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# THE RESOLUTE STUDENT

by

WIPA KHAMPOOK

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SYNTHESIS\*  
MASTER OF ARTS  
CRITICAL AND CREATIVE THINKING  
UNIVERSITY OF MASSACHUSETTS BOSTON

May 2017

Advisor: Professor Peter Taylor

Abstract: This synthesis paper presents an autobiographical narrative of my journey as a learner from a poor rural background in Thailand to completing a Masters program in the USA. I describe obstacles and problems at different times in my life — elementary school, high school, college, work, coming over to America, attending an ESL school, earning an Early Childhood Education certificate, and studying in the Critical and Creative Thinking Program. In overcoming obstacles I show myself to be a resolute person. Lessons that I share with readers include grades are not everything, memorizing is not an effective way to learn, meditation helps me understand myself and be mindful, I enjoy learning with passion, plans and strategies are important for success, and thinking skills can be learned. I relate these lessons to the work of various authors, including Dweck, Perkins, Scharmer, and Tishman, The last chapter presents my plan to become a better thinker.

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\* The Synthesis can take a variety of forms, from a position paper to curriculum or professional development workshop to an original contribution in the creative arts or writing. The expectation is that students use their Synthesis to show how they have integrated knowledge, tools, experience, and support gained in the program so as to prepare themselves to be constructive, reflective agents of change in work, education, social movements, science, creative arts, or other endeavors.

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# The Resolute Student

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## Abstract

This synthesis paper reveals how I overcame my obstacles and problems at different time frames in my life — elementary school, high school, college, work, coming over to America, attending an ESL school, earning an Early Childhood Education certificate, and my experience in the graduate program at UMass Boston — by being a resolute person. The paper describes how I learned that grades are not everything, memorizing is not an effective way to learn, learning with passion is the way that I enjoy most, and that plans and strategies are important elements that will help me succeed. I learned to meditate and to use meditation to help me understand myself better. I discovered my strengths and my weaknesses. I found out that thinking skills can be learned, and it inspired me to want to become a better thinker. In the last chapter, I discuss how I will implement my plan to become a better thinker.

**Keywords:** Resoluteness, Education, Learning, Thinking, Plan, Strategy

## Introduction

In my journey of learning, I have made countless mistakes, but I have also learned what I have done right. The one profound lesson that I learned from my father that I have been carrying with me my entire life is, that as long as I do not give up, I will achieve my goals. My father was the one who gave me the resolute spirit of a fighter. He was a boxer who never lost a fight in his entire career. Every time I complained to him that I was really tired of my work or school, my father would say to me, “Keep fighting and be patient. You are a daughter of a fighter.” I always listen to my father’s words. It is not a cultural thing; I listen to him because I agree with him. I do not see why I should not follow good advice. Because I take my father’s words seriously, I keep knocking my obstacles down when they try to scare me away and make me abandon my goals.

Yet being resolute may not be enough to get us to our goals. We need to use our brains to come up with plans and strategies. What if we had to find out how many M&M chocolate candies were in a giant truck? Would we count all day and all night nonstop and hope to finish in a week? Or should we try to find better ways of counting them so that we would not have to do all that crazy

counting? In addition to having plans and strategies, we need to pause and take the time to think about what we do well and what we have to improve. I did not learn this lesson until I joined the Creative and Critical Thinking classes.

If I had lived 40,000 years ago, I would have painted on cave walls to tell my stories. I want the next generation get my message because I believe that my learning experiences might benefit them in some way. The stories of my learning experiences are drawn from before I went to preschool through my time in graduate school at UMass Boston. My stories come from my personal experiences and reflect how I learned and how I became the new me I am today. My goal is to deliver a special message to students, educators, and parents. I want people to learn from my mistakes and my successes. To the new generation, I am a traveler with experience. My message to them might be a piece of advice or a warning that will give them a head's up.

Teachers and parents can also see what may be good or not so good for their own learners. My stories are not meant to be a guidebook or a how-to book. My story should benefit anyone who knows how to digest it and apply it. For people who have already finished school, I hope that my personal stories will lead you to reflect upon your own stories and inspire you to be resolute and overcome obstacles so that you can achieve your goals. I am giving you a reason to think about your personal history. For people who are still in school, I hope that my story will help direct you and help you to find yourself like I did.

I have been interested in how I learn, how people around me learn, and how I can learn better my whole life. As every minute that goes by we are not the same person as we were one minute earlier. We get older and learn more and gain more experiences than we had the day before. Life is a long learning process. Learning is not only limited to lectures or the classroom. We learn from others, but we can also learn from ourselves. I love to learn about everything that I possibly can. I like to work on my mistakes. I would like to be a better person than I was yesterday. I want the best out of me. That is why I keep learning. I believe that learning can change people's lives and who they are. People even have a greater chance of survival if they learn from their mistakes. For instance, 12 years ago there was a tsunami in the Indian Ocean. Eleven countries were affected by this gigantic wave, including Thailand. Many survivors reported that most people died because they stood staring at the wave instead of running for their lives. A couple of survivors said that they were still alive only because they saw chickens and dogs running away from the tsunami toward higher ground and they followed them. And a ten-year-old girl on

vacation with her parents in Phuket saved the lives of nearly 100 people because she had learned about tsunamis in her geography class, knew the warning signs, and alerted people around her. People grow when they learn and we should never stop learning. People can achieve anything if they work hard enough and have everything they need in order to be able to learn. This is why I am fascinated by learning and have become obsessed with it.

Some people learn because they would like to fulfill their dreams. Some learn because they just follow societal norms. Some people study to become doctors or engineers because their parents want them to. My goals may be slightly different: I learn because I would like to understand things, and more importantly, to know myself. We may have different goals in learning, but we can all learn from each other. I have learned so much from others and I would like to pay it forward. I would like to use myself as a test-subject that other people can learn from. I do not want to be only a taker; I would like to be a giver too. It does not seem fair to not pay back to society. This is my chance to do just that.

I would really like my readers to keep learning and fighting when they are upset about their mistakes, forgive themselves, get up, come up with a better plan, and move forward. At the end of the day, we should tell ourselves that we are a great person, a person who did well, and keep going. We need to remind ourselves that the beauty of the journey is not only the destination, but the path that takes us there is beautiful too. I believe that a path without obstacles is dull compared to a path with them. A path with obstacles is full of excitement and adventures. If you read my paper, you may have a new lens to look at obstacles.

## Chapter One - The First Steps in My Learning Journey

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I was born, raised, and grew up in Thailand. I grew up in a small village far away from the city. My village was surrounded by mountains. My parents were farmers. My father attended school through sixth grade, but my mother had to leave after first grade. They spent most of their time working on their farm and other people's farms. We lived in a small wooden house with a thin galvanized steel roof that was rusted through in a few places. Because the house was not finished completely it was not very weatherproof; my father did not have enough money for wood so the walls did not reach up to the ceiling on every side. This caused our house to get very wet during heavy rains and storms. We had to move things around inside the house and cover them with plastic sheets so they would not get wet.

