Focus Questions for Inventology: How We Dream Up Things That Change The World

These focus questions are intended to aid you in the active reading of Pagan Kennedy’s “Inventology: How We Dream Up Things That Change The World,” one of the books selected by the faculty of the Syracuse University College of Law to help prepare you for your time studying law. This book was chosen by Professor Shubha Ghosh.

The questions are written with the intention of helping you. You won’t be tested on your answers and you can feel free to read the book without them should you choose. And there aren’t any correct answers for these questions. It’s more important to question the text and reflect on what the answers might be than to seek for a definitive “correct” answer.

The questions are designed to model the process of active reading, which is a skill with which you should already be familiar. Active reading is a crucial skill for doing well in law school, and the more adept you become at it before you come to school, the better you will do during your time here. If you would like to learn more about active reading, there is content discussing the topic in more depth on the Legal Writer’s Toolkit site.

You shouldn’t assume that these questions indicate a point of view or that they’re trying to steer you to answer them in a particular way. Rather, they’re intended to provoke you to think critically about what you read and to help you form your own conclusions, based on the information the author gives you about the topics discussed in the book.

We hope you enjoy Inventology, and we look forward to meeting you and working with you over the course of the next few years.
INTRODUCTION

1. The author asks if there is a formula for invention and, if so, can anyone learn it. Given the nature of a book such as this, what do you imagine the answers to both of these questions will be? Before reading any more, what do you think that formula will be? If you can’t imagine the whole thing, can you imagine what some of the constituent parts of the formula might be? Have you ever invented anything? Have you thought of things to invent but felt you lacked the technical or other knowledge that would have allowed you to follow through on the idea?

2. As you read this book, look closely at the way the author has structured the information in it. How many pages are in each section? Why does the book have five parts, each with three or four chapters, and why does each chapter have numerous subdivisions, each with its own heading? Is this an effective way of presenting information? In this a technique you can apply to your legal writing?

3. How does this introduction function? What is its purpose? Again, is this approach something you can use in legal writing?

4. This might sound fanciful, but sometimes lawyers have to invent solutions to their clients’ problems. Do you think anything you read here will help you in your legal research or in creating answers to the problems posed by your clients?

CHAPTER ONE

1. Have you participated in repetitive tasks like the ones the author describes? Have you invented ways to make these tasks less tedious? Were your solutions successful? If so, are you an inventor?

2. Are you surprised to read of the way in which suitcases with wheels were developed? Twitter? Are there lessons here for lawyers?

CHAPTER TWO

1. Notice how the author varies her sentence and paragraph lengths throughout this book. Why are some paragraphs shorter than others? Is this approach successful? Is this approach something you can use as a legal writer?
2. The author quotes Jon Schull as saying “[t]he tools of production are now in the hands of the masses.” Does this line sound familiar to you? Where might you have read of someone saying something similar before? Does this new approach to invention, design, and production spell a revolution in the way things are produced?

3. Do you feel the urge to interact with products in the same way we engage with the media that the author describes? How does this urge manifest itself?

CHAPTER THREE

1. The author discusses invention in terms of Western-centric bias. Do you agree? Does the author make her point convincingly? If so, what solutions are open to us to improve the situation?

2. Lawyers are often – usually – asked to solve the legal problems of clients who operate in fields about which the lawyer has no understanding. Does this matter, or should lawyers try to understand their clients’ businesses as they try to develop answers to their clients’ problems?

CHAPTER FOUR

1. The author describes Dick Belanger’s experience in having many good ideas that he decided not to try to follow through on, before finding the one idea that he thought would have significant commercial appeal. She describes this process as his “exquisite sensitivity to signals. . . .” Do you think lawyers must have similar instincts in their problem-solving role or do you imagine that the process for lawyers is very different?

2. The author also describes the concept of “continuous improvement.” Do you see why this might be a useful approach for lawyers to follow, even if the specifics of the process might be different in the legal context?

3. Have you ever participated in a crowdfunding project? Why, or why not? If you had some disposable income, is this something you would like to participate in?

4. Is crowdfunding a concept that could be used by lawyers to solve research problems they might encounter? Can you think of any ethical concerns that might be raised by such an approach?
CHAPTER FIVE

1. Do you imagine that the law is a relatively cut-and-dried profession in which all the answers are lying in plain sight, waiting for lawyers to pick them up and apply them? Or do you think that there might be a place for the creative process the author introduces in this chapter?

