approach on their learning.
2. When discussing his mastery of Tai Chi Chuan, Josh says that it was key for him “to recognize that the principles making one simple technique tick were the same fundamentals that fueled the whole expansive system.” Have you identified the concepts and ideas that are most fundamental to the subject(s) you teach? Make a list of these and discuss them with your colleagues. Is your teaching rooted in the fundamental principles of your subject? If so, do you take the next step of exploring how those principles connect to other areas of life?
3. Do you relate to the notion of interconnectivity within a system of learning? Discuss strategies for conveying the interconnectedness of all concepts within a given area of study. Talk about ways you can help your students perceive the connections between disparate areas of study so as to help them grasp seemingly new topics more readily.
4. When it comes to your classroom teaching, do you make sure that your students have absorbed, refined, and truly internalized a basic skill set before advancing them to a more complex set of ideas and skills? Why or why not? Do you have concrete methods for helping your students drill down to the fundamental principles/axioms underlying a concept? How do/can you help them arrive at a *profound* understanding of fundamentals



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and help them see how essential this foundation is to further learning? Discuss the support or lack thereof of your school system with regard to this educational approach and what can be done to further enhance support.

5. Discuss the concept of “depth beats breadth” in terms of helping fuel students’ creative insights, and helping them gain an understanding of how to generate the leaps associated with excellence and mastery.

CHAPTER 12: USING ADVERSITY

INTROSPECTIVE DISCUSSION

1. Josh stresses the importance of undulating between external and internal training or preparation. What do you do to prepare yourself mentally for your work and other pursuits? How often do you engage in this/these practice(s)? How would you describe the impact of your preparation?
2. By using one hand to combat partners with full use of their two hands, Josh discovered how to accomplish ‘more with less’, and the silver lining of his impairment. He also engaged in an intense visualization practice to strengthen his weak right side. What has been your typical reaction to adversity in your own life? Have you used setbacks, physical or mental, to figure out how to improve yourself and turn the adversity into an advantage? If so, in what ways?
3. Josh writes about “creating ripples in our consciousness, little jolts to spur us along, so we are constantly inspired whether or not external conditions are inspiring”. How do you create inspiration for yourself? Do you have an internal mechanism for the creation of inspiring conditions? Did you arrive at this mechanism by virtue of your response to an adverse external event or obstacle? If not, do you see how you might adapt a prior positive response to adversity to your ongoing work to boost growth and performance? Discuss how you might do this.



TEACHING INSIGHTS AND STRATEGY

1. What do you do to help your students mentally prepare for their tasks and tests?
2. How do your students typically approach obstacles and losses? How can you help them transform their setbacks into fuel for learning and see that such challenges are opportunities for getting ‘imaginative’?
3. Discuss how students can be taught to utilize an internal strategy to inspire themselves.

CHAPTER 13: SLOWING DOWN TIME

INTROSPECTIVE DISCUSSION

1. Josh describes experiences of working with the unconscious parts of his mind in this way:

“I would take in vast amounts of technical information that my brain somehow put together into bursts of insight that felt more like music or wind than mathematical combinations. Increasingly, I had the sense that the key to these leaps was interconnectedness—some part of my being was harmonizing all my relevant knowledge, making it gel into one potent eruption, and suddenly the enigmatic was crystal clear.”

Have you experienced similar bursts of understanding? Describe your personal experiences of intuition and what conditions/realities you think fueled the sudden comprehension and/or solution(s)? Can you relate to Josh’s sense of time having been slowed down during his episodes of sudden insight? How so?

2. Have you worked at cultivating a connection to your unconscious self—one you can activate at will? If so, how have you done this? Do you view this sort of connection as a mechanism for accessing and navigating your body of internalized knowledge? What methods do you employ for navigating your knowledge base and synthesizing information to maximize its utility? To fuel insight when considering critical questions and issues, Josh suggests this method: Take a break and ‘sleep on it’,



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then bring your mind back to the matter the next morning or later on that day.