When I was four years old, I saw my cousin reading a book quietly in a corner of the house. I walked over to him and looked at the book in his hands. He did not bother to look up at me but continued to read his book. I looked at the page he was reading and I saw bunches of letters laid out next to each other in lines. I did not understand a single word, or even a single letter on the page. I did not know the concept of reading or why people would want to. I asked my cousin what he experienced when he read. He told me that it was like listening to someone telling him a fun story, except that it was in writing. I told him that reading sounded exciting. I thought to myself that it would be fantastic if I could read. It meant that I could know something new if I could read. I wanted to be able to sit down quietly and read just like my cousin did. I can say that my cousin was the first person to inspire me to embark into the world of education. I had seen my cousin read and I wanted to be able to read as well. This reminded of what the Soviet psychologist Lev Vygotsky believed. He explained that the environment that children grow up in influences the way they think and how they think. I cannot imagine what I would be interested in today if I had grown up in a bad environment.

From the day I saw my cousin reading, I kept thinking about learning how to read myself. I told my father that I wanted to be able to read. He told me that the first thing I needed to know was the Thai alphabet. He said that he would teach me if I really wanted to learn. I thought in order to be a real student; I would need to have some of the things that my cousin had. One day, when there was no one around, I opened my cousin's schoolbag to see what was inside. I saw that he

had a number of notebooks, pencils, and school books. I figured that I would need at least two things: a pencil and a notebook. I closed my cousin's bag without taking anything from it. Then I went to the grocery store across from my parents' house. I wanted to know how much a pencil and a notebook would cost. But, before I could ask the owner of the shop, I saw his son throwing two of his old notebooks into a trash can. I walked over to the trash can and grabbed the two notebooks out of it. I opened the two notebooks to see if they had any blank pages that I could use. Both of them had many blank pages. I was so happy, I held the two notebooks firmly to my chest. I ran home with a smile and the hope that I would get to learn how to read with my father soon.

My father started my very first lesson by introducing me to the first few Thai consonants. Then he taught me how to write. I enjoyed learning with him. I had no problem memorizing all the consonants and vowels, but at first I did not know how to write all of them. After I learned all of the consonants and vowels, my father taught me how to read. We used my cousin's old book that he used when he was in first grade. My father began to teach me to read some Thai words. All of the words in that lesson had same vowels but different initial consonants. There were about nine words. He read each word and he had me it repeat after him. I could copy his pronunciation just fine. Then my father asked me to read on my own. I could read all but two of the words. My father then re-read all of words and had me read them a second time by myself. I struggled with the same two words again. My father got very frustrated. He yelled at me very loudly and asked me why I could not read them. I was scared and nervous, so I cried. My father allocated time to teach me every evening, but I was not looking forward to learning how to read anymore. I did not want to disappoint him and I did not want to get yelled at. Whenever I could not read some words, I would make an excuse to not continue my lessons. I did not know that that was not a good way to fix my reading problem.

I was too young then to explain to my father why I could not read some of the words and that I did not understand the concepts that he tried to teach me. I was too worried about getting yelled at that I could not stay focused on my reading one hundred percent. On the other hand, my father did not have the basic knowledge a teacher needs. My father did not know that the reason I could not read all of the words was because I did not understand the concept of mixing vowels with consonants. While studying at Harvard Graduate School of Education (HGSE), Ray Ward, Catherine Park, and Kevin Lee interviewed both faculty and students at HGSE and Columbia's

Teachers College to produce the documentary film “What Makes Good Teaching?” These are some of the advice, strategies, and approaches they drew from the interviews:

- Know who the student is, and what they care about.
- Model how to learn really well.
- Focus on students; utilize empathy.
- Establish a personal relationship with students to better engage them.
- Take your students seriously. Treat them as people capable of sophisticated thought.
- Be able to think on your feet and improvise.
- Love to learn.
- Be reflective.
- Pay attention to how you’re communicating. Tone of voice is important.

My father definitely knew me very well, but he did not pay attention to how he communicated with me and he was not careful to control his tone of voice. Had my father known just how important it was to focus on his student and show empathy, it would have helped me a lot. Then he would have known that yelling at me would make me shut myself off from his teaching. However, I am not going to blame my father for not knowing good teaching strategies. He was carrying out the only approach that he knew; he did his best.

I really wanted to stop learning to read with my father. I actually was brave enough to tell my father that I did not want to read anymore. My father told me that I should not stop learning to read because I got yelled at. He said to me that if I did that, it would like I running away from a problem. He told me that I must learn to be like him. He said that I should practice and spend more time on my lessons. Then my father told me about his boxing experiences. He said that had to run and practice all day long before he became a great boxer. He wanted me to do the same. He told me, “My daughter is a fighter and she will never give up.” What he told me was a special mantra that has always stayed in my mind. That mantra gets louder whenever I want to give up on something.

I went to kindergarten when I was five. I was apprehensive knowing that I had to go to school the next day, because I was scared to go to a new place and to be away from home for the day. I used to stay home and play all day with my sister. I did not want to go anywhere; I just wanted to stay home. On the morning of my first day of school, I did not want to get up. My mother got me up somehow and helped me get dressed. She told me that it was time for me to go to school. I cried and told my mother that I didn't want to go to school. So she said that she would walk with me to the school and stay there with me for a while. I was okay with her proposal. She stayed with me for about 15 minutes and that was it. From then on she never walked me to school again. She was so tough on me. I do not know how she did it but it worked out fine for both of us.

After I had mastered and began to excel in reading, I looked for a new challenge. I wanted to become first in math in my class. Most of the time, I was in second place, and sometimes third place. I wanted to become the best math student. I thought of my classmate who was the best math student as my opponent. I don't think that he was aware at this at all. Whenever I was in math class, I would observe him closely. I discovered that he would sit quietly, look at the chalkboard, listen to the teacher carefully, participate in most of the topics that the teacher raised, and moved his eyes around a lot. I noticed also that he was able to grasp new concepts quickly and that he was able to solve complicated problems faster than other students. I looked at all of the things that he did, and it still puzzled me. I did not understand why he could understand mathematical concepts and can solve problems faster than anyone else in the class. I assumed that he was just smarter than the rest of us. I told myself, "Even if I am not a smart student, I can be a student who works hard and studies hard." I hoped that I would beat him one day. So I started to pay attention to improving myself instead of worrying about my opponent so much. I made myself fall in love with math. I played mathematical games with my sister at home. I watched math shows on TV. I spent most of my time on math homework. If I could not solve a math problem, I would not do anything else. I got better at math and I remember that I achieved the best ranking in math one semester. I still was not proud of myself because I thought I wasn't smart compared to my classmate who was so good at math. He learned math effortlessly but I had to devote a lot of time and hard work to be good at it.

