



The Art of Learning *project* A W. M. Keck Center Initiative

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





The Art of Learning *project* A JWF Foundation Initiative

A Note about The Guide

The Students' Guide to *The Art of Learning* is a series of questions and exercises designed to give students a deeper understanding of the principles in the book as well as concrete ways to apply them to further self-awareness, learning, performance, and growth.

Some students will work with the content on their own; others will participate in classroom discussions and execute written assignments under the guidance of an educator. Whatever the case, we encourage all users to make this work their own by focusing on the content that is most relevant.

As always, we are here to support you—please don't hesitate to contact us.

Enjoy!

Sincerely,

The JWF Team



INTRODUCTION:

Josh talks about how fame diluted his inspiration and distracted him from the peaceful feeling he got from intense reflection and his study of chess.

IN-CLASS DISCUSSION

1. Have you found that the desire to get a high grade, earn a trophy or win admiration can get in the way of learning and performance? Share your thoughts and experiences regarding this issue.
2. Do you feel that all fields are connected in some manner? Describe your sense of these connections. Have you found that some of the study, analytical, or athletic skills you've gained or are gaining now can be applied to a variety of subjects? How so?

WRITTEN ASSIGNMENT:

1. Think about your own learning process. Are you, for example, more of an auditory, kinesthetic or visual learner—or are you some combination of these? Describe your learning method. Feel free to delineate different approaches you take to different subjects, but also analyze where your methods overlap.



PART I: THE FOUNDATION

CHAPTER 1: INNOCENT MOVES

IN-CLASS DISCUSSION

1. Do you think your unique, natural learning style or personality has been squelched or supported while being instructed? Consider this question with regard to a variety of subject areas. Are you able to express your personality through your pursuit of subjects you are studying? How so? If not, what do you think is preventing you from doing so?
2. Do you feel you have an honest relationship with your parents and instructors with regard to praise and critique? Have the compliments and criticisms you've received or are now receiving been constructive and conducive to continued learning? Why or why not?
3. Describe the nature of the balance that others have struck for you (at school, on the playing field, and at home) between winning or achieving a high score and keeping passion alive. What have various teachers and your parents done to stimulate interest in the subject(s) you are studying beyond the reward of a good grade or a compliment?

WRITTEN ASSIGNMENT:

1. Josh writes about his early and immediate attraction to chess. Have you ever felt an instantaneous connection to a particular 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 then and/or now one or more mentors to nurture your passion and skill set? Talk about them and the ways in which they encouraged/cultivated your interest and progress.
4. How do your parents, mentors or teachers "set you straight" when they think you are pursuing wrongful ideas, refusing to learn new ways, or holding to an ineffective approach that prevents you from progressing.



The Art of Learning *project* A MENTORING INITIATIVE

5. Do you think you are emotionally prepared for both “wins” and “losses” in your academic and extra-curricular pursuits? Talk about the ways in which you think you are prepared and the ways in which you are not. Do you consider yourself emotionally prepared to do the work necessary for learning and steady growth? Describe the emotional states that hinder or further your progress and what gives rise to these.

CHAPTER 2: LOSING TO WIN

IN-CLASS DISCUSSION

1. Do you take regular breaks from your daily routine? Describe your ways of taking breaks. Are these restorative for you and do they give you a new and more creative perspective on the issues and situations you face?
2. Josh writes about the importance of ‘fun’ in his study of chess. Do you ever experience a sense of joy in your studies or is it missing? If you do, what form does it take in your various classes? What would make the studies more enjoyable? Be specific and realistic about what is doable in a classroom or homework setting.
3. 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?
4. Talk about the range of your responses to loss in competitive situations and to unsatisfactory scores or grades. What would make you want to persist and push harder when you become dispirited? Have you ever been pushed too hard? Describe the circumstances.

WRITTEN ASSIGNMENT:

1. Josh describes the critical importance of his parents in his life. Who, if anyone, in your life has provided essential emotional support through ‘thick and thin’ and how did/do they give this support? Talk about your perceptions/ideas regarding effective and ineffective support strategies.