TEACHING INSIGHTS AND STRATEGY

1. Josh encapsulates the road to mastery in this way:

“You start with the fundamentals, get a solid foundation fueled by understanding the principles of your discipline, then you expand and refine your repertoire guided by your individual predispositions, while keeping in touch, however abstractly, with what you feel to be the essential core of the art.”

He expands on this description by elucidating the brain’s capacity to find a ‘harmonizing/logically consistent strain’ or “organizing principles” and patterns that link the vast amounts of information it stores. In what ways do your own teaching strategies follow or deviate from Josh’s description of the steps to mastery? Do your teaching methods enable construction of a network of information that builds on a foundation of fundamentals and gradually expands to afford a broad perspective? If not, how might you change your strategies to allow your students to access their expanding reservoir of information, perceive connections, and arrive at creative insights?

2. Josh explains that as the knowledge base grows,

“learning becomes unlearning—a matter of sequentially grasping principles that are exceptions to the ones initially mastered. At this level, psychology transcends technique—relaxation of the conscious mind allows the unconscious to flow unhindered without losing precision. One can perceive much more with less conscious thought, look at very little with the conscious mind yet at the same time see a great deal with the unconscious mind. Since the conscious mind is focusing on a narrow band, it has less to deal with and can perceive greater detail in less time—and so time feels slowed down.”

What are your ideas for integrating deep and sustained practice into your students’ learning such that you enable them to train their brains in the manner Josh describes? How can you enable them to internalize increasingly complex layers of knowledge so thoroughly that their brains



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are able to utilize it on an unconscious level and their conscious minds are freed up to focus on and grasp the details of a smaller amount of information and formulate creative solutions?

CHAPTER 14: THE ILLUSION OF THE MYSTICAL

INTROSPECTIVE DISCUSSION

1. This chapter emphasizes the critical value of psychological awareness and understanding, and starts by explaining that there are parallels between how one approaches life's daily realities, and how one approaches learning and mastery of a discipline. Discuss some of life's mundane situations in which emotional intelligence plays a critical role.

TEACHING INSIGHTS AND STRATEGY

1. How does psychological understanding of your colleagues impact on your relationships with them, and ultimately, on the progress of your school? Discuss strategies for enhancing communication and understanding.
2. How does your understanding of the character nuances and emotional tendencies of your students impact your approach to teaching? Do you probe and consider the dispositions of your students so as to engage them and motivate them more effectively? Discuss effective strategies for doing so.
3. How does acute awareness of the psychology of one's classmates affect a student's in- and out-of-classroom success? How can you cultivate and develop your students' emotional awareness and sensitivity?



PART III: BRINGING IT ALL TOGETHER

CHAPTER 15: THE POWER OF PRESENCE

INTROSPECTIVE DISCUSSION

1. Think about your own level of presence in varying situations: To what degree are you able to be “at peace with mounting pressure”? Rate your threshold for both internal and external discomfort.
2. Think about your various activities in daily life. Do you spend much of your time just “going through the motions”, or are you fully connected to your pursuits and reaching for the rich learning potential of each moment and, therefore, for excellence? Make a list of your commitments and activities and rate them on a scale of 1-5 in terms of your investment in them—this is not about time but rather about your commitment to excellence. Consider how your degree of presence fuels or inhibits your learning process. Now think about how your level of presence affects your degree of personal success.
3. Josh says “in the absence of continual external reinforcement, we must be our own monitor.” To what degree are you able to serve as your own monitor, perceive what you need to do to promote personal growth and expression, and take the steps required? What do you think prevents you from effective self-monitoring?

TEACHING INSIGHTS AND STRATEGY

1. Think about your students: To what degree have they cultivated an ability to be present? How has their greater or lesser capability for presence fueled and enriched their learning process? Do you think there is a correlation between your students’ ability to excel and their capacity to stay present? How can you help them develop the quality of presence and help them create “a lifestyle of reinforcement” so that they reach beyond test scores and grades and instead strive to maximize each moment’s creative potential?



