Professor Ken Kiewra University of Nebraska Study guide

The Art of Learning

Introduction

- 1. What qualifications and experiences does Josh bring to the writing of *The Art of Learning*?
- 2. What makes Josh's qualifications and experiences unique from other authors who've written about talent development?
- 3. Think about an area in which you excel. Now be insightful and recount the principles of learning you followed or even developed to gain expertise.
- 4. Josh said he "stumbled" upon a book that turned his life toward Tai Chi. Do you believe that that turn was pure happenstance? Why else might it have occurred? Can you think of other superstars who stumbled onto their Element?

Chapter 1: Innocent Moves

- 1. Chess seemed to come naturally to Josh. He writes of discovering a lost memory and feeling like he had done this before. Have you had such feelings before? Describe the circumstances. Can you think of other superstars who showed a natural attraction and affinity for a domain?
- 2. What do you already know about Josh's background that made chess a good organic match for him?
- 3. What were some of the teaching techniques that Pandolfini employed that were just right for Josh and characteristic of successful first mentors in general?
- 4. We were introduced to the term concerted cultivation in a previous book we read. Recall its definition and how it applied to Josh's upbringing.

Chapter 2: Losing to Win

- 1. Young Josh resides in a world of high-stakes, cut throat competition. Explain why his parents and teachers allowed Josh to reside inside this world. What did they do to shield him and help him through it?
- 2. Josh turns to the ocean and to family for healing and renewal. Where do you find these things? Can you recall how others we've read about or interviewed found solace?
- 3. What emotions did you feel and what thoughts did you have as Josh described his relationships with his mother and father? Speculate how important these relationships were to his development.
- 4. How did losing help Josh win? How does he turn lemons into lemonade?

Chapter 3: Two Approaches to Learning

- 1. Josh describes the entity and incremental approaches to learning. Recount what these approaches are and explain why the incremental approach is best.
- 2. What can parents and coaches do to help children develop an incremental approach? What might a parent say to his son who just struck out three times and who committed a crucial game losing error?
- 3. What's Josh talking about when he speaks of the classic anorexic hermit crab and how learning occurs between shells?
- 4. How did Josh learn chess from the foundation up? How might this approach work and pay dividends later for someone in a specific field outside of chess?
- 5. Howard Gardner said that one of the virtues of creative people is framing. Recount what framing is and explain how framing helped Josh succeed in chess.

Chapter 4: Loving the Game

- 1. Josh recognized that his chess strengths were in the classic endgame positions or in the stormy and complex middle game positions so he tried to steer games in those directions. Think about something you do well—perhaps teaching, running, cooking—and your strengths within that domain. How do you steer things toward your strengths?
- 2. Josh says that a key to learning is recognizing that the beauty of roses lies in their transience. What is he talking about and what is the lesson here?
- 3. Josh says that growth comes at the point of resistance. What does this have to do with competition and losing? What does it have to do with the three zones of practice we learned about earlier in the course: comfort, learning, and panic?

- 4. From the standpoint of attention, what problem can unfamiliar chess pieces pose? How might better regulation by Josh's parents or coach have prevented the unfamiliar chess piece problem?
- 5. How is Josh's change in chess coaches similar to what Bloom described in the progression of mentors?

Chapter 5: The Soft Zone..."Lose Yourself"

- 1. As I read this chapter, a deranged robin sporadically and intentionally flies into a window in the room where I am working. What might be a hard zone response to this distraction? What might be a soft zone (making sandals) approach?
- 2. Josh outlines three steps for handling unexpected events: a) flow with whatever comes, b) use whatever comes to your advantage, and c) actually create such events and feed off them. Create an example of an unexpected event and these three response methods.
- 3. Suppose you are taking a test and become distracted by someone loudly chewing and cracking her gum. You ask her to be quiet but gum-chewing silence is short lived. Describe how you find the soft zone.

Chapter 6: The Downward Spiral

- 1. Through Josh's insights and teachings, Ian learns the lesson of the lady and the bike and applies it to his chess game. Describe a situation where you might have benefited from this lesson but instead traveled through a downward spiral of progressive errors. Next, describe a situation where time and perception remained in sync and you were able to nip the first error in the bud before subsequent errors reared their ugly heads.
- 2. Give an example of how what is commonly thought of as a surge of momentum in sports might actually be the result of a downward spiral of errors by the opposing team.