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2. Reflect on 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 hindered it? How or how not?
3. How important do you think it is to have a balanced, even-keeled sense of confidence to progress in the classroom and on the playing field?
4. What are your thoughts regarding this question, which Josh posed to himself after losing his first big tournament: Is there “worth outside of winning?”

CHAPTER 3: TWO APPROACHES TO LEARNING

IN-CLASS DISCUSSION

1. Josh poses this question at the beginning of the chapter: “If ambition spells probable disappointment, why pursue excellence?” What is your answer to his query?
2. After a test or assignment is graded and handed back to you, or after a game or practice session, are you offered follow-up of any kind? What are your ideas for your own and instructor follow-up that could help lead you down an ‘incremental learning’ pathway.

WRITTEN ASSIGNMENT:

1. Do you have an *entity* or *incremental* perspective of your own intelligence? What do you think caused you to have this point of view?
2. How do you think your views of your own intelligence and abilities have affected your ability to learn, your academic progress, and your performance in various subjects/pursuits—including athletic and artistic ones?
3. Consider the language you use and others use/have used to talk your abilities, wins and failures. Write down concrete examples of these reactions. Are the ways in which you speak more in keeping with an *entity* or *incremental* theory of intelligence? How might you change your words



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and thoughts to shift towards an incremental attitude toward and approach to learning—an approach of hard and devoted work over the long term?

4. 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? Cite examples. Have you been/are you now willing to draw wisdom from every experience—both good and bad? How can you cultivate this willingness?
5. Are you more inclined to reach for immediate results rather than undertake a path of prolonged effort? Think about and then discuss how setbacks and mistakes hold lessons that show us how to succeed. Give examples of how you might have handled past setbacks differently so that they could have promoted greater progress.

CHAPTER 4: LOVING THE GAME

IN-CLASS DISCUSSION

1. Both your long-term learning process and your short-term goals are important—how do you strike a balance between them? Talk about your ideas for achieving balance.
2. Do you believe that taking on competition and pitting yourself against an opponent with equal or superior skills can promote learning and mastery? Why or why not? Do you willingly do this or do you shrink back from such challenges? If you do hold yourself back, why do you think you do so?
3. Write down messages that one can say to oneself to foster both internalization of a process-first approach and appreciation of personal wins. Discuss these thoughts aloud.
4. 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.” Talk about how you can motivate yourself to meet challenges with maximal effort and stretch yourself beyond your present notion of your own limits?



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WRITTEN ASSIGNMENT:

1. Do you express your personality through your pursuits? Discuss how you do this and the reasons why some of your pursuits and learning methods do not allow your personality or natural approach to come through—if such is the case.
2. Share your ideas for expressing your unique personality and learning style through all the various subjects you are learning. What about them sparks a sense of excitement in you?
3. Discuss the factors (for example, passion, fear of failure, a desire to win and succeed at accomplishing goals...) that motivate your actions in the key areas of your life (e.g., school, sports, other extracurricular activities, social life, family life).
4. Do you try to put everything on the line and give ‘your all’ to your pursuits? Do you sometimes offer up less than ‘your all’? Why do you think this happens? Why might changing this be worth your effort and what can you do to change?

CHAPTER 5: THE SOFT ZONE “LOSE YOURSELF”

IN-CLASS DISCUSSION

1. 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.
2. Discuss ways you can cultivate focus and mental resilience so that you can stay on track (without denying your natural reactions) when faced with disruptions, whether environmental, psychological, or physical? Talk about ideas you have for ways others can support you in these efforts.
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? Discuss your ideas for building up the ‘muscles’ necessary for taking on challenges rather than avoiding them. How do you think others can help you ‘build up muscles’, bearing in mind Josh’s comment that “this type of internal work can take place in the little moments of our lives,”?