If Dr. Carole Dweck, the author of the book called *Mindset, the New Psychology of Success* were to read my story, she would say that I have mixed mindsets: both growth mindset and fixed mindset. The quality that gives me a growth mindset is my belief that if I work hard then I will

get better. My thought that being able to work less and apply less effort equates to being smart makes me a fixed mindset person. Dr. Dweck pointed out that many students who think that they are smart will try to avoid challenging tasks. Challenging, to students with fixed mindsets, means that having to expend more effort equals not being smart, while students with growth mindsets think of obstacles and challenges as things that are going to extend their abilities. One good thing about me is that even if I may think that I am not an intelligent, I will never give up on who I am. From preschool to middle school, I loved all kinds of artistic activities such as drawing, painting, and crafts. I have vivid memories of what I did when my teacher gave drawing assignments to the class. Most of the time, I would draw a single house, three mountains, two trees, one sun, a couple of clouds, the sky, a family of ducks, and some chickens. I drew all of the animals facing left. All my trees would have green leaves and all the tree trunks were brown, all of my ducks were yellow, all of my suns were yellowish and orange, my clouds were white, and my skies were blue. It seemed that all of the drawings were based on reality and lacked creativity. When I looked back to try to figure out why I drew the same picture almost all of the time, I remembered my first drawing lesson where my teacher drew a house, a sun, and some trees on the blackboard. I assumed that I had to draw exactly the same as my teacher did. More importantly, my teacher told us that leaves were green and to remember to use the real color and do not make the leaves purple. During the drawing period, I would walk around the classroom and look at other students' drawings. I would visit almost every table if my teacher did not stop me, because I wanted to see what my classmates were drawing. I just wanted to make sure that I would not do anything different than my classmates. Then I would go back to my table and make sure I drew something similar to what my classmates were drawing. If I had missed something, I would add it so my picture looked the same as those of my classmates.

Dr. Richard Pearce is an education expert who assembled a collection of essays by himself and others titled *A Guide to International Education and Schools*. His main goal in compiling the book was to help international students fit into new cultures and to guide teachers in assisting students to make smooth transitions to new cultures and environments. He coined the phrase “because a good fit means good learning, quite apart from avoiding the problems that come from a bad fit.” What he said made so much sense; It was why I didn't want to be different than my peers. I just wanted to be left alone and have a good time at school.

When my teacher gave us a craft lesson, I would try my best to do exactly as my teacher instructed. I wanted my teacher to praise me and be proud of me. When my project turned out almost the same as my teacher's, she would praise me and say, "Good job!" Then I would smile and be happy for the rest of the day. I learned to copy my teachers in order to please them. I thought that if I could make my teacher smile and like my work, it meant I had done well. I rarely heard my teachers say what they liked about my work or how I could make my work better. Most of the feedback I received was not very constructive, and was usually limited to the teacher writing "fair," "good," "very good," "excellent" or a simple grade score on my paper. My teachers did not encourage their students to work independently and work for their own pleasure. The teachers just wanted the students to do what they told them. What my teachers did was totally opposite of Dr. Maria Montessori's methods. Dr. Montessori encouraged children be independent and promote self-expression, self-evaluation, self-discovery, and self-esteem. If a child were to draw a green rabbit, it should be because he himself wanted to, not because he knew that the teacher liked green. When I worked at a Montessori school three years ago, I was trained not to say "good job" or tell them that I liked something they did. Instead, I was to ask the children what they thought about their work. For instance, if a child said to me, "Do you like my painting?" I would say, "I think it is better for you to tell me what *you* think about it." Asking children to think about and evaluate their own work helped create a sense of ownership and independence.

In contrast, students at my school who were different were considered weird. Because of this I just wanted to be like everyone else, so I tried not to think or do things differently. I just played it safe. Doing the same things my friends did made me feel more secure. I also thought that if I did anything different, then people would laugh at me and make fun of me. I hated it when that happened. But there was one thing that I could not do anything about, even if I wanted to. I could not make myself be the same height as my peers. I was taller than most of my girl classmates. Many boys in my class thought that being tall for a girl was odd. They decided to pick on me and they called me, "Super Tall Girl" and laughed at me. I got mad every time someone called me "Tall Girl." I thought of a way to strike back. Thai people respect their parents highly, so it is a grave insult to call someone by their parent's name. So that's what I did. I did not want to be a target that they could pick on easily, so I fought back. That was how I survived. But, according to [kidshealth.org](http://kidshealth.org), the way that I reacted to being bullied was not an effective way to handle it. I

should have ignored the people who tried to make me mad. Their goal was to make me mad, so if I did not show them any sign that I was paying attention to them they would just leave me alone. I should have just ignored them, walked away, and found true friends. It would have helped me handle the bullying better.

As my creativity was very limited at school, at home I sought to exercise my creativity and extend my imagination through play. I felt like I was my own boss when I was home. I did have to obey my parents but that did not bother me that much. As long as I was well-behaved and did my chores, I would be granted the privilege of doing some of things I wanted to do. So each day when I got home, I would hurry to get changed and go straight to my chores. First, I had to sweep the floor, and then I had to mop it. My next task was to wash my clothes. I had to wash them by hand because we did not have a washing machine, so it took about an hour, and unfortunately, I had to wash them every single day because I had only two school uniforms and the weather was tropically hot most of the time. Every day I would try to think of ways to do my job faster and more efficiently. Finishing early meant that I would have time to play more, so I learned to prioritize my tasks. Sometimes I was able to talk my younger sister into helping me. I would say to her something like, “If you help me with the laundry today, then we could play together longer.” If my sister agreed to help me I would play with her longer, as I promised.

When I played with my younger sister, I was the one who managed everything. I was as if I were her boss. I would tell her what to do and what to say. She was a good follower and she would do anything that I asked her. We did not have any commercial toys. My parents had just enough money to feed us. When we played, we had to make our own toys. Most of our toys came from the environment that we lived in. We would use various kinds of leaves and pretend that they were products from a grocery store. We would use snail shells as our money. Big shells had more value than smaller shells. We had to make change just like in real life. We loved to cook. We made cookies from dirt and curry from dirt mixed with water and leaves. We had all the pots and pans we needed because they were broken and they were no longer of use to anyone. We used coconut shells for our bowls and plates.