2. What can you do to help give your students the skills to evaluate their own progress, self-correct, and move forward?

CHAPTER 16: SEARCHING FOR THE ZONE

INTROSPECTIVE DISCUSSION

1. Is sustaining a consistent level of performance—at work, at home, in other areas of your life—difficult for you? List what you believe to be the sources of your difficulties. Josh writes about his ability to bring a high level of energy to certain tasks but inability to perform at an equally high level over the long term. Can you relate to this pattern? Talk about your own issues with burn-out.
2. Josh writes “that in virtually every discipline, one of the most telling features of a dominant performer is the routine use of recovery periods.” Have you integrated such periods into your own life? What have you done? If not, what strategies can you employ?
3. This chapter elucidates the connection between physiological training and recovery from mental exhaustion and tension. Have you or do you now employ any physical ‘flushing’ techniques to boost your mental clarity? Have you engaged in any form of interval training? If so, what types?
4. Consider how you might incorporate the rhythm of stress and recovery into *all* aspects of your life to bolster personal resilience and creativity; make a list of these ideas.

TEACHING INSIGHTS AND STRATEGY

1. Do you see oscillating patterns in your students’ performance arc—an ability to bring a high level of energy to certain tasks but inability to perform at an equally high level over the long term? Discuss what you perceive to be the underlying reasons for the inconsistencies and what you can do to help achieve greater evenness.



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2. Consider your students and the various pressures they are under. To what degree do you think they have integrated periods of and strategies for recovery into their schedules? What kind of ‘recovery’ actions do they engage in? How can you communicate and help them understand the value of relaxation and recovery and their positive impact on learning and performance—especially in pressured conditions?
3. Josh describes players who are able to relax and let things go in brief moments of inactivity. Beyond giving your students an understanding of the importance of recovery periods and their impact on efficient thought, what sorts of brief breathers can you integrate into the classroom to help fuel concentration? How might you engage the students in devising breathers that are effective for them, activating recovery even under very strained personal, academic or sports-related circumstances?
4. How might you guide your students to incorporate the rhythm of stress and recovery into *all* aspects of life in order to enable them to move back and forth more smoothly between stressful and relaxing conditions and access unconscious levels of creativity? Having students journal about their personal strategies and their results in and out of the classroom might be a useful way to engage them and activate commitment.

CHAPTER 17: BUILDING YOUR TRIGGER

INTROSPECTIVE DISCUSSION

1. Reflect on the messages you received during your childhood about *focusing* and *paying attention*. Do you think you learned to associate periods of inattention with ‘being bad’? If so, did such messages lead to a pattern of concentrating/exerting to the point of meltdown?
2. Discuss Josh’s notion concerning the many anti-climactic moments in life—namely, that all moments that lead up to and follow the times we think mark the beginning of our *real* life are not periods of waiting but rather *life* itself. He says that we must be fully present to and able to dive deeply into the hours that appear normal and humdrum in order to learn and find both success and happiness. What are your thoughts about this? Do you find yourself unable or unwilling to “dive into the banal”? Are you



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- forever looking ahead or into the past instead of finding the richness of the present?
3. How has your view of and approach to daily routines vs. the seemingly destiny-shaping periods affected your performance during climatic moments? Discuss this issue from both professional and personal perspectives.
 4. List and discuss the activities or thoughts that you know foster a state of serene focus in you. Discuss how you can create a routine of these and carve out time to practice it on a regular basis, and then, after a time, use it to cultivate a sense of presence and calmness before important and charged moments.
 5. Create and discuss a plan for slowly and incrementally (via a series of very small changes) condensing your routine for inducing serene focus. When creating this plan take into account the power that visualization alone can wield.
 6. Josh emphasizes the importance of good nutrition—do you have a particular eating strategy for preparing yourself for exertion and for avoiding sugar crashes and dulled senses? What is your strategy?