2. When it comes to finding information, do you consider yourself to be a “super-encounterer,” a “non-encounterer,” or something in the middle? Do you see why this discussion has relevance to lawyers?

CHAPTER SIX

1. The author describes the accidental discovery of the drug known as Viagra. When the next edition of this book comes out do you think the author will include a chapter dedicated to the discovery and development of the Covid-19 vaccine? From what you know of the development of that vaccine, would such a chapter belong next to this chapter?

2. Have you experienced the effect of serendipity in your life? As a researcher, have you been looking for a result and found an answer in an unexpected place, or found an unexpected approach to the problem you were trying to solve?

3. What role do you think data mining will have in legal research? Is this approach something that might have value to lawyers? If so, how might that affect the work lawyers are asked to do?

4. The author describes the ability of anyone with the necessary skills – or even without those skills for those determined to do this type of research – to perform drug trials and perform high-level research. Does this surprise you? Does it excite you with hope for the future or concern you? Why? Is there anything from this discussion of science that could be, or is currently being, applied to the law? From society’s perspective, would that be an exciting prospect? From a lawyer’s perspective?
CHAPTER SEVEN

1. This chapter is concerned with making something from nothing. It gets us closer to the nature of creativity than we have come so far in this book. It is a fascinating discussion in its own right, but is there something that lawyers can learn from it that will help them in their practices? Think about that as you read this chapter and keep asking, during this chapter and throughout the time you spend reading this book, how what you’re learning could be applied to the practice of law.

CHAPTER EIGHT

1. The author points out that to invent, you have to think about the future and imagine what people will want then. Do you think there are any parallels between this insight and legal research or legal problem-solving? Do you expect that lawyers will know the law relevant to solve a client’s problems or do you think that lawyers have to imagine what the solution might be and then find the law to confirm or refute that assumption?

2. The author describes the development of the cell phone and how it came to be such a ubiquitous part of contemporary life. Can you imagine what life was like without this technology? Do you even think of cell phones as technology? Can you think how many pieces of technology your cell phone has replaced and what kinds of activity were impossible without cell phones? As lawyers, should we fear or look forward to the next technological leap? What kinds of lawyer activity might be threatened by technology in the future?

3. The author describes the events surrounding the FCC’s decision to open up the radio spectrum, and Motorola’s efforts to make inroads into the nascent cellular telephone market. In particular, the author describes the importance of a demonstration of a working cell phone at a time when there were none. Is there something for lawyers to learn from the discussion and, in particular, can litigators learn lessons from Motorola’s approach?
CHAPTER NINE

1. The author writes in this chapter about gender vision or blindness – the ability of one gender to see and appreciate something the other gender cannot. Is this an insight that can be applied to the law? Is the law gendered, in theory, application, or (and) practice? Your answer might, or might not, change as you have more knowledge of the law and the way it works, so keep this question in mind as you study law and keep asking it to yourself.

2. Does the concept of gender vision or gender blindness have relevance to litigators seeking to persuade a jury? How might litigators who understand this concept have an advantage over those who do not?

3. What do you think the world will look like in ten years? Twenty years? What will the practice of law look like by the middle of your career? By the time you retire? Consider writing your predictions down and checking them from time to time.

4. The author discusses the different interpretations of Moore’s law – as something unrelated to economics and social forces or as a mass delusion. What do you think about this debate? Is the word “law” the appropriate way of describing what Moore concluded, or is “theory” a better term?

CHAPTER TEN

1. It seems almost unnecessary to point this out, but there is nonetheless value in pointing out that nothing in this chapter, this book, or law school, should be taken in any way as an endorsement of LSD and, in fact, you are unequivocally advised against taking this or any other illegal product of any kind. You should not, under any circumstances, even consider following Myron Stodaroff’s experiments with LSD or any other mind-altering substance.

2. The author describes the pained reaction many people have to sitting alone with their thoughts. How would you react if placed in this situation? Have you ever been in this situation? When you study, at home in the library, are you alone with your thoughts or are you conducting an internal conversation with the materials you’re studying? Do you study in silence or do you listen to music when you work?

3. The author describes her experience as a writing teacher, watching her students suffering through the process of learning to explore their inner thoughts. Have you found writing to be a difficult process? Is it for this reason? If so, what do you do to make yourself
more comfortable as you write? If you haven’t engaged in long writing projects before coming to law school, what do you expect that will feel like?

