

Critical Thinking: The Zia Prep Academy Case

Terry R. Adler, New Mexico State University, USA

ABSTRACT

This paper discusses a case called “The Zia Prep Academy” that was developed to hone a person’s critical thinking skill set in the context of structuring an agreement in the rehiring of a key executive. A detailed discussion is provided in how to set up an employee’s contract and project plan given the potential for strategic deception and misaligned expectations. Critical thinking skills require students to integrate framing project work in a work breakdown structure for the Zia Prep Academy Superintendent and then to decide what work is not necessary over her next term of employment. Essential versus non-essential information is presented as student’s process what is important to include in their overall analysis. Students must deal with the conditions of information compactedness, bounded rationality, and possible opportunism in writing the business case, or project plan, that accompanies the employee contract. The potential for strategic deception is present as uncertainty exists regarding the intentions of the school superintendent due to her proposed contract. Students work in traditional project management teams in writing a contract, business case, and financial analysis as part of the project plan. The outcome of this case is a greater understanding and ability in how to communicate key organizational requirements through team-based designs. The Zia Prep Academy case also facilitates one’s development of conceptualizing a problem and then reaching a reasoned, team-based conclusion.

Keywords: Critical Thinking; Strategic Deception; Project Management; Business Case; Contract

“The function of education is to teach one to think intensively and to think critically.” (Martin Luther King, 2014)

The necessity to understand and solve complex problems is a fundamental requirement for any successful manager in any business organization. We spend a lot of time studying leadership issues in business, see Finkelstein (2003) for example, but the real issue may be how do people at all levels in an organization approach, analyze, and frame a solution to a problem through team-based designs. The need for people to be able to process information in critically solving problems in teams is growing so acute that the Association to Advance Collegiate Schools of Business (AACSB) has stated that analytical, or critical, thinking should be a mandatory foundation of every business school’s curriculum (AACSB, 2013). The trend, however, for getting better at critical thinking is not pretty. According to recent studies, most results show no improvement, and in some cases, a decline in critical thinking skills of students at all levels, especially when team-based frameworks are used (Gorski, 2011; Shenkman, 2008).

Cases that address this deficiency in critical thinking are, thus, needed. We provide a case that improves critical thinking skills because it is simple enough to encompass a situation that every organization faces, the hiring of a key leader, and complex enough to deal with managing potential strategic deception in the hiring process. The Zia Prep Academy (ZPA) case also provides trainers and instructors with the opportunity to discuss the difficulties of communicating requirements through team-based designs. The case is experiential as communication in team-based designs adds a level of complexity that reflects real world conditions found in most business organizations. The ZPA case is also fundamentally an opportunity to expose students to realistic scenarios so that they can improve their critical thinking skills and gather lessons learned along the way.

THE ZPA CONTEXT

The ZPA case is based on the framework found in Wanasika and Adler's (2011) framework of strategic deception. A strategic deception framework is ideal for teaching basic team-based communication processes and improving four aspects of a student's critical thinking: 1. Increasing a team's understanding of a project's core issues; 2. Appropriately using principles in analyzing, or framing, the problem from different perspectives; 3. Demonstrating an understanding of what is essential and non-essential information; and 4. Demonstrating an ability to form a clear and comprehensive recommendation given limited information. We will discuss how these aspects of critical thinking are present in the ZPA case in the hiring of a key executive, the ZPA superintendent, later in the paper.

Background

ZPA started in 2001 as a small private school within the southwestern United States. Licensed within their state to teach a curriculum from kindergarten to 12th grade (i.e., K-12), ZPA also offered many educational and training services for adult classes at night. In fact, the services that ZPA offered were as follows:

- a. Elementary Curriculum
- b. Middle School Curriculum
- c. High School Curriculum
- d. Adult Education in support of a General Education Diploma
- e. Specialty Fundraising Workshops
- f. K-12 Tutorials

ZPA began with 20 students in kindergarten. Within three years, they had 189 students across all grades from K-12. Their growth was primarily attributable to a sharp Superintendent named Selena Munoz. She came to the school from Harding, Missouri where she was a High School Vice-Principal so this was her first job where she was in charge. The local papers recognized her ability to communicate the mission of the ZPA eloquently. This mission was as follows:

The mission of ZPA is to offer the most excellent education and training services in the United States to local southwest families. ZPA Academy will do all that is possible to be the most technologically advanced and cutting edge with regard to educational needs in America. Thus, ZPA faculty and administrators will be the best in their fields.

Her vision for ZPA was an astounding success just based on the growth in student numbers in her first three years. With the growth in numbers, she also needed to expand her faculty to keep her self-imposed 10-to-1 student-faculty per class per grade ratio. She hired 20 new teachers since 2001 to keep pace with the student growth. Facilities were not a problem as the school building was a deserted and dilapidated old warehouse that the founders of the academy bought for a dime. These founders, Tom Smith and Ricardo Martinez, were the visionaries who sought out her talents to lead the school. They also provided the seed money to buy and refurbish the building at its inception. They paid US\$750,000 for the 100,000 square foot warehouse in 2000. It took them close to 7 months to remodel the warehouse for a K-12 set of approximately 100 classrooms and offices.