My favorite type of play was role play. I liked role play because I could be anything or anyone. One day, my sister and I played soldiers. Our roles were male soldiers. I had a much higher rank than my sister. I would just sit and tell my sister what to do. I would sit down on the swing set

which was five feet from the kitchen. The swing set was my command center. I would tell my sister to do different things like, “Drive me to work” or “make me some coffee.” One time, while I was busy commanding my sister, four chickens went into the kitchen and had a party in there. Our parents did not like it when our chickens got into our house because chickens tend to poop everywhere they go. I did not want to clean up chicken poop, so I decided to have my sister chase the chickens away. Remaining in character, I commanded, “Get rid of those chickens immediately!” My sister said, “Yes sir,” and saluted. She ran quickly to grab a broom in the kitchen. She then raised the broom high, intending to hit the kitchen floor hard to scare the chickens away. I then heard an explosive sound and the noise of shattered glass falling on the floor. My sister was standing stock still, still holding the broom with both hands. There was thick smoke above her head and there were a lot of broken pieces of glass on the kitchen floor. I was so shocked at what I saw, my jaw dropped and my eyes opened wide. Then I pulled myself together and jumped off the swing set. I ran quickly to check on my sister; she was fine. Then we both looked up the ceiling and noticed that she had broken one of the fluorescent lights. My sister began to cry because she was afraid that when our parents got home she would be in trouble. I was sad that this happened and worried that our parents were going to get very mad at us. I told my sister that we would have to clean the floor first. Then I told my sister to hide from our parents and that I would tell them that I had no idea where she was or what happened to the light. When my parents returned home, they asked me what had happened. I told them my story but they did not buy it, so I told them what really happened. But they were only upset because we had endangered ourselves, and they told me that my sister and I must be more careful in the future. I went to find my sister and told her that our parents had found out what had happened. She cried because she thought that she would get spanked. I told her that she would be fine. From then on we played more carefully and tried not to break things in the house.

In order to avoid breaking anything in the house, we decided that we would just play outside. We would walk to the rice paddy, woods, river, farm, or the orchard near our house and play. All of these places belonged to our neighbors. My sister, my cousins, my friends and I would spend most of our weekends in these places. When we went to the rice paddy, we would catch tiny crabs, fish, shrimp, and snails. We used a *sàwǐng* to catch these animals. A *sàwǐng* looks like a fisherman’s landing net, or a maybe a tennis racket with a scoop-shaped net instead of strings. Thais use them to catch small animals in water. Using a *sàwǐng* is quite easy. All you have to do

is lower it into the water in front of you and swish it to and fro, lifting it periodically to see if you have caught anything. If you catch something, then put it in a bucket of water so your catch will stay fresh. Sometimes we would fight amongst ourselves over who got to use the *sàwǐng*. I told my sister and my friend that in order to make it fair, we should take turns using the it. Each person would get to use the *sàwǐng* while the rest would count to one hundred because none of us a watch. After we got bored catching animals we would think of something new to do. Late one morning, my two younger sisters, my two younger cousins, and I played at the edge of a pond. My youngest sister was only nine months old and I was about seven years old. I told them that I wanted to dig a hole to find a new source of clean water for our parents. My younger cousin, my younger sister and I helped each other dig a hole. We were engrossed in our digging, and our hole reached a depth of about two feet and it was about one-and-half feet wide. Some water started to seep into it. Then we heard a loud splash. We ran to the pond and saw my baby sister floating in the water. We could see her clearly. My baby sister was face down and sinking toward the bottom of the pond. I did not know how to swim but I told myself that I must do something to help my sister immediately. Our parents were too far away for us to reach. I grabbed a stick that was close to me and plunged it in the water. I wanted to find out how deep the water was. When I placed the stick in the water, my stick was not at a 90 degree angle with the bottom; it was more like 45 degrees. I pulled the stick out of the water and I stood up next to the stick. I wanted to know if the wet part of the stick was longer than I was tall or not. I looked at the stick and I lost hope. The watermark on the stick was over my head, and that meant the water was deeper than I was tall. But I had no choice, so I jumped into the frigid water anyway. I froze and thought I would not make it. Then I realized that I was okay, and I reached for my sister and pulled her toward me. I gathered her in my arms and held her tight. I took her out of the water, laid her down on the ground and pressed on her stomach until water came out of her mouth. I carried my baby sister back to our house and she was fine.

Sometimes we would walk many miles away from our home to find edible plants that grew in the wild. We learned which plants we could eat and which we could not from our mother. There was one plant that is in the same family as morning glory which we called *pàkbûng*. *Pàkbûng* grows both in water and on land, but most of the time we would pick it in the water. One challenge we faced sometimes was having to cross a creek. Since most of us could not swim, we would have to devise strategies regarding who should go with whom and who should cross the

creek first and who should cross last. It was not that easy for us to cross the creek because we were young and not that strong and the water was chest deep. Plus we had to bring our flip-flops along with us. When we knew that it was safe, we would decide to play in the water. I did not know how to swim but I would crawl in the water and pretend that I could. That was such a joy for me and my friends.

But childhood play is more than just play. Dr. Peter Gray, a research professor of psychology at Boston College, explained that play is important to all children because it is fundamental for all kinds of development. When children play, they make their own decisions and they learn how to get along with their peers. During play, children can invent things in their own ways; anything is possible in play. Open-ended learning materials allow children to let their imaginations run wild while they are playing. Children do not have to worry if they get it right or if their ideas will be the same as others'. They get to extend their creativity and exercise their imaginations.

I think that play not only promotes creativity, it also promotes critical thinking skills and problem solving skills. I tried to figure out ways to do my chores faster, how to get my sister to help me, to think of a way that would help my sister and I avoid punishment for breaking the light, thinking about how to cross a creek, and how to rescue my sister from the pond. I also think that these were wonderful hands-on learning experiences. I learned to work with a team by resolving many disagreements with my sister, cousins, and friends in my neighborhood. My friends and I learned how to solve disputes within our group. We discussed and negotiated in order to find the best solutions. Thinking about what I could use for toys and how and where to play so as to not ruin my parents' house developed my problem solving skills. Playing outside under the big sky with mud, water, and under the trees connected me to the world. I grew up to be an adult who cares for the planet, nature, and animals because I feel that I am connected to those things. I would like to protect and preserve the environment so the next generation can enjoy nature like I did. Play had a huge impact on my creativity, critical thinking, problem solving skills, my ability to love, and my affinity toward nature. If I could go back and change my childhood, I would not change a thing. I love it just the way it was. If I had had toys and lived in a big house, I might not have had all of these fun and enriching experiences. Because lacking something does not mean not having anything.