4. The author describes the frustrations of a student who had a writing project mapped out in his head but who found difficulty getting the words down on paper. Have you experienced a similar issue? What did you do about it? Were you able to overcome that issue? Does it happen often to you when you write?

5. The author is writing about a problem people have when engaging in creative writing. Do you expect that lawyers experience the same problems when they write or are these issues confined only to fiction writing?

CHAPTER ELEVEN

1. The author describes Altshuller’s TRIZ method. Does this approach have any value to you as lawyers? Are some of the constituent parts of this approach useful to you as lawyers or law students?

2. The author discusses the dangers of misleading clues and the “law of least effort.” Do you think the dangers described here might also apply to legal analysis and the attempt to find legal solutions for clients? If so, how can lawyers protect themselves from the effects of this problem?

CHAPTER TWELVE

1. This chapter discusses the possibility that someone from outside an established area of study might be able to solve a problem that experts in the field cannot? Could this happen in the law? If not, why not? If so, what are the implications of that for lawyers? If it is not possible in the law itself, might this outsider approach solve some collateral issues lawyers experience, such as how to make legal research cheaper and more effective?

2. The author describes the way our jobs shape our minds, perhaps making it more difficult for us to see solutions to problems? Is this a problem for lawyers? Is it possible lawyers develop blinders when it comes to solving their clients’ problems? How can that be avoided?
CHAPTER THIRTEEN

1. As you read this book, ask if you are seeing many gaps in the way the author presents information. Do you see places where she is covering over those gaps with words like “probably” or “it’s likely that” or “it seems.” Are you finding places where the author makes claims that are unsupported by sources (and note that there are endnotes after the text)? Or is the writing well supported and carefully crafted with few or no gaps?

2. The author has described competitions used to stimulate discovery in several chapters now. Who owns the designs submitted to these competitions? If only the winner of the competition gets paid, as one of the contestants suggests, are the losers returned the rights to their submissions or do the competition organizers retain the rights to those submissions as well? Do you imagine that someone is reviewing those failed submissions to see if they solve other problems?

CHAPTER FOURTEEN

1. The author describes a competition to make a better central-line catheter. Assume the process she describes is successful and is built, and is marketed commercially. Suppose that such a catheter is used in a hospital unrelated to the Cleveland Clinic and malfunctions, allegedly causing injury to the patient. Who might be liable to the patient for damages? The implanting physicians, the nurses that assisted them, and the hospital where implantation took place? The Cleveland Clinic and those responsible for the device’s development? The manufacturer? The competition winner who submitted the original design? All of them? None of them?

2. Suppose a hospital submits a challenge on InnoCentive related to a problem that resulted in a patient’s death. Can that patient’s estate use the fact of that challenge in litigation as an admission that the hospital did not know how to treat the patient? If so, might this limit the willingness of a hospital to participate in this form of problem-solving? Should lawyers who sue doctors and hospitals monitor InnoCentive and any similar sites for evidence that might help them in lawsuits?
CHAPTER FIFTEEN

1. The author recounts Altshuller’s story about being tortured in prison and how that torture came to an end, and she is skeptical of that story. Do you see why it is important to question everything you read, or that people tell you, in order to be convinced that you are being told the truth? Do you see how asking questions of the text is a useful way to explore that skepticism? You might end up concluding that you been told the truth, but you should first explore the possibility that what you have read or heard is either not the truth or is not the whole truth.

2. The author uses the word “putative.” What does this word mean? Did you have to look it up to be sure you could define it correctly? Do you do this every time you encounter a word the meaning of which is unclear to you? If not, why not?

CHAPTER SIXTEEN

1. The author describes the attempts of an engineer to encourage children to develop the skills necessary to become inventors. Could a similar approach work with the law? Should lawyers and law schools be trying to engage high-school – or younger – children with the law, so as to persuade them to consider law as a career? If so, what would that project look like? What type of engagement with the law might excite or interest those children? Can you think of five things such a project might emphasize? How much would such a project cost? Would you be interested in participating in such a project if it could be developed?

CONCLUSION

The author describes the disparity in health care in which some have access to solutions and others do not. Does the same problem exist in the law? If so, how might that problem be solved? Should law schools be part of that solution, or is that something best left to practicing lawyers?