From 2004 to 2010, the student population grew even more with a little over 1,200 students. Selena stated that some point their limit to growth would be how much "parking space" they could build to accommodate all the new students and faculty. Their faculty numbers increased to over 130 teachers and a little over 30 administrators. Mr. Smith and Mr. Martinez were able to get grants and low-interest loans to build a 10-story parking garage in 2007 that abutted the end of the kindergarten buildings. While this was not an ideal location, it did provide easy access for ½ day students in the new pre-school and day-care services that were added as part of their curriculum in 2007. A production operations specialist, Ms. Mia Ruiz, from a local university was hired in 2006 to study traffic flows to design and build the best drop-off and pick-up zones for the school. Ms. Ruiz was talented at seeing what needed to be done and was a very good communicator of the Academy's mission and plans for expansion. Ms. Ruiz tried to see

‘what it could be’ and not necessarily ‘what it was,’ thus she designed the traffic flows and parking garage with expansion in mind. Fueling the growth in student population were several factors:

- a. Department of Education ‘Award for Excellence’ for 3 consecutive years (2008 to 2010)
- b. Retirees choosing New Mexico
- c. Higher graduation rates than local public schools
- d. Highest nationalized test scores in their state
- e. No local private competition

Because there was a lack of private-school competition, the school charged higher rates than they normally would charge given the lack of competition in their local area. These rates were as follows:

K through 5th grades: \$10,000/student (623 children)
 6th through 8th grades: \$12,000/student (389 children)
 8th through 12th grades: \$18,000/student (260 children)

The cash flow for ZPA has been very good in the past but expansion has begun to take its toll on their financial health. For instance, the Academy added new computers for every child in the school. In fact, the school was a “National Laptop” school with no books and no library in the traditional sense. Students at all levels were required to carry their laptop to class, do their homework on-line, conduct research via the internet, and interact with their teacher during set on-line hours outside of class. This in addition to the normal in-class, on-line lessons teachers traditionally did at ZPA. Every class had at least three magic boards that tied to the internet and ZPA’s own intranet. Many classes were slaved to each other during lectures and inter-class projects. The acquisition and maintenance of this capability required a huge investment by the school of over US\$6 million initially in 2004 and over US\$0.5 million per year thereafter. This investment covered the salaries of four full time information technologists and a supervisory administrator to manage the databases and connectivity required to run the school. ZPA was also on a full-school year which required relatively higher utility bills, teacher salaries and facility and equipment upkeep. The fiscal year for ZPA starts 1 June and ends 31 May. The following data in Table 1 represents the cash flow status of ZPA as of today in 2010.

Table 1: ZPA Cash Flow Status
Fiscal Year (in US\$ millions--2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Revenues										
Tuition	0.16	0.34	1.2	2.0	3.1	5.2	8.4	10.9	15.2	15.6
Donations	1.5	2.6	2.8	3.1	5.0	6.1	6.5	6.8	5.0	4.4
Fundraising	1.1	1.5	2.2	2.2	2.6	2.7	2.7	2.8	0.6	0.5
Subtotal	2.76	4.44	6.2	7.3	10.7	14.0	17.6	20.5	20.8	20.5
Expenses										
Faculty Sal	0.06	0.12	0.46	0.88	1.8	2.4	3.6	3.9	4.8	5.4
Admin Sal	0.06	0.06	0.09	0.12	0.30	0.30	0.45	0.85	1.1	1.5
Equipment	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Facilities	0.8	1.2	1.5	2.3	2.3	2.3	2.4	2.5	2.5	2.6
Com Support	0.02	0.03	0.09	0.09	0.21	0.35	0.56	0.76	0.91	1.02
Security	0	0	0	0	0	0.25	0.25	0.3	0.3	0.3
Buses (6)	0.01	0.02	0.03	0.03	0.04	0.12	0.19	0.19	0.19	0.23
School Main	0.15	0.25	0.85	1.05	1.5	2.1	3.1	4.5	4.8	6.2
Utilities	0.05	0.07	0.07	0.08	0.12	0.14	0.14	0.18	0.21	0.29
Lic/Fees	0.01	0.01	0.02	0.02	0.04	0.04	0.08	0.08	0.16	0.16
Advertise	0.5	1.5	2.1	2.1	2.1	1.8	1.8	2.1	1.1	1.0
Interest	0	0.5	0.6	0.19	0.19	0.19	2.5	2.5	2.4	2.4
Subtotal	2.16	4.26	6.31	8.49	10.32	11.8	16.07	18.86	19.47	22.1
Delta	0.6	0.18	(0.11)	(1.19)	0.38	2.2	1.53	1.64	1.33	(1.60)

Key Issues

ZPA faces ten major issues before their annual board meeting next month: 1. Student growth is expected to increase over the next five years but the school needs a good marketing strategy; 2. The board wants to start offering athletic teams as a means to attract more students and, thereby, increase the student population at large; 3. ZPA is beginning to max out their usable space as they only have 90 classrooms and 20 offices/storage niches —how much can they increase before they have to consider expansion in facilities and equipment; 4. Last year ZPA lost money and many view this as a trend of the future; 4. ZPA faces an accreditation visit in one year and needs to pass with flying colors; 5. Curriculum concerns are high given accreditation issues and maintaining a quality college preparatory environment; 6. New facilities to house new students are probably going to be necessary; 7. Communication with ZPA stakeholders over this projected growth needs to be improved; 8. Potential security issues need to be addressed to ensure student, faculty, and staff safety; 9. Tuition increases need to be addressed; and, finally, 10. Ms. Munoz is being courted by several top eastern seaboard schools who are expected to triple, if not, quadruple her salary. Her contract has run out and the ZPA Board is getting ready to negotiate a new contract with her this summer.