Now I want to take a look at how chores became an important aspect that helped me learn to be responsible for my life and that of others. My mother had one rule for my chores: I had to finish all of them before she got home in the evening. I took my mother's order seriously because I knew that if I did what she said then I would be free to go play. I finished my chores before my mother get home almost every day. Sometimes when I got home I just wanted to go play right away but I had to check the clock often. I needed to make sure that I would have enough time left for my chores. In order to do this, I had to make a plan to make sure I completed my tasks. Which chores I chose to do first did not matter as long as I got them all done on time. Having to do chores has helped me learn to be responsible, and not just think of myself. I started to think of how I could contribute to my family. If I went to a place that had edible plants or a place where I could find shrimp, fish, or crabs, I would catch them and bring them home so my mother could cook them for us. During the dry season, my brother, my sister, and I would have to go get water from a pond that was about a half-mile away from where we lived. We would bring our pushcart loaded with big plastic gallon containers with us. We would each take a container and climb down the very steep bank to the water. We submerged the containers in the water and filled them up. When all the containers were full, we brought the water home. Every time that we went to the pond, I would try to come up with better ways of getting the water. For instance, instead of filling the containers completely, I thought of filling them only halfway, then pouring their contents into the other containers we left back on the pushcart. I thought of this way because it was safer for us to carry containers that were not too heavy. Carrying a full gallon could be dangerous because we might slip and fall into the pond. Sometimes my new ideas did not work so well, but my brother was very kind to me, and let me try my new ideas without complaining.

It is not only I who believes that doing chores can benefit children when they are growing up. Julie Lythcott-Haims, former dean of freshmen at Stanford University and author of *How to Raise an Adult* believes this too. She pointed out that employees who had to do chores when they were young tend to have more empathy toward their coworkers than employees who were not required to do chores when they were kids. That is because kids who do chores learn the benefits of struggling to achieve something. In her study, Lythcott-Haims wrote "By making them do chores — taking out the garbage, doing their own laundry — they realize they have to do the work of life in order to be part of life." My mother might not realize how grateful I am and how much impact her chores have had on me, but nowadays I feel thankful that she had me do chores

ever since I was young. No, I did not appreciate doing those chores when I was a child. However, I cannot deny that having to do them has helped me very much in my adult life.

During my three years in middle school, I took my learning much more seriously than when I was in elementary school. There were three main reasons why I decided to do that. The first reason was that I always wanted to be a volleyball player for my school but I was not good enough. The most I could do was to cheer my classmates from the sidelines. I told myself that while I might not be a good volleyball player, I could be good at learning. Therefore, I devoted most of my time to studying and paying attention in class. My second reason was that I wanted to go to the high school in the city. In order to get into that school, I needed to maintain good grades in middle school. My last reason was that I did not want to work on a farm like my parents. The only way out for me that I could see was getting good grades in school so I that did not have to be a farmer.

Because of those three reasons, I read before class and after class almost every day. Sometimes I read so much I dreamed about it. One night, while I was studying about magnetic fields in our living room, I tried to understand why like poles, such as north and north, or south and south, repelled each other and why different poles attracted each other. I thought about it until my brain was exhausted and I fell asleep. In my sleep, I said something about north and south poles out loud. My mother and my sister, who were watching TV next to me, laughed at me and woke me up.

I would wake up at five o'clock every morning, cook rice for my family, and then go straight to study for about one hour before I got ready for school. Because I studied so much, I could predict what questions the teachers would ask. I knew what teachers looked for when they created quizzes, tests, and exams. Most of the exams I took were based 90 percent on memorization and only 10 percent on understanding. All I had to do to pass the tests was to read a lot and that is what I did. I would read and review while my friends sat down and chatted with each other. I would read in the classroom before the teacher arrived. I seized every chance I could to read and study. I studied so much that sometimes I forgot to talk to my family. They wanted to talk to me but I was lost in my own world.

I was a competitive person but I was not selfish. I would help anyone who asked me to explain something. I was well behaved and many teachers would complement me and invite me to

participate in activities more often than my classmates. Because of this, many of my female classmates did not like me. It became my biggest obstacle in middle school. I had only three close friends and the rest of the students united against us. We never had a physical fight; but we endured verbal abuse and rude gestures from the other groups. I was sad that this happened. I would try to stay away from the other groups as much as I could, but I did not let the problem with my classmates stop me from being a diligent student. I knew that I could not make them like me, so I decided to be myself. I knew what I wanted. I focused on my goals and left my haters behind to cry when they saw me succeed. My diligence paid off well; I had the best academic performance of any student in the school for three years straight.

## Chapter Two - All About the Grades

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In order to connect all of the dots to complete the picture of me and my learning development during high school and college, I have to tell the story of how I lived my life, including my family, friends, schools, classrooms, and the other elements related to me in the picture because they were all connected and they all had impact on my life. I believe these factors affect how others learn and impact their learning as well.

After I finished middle school, I wanted to go to the biggest and most prestigious school in the city. I knew that if I could get into that school, I would be able to study for free because my father worked for the city at that time. The school is not free for all students but it was the least expensive public school in the city. The city had a large population and most of the students in the city wanted to go that school. Each year thousands of students would try to get into it. Many students had to compete against each other by taking the admissions test. The night before I took the test, I was so nervous I could not sleep well. My mother was the one who took me to the testing place. We took a public van to get there. I thought I did OK. One week later, I went back to the high school with two friends from middle school to check for our names to find out if we had scored high enough to be accepted. My friends found my name for me; we all made it. We were so happy that we would continue to see each other.

Roughly 540 students would make up the 10<sup>th</sup> grade at my new high school. The students were divided into 12 rooms of 45 or so students per classroom. Ten of the rooms were for students who were in the math and science program and two rooms were for those in the arts and languages program. I chose the math and science program because I loved math and science. Tenth-grade classrooms were not divided into levels; students would not be placed in rooms based on their academic performance until the 11<sup>th</sup> grade. The room for students with the highest grades was called the King Room and the room for those with the next-best grades was called the Queen room. I was placed in the Queen Room in my junior and senior years.

### Family

The high school was about a one-hour drive from my home. There was no way that I could walk to school like I used to. I would have to take a public van to school, but the public vans in my

village did not run early enough in the morning for me to arrive at school on time. I would have to go to another village that was about 20 minutes away and take a van from there. My father decided to buy a motorcycle for me so I could get there on time. My father taught me how to ride the motorcycle a week before school started. I was afraid to ride the motorcycle because it was big and heavy. I worried that I would not do well. My father told me that if I wanted to go to school I would have to learn to ride the motorcycle. One day, before I started school, my father asked me to ride around to get used to my motorcycle. I got on the motorcycle, put the key in, and turned it. My father said, "Remember, you can do this, and be careful." But in order to reach the road, I had to accelerate quickly because our house was lower than the road. I sped up too fast and lost control of my bike. It was wobbling and I was heading straight toward a utility pole. I lost my balance and fell, landing just 3 inches from the pole. The whole incident happened in the blink of an eye. I had a very bad scratch on my left arm, and I had a bandage on my elbow the first day of high school.

My father decided to ride with me for a week to make sure that I could ride the motorcycle safely. I did not disappoint him. I rode safely every day to school. My father taught me two very important life lessons then: do not let fear stop you, and with the love and support of family, miracles can happen. If I could overcome my fear once, then I would always be able to. My father kept encouraging me and he never gave up on me; that is why I believe in myself. According to the American Academy of Pediatrics, what my father did was to enrich my self-esteem. He told me that I could do it and, moreover, he believed that I would. Giving children praise and encouragement can definitely increase their self-esteem.