WRITTEN ASSIGNMENT:

1. Detail some of the large and small challenges you have confronted in your life. How have you handled these unexpected disruptions? 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 so? How did the disruptions feel at the time they occurred and after?
2. What are your responses these days to distraction or difficulties? Talk about the different kinds of challenges you face.
3. Think about your use of technology—e.g., playing videogames, Facebook, text messaging, emailing, surfing the internet, watching TV, listening to music. How do you juggle these activities with your studies, extracurricular tasks, work responsibilities, and face-to-face social interactions? Discuss how this multi-tasking is impacting your academic progress and emotional status.

CHAPTER 6: THE DOWNWARD SPIRAL

IN-CLASS DISCUSSION

1. 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 (*stuck in*) an occurrence that has already passed. Give one or more examples.
2. 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? If you don’t have any right now, think about and describe some methods you think would be effective for you to practice.



The Art of Learning *project* A MENTORING INITIATIVE

3. 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." Cite examples from your own or someone else's life.
4. Identify and talk about fellow students and others (e.g., people in the public arena or historical figures) who have demonstrated a capacity to move past their errors and other obstacles in their lives. Analyze their shared characteristics and their unique strategies for staying present and progressing. [Can be Research-Based]

WRITTEN ASSIGNMENT:

1. Do you have an attachment to perfection in one or more areas of your life? Do you see how perfectionism can translate into "a brittle dependence on the safety of absolute perfection"? Write about how this dependence and brittleness manifest/have manifested in your life.
2. Have you ever experienced, or witnessed in someone else, a process whereby an error "triggers fear, detachment, uncertainty or confusion that muddies the decision-making process"? Talk about this(these) experience(s).
3. What does 'being present' mean to you?
4. 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? Have you ever witnessed someone else going through a downward spiral? Give examples. What do you think caused these to happen?
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? How do you think others (parents, teachers, coaches, fellow students) can help you prevent or exit a chain reaction of errors and mishaps?



CHAPTER 7: CHANGING VOICE

IN-CLASS DISCUSSION

1. Has your passion for and sense of connection to a pursuit ever changed midstream? In what ways did they change? Talk about the factors that led to this.
2. How would you describe your natural voice? Have you ever experienced roadblocks to the expression of your native leanings and disposition? Discuss these obstacles.
3. Josh describes developing a method of study “that made chess and life begin to merge in my being.” Have you ever had the experience of an academic subject or extracurricular pursuit merging with your sense of your deeper self and your broader life through your own method of study? Talk about this experience(s).
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 state? If so, were you able to see the connections between your broader life and the behaviors and decisions related to your particular pursuit? Discuss.
5. 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. Talk about the methods you already employ to resolve emotional issues that hinder your personal performance. Now discuss ways others can support you in understanding and resolving emotional barriers to successful learning and performance.
6. 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.
7. Discuss what you have learned about yourself through your pursuits and the approaches you have taken to engaging in and managing them. What



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are your thoughts for shaping your own learning process such that it fosters an ever-growing self-awareness?

WRITTEN ASSIGNMENT:

1. This 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 5 or 10 errors in judgment or process that come to mind. In one column, list academic or sports mistakes, and in the other, lapses in your personal life.
 - Do you notice any patterns? Detail these from both a technical and psychological perspective.
 - Now, repeat this exercise, but this time list your successes. Describe the patterns behind your best personal and academic/sports 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?
 - Discuss the psychological barriers and strengths you bring to bear on your learning process and academic and/or sport performance.

CHAPTER 8: BREAKING STALLIONS

IN-CLASS DISCUSSION

1. 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.” Describe your ‘natural voice’.
2. Has your ‘natural voice’ ever been compromised while learning something new? How so? Do your parents, teachers and coaches give consideration to your unique disposition and learning style when teaching you new things? Talk about the specific ways they adapt their teaching methods to cater to the different learners in your classes and support your and their distinctive approaches to creativity. How do you think they can they do a better job of this?



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3. With which of the two teachers Josh describes do you resonate? Why? Do your school and district support the teaching style you prefer? How or how not?