The board wants to keep her at ZPA but just how much are they willing to pay for her leadership services? Can ZPA afford her at this point in their lifetime? Her current salary is US\$170,000 and she is definitely underpaid compared to the salaries of her contemporaries back east who typically make in the half million dollar range in schools doing well. ZPA is doing well by many standards but imagine what she could do if she was in charge of a school in a big city with more resources. One famous eastern school in Massachusetts flew her out to visit last month and apparently made her an offer that according to Ms. Ruiz “would have knocked your socks off.” The Academy board fears that she is beginning to mentally check out of ZPA business as she contemplates her future, a future that does not include ZPA.

Team Assignments

The primary tasks for each team are to develop Ms. Munoz’s employment contract, a project plan, a work breakdown structure, and a financial analysis for the ZPA Board so that it can manage the hiring of Ms. Munoz. Each team’s output should be consistent with the following vignette provided to each team:

You are considering rehiring Ms. Selena Munoz as an administrative/executive provider to do work for ZPA. You have a working knowledge of Ms. Munoz and are confident she has provided a good contract for your review (see Appendix A of this paper). You are dependent on her due to her success these past 10 years as superintendent of ZPA. You are also aware that Ms. Munoz has not been totally upfront and reliable when times have turned bad in the past. Thus, she seems to be a ‘Fair Weather’ type of partner. Consequently, you may not want to let her have access to all Board of Director (aka “ZPA Board”) meetings or projects since she may turn around and leave ZPA at any time or possibly just not show up for work. However, if requirements can be defined clearly in a new employee contract, this situation might be avoided.

The draft contract requirements she has provided for your review are just that—a first draft at defining what will be required of her to complete duties as superintendent of the Academy. After your team’s review, you may notice that many things seem left out that she is responsible for doing. Maybe she left details out to provide her with a loophole if things do not go well for her. Remember, your team has to revise Ms. Munoz’s contract, develop the project plan with three to four bullet items (or more if necessary) under each element, provide a work breakdown structure down to Level 3, and develop a financial analysis for the ‘ZPA Board’ to consider as part of the project plan. Your team has just received this work as the first step in consulting with ZPA. If the ZPA Board likes your work, you can expect to get follow-on consulting work for years to come from the school. Good luck!

ADMINISTRATION OF THE CASE

The following steps for conducting the case are suggested to improve critical thinking skills in a business environment. This can include traditional collegiate settings as well corporate training.

Step One: Assignment of Participants to a Team**Step Two: Introduction of the Case and Team Assignments**

The instructor explains the assignment deliverables previously discussed: a draft employee contract (e.g., a binding document stating Ms. Munoz’s contractual requirements), project plan (e.g., ZPA’s business case), Work Breakdown Structure (WBS), and financial analysis as part of the project plan are required. Each student team essentially will serve as consultants to the ZPA Board in the hiring of Ms. Munoz. Consequently, student teams work for the ZPA Board in the hiring of Ms. Munoz. The ZPA Board has hired your team to do this project because the ‘ZPA Board’ does not have the expertise to manage the project, they do not have the time and resources to do this project, or a combination of both. Student consulting teams typically play an intermediary, or supporting, role in assisting the ZPA Board revise the contract and business case with Ms. Munoz as shown in Figure 1.

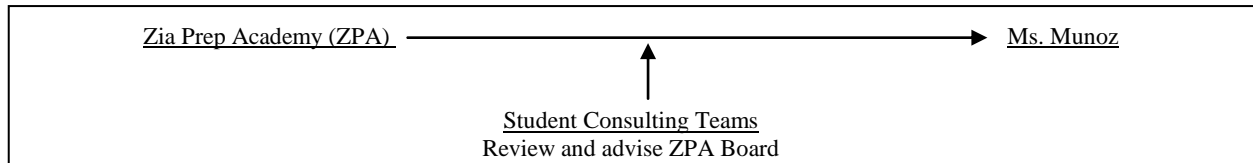


Figure 1: Student Teams Role in the ZPA and Ms. Munoz Relationship

Step Three: Students Build a Work Breakdown Structure, Revise the Employee Contract, and Develop the Project Plan (including the Financial Analysis)

This is the heart of the case. First, in order for teams to understand this project’s core issues, they must first develop a WBS (i.e., an outline of the scope of the Ms. Munoz’s employment). The WBS is defined in the Project Management Body of Knowledge (PMBOK) as (PMBOK, 2004, p. 112):

“a deliverable-oriented hierarchical decomposition of the work to be executed by the project team, to accomplish the project objectives and create the required deliverables. The WBS organizes and defines the total scope of the project. The WBS subdivides the project work into smaller, more manageable pieces of work, with each descending level of the WBS representing an increasingly detailed definition of the project work.”