I had a lot of strong feelings and emotions the first day that I started at my new school. I was unhappy being in a strange place. The school was five times bigger than my previous school. There were more students and teachers and they were almost all strangers to me. I had my two friends from my previous school, but we were not in the same classes. I was afraid that I would not have friends that would understand me. I was worried that the teachers might not be very nice like my old teachers. I started at this new school feeling uncomfortable; it gave me a different sense from the school that I had gone to before.

## Friends

I tried to look for friends who loved to learn just as I did. I did not want to become friends with someone who was too different from me. I believe that people who have opposing ideas are not a good match, so I looked for friends that did not mind hanging out in the library during their free time. I would avoid being friends with someone who just cared about putting makeup on and being pretty. I am not saying that girls who care about makeup are bad. I just wanted to find friends who were interested in the same things I was. That way, we could support each other better. I slowly began to have new friends that I trusted. It made me feel so much better. I continued to gradually make more friends with the same interests in my second and third years there.

Since my home was a bit far from the school, I had to travel two hours a day, every day that I went to school, which drained a lot of my energy away. I felt like I did not have as much energy as I did when I went to school closer to home. I still worked hard like I did before but I would fall asleep at my reading desk every so often. Sometimes, I would wake up when I felt my four-year-old brother brushing my hair.

He loved to brush my hair because he had overheard my mother admonish me often about my hair. She would say, “Na, please brush your hair before go to school.” or, “Na, please don’t go out of the house like that. Brush your hair first.” (Na is my nickname.) My brother wanted to help me by brushing my hair while I was sleeping, so that when I woke up I would be ready to go out without having to brush my hair. My brother was so kind to me.

I still felt that what I read and studied did not really stick in my head. Many of the things I studied so hard, I forgot so easily. I did not understand why.

## Work and Money

Every weekend, I would work on a farm or in an orchard so I would have money to use at school without bothering my mother. It was no fun at all to work on a farm or in an orchard. It was so hot that I would sweat all day. It felt like I was standing in front of a hot oven all day. I did not want to do it but I could not avoid it. Some of the money I earned helped support my family. The money I earned was enough for me to spend at school for five days, with enough left for my mom to buy one day’s worth of food for the family. She was the one who made the money to

buy food for our family for the rest of the week. Sometimes, I would have to travel far away to work, leaving very early in the morning and not getting home until 8:00 or 9:00 PM. On one long school break, I worked for a lady every day and did not have leisure time to spend like other students my age. There were many times that I worked too much and I became sick. I have to say that I had mixed feelings when I got sick and could not work. I was happy that I would have some free time at home like other students, but I was sad that I could not make money so I could help support my family.

Sometimes I was embarrassed by my poverty, and I felt like I did not belong. When my classmates talked about their weekends, no one at all had to work during the weekends like I did. I did not want my friends at school to know that I was so poor that I had to work every single weekend. There were many times that I had to work only a couple miles from my school. I was worried that my classmates who lived nearby would see me. That bothered me very much, but I could not do anything about it. I just had to do my work and hope that my classmates would never see me working on a farm.

## **Entrance Exam**

Entrance exams in Thailand are usually given once a year. The content of the test is drawn from the subjects that students have been taught in the last three years of high school. Therefore, students must study everything they have learned in high school in order to pass. All students are eligible to take this test. School grades do not matter. Some students with poor grades in school pass the entrance exam because they were able to go to a tutoring school, and some students with good grades in school fail the entrance exam because they could not.

Nowadays, in an effort to make the system more fair, eligibility for college is based on students' grades in school and three tests: GAT, PAT and O-NET. GAT is the General Aptitude Test and the test is based on reading, writing, analytical thinking, and problem solving. The PAT, the Professional and Academic Aptitude Test, measures achievement in specific areas such as engineering, architecture, and teaching. O-NET, the Ordinary National Education Test, is based on five subjects: mathematics, social studies, Thai, English, and Science. In order for students nowadays to be able to get into college, they must have good grades in school, and do well in the GAT, PAT, and O-NET. Students in my generation were solely dependent upon the entrance exam.

Besides my busy weekends, I had another big thing that I worked on over the course of three years in high school, and that was the college entrance examination. The entrance examination was the most significant test most students would ever take in their lives. It was the exam that students who hope to go to a public college or university must take. There was no minimum score that would guarantee acceptance. Most high school students in my generation shared the same dream of getting into a public college. Being able to get into a public college meant that students had to do very well in school and work hard to prepare for the entrance examination. Students who go to public colleges have better credit compared to students who go to private schools. Public colleges are also much less expensive. That was why I worked so hard to get into a public college. I reviewed and studied for the entrance examination as often as I could after I was done with my homework from school.

Thailand has many schools that specialize in preparing students for the college entrance exam. Thai people call them tutoring schools because they have many more teachers per student than regular schools. These schools are privately run and are similar to prep schools in the U.S. These schools teach students the same subjects that students learn in state-run schools but they offer more shortcuts and techniques that help students do better on the exams. Some students in Thailand go to these schools starting with preschool. This is just crazy.

I heard from my classmates that some of the teachers who taught at our school purposely held back. When they taught at a tutoring school they taught much better and they taught many more techniques. It made sense; if they taught well in the regular school then their students would not need to go to a tutoring school, and they would not be able to make extra money by teaching at a tutoring school. This is not a nice thing for teachers to do. I have heard that many teachers at other schools do likewise.

Since I did not have the money to pay for a tutor to help me, I studied hard on my own. I stayed up until midnight every night and woke up at 5:00 AM each morning so I could study for my entrance exam. Whenever I was free from working in the farm, I would read a book under a mango tree in front of my parents' house. Sometimes I was so tired that I fell asleep while I was reading. When I woke up, I would just continue reading like nothing had happened to me. I did not go hang out with my classmates during the weekends for three years straight. I just wanted to

make sure I would be able to get into a public college so I would not have to pay high tuition and be in debt for many years after I graduated.

My classmates that came from families that had a lot of money would go to tutoring schools during weekends and long school breaks. When they came back to school, they would say that they had learned things that our school did not teach. One girl even shared a technique of calculating a complex number with me. I thought that it was fantastic. I went home that day and told my mother that I wanted to go to a tutoring school to see if it could help me. My mother told me that she did not have enough money to afford it. If I really wanted to do that, I must find my own money. I thought that was possible. I worked harder and saved enough money for a tutoring school in Bangkok, the capital of Thailand. I signed up for a math course that was one and half months long. It was about 40 hours of tutoring. I had heard from some of the senior students that this tutoring school was very good and taught a lot of techniques that would help students solve math problems faster. My teacher at that school used to be an engineer, and he did have many techniques that helped us students do the math faster. He would make the students laugh every once in a while, which made the environment of the classroom warm and conducive to learning. I did not forget to pay attention to the students who did better than others in the class. I wanted to see what was in their minds and why they could do better than everyone else. I did not get any answers. However, I had learned what I wanted to learn most. My goals for going to this school were to learn new techniques like my classmate did and to get ready for the entrance exam. I knew that was such a shallow idea. I was not proud of myself that I did not want to gain a deeper understanding of math and to appreciate its beauty. I was too anxious about my future; all I thought about was getting into college. The one thing that I could be happy about was that I had paid for the tutoring school myself.