WRITTEN ASSIGNMENT:

1. Discuss the notion of approaching the learning process with a child's lighthearted love of discovery and fearlessness. Do you recall ever having adopted this attitude? Talk about why or why not—in what ways have you been supported or prevented by others from taking a child-like approach to learning? If you have taken this approach, do you think a child-like mentality unleashed your learning process and your performance?
2. 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.
3. Have you ever had the experience of being able to perceive connections between entirely disparate subject areas or circumstances? Cite examples of the interconnectedness you've perceived. What fueled your own intuitive leaps?
4. 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. Talk about the approaches typically applied in your classrooms, your home, and on the playing field.
5. Consider your own learning processes with regard to both academic and extracurricular subjects. Have/do they strike a balance between personal creativity and technical awareness of the subjects? What steps do you think you can take to better achieve this sort of equilibrium? Share your thoughts for ways your instructors and parents can help you strike this balance and enable you to absorb technique and fundamentals in a manner that you find personally relevant and expressive.



PART II MY SECOND ART

CHAPTER 9: BEGINNER'S MIND

IN-CLASS DISCUSSION

Consider reading the Tao Te Ching prior to the 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.” Can you resonate with his notion that the assimilation and application of information involves transcending its concrete characteristics? Why or why not?
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 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”. What do you think he means by *awareness*? How do you define *awareness*? Discuss your view of the importance of *awareness* to successful learning.

WRITTEN ASSIGNMENT:

1. Josh portrays William Chen’s teaching style as “understated” with much of his subtle instruction going unnoticed. How would you describe your own teachers’ styles (break down by various subjects) and your reaction/responsiveness to them?
2. Chen is said to have sent the message: “If I can do it, you can do it.” Do you think your teachers/coaches convey a similarly humble message to



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- you? Do you accept that you can master the subjects you are being taught in the way that your teachers/coaches have? Why or why not?
3. Consider the Tai Chi perspective that “if there is tension in one place, the mind stops there.” Do you think this concept has relevance to learning in general? What are the sorts of obstructions to mental fluidity that you encounter(ed) in yourself? How have you gone/can you go about removing such obstructions?
 4. 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 work toward easing your mental stresses? How, specifically, are you doing this? Do you, for example, exercise regularly? Describe the results of your efforts.
 5. Describe your understanding of the relationship between your mind and body. Do you sense a connection between the disparate elements of your being? What physical practices can you undertake/are you undertaking to help you be more mindful of this connection and cope with your mental stressors?

CHAPTER 10: INVESTMENT IN LOSS

IN-CLASS 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 in order to make progress in a new, or even an old, pursuit? 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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WRITTEN ASSIGNMENT:

1. Think about and discuss the range of your 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 your various stances hinder or fuel your progress.
2. Josh viewed his vulnerability and the pain he endured in practice as *opportunities* to master Tai Chi Chuan’s nuances. Cite examples of mistakes you have made on tests, assignments, and in other areas of your life and the ways in which you handled these. Did you accept your mistakes, forge ahead, try to learn from your errors, revamp your ways, and continue to give your tasks your all? Or did you get defensive, shrink back, and proceed as you had in the past? Are you willing to learn from your mistakes and continue to fully invest in ongoing learning rather than give up or work in a half-hearted way? Why or why not? How will you cultivate/are you cultivating a full-blown investment in learning?
3. Discuss this quote: “Great ones are willing to get burned time and again as they sharpen their swords in the fire.” Research and cite examples of historical figures or present day influencers who embodied/embody this approach and therefore made/are making important strides.

CHAPTER 11: MAKING SMALLER CIRCLES

IN-CLASS DISCUSSION

1. How would you describe your approach to absorbing information these days (bear in mind your use of technology and digital sources)? 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 micro tick”? Why or why not?



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3. 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.” Make a list of the concepts and ideas that are most fundamental to the subject(s) you are studying; organize these by subject. Do you perceive an interconnectedness between the fundamentals of the different subjects? Discuss the notion of interconnectivity and why these links are meaningful.
4. Talk about how your teachers can cast more light on the interconnectedness of all concepts within a particular area of study?