WBS School Solution

In order to revise Ms. Munoz’s contract, students start with developing a WBS. There are seven major modules of work identified in the WBS school solution presented in this paper. These deliverables are identified as 1.1 to 1.7. The work that needs to be done by Ms. Munoz is identified at the lower levels of the WBS. These will be the basis for structuring a revised contract and then compared to what Ms. Munoz provided in Appendix A. More specifically, Ms. Munoz is responsible for:

Performing superintendent duties (1.1)

- Developing a marketing plan (1.1.1)

- Assessing plan for increasing ZPA revenue (1.1.2) to include the following:

- Developing sponsorship and fundraising goals (1.1.2.1)

- Assessing tuition adjustments (1.1.2.2)

- Implementing parking fees (1.1.2.3)

Developing communication plan (1.2)

- Identifying a list of security hazards (1.2.1)

- Explaining what the ZPA administrator’s roles are as part of the communication plan (1.2.2)

Managing accreditation process (1.3)

- Developing ZPA accreditation requirements (1.3.1)

- Submitting to ZPA Board for approval (1.3.1.1)

- Ensuring compliance with National and state accreditation standards (1.3.2)

- Conducting a pre-accreditation audit (1.3.3)

- Overseeing curriculum quality (1.4)
 - Developing preventative measures to ensure ZPA curriculum is high quality (1.4.1)
 - Developing corrective measures to change ZPA curriculum to maintain quality (1.4.2)
 - Developing curriculum evaluation standards (1.4.3)
 - Researching and assessing curriculum standards (1.4.4)
 - Developing and publishing awards for curriculum excellence (1.4.5)
- Expanding and improving the athletic department (1.5)
 - Acquiring funding for athletic teams (1.5.1)
 - Appointing an Athletic Director (1.5.2)
 - Hiring appropriate coaches (1.5.2.1)
 - Purchasing appropriate equipment (1.5.2.2)
 - Developing athletic marketing plan (1.5.3)
 - Developing athletic program goals (1.5.4)
 - Developing recruitment plan (1.5.5)
- Performing integration of all academy operations (1.6)
 - Finalizing land purchases (1.6.1)
 - Ensuring construction of new academic facilities (1.6.2)
 - Acquiring funds for school classroom expansion (1.6.2.1)
 - Overseeing construction of new facilities (1.6.3)
- Performing project management (1.7)
 - Providing a project plan for her contracted tenure (1.7.1)
 - Overseeing communication between school committees, Board, and stakeholders (1.7.2)
 - Evaluating and implementing viable school budget (1.7.3)

You will notice that there are seven major pieces of work with the more detailed work being explained at the lowest levels of the WBS. As you can see, the responsibilities of Ms. Munoz are far greater than what she proposed in Appendix A. Why is that? Was it intentional? Given that Ms. Munoz has been with ZPA for 10 years and has an excellent working knowledge of what the major issues are for the school, one can only conclude that she provided the draft employee contract in Appendix A in order to either ambiguously frame her future responsibilities or to not address the major issues facing ZPA. Many of the items she provided in Appendix A are unverifiable as we will discuss. Setting up her employment contract this way could be considered as strategic deception on her part. Strategic deception refers to strategic actions aimed at misleading potential partners from the true strategic intent of the firm or the environment (Wanasika & Adler, 2011). Strategic deception's extent and nature may vary from simple concealment of trivial information to outright lies and disinformation. Consequently, deceptive strategies may range from perfectly legal competitive strategies to illegal practices of lying to gain an advantage. This case deals with only legal, or legitimate, forms of strategic deception as these are most common in relational contracting (Donaldson & Dunfee, 1994). One has to understand the core issues of a problem to fully appreciate what information is essential and non-essential which is a very difficult task to do if information is ambiguous or unverifiable. In Ms. Munoz's situation, there is a lot left out of her proposed contract. Thus, student teams need to read the case and come to a reasoned conclusion as to what is really appropriate to protect ZPA's best interests—what is essential and what is not.

The next step for student teams is to revise the employee contract for Ms. Munoz. The comprehensive way to write the contract would be take the work identified in the WBS and then to put it into contract terms. Thus, a proposed school solution might look like this that is consistent with the WBS just presented:

Ms. Munoz's Revised Contract

- 1.0 Ms. Munoz shall perform superintendent duties to include the following for ZPA Board approval: development of a ZPA marketing plan and assessment for increasing ZPA revenue that includes developing sponsorship and fundraising goals, assessing tuition adjustments, and implementing parking fees. Ms. Munoz will provide a monthly report on the status of these duties any proposed changes documented in the project plan.

- 2.0 Ms. Munoz shall develop a communication plan that identifies a list of security hazards and explains what the ZPA administrator's roles are throughout the school year. Ms. Munoz shall submit her recommended communication plan for ZPA Board approval within one month after this contract is finalized and update the project plan so that it is consistent with her proposed communication plan. The communication plan shall be presented by Ms. Munoz at the monthly status reviews for Board approval.
- 3.0 Ms. Munoz shall manage the ZPA accreditation process that includes identifying requirements and resources required to pass the accreditation visit in one year. Ms. Munoz shall submit this accreditation plan to the ZPA Board for approval 6 months after this contract is finalized. The plan submitted by Ms. Munoz shall ensure compliance with National and State accreditation standards. Ms. Munoz shall conduct a pre-accreditation audit within 3 months after this contract is finalized.
- 4.0 Ms. Munoz shall oversee ZPA curriculum quality that includes the following: development of preventative measures to ensure ZPA curriculum is high quality; development of corrective measures to change ZPA curriculum to maintain quality; development of curriculum evaluation standards; research and assessment of curriculum standards; and development of awards for curriculum excellence. Ms. Munoz will provide a report twice a year on how the ZPA curriculum status with regard to meeting these standards.
- 5.0 Ms. Munoz shall initiate and support the development of the ZPA athletic department. This includes the acquisition of funding for athletic teams, appointment of an Athletic Director, hiring of appropriate coaches, and purchase of appropriate athletic facilities and equipment within the next calendar year. Ms. Munoz shall also develop athletic marketing plan, goals, and recruitment plan as part of this effort.
- 6.0 Ms. Munoz shall perform the integration of all academy operations to include the acquisition and finalization of land purchases, construction of new academic facilities, acquisition of funds for school classroom expansion, and oversight of construction of new facilities.
- 7.0 Ms. Munoz shall perform project management by developing a 'living' project plan for all the work stated in this contract, oversee communication between school committees, the ZPA Board, and ZPA stakeholders, and evaluate and implement viable school budgets. By 'living,' we mean that the project plan reflects information about the status of Ms. Munoz's work so that it reflects any approved change by the Board.