TEACHING INSIGHTS AND STRATEGY

1. What sorts of messages are you conveying to your students regarding concentration and paying attention, and “fueling up” vs. “last-minute cramming”?
2. Consider your students: Josh says that the real power of incremental growth lies in its steady, ongoing nature—similar to the steady carving power of water, which just keeps ‘on flowing when everything is on the line.’ How can/do you lead your students to integrate patterns of learning and creativity into their daily routines that enable them to stay even and deliver, both for the big test, and beyond? Identify the learning habits that could help keep students on an even keel and promote growth.
3. How can you help your students pinpoint their personal catalysts for recovery and undistracted presence so that they can shape a routine with them, which, after a period of practice, can also be used just prior to critical tests and events to fuel academic and athletic performance?



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4. Discuss how you can guide your students to devise a step-by-step plan for condensing their personal relaxation-and-focus-boosting routine.
5. Discuss your students' apparent approaches to nutrition and the ways that the school day or the school's food offerings may act as a hindrance to a more optimal nutritional status. How can you systematically identify and communicate more beneficial habits to them?

CHAPTER 18: MAKING SANDALS

INTROSPECTIVE DISCUSSION

1. Think about your emotional disposition and your feelings about and resultant reactions to various circumstances. Are you a person who freely expresses your emotions—or do you tend to deny and repress them? To what degree do you do this? Would you describe yourself as introspective—do you turn inward and attempt to analyze and understand your reactions, perhaps in an effort to alter them? How do you think your relationship to your own emotions has affected your performance in your personal and professional life? Has emotion fueled or hindered your ability to concentrate and focus? How has emotion affected your creativity and your general progress in your work and personal life?
2. Josh details three steps that are critical to 'resilient, self-sufficient performance': learning to a) flow with distraction; b) use distraction for inspiration; and c) recreate internal settings for inspiration—'make sandals'. Consider these steps specifically in the context of the emotions of irritation and anger and honestly assess your level of achievement of *a* and *b*.
3. A key aspect of success is being prepared for imperfection—acknowledging reality and instead of denying natural emotions, using them to spark creative states of inspiration. Josh calls this process 'converting passion into fuel'. Think about and write down how you might go about working on yourself, first raising your 'tolerance for turbulence' rather than denying it, then building a trigger for funneling your emotions into creative expressions and actions.



TEACHING INSIGHTS AND STRATEGY

1. Discuss your students' issues with anger and fear, and the impediments they represent for learning and high functioning. Josh writes that when it comes to disruptions caused by anger, it is important to recognize that "the problem is mine." He further says: "I had to learn to deal...with a cool head. Getting pissed off would get me nowhere in life." How can you communicate to your students the value of cultivating an ability to stay cool under bad conditions and of viewing difficult circumstances as opportunities for expanding one's threshold for turbulence (by gaining new skills and addressing one's natural emotional responses)? What specific strategies can you give them for maintaining a cool head?
2. Discuss how you can help students raise their 'tolerance for turbulence', then build a trigger for funneling their emotions into creative expressions and actions in a way that is in keeping with their personalities.

CHAPTER 19: BRINGING IT ALL TOGETHER

INTROSPECTIVE DISCUSSION

1. Give some thought to the notion of individuality as it pertains to learners and learning. Josh writes: "The real art in learning takes place as we move beyond proficiency, when our work becomes an expression of our essence." Make a list of your unique strengths and characteristics. Now, consider how you apply these to your daily work and shape your endeavors with them; think about how your unique disposition expresses itself in actions that promote personal success.
2. Discuss your thoughts related to Josh's pyramidal concept of creativity—creativity's relationship to a foundation of knowledge upon which condensed chunks of technical information and principles can be built and lead to inspired discoveries. Have you ever regarded your sudden inspirations, epiphanies and leaps of creativity as products of this sort of pyramidal process?



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TEACHING INSIGHTS AND STRATEGY

1. Have your students make a list of their unique strengths and characteristics and, then, have them consider how they apply these to their daily activities. The objective is to prompt them to gain an awareness of that which makes them unique—qualities that should be expressed in all that they do.
2. What strategies can you give your students to enable them to analyze and understand their breakthroughs such that they can be re-created at will, thus raising the foundation for new and more advanced creations? This process is critical for the development of a repertoire built around an individual's unique disposition.