WRITTEN ASSIGNMENT

1. 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? Discuss your strategies for deeply internalizing knowledge?
2. When it comes to your academic learning, do you make sure that you have absorbed, refined, and truly internalized a basic skill set before advancing to a more complex set of ideas and skills? Why or why not? Share any thoughts you have regarding the teaching methods that interfere with or support your mastery of basic skill sets. Do you have concrete methods for drilling down to the principles/axioms underpinning of a concept? What are these?
3. Josh says that “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 stunning accomplishments and seeming leaps of understanding and inspiration; track what you think enabled you to arrive at these. Now address your failures and setbacks—did these arise from a more shallow approach to learning?



CHAPTER 12: USING ADVERSITY

IN-CLASS 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 academic work and other pursuits? How often do you engage in this/these practice(s)? How would you describe the impact of your preparation? Discuss your ideas for how your teachers, coaches and parents can help you mentally prepare for your tasks and tests.

WRITTEN ASSIGNMENT

1. 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? How do you typically approach obstacles and losses? How do you think you can transform your setbacks into fuel for learning and see that such challenges are opportunities for getting ‘imaginative’?
2. 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 so, explain the circumstances. If not, do you see how you might adapt a prior positive response to adversity to your ongoing effort to boost growth and performance? Discuss your thoughts about how you might do this.

CHAPTER 13: SLOWING DOWN TIME

IN-CLASS DISCUSSION

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



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“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 ever 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?

WRITTEN ASSIGNMENT

1. 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’, then bring your mind back to the matter the next morning or later on that day.” Try this approach for two weeks and document the results in a daily journal.
2. 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. Consider your own learning strategies: In what ways do they follow or deviate from Josh’s description of the steps to mastery? As you think about the various subjects you have undertaken, have you/are you constructing 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



The Art of Learning project A WU Foundation Initiative

approach to learning to access an expanding reservoir of information, perceive connections, and arrive at creative insights? How do you think the educators in your life can help you do so?

3. 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 learning such that you can train your brain in the manner Josh describes—internalizing increasingly complex layers of knowledge so thoroughly that your brain is able to utilize it on an unconscious level and your conscious mind is 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

WRITTEN ASSIGNMENT

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. How does psychological understanding/emotional awareness of your peers impact on your relationships with them, and ultimately, on your progress inside and outside of school? How can you bolster your understanding of your fellow students?



PART III: BRINGING IT ALL TOGETHER

CHAPTER 15: THE POWER OF PRESENCE

IN-CLASS DISCUSSION

1. Think about your level of presence in varying situations: To what degree are you able to be “at peace with mounting pressure”? Describe your threshold for both internal and external discomfort.

WRITTEN ASSIGNMENT

1. Do you spend much of your time just “going through the motions” of your pursuits—or are you fully connected to them and reaching for the rich learning potential of each moment and, therefore, for excellence? Make a list of your obligations 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. Now, consider how your degree of presence and commitment fuels or inhibits your learning process and affects your degree of personal success. Write about the correlation you perceive between your capacity to stay present and your ability to excel.
2. How can you develop the quality of presence and create “a lifestyle of reinforcement” so that you reach beyond test scores and grades and instead strive to maximize each moment’s creative potential?
3. Josh writes, “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? Talk about ways you can develop skills to evaluate their own progress, self-correct, and move forward. What sorts of concrete methods can you put into action for such personal development? What specifically can your parents and educators do to help you?



CHAPTER 16: SEARCHING FOR THE ZONE

IN-CLASS DISCUSSION

1. Josh writes, “in virtually every discipline, one of the most telling features of a dominant performer is the routine use of recovery periods.” Have you integrated methods of relaxation and intentional recovery periods into your own life? What sorts? If not, think about and identify specific strategies for doing so.
2. What do you think the impact of relaxation and recovery is on your own learning and performance—especially when under pressured conditions?
3. Josh describes players who are able to relax and let things go in brief moments of inactivity. What sorts of brief breathers can you integrate into your school day to help fuel concentration and activate recovery even under very strained personal, academic or sports-related circumstances? Offer suggestions for this type of breather to your instructors.
4. 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?