In all likelihood, there are probably many different solutions to this case depending on the assumptions made by student teams. For instance, teams will probably perceive that Ms. Munoz is trying to deceive the ZPA Board in what she has provided as a draft employee contract. Teams will also see that the contract in Appendix A contains a lot of ambiguous terms. What exactly does "notify the buyer of any processes that could adversely impact users of the school" or "to the maximum extent possible" mean? Do you want her to just "notify" the ZPA Board or actually resolve these adverse impacts? Where is the hiring of an "assistant administrator" mentioned in the case? Why is the "assistant administrator" responsible for making sure that Ms. Munoz's employee contract is implemented and not Ms. Munoz? Does this "assistant administrator" report to Ms. Munoz or the Board? How much is this going to cost ZPA to hire another administrator? Has branding of new athletic programs, building of new parking lot, and potential construction of new facilities been left out of the draft contract on purpose? If so, why? Section 3 of Ms. Munoz's proposed contract is written in the passive voice which means no one is really doing the work. In other words, who is responsible for managing the accreditation process? Ms. Munoz provides no basis for what an "elite" status is for the ZPA nor does she explain how she will go about modifying the curriculum. These and other discrepancies might lead one to believe that Ms. Munoz intentionally structured the draft employee contract to give her the greatest latitude with the least amount of board oversight.

By integrating the WBS with the revised employee contract and project plan, teams get at the core issues in this case. These core issues are represented in the school solution employee contract just presented. The proposed school solution is clearer and shifts control to the ZPA Board, hence avoiding possible strategic deception on Ms. Munoz's part. In addition, student teams typically use a variety of economic, financial, legal, and project principles to frame the WBS, employee contract, and project plan. Key components of critical thinking include contemplating what the value of what Ms. Munoz put into the draft contract versus what the Board requires. Sometimes employee contracts are structured vaguely enough to give flexibility to a leader but in other cases you may want explicit terms (Eisenhardt, 1989). It is up to each student team to identify the essential requirements Ms. Munoz is responsible for and then communicate these requirements, or terms and conditions, in a revised contract.

Teams must also ensure that the project plan is consistent with the WBS and employee contract. For

instance, if Ms. Munoz is being hired for a term of 3 years, then there should be a 3 year span of work to be addressed in the project plan (aka ‘the business case’). Appendix B is typically given to student consulting teams with the instructions to expand it so that it captures the context of hiring Ms. Munoz. The project plan is an internal document typically used by ZPA to manage the term of Ms. Munoz’s employment as superintendent. The project plan is not contractual per se but a blueprint of all the work that needs to be accomplished at ZPA as managed by Ms. Munoz. The project plan also contains non-contractual issues that affect how the work will be done by Ms. Munoz. For instance, the assumptions in the project plan greatly influence how Ms. Munoz will be able to perform. Assumptions about student enrollment, classroom space at the school, and the implications of not hiring Ms. Munoz are not put into the contract. By integrating the contract language with the provisions in the project plan, students will learn how difficult it is to manage contractual agreements as part of a project’s larger scope. Instructors can also provide a few examples to indicate how a requirement might be ambiguous or where there might be areas of overlap between the employee contract and project plan (Adler, 2000). Integration between the revised contract and project plan is extremely important. Receiving accreditation might be a key milestone in the plan that would also be a key requirement in Ms. Munoz’s contract. A milestone identifying “Accreditation” as an important event might be an achievement that ZPA might want to recognize and market. Student teams are tasked to provide an expanded project plan (an example is provided in Appendix C) along with their revised contract for Ms. Munoz.

In general, the potential for deception should lead to more integration between the employee contract and project plan. The instructor can emphasize how in theory, the more potential for deception there is in a trading partnership, the more likely partners will want explicit terms framing the relationship (e.g., hard contracting) to guard against potential opportunism (Pittz & Adler, 2014; Williamson & Ouchi, 1981). Another area of discussion is the difficulty of inter-team integration and communication in project management. In essence, student team solutions demonstrate a team’s ability to form clear and comprehensive recommendations given ambiguous information, all key components of critical thinking. Not only do students get exposed to relevant assignments found in organizations today, they get to experience how difficult it is to do work that is interdependent with work from others within their own team.

Student Feedback

The ZPA case is frequently highlighted by students as their most favorable experience as an undergraduate student and in the corporate training environment. Instructors would be wise to ensure that team member composition is diverse enough so that participant backgrounds, or majors, are complementary with each other. Participants explain that this case is a lot of work and they would do it again because of the concrete experience gained. In general, critical thinking of a complex situation like the potential for strategic deception while planning project work is a difficult challenge in any venue. This instructor has found that students tend to see more interdependencies in the implementation of work when they are in team-based designs. Students indicate that they value diverse teams more than when they began the case. They also state that having a diverse team allowed them to discuss issues of dealing with strategic deception more realistically.