Chapter 7: Changing Voice

- 1. Josh had a new mentor who encouraged him to play in a defensive style different from his attacking style. What are the problems associated with altering style? What might be the advantages?
- 2. I am having trouble understanding the concept of numbers to leave numbers. Can you explain it and provide an example?
- 3. Josh sometimes spent 30 hours seeking the truth of a chess position before finally gaining understanding. Does this surprise you? What comes from this sort of study as opposed to asking a computer to find the best moves?
- 4. Chess and life problems and solutions become entwined for Josh. What are your thoughts about this?

Chapter 8: Breaking Stallions

- 1. Josh seems to lose the playfulness, the child-like appreciation of chess. Rather than lose himself in the art and sport, he becomes a performer teetering on the chess beam and afraid to fall. What factors led Josh to this precarious and unhealthy position?
- 2. What was Josh's natural voice and how was it being squelched?
- 3. What does Josh mean when he says that he can learn Karpov from Kasparov? How might Beethoven be learned from Mozart or MAC from PC?
- 4. What are the advantages of breaking horses and developing a child's talent in a whispering manner rather than through shock and awe?

Chapter 9: Beginner's Mind

- 1. Josh's story reminds me a bit of Siddhartha's story. Siddhartha leads an ascetic life, followed by a life of lust, before striking a balance. How does Josh's life story so far seem to parallel Siddhartha's story?
- 2. Josh describes Chen as ageless and flowing when he is in his element. Where else have we seen such transformations in this book and elsewhere?
- 3. How is Josh's indoctrination into Tai Chi different from that of chess? How is it similar?
- 4. Josh speaks of students missing the subtleties of teachings. Recount examples where you've witnessed or experienced this firsthand. Why is Josh catching these subtleties?

Chapter 10: Investment in Loss

- 1. Describe how Josh's foray into Push Hands is handled more like the whispering method for taming a horse than the horse breaking method.
- 2. How does Push Hands fit with Josh's chess style? How does it not fit?

- 3. Why was Josh able to embrace the defensive style of Push hands but not the defensive style of chess play?
- 4. Think of other examples where people seem to defeat a thousand pounds of pressure with four ounces.
- 5. Explain how the investment in loss principle helped Josh improve but kept Evan from improving.
- 6. Think about the tough positions Josh put himself in during chess and Push Hands training and competitions. Is it any wonder that he succeeded? What was gained from this sort of preparation?

Chapter 11: Making Smaller Circles

- 1. How are Josh's chess and martial arts training similar with regard to the principle of making smaller circles?
- 2. Howard Gardner says that education would be better if instructors taught just one third of what they planned to teach during the same time frame. How does this notion fit with making smaller circles?
- 3. Describe how the notion of making smaller circles would benefit you in your pursuit of excellence.

Chapter 12: Using Adversity

- 1. Josh is injured. Rather than sit on the couch for six weeks and eat potato chips, what four things does he do to actually improve?
- 2. We need not wait for an earthquake or broken hand to spur us to deeper concentration. What might we do instead?
- 3. How might you use (perhaps even create) adversity to improve performance in a particular domain?

Chapter 13: Slowing Down Time

- 1. This chapter is built on the premise that time seemingly slows down in times of crisis such as when faced with an earthquake, a broken hand, or a child trapped beneath a car. Do you know of any scientific evidence that confirms this premise?
- 2. The focus of this chapter is the intentional slowing of time. According to Josh, how is this accomplished?
- 3. Josh credits the unconscious mind for allowing us to better navigate our connected chunks of information. How else might this process be explained without including the unconscious?
- 4. How does this chapter reconfirm the importance of the SOAR learning model?

Chapter 14: The Illusion of the Mystical

- 1. At the opponent's slightest move, I move first. Recount how this is possible in chess or the martial arts.
- 2. How might one read and control intention? Provide a novel example.
- 3. Garry Kasparov, the former chess world champion, was famous for blatantly loosening his watch when he felt that the game was won, even though victory might be many moves away. How might an opponent react to this psychological tell?
- 4. We get a better understanding of what Josh means by the role that the unconscious plays in learning from his story about the magician who engages the conscious mind leaving just the unconscious mind to detect the target card. Explain how it is important to operate beneath the conscious radar with respect to controlling someone's intentions.