WRITTEN ASSIGNMENT

1. Is sustaining a consistent level of performance—at school, at your job, at home, in other areas of your life—difficult for you? List what you believe to be the sources of your difficulties, if you experience any. Josh’s particular problem of burn-out manifest as an ability to bring a high level of energy to certain tasks but an inability to perform at an equally high level over the long term? Do you see similar patterns in your own performance arc? Discuss what you perceive to be the underlying reasons for the inconsistencies.
2. 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. Your goal is to be able to move back and forth more smoothly between stressful and relaxing conditions and access



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unconscious levels of creativity. Document in a journal the personal strategies you have implemented both in and out of the classroom and the results of your methods.

CHAPTER 17: BUILDING YOUR TRIGGER

IN-CLASS DISCUSSION

1. Josh emphasizes the importance of good nutrition—do you have a particular eating strategy for preparing yourself for exertion (whether mental or physical), and for avoiding sugar crashes and dulled senses? Discuss your approaches to nutrition.

WRITTEN ASSIGNMENT

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 melt-down? What sorts of messages do your teachers, coaches and parents now convey to you regarding concentration and paying attention, “fueling up” vs. “last-minute cramming”?
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”? Do you often find yourself looking ahead or into the past instead of finding the richness of the present? If so, why do you think this is the case?
3. How have your overall views of and approach to daily routines vs. so-called destiny-shaping periods affected your performance during climactic moments, both in class and in your extra-curricular activities? Josh says that the real power of incremental growth lies in its steady, ongoing nature—similar to the steady carving power of water, which keeps “on flowing when everything is on the line.” How do you/can you integrate patterns of learning and creativity into your daily routine that enable you to



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- stay even and deliver both for the big test and beyond? Identify the learning habits that could help keep you on an even keel and promote growth.
4. Consider and write down the activities or thoughts that foster a state of serene focus in you. Now talk about how you can create a routine of these and carve out time to practice it on a regular basis, and then, after awhile, use it to cultivate a sense of presence and calmness before important and charged moments.
 5. Create and discuss a step-by-step plan for slowly and incrementally (with 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. Document your food and drink intake over two weeks time and jot down notes of how what you ingest affects your mental status and performance. Draw conclusions about the impact of your nutritional patterns on your learning and performance. Write about the beneficial habits you can adopt to improve your outlook and performance.

CHAPTER 18: MAKING SANDALS

IN-CLASS DISCUSSION

1. Discuss your issues/experiences 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.” Discuss 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 are your specific strategies for ‘keeping cool’?



WRITTEN ASSIGNMENT

1. 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.
2. Think about your emotional disposition and your feelings about and reactions to various circumstances. Are you a person who freely expresses your emotions—or do you tend to deny and repress them? How so? 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 learning and your performance in your personal and professional life? Has emotion fueled or disrupted your ability to concentrate and focus? How has emotion affected your creativity and your general progress in your work and personal life?
3. Josh details three steps that are critical to ‘resilient, self-sufficient performance’:
 - a) Flow with distraction.
 - b) Use distraction for inspiration.
 - c) Recreate internal settings for inspiration—‘make sandals’.

Consider these steps specifically in the context of the emotions of irritation and anger you have experienced. To what degree do you think you have been able to achieve *a* and *b*? What are your techniques for flowing with distraction and using it for inspiration?

CHAPTER 19: BRINGING IT ALL TOGETHER

IN-CLASS DISCUSSION

1. 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 a product of this kind of



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knowledge pyramid? Analyze how you think you achieved breakthroughs and talk about strategies for re-creating them in ways that express your unique disposition.

WRITTEN ASSIGNMENT

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.”
2. Make a list of your unique strengths and characteristics. Now, consider how you apply these to your daily activities and shape your endeavors with them; think about how your unique disposition expresses itself in actions that promote personal success. The goal of this exercise is to gain an understanding of what makes you unique—qualities that should be expressed in all that you do.