Teams typically believe they must limit the partnership to 3-5 years in duration to avoid miscommunication and to ward off future opportunistic intentions by Ms. Munoz. Most teams believe that a window of 3-5 years is sufficient to accomplish all the work in the WBS provided. Ms. Munoz knows the ZPA administrative operations and culture but student teams do not which gives her an edge. Student teams need to bind together ZPA’s and Ms. Munoz’s requirements in the employee contract to overcome potential strategic deception and potential deleterious effects from a failed partnership. Many students ask us why would one even go into a partnership if there is a possibility of strategic deception? While that is a good question, the answers are numerous. For instance, an organization may have to enter into an agreement where they are vulnerable like this due to government requirements (especially in global, non-familiar settings), or a provider may be the sole provider of goods and services thus limiting your choice of suppliers. You could also be in a situation where a provider’s technical expertise outweighs the potential harmful effects that the partnership may cause you later. Students learn how to minimize the effects of strategic deception by critically analyzing the partnership and structuring a more mature and clear contract and plan.

DISCUSSION

In general, research into the use of negotiated agreements is a growing body of work (Barthelemy & Adsit, 2003; Kent & Becerik-Gerber, 2010; Schilling & Steensma, 2001; Zuckerman & Higgins, 2002). There are many instances in newspapers and magazines about firms partnering with other entities through joint venturing, franchising, and alternative work arrangements. The employee contract in this case is an example of how difficult it is to frame a partnership agreement. We suggest that there are three conditions of strategic deception that make it difficult: information compactedness, bounded rationality, and opportunism. Information compactedness is primarily aimed at achieving competitive advantage (Williamson, 1985). Such advantage can be achieved through increasing rivals' cost functions, tying up competitor resources in less productive areas, wearing down competitors by launching multiple feints before executing the actual strategy, exploiting asymmetric information to make early market or product entry or simply muddying the competitive environment to increase the level of noise (e.g., useless information and subsequent uncertainty). These strategies lead to increased waste, thereby, weakening their competitive position. Information compactedness muddies the waters of entrepreneurial activity because it allows major players in a transaction latitude and time to do things they deem necessary without scrutiny.

Information compactedness is key to understanding how strategic deception is practiced. It occurs when one partner has more knowledge of an exchange than the rest (Williamson, 1985). Hendricks and McAfee (2006) find that organizations often use information manipulation to disguise their true intent while introducing new products or entering new markets. Strategic deception will work if there is potential payoff from fooling the competition due to limited information.

The other two conditions necessary for strategic deception are bounded rationality and opportunism. Bounded rationality is the inability of students and teams to adequately process information due to one's cognitive limitations. Williamson (1985) also defines opportunism as self-interested seeking with guile. The combination of the two creates direct competition for control of a firm's resources, processes, and gain. Bounded rationality causes an inability to make sense of complex phenomenon, especially when uncertainty rules the day. Different degrees of rationality and opportunism will lead to unique opportunities for strategic deception along the same continuum. The confluence of uncertainty and bounded rationality creates competitive holes which can be exploited by the more competent people with private knowledge of market conditions. The ZPA case provides students with the opportunity to experience the affects of this confluence since Ms. Munoz intentions are not truly known. Based on classroom experience, the ZPA case is best used in a capstone course such as business policy or strategy in either undergraduate or corporate training curriculums. Two practical implications of this case are provided:

1. The conditions that lead to strategic deception are a central component of team-based designs in outsourcing relationships.
2. Students need to develop critical thinking skills required for most teams and businesses to succeed in today's complex world.

Wanasika and Adler (2011) posit that information compactedness, bounded rationality, and opportunism provide the necessary framework for strategic deception especially when team-based designs are employed to get work done. Since contracts represent a governance structure for managing work between two or more organizational entities, teams developing contracts are typically required to structure requirements in a way to avoid potential loopholes, viably from the presence of strategic deception. Relational contracting requires consideration of strategic deception because this condition affects how requirements are written in the contract (Jeffries & Reed, 2000). An employee contract is nothing more than a conduit by which the partnership is framed. Teams performing the ZPA case are subject to strategic deception since they do not always have key information, are limited in how they process information, and can be manipulated by their future provider—Ms. Munoz.

CONCLUSION

The practicality of the case is important since most participants will have to negotiate a contract, or agreement, at some point in their business career. The assessment of critical thinking can be accomplished very well

through written communication and this case allows an instructor to see how a team frames the scope, or size, of a project given that their future provider may not have their best interests at heart. Thus, teams struggle with how much is too much to put in a contract and what are the barebones requirements that reflect the responsibilities of Ms. Munoz. The size of a relationship and the factors that affect this scope is one of continuing interest to researchers and practitioners (Crook, Combs, Ketchen, & Aguinis, 2013). Anticipating the possible strategic deception of Ms. Munoz provides teams with the opportunity to visit the ‘size’ issue with high returns in lessons learned.

Teams also must manage the difficulty of the hiring process that is present in a team-based design. Working in teams is almost a given now in most business settings. While team-based designs provide better outputs in most cases, there are constraints and weaknesses to team-based designs. The use of team-based designs provides students an opportunity to participate and witness how critical thinking might be limited given the difficulties of communicating within a team and as a team. The primary challenge for teams is how to best collectively set boundaries for Ms. Munoz. Team solutions, therefore, are usually unique depending on how teams view risk and how they try to minimize it. We find that the variety of team solutions that students propose is extremely beneficial for motivating participants to think ‘out of the box.’