Chapter 15: The Power of Presence

- 1. Had Josh been wielding the machete in the jungle, how might he have defeated the jaguar based on what we know of Josh so far?
- 2. Compare the jaguar's patient waiting game to the Karpovian style of chess that Josh rejected earlier. Given his martial arts training, what might he say about that chess style now?
- 3. How have you used the power of presence to improve and succeed? How have you allowed presence to slip and paid the price?

Chapter 16: Searching for the Zone

- 1. Why does reckless intensity not work as a means for establishing focus and long-term concentration? I've engaged in reckless intensity a few times while trying to stay awake on a long or late-night drive. Where have you experienced it and what was the result?
- 2. Given what you learned from this chapter, how will you create and take advantage of tiny havens for renewal in your work, hobbies, or daily life?

3. Josh advocates interval training to build endurance, high performance, and quick recovery. The news is recently filled with stories advocating interval training as well. Might you try it? Think it will help?

Chapter 17: Building Your Trigger

- 1. I once made a science of conserving and building my son's energy at big chess tournaments. I, like Josh, scoffed at those conducting lessons between rounds. Think about baseball. How should players harness energy during certain facets of the game?
- 2. What routine do or might you use to get in the zone before your own personal combat begins?
- 3. Josh was thrown off kilter at the 2000 Push Hand championships. How is this story like the one where he came late to a chess game and encountered strange pieces? What do both these stories have to do with regulation?
- 4. How can building a trigger enhance your everyday life?

Chapter 18: Making Sandals

- 1. Recount a time that your emotions got the better of you and caused you to fail or make a costly mistake. Is this a reoccurring pattern? Under what other circumstances is this negative emotion arising?
- 2. How might Josh handle the Boris chess distractions today?
- 3. Are you amazed by the incredible amount of deliberate practice Josh puts into handling dirty fighters? Describe what kind of deliberate practice you might do to counter an aversive situation that reoccurs in your life.
- 4. Reggie Miller is fueled by Spike Lee; Jordan by trash talking foes. What spurs you to raise your game? How can you create and pull such an emotional trigger that works for you under any circumstance?

Chapter 19: Bringing it All Together

- 1. Comment on the connection between Josh's search for and cultivation of a personal style and what Bloom describes as the last stage of creative development?
- 2. Josh grew up in New York City, a hotbed for chess—just minutes away from Washington Square Park—and an apparent U. S. Mecca for Push Hands training. To what degree did Josh's success result from that environment? What might have been his fate if born in Nebraska?
- 3. Several times in this chapter and in others as well, Josh mentions the study of videotape. What is he learning from studying these tapes? Think about this question because the ultimate prize of study is quite compelling.
- 4. What is meant by, "penetrating the macro through the micro?" Have you engaged in this process?
- 5. How is it that Josh can adopt a personal style so different in chess and martial arts? Does he have a split personality? Is he really basing his competitive style on his personality or his strengths?
- 6. Josh is not satisfied with only an improvement in technical skill. What is he really after?

Chapter 20: Taiwan

- 1. What a chapter; I'm exhausted! After following Josh's story, did you find yourself rooting for him as if he was your brother or son?
- 2. The deck was suddenly and completely stacked against Josh: Pedestals were removed, ring size was altered, the opening hold was changed, score keeping was suspect, a separate tournament for foreigners was advocated, between-round intervals were changed, and round times were extended. It's surprising that Josh didn't have to fight with one hand tied behind his back. How did Josh react to these unfair alterations or infractions, and how did his training prepare him for these "unforeseen" events?
- 3. Explain why this might be the most important sentence in the book: "Tactics come easy once principles are in the blood."
- 4. Josh spoke earlier about resting, building reserves, when not in competition. Why then is he watching the Buffalo's matches?
- 5. Josh enters both Push Hand competitions instead of just one even though a single two-day competition is grueling. In the final match, he does not want to be co-champion, he wants overtime even though he has lost chess championships pushing for a win when a draw would be enough to claim a championship. What's going on here?

Afterward

- 1. Josh says: "I believe the key is to have prepared in a manner that allows for inspiration, to have laid a foundation for us to create under the wildest pressures we ever imagined...In the end, mastery involves discovering the most resonant information and integrating it so deeply and fully it disappears and allows us to fly free." Comment on these closing thoughts.
- 2. Josh titled his book *The Art of Learning*. Perhaps *The Art of Mastery* is more fitting. What do you believe is the best title for this book and why?
- 3. Josh knows chess, martial arts, learning, and also writing. What was it about his writing that captivated you?
- 4. Tell two specific impacts this book has had on your personal journey?