### **How I Learned During My Three Years in High School**

Teaching and learning styles at that high school were very similar to my middle school, except that students at that school tended to be more competitive. In one semester, I had to learn math, chemistry, biology, physics, social studies, Thai, English, and three more subjects. I studied all day long, but I did not really learn anything. All I did was sit in class, listen to the lecture, and take some notes. There was no real discussion; the teachers would only ask, “Do you understand?” I never knew why I had to learn every single detail about a subject I would never

use. I did not know why it was important for me to learn. I did not know what I could do with what I learned either. One thing that I knew for sure was that I had to learn and absorb information like a sponge. The more I could memorize, the better I would do on tests. From my perspective, the teachers did try their best to deliver what they thought we should learn and know. The students' job was to be good receivers by taking what the teachers offered.

During my high school years I still tried to find out how students who had superior academic performance learned. I noticed that these students shared a number of traits in common. They were calm, happy, very focused, and they took their learning seriously. All of this information did not help me learn any better, but it did help me understand the people around me better. This information alone was not enough for me to understand the way these students thought. I was like I knew their features but not their functions. I had run into a dead end. That was it. Since I did not know how they thought, I assumed that those students were just born smart. I could have told myself that there was no way that I could achieve at their level, but I did not do that. I squared my shoulders and decided that I would just worry about how I could learn better. I then shifted my focus to my own learning. I read a lot and studied hard but I still did not do well in school. I did OK, but did not excel. Something was wrong; I studied just to memorize the specific things that I thought I would see in the next test. I did not study with the passion and the love of learning that comes from wanting to know about something deeply. I did it all for better test scores and for my future college. It was like a couple getting married for the wrong reasons. Let us say that a couple gets married only so they will not be lonely. Then they would each see the other as just someone whose job was to fix their loneliness. Since their marriage is not based on love, they will not really care about each other, and one day it will show. Their feelings will be hurt when they find out that their partner does not really love them. Their marriage will likely fall apart due to a problem inherent from the beginning. It is the same with learning. The goals of learning should not be based on getting good grades. It should base on our love for what we learn. Some may argue that we cannot love everything that we must learn. I would say that we can always find something that we can love to learn and know. We just have to find it. I also believe that learning without love and passion is so dry. I have admitted that, in my three years in high school, I learned without love and passion. I like what Ainissa Ramirez, who is a science evangelist, wrote in her article called "Passion-Based Learning." She said that passion is powerful enough to move a mountain. Passion can make something that seems impossible

possible. I cannot agree with her more. I believe that if learners learned with passion, they would do better than just getting better test scores. Not only that, passion can help us be brave enough to break with tradition, become ourselves, and let our imaginations lead us. This is what cellist Yo-Yo Ma said in a conversation at Harvard's Farkas Hall in 2015. Ma also performed a piece of music that was based on his imagination that day. Ma and his musical ensemble decided that they would not play it safe by trying to please the audience, or even a composer. Without a musical score in front of them, they improvised the entire performance right there on the stage. It turned out to be a remarkable piece of music. It made me see that I was much too crazy about getting good grades and getting into college. That set me on a new path like the one Ma took. One day, I hope that I will gradually break out of my shell and comfort zone like Ma did with his musical partners.

## College

The year that I took the entrance exam about 150,000 students took the test. However, the public college was only able to accommodate about 15,000 students. I had little hope that I would be able to succeed. The number of test-takers scared me, but I thought that if I could pass it would be great, and if not, it would not mean that my life was over and the world would come to an end. After I took the test, I went back to work on a farm. My parents were with my brother in a hospital at that time. The day the test results were announced my parents were more anxious than I was. My father bought a newspaper so he could look for my name. I did not bother to check if my name was on the list or not, but when I went to the hospital to visit my brother, the first thing that my father told me was, "I found your name in the newspaper." He said it with a big smile on his face. I did not believe what I heard so I asked my father if he could point out my name in the newspaper. I could not believe it when I saw my name in the list of the students who had passed. That meant my hard work in high school had paid off. I would be able to go to a public college like I wanted to. I was accepted into a college in Bangkok that specialized in educational degree programs, Srinakharinwirot University, which was created from two institutions: the Advanced Teacher Training School, founded in 1949, and the College of Education, founded in 1953. In 1973 more departments, such as science, social studies, and psychology, were added.

I intended to major in physics, but my parents wanted me to go to a nursing school. I did not say anything when they talked to me about going to a nursing school, but they knew me well enough

to know that when I did not say anything back to them it meant I was not interested in what they were trying to get me to do. And they knew that I was a very stubborn person, so they decided to let me have my way.

I asked my classmates why they decided to study physics, but they said they actually wanted to go to an engineering or medical school, but could not get in. For me, I chose to learn physics because I just wanted to know what was so hard about it to understand. I remember the first time I received a D in my entire life was in physics. My classmate told me that I was crazy. If she were me, she would leave physics alone. I told her that I just wanted to win and I would feel like a loser if I ran away from something just because it was hard. This brought me back to the time I was learning to ride a motorcycle when I first got into high school. My father told me I would have to face my fear to get what I wanted. Because I was willing to do that was the reason I overcame my fear that day. It is not only my father who thinks that facing fear is better than just letting fear have power over us. Neuroscientists believe that too, and they have proposed six ways to overcome fear. Two of them are to be vulnerable and to practice being courageous. These two things can make our lives better.

### **How I Managed My Money in College**

My family did not have money to pay for my college expenses. I was a little bit upset about that but it was not their fault. I was pretty lucky that I could borrow money from the government to pay for my school tuition and all of my other expenses during the four years I was in college. Many of my classmates did the same thing. In fact, many of my classmates thought of the money that they borrowed from the government was free money. They believed that students were not obligated to pay it back when they finished school. So they borrowed more than double the amount I did. I did not believe the money was free at all. But I still wondered about it, and I thought, “What if I believed my classmates and borrowed a lot of money like they did?” If what my classmates believed was true, I would be fine, but if not, I would have to pay back a whole lot of money. I did not really need to use that much money. I decided that borrowing the least amount of money from the government possible was the safest and optimal course for me.