Finally, corralling Ms. Munoz is more difficult than it looks. Most writing assignments look for grammar, spelling, and other copy-editing issues. This case looks more at a participant’s ability to write collectively in a team setting so that Ms. Munoz’s responsibilities are clearly stated. Many authors have discussed how anticipating loopholes in governance agreements is difficult if not impossible (Williamson, 1985). However, just because it is difficult does not mean we should ignore the process of writing a clear and comprehensive employee contract. We all face this dilemma to some extent in business today with regards to the contractual aspects of our work. How much is too much information to expose an employee to? How much information does a provider need to do their job? The ability to formulate boundaries in our professional relationships is fundamental to the success of many organizations today. This case provides vital lessons learned in developing an ability to critically analyze and provide sound recommendations in setting buyer and seller boundaries.

AUTHOR INFORMATION

Terry Adler is currently an Associate Professor of Management in the College of Business at New Mexico State University (NMSU). He received his MBA from Boston College in 1986 and his Ph.D. in Strategy from the University of Cincinnati in 1996. Besides being widely published in the top academic business journals on such topics as trust, distrust, governance, and project management issues, he was named the 2005 Donald C. Roush Professor of the Year at NMSU. Dr. Adler has made over 300 presentations to organizations throughout the world. Terry frequently consults with global companies on project management and organizational issues. E-mail: tadler@nmsu.edu

REFERENCES

1. Association to Advance Collegiate Schools of Business (AACSB). (2013) Business Accreditation Standards (Section 9). Retrieved 22 January 2014 from <http://www.aacsb.edu/accreditation/business/standards/2013/learning-and-teaching/standard9.asp>
2. Adler, T. (2000). An evaluation of the social perspective in the development of technical requirements. *IEEE Transactions on Professional Communication*, 43(5), 17-25.
3. Barthelemy, J., & Adsit, D. (2003). The seven deadly sins of outsourcing. *Academy of Management Executive*, 17(2), 87-101.
4. Crook, T., Combs, J., Ketchen, D., & Aguinis, H. (2013). Organizing around transaction costs: What have we learned and where do we go from here? *Academy of Management Perspectives*, 27(1), 63-79.
5. Donaldson, T., & Dunfee, T. (1994). Toward a unified conception of business ethics: Integrative social contracts theory. *Academy of Management Review*, 19(2), 252-284.
6. Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
7. Finkelstein, S. (2003). *Why smart executives fail*. NY: Penguin Group.

8. Gorski, E. (2011). College students lack critical thinking skills, study finds. *The Associated Press*. 19 January 2011.
9. Hendricks, K., & McAfee, R. (2006). Feints. *Journal of Economics and Management Strategy*, 15(2), 431-456.
10. Jeffries, F., & Reed, R. (2000). Trust and adaptation in relational contracting. *Academy of Management Review*, 25(4), 873-882.
11. Kent, D., & Beceric-Gerber, B. (2010). Understanding construction industry experience and attitudes toward integrated project delivery. *Journal of Construction Engineering and Management*, 136, 815-825.
12. King, Jr., M. L. (2014). BrainyQuote.com. Retrieved January 23, 2014, from BrainyQuote.com Web site: <http://www.brainyquote.com/citation/quotes/quotes/m/martinluth402936.html#s7fv6J0M44LLSx6F.99>
13. Pittz, T.G., & Adler, T.R. (2014). Entrepreneurial piracy through strategic deception: the ‘make, buy, or steal’ decision, *International Journal of Entrepreneurship and Small Business*, 22(4), 466-481.
14. Project Management Body of Knowledge (PMBOK) 2004. *A Guide to the Project Management Body of Knowledge*, 3rd Edition. Newton Square, PA: Project Management Institute.
15. Shenkman, R. (2008). *Just how stupid are we? Facing the truth about the American voter*. NY: Basic Books.
16. Schilling, M., & Steensma, H. (2001). The use of modular organizational forms: An industry-level analysis. *Academy of Management Journal*, 44(6), 1149-1169.
17. Wanasika, I., & Adler, T. (2011). Deception as strategy: Context and dynamics. *Journal of Managerial Issues*, 23(3), 364-378.
18. Williamson, O. (1985). *The economic institutions of capitalism*. New York: The Free Press.
19. Williamson, O., & Ouchi, W. (1981). The markets and hierarchies program of research: Origins, implications, prospects. In W. Joyce & A. Van de Ven (Eds.), *Organizational design*. New York: Wiley.
20. Zuckerman, D., & Higgins, M. (2002). Optimizing cross-organizational team performance and management. *Pharmaceutical Technology*, 26(6), 76-79.

APPENDIX A

Ms. Munoz’s (aka ‘The Provider’) Draft Contract

- 1.0 The provider shall perform superintendent duties for the Zia Prep Academy to the best of her ability. This includes the administration of tests, and maintaining an elite status for the school.
- 2.0 The provider shall notify the buyer of any processes that could adversely impact users of the school and which have, or potentially could, impact the requirements in this work statement. The primary criterion is the unintentional demise of the school. The provider should provide a list of possible hazards that should be considered.
- 3.0 The accreditation test plan shall be prepared in accordance with buyer requirements and submitted for buyer approval. The provider shall perform accreditation planning in accordance with the approved state and national authorities. Pre-accreditation planning results shall be retained by the provider and shall be available for buyer review.
- 4.0 The main objective of the curriculum program shall be to prevent poorly designed systems and an inability to service all students at Zia Prep Academy. The major thrust of this requirement shall be the early/timely implementation of proposed corrective actions. The provider shall evaluate the design of any new or modified curriculum to provide a cost, schedule and administration impact statement.
- 5.0 The provider shall be the point of contact for the governing board of directors of the buyer. The provider shall provide all supporting materials for all board meetings to the maximum extent possible. The provider shall insure that all data is collected appropriately identifying all students and faculty clearly on the assessment reports.
- 6.0 The provider shall identify to the buyer an assistant administrator responsible for all tasks required by this work statement. The provider’s administrator should be the single focus for reporting all information about the status of the school. The provider’ administrator shall support board planning efforts by attending meetings, conferences and reviews and responding to requests for information.
- 7.0 The provider shall prepare and submit a Zia Prep program status report bimonthly commencing 30 days after this contract renewal. These annual reports should include, as a minimum, the status of all students and staff, any significant problems or issues, current schedule, accreditation assessment results, and licensing analyses.
- 8.0 The provider shall provide executive support services on a request basis to provide regular operation of the school for a period of twelve (12) months after delivery.

APPENDIX B

Project Plan Outline (14 Sections)

Background	Constraints
Project objectives	Stakeholders
Deliverables	Reviews
Key milestones	Communication Plan
Assumptions	Change Management Plan
Risks	Financial Analysis
Key resource requirements	Project Rewards

APPENDIX C

Expanded Project Plan

- 1.0 Background
 - ZPA offers K-12 curriculums and other specialty adult education courses
 - ZPA has grown to over 1,200 students, 130 teachers, and 30 administrators
 - ZPA has achieved numerous and recent Awards for Excellence
 - Student population has continued to grow causing correlated expansion fits and pains
- 2.0 Project Objectives
 - Get Ms. Munoz’s contract negotiated and signed as soon as possible
 - Expand facilities, equipment, and athletic teams
 - Achieve favorable accreditation
 - Keep campus secure
- 3.0 Deliverables
 - Perform superintendent duties
 - Develop communication plan
 - Manage accreditation process
 - Oversee curriculum quality
 - Expand and improve athletic department
 - Perform integration of ZPA operations
 - Perform project management
- 4.0 Key Milestones
 - Accreditation in one year
 - Pre-accreditation audit with 3 months after contract award
 - Curriculum development within 6 months after contract award
 - Expansion of school
 - Hiring of athletic faculty within 12 months after contract award
 - Classrooms
 - Parking
 - Hiring Ms. Munoz within the next 30 calendar days
 - Planning and implementing new athletic programs
 - Increase school revenue (see financial analysis section)
- 5.0 Assumptions
 - Student growth expected to continue
 - ZPA running out of classroom space
 - Not rehiring Ms. Munoz could cause parental supporters to remove their children from ZPA
 - Environmental factors continue to be healthy with regard to growth in:
 - Local businesses
 - Retirement community
- 6.0 Risks
 - Potential loss of students if Ms. Munoz not rehired
 - Potential strategic deception by Ms. Munoz if she is rehired
 - Investing in athletic programs could bring in less academically prepared students
 - Faculty remain satisfied and stay at ZPA
 - Environmental risks of inadequate security and loss of funding
 - Technological if information technology is not upgraded
 - Financial health of the school is in decline
- 7.0 Key Resource Requirements
 - Hiring an assistant for Ms. Munoz
 - Hiring of an Athletic Director
 - Hiring of coaches
 - Expansion of facilities, parking, and classroom space

8.0 Constraints

- Ms. Munoz’s popularity limits the Board’s pay and flexibility in hiring her
- Money needed for expansion is not guaranteed
- Tuition increases have limits given local situation

9.0 Stakeholders

- Founders: Mr. Tom Smith and Mr. Ricardo Martinez
- Board of Directors
- Administrators including Ms. Munoz
- Financial supporters/contributors
- Parents
- Students
- Faculty
- City where located

10.0 Reviews

- Weekly status reviews
- Monthly status reviews for donations, fundraising, project plan, communication plan, and parking
- Twice-a-year status reviews for accreditation progress and curriculum review

11.0 Communication Plan

- Formal communication in status reviews with key stakeholders (i.e., the Board, founders, faculty, and administrators)
- Informal communication in periodic meetings with other stakeholders

12.0 Change Management Plan

- Any changes to this project plan need to be presented to the Board for Board approval
- All information in this project plan and employee contract shall be considered proprietary and property of the Board

13.0 Financial Analysis (see Table 1 as a reference)

- Donations decreased from 54% to 21% of total revenue. This trend needs to be reversed and addressed by Ms. Munoz in 2011
- Fundraising decreased from 40% to 2.5% of total revenue. This trend needs to be reversed and addressed by Ms. Munoz in 2011
- Tuition rose from 5.79% to 76% of total revenue over 10 year window. This trend needs to continue with moderate changes for 2011 and should be led by Ms. Munoz
- Maintenance and utility costs are going through the roof. Ms. Munoz needs to address how new facilities, classrooms, and possibly ZPA procedures can reduce these costs in the future. She needs to come up with a viable sustainability program for the future

14.0 Project Rewards

- Bonus for Ms. Munoz if she is able to maintain a graduation rate of 99% or above
- Bonus for Ms. Munoz if she is able to increase donations
- Bonus for Ms. Munoz if she is able to increase fundraising
- Bonus for Ms. Munoz if she is able to lead ZPA through the accreditation process with an excellent rating
- Bonus for faculty if they continue to teach a quality curriculum that leads to accreditation