The money that I borrowed was just enough for my tuition and my other expenses each month. I had about 100 dollars that I could use each month. Half of the 100 dollars would go to my rent and the other half would go for food and everything else. That meant I would have to come up

with a strategy on how to manage and survive on 50 dollars a month for four years. I started to think about how I would spend the 50 dollars remaining after paying the rent. I thought about what the least amount I could spend money in one day was, and I came up with \$1.50 a day. My three meals at the college campus would cost \$1.20 and round-trip transportation to and from the campus to my apartment would be an additional \$.30. That meant I would have to spend only 45 dollars every month and I would have 5 dollars left over for something special. I did not know anyone in my class who only spent 50 dollars a month like I did. Most of my classmates spent around 250 dollars per month, but I was not embarrassed that I had less money than anyone else in my class. I did not see the point of comparing myself to my classmates. I thought that it would not help me in any way.

After I knew how much I could spend each month, I thought about what activities I could do for free while I was in school. I thought of two things that I could do for free: going to the library and staying in my apartment. For most of my free time when I was in school, I would go to the library seven days a week. The library was everything for me. I did my homework, chatted with my friends, took naps, and watched free movies there.

Besides taking academic classes in school, I gained experience with money management on my own. It was not a bad skill to have at all. People do need to know how to manage their money so they will not have to worry about money in the future. If I had come from a rich family and had a lot of money to spend, I would not have had to worry about how I would spend my money at all. The reason that I was able to make it through my four years in college was not only because I had good strategies, but that I also had self-discipline.

Remez Sasson, the author of *Strengthen Your Willpower & Self Discipline* stated that willpower and self-discipline are the two ingredients of success. He also pointed out that self-discipline gives people the ability to stick with their decisions and do what they say they will do. When people have self-discipline, they will find ways to make things happen. I should be happy that I learned self-discipline because I had limited money in college.

### **My Learning Development in College**

I took at least 18 credits per semester. I was overwhelmed because it was so hard for me to memorize so many subjects. The first two years, I learned math, computer science, biology, physics, chemistry, English, and Thai. The learning setting was the same as when I was in high

school. Classes were taught lecture-style and the teachers were the ones who did most of the talking. It was similar to listening to a talk show where the speaker just tells the audience whatever he or she likes. Once in a while, the speaker would ask the audience to participate. However, listening to lectures there was worse than that. I had to pay attention to catch things that the teacher highlighted and commit them to memory so I would be able to pass the test. I just went with the flow. I was like a robot that was programmed only to listen and memorize things. I paid attention to everything that my teacher said and took notes. I read a lot and I studied after classes every day. I went to bed around 1:00 AM almost every night. But I still did just okay in class. I was not in the outstanding group of students; neither was I in the poorest group. I was not happy with my achievements. I did not want to do just okay, but I did not know what else I could do better.

I then tried to figure out why I was not doing very well in school. I looked back at what I did and found out that many things I did were too extreme. I did not get enough sleep. I slept only 4 hours a night and I was very tired when I was in class. I did not exercise at all and I got sick very often. I did not allow myself to have fun. I just read and read. I think I read at least four hours a day but I still did not do very well in school. Based on two categories of readers identified by the City College of San Francisco's Learning Assistance Center, I was a passive reader. I never stopped to ask myself what I was reading or check if I understood the content. I read because I thought of it as my job and it was something that I had to do. I was not aware that I had to change the way I read so I could comprehend better. I also did not know how to organize my ideas after I read. It was no wonder my comprehension was so poor.

Another reason why I did not do very well in school was the way I thought about learning. When I went to class, I thought of it as a duty. I tried too hard to be a good student. I jotted down everything my professors said. I listened intently, and I mean, I just listened. I did not raise questions nor have any doubts. I was too naïve in thinking that I had to listen to and remember everything my professors told me, not to raise questions or to check if what famous scientists, mathematicians, or educators had said made any sense. It was no surprise that I did not question them. I was raised to respect older people, and one important aspect of showing respect is not showing doubt by asking, "Why?" That teaching had a very big impact on the way I learned.

It seems like I had my hippocampus working overtime (the hippocampus is an area of the brain that mainly deals with memory) and I did not have a plan or strategy to help me learn better. My poor hippocampus had to work extremely hard to process the tons of different kinds of information that I fed it every day. I did not use the other parts of my brain as much as I used my hippocampus.

According to neurologist Barry Gordon at Johns Hopkins School of Medicine in Baltimore, most people think that they do not use 100 percent of their brains. However, all parts of the brain are active all the time. The reason that makes people think we use only 10 percent of our brains is that the brain is composed of 10 percent neurons and 90 percent glial cells. Neurologists know how neurons function, but the remaining 90 percent of the brain still remains a mystery. I am not going to disagree with Gordon about what percentage of the brain I usually use, but I have to say that I did not use my left brain enough. The left part of the brain performs functions like analysis, logic, and scientific thinking. I did not use my right brain as much as I should have as well. If I used my right brain more, I would have brought more of my imagination and creativity into my learning processes. I had a brain, but I did not know how to operate it efficiently, and that was the reason why I did not get the most out of my brain. Based on the six elements in the Bloom's revised Taxonomy: remember, understand, apply, analyze, evaluate, and create, I only had one element, which was remember. If I had applied all six elements of his framework, it would have helped me learn much better. If I now practice all six elements, I will have a chance to find out if I understand what I am studying or not, and I will also be able to apply my knowledge in new contexts, manage the knowledge that I have, evaluate what I do, and plan to do something with what I learn. This sounds so much better than just trying to memorize information.

Normally, when people try something over and over without success, they tend to change their methods and try something else, just as in the Trial-and-Error Learning Theory by E. L. Thorndike (1874-1949). Thorndike believed that we learn by trying things out; we do not know if they are going to be the best ways at the beginning, but we learn to make them work later on. I think that I do that very often without being aware of it. There are many things that I try to do without knowing whether they are going to work or not. For instance, I would turn off the heater in my apartment when I was going to be away for a day because I wanted to save energy. Then I learned that just turning the thermostat down would help save more energy than turning the heat

off completely. It is just like when I was trying to learn in school, where I tried so many ways to improve.

In the very beginning of the second semester of my junior year, I thought about finding new ways to learn better. I started to look back at some of the things that I thought I should change. I focused mostly on things that were too extreme. I realized that not getting enough sleep would ruin my whole day at school. When I started to go to bed early, my two roommates thought that I had become lazy and did not want to study anymore. They would ask me, “What’s wrong?” “Don’t you want to get good grades?” and “Why did you go to bed so early?” I told them that I just wanted to get enough sleep, and I would wake up and study in the morning after my body had enough rest. They still did not see how going to bed early would help me learn better. I thought that I did not have to explain everything, so I left them to puzzle it out for themselves. I started to be more relaxed in school and enjoyed the things around me more like trees, birds, rain, skies, and rainbows. All of the small everyday things around me made me feel more relaxed. I was happier with myself and my life. I came to realize that I did not have to go crazy focusing on reading and lectures. Because I was happier, I could learn better. When I did not have to worry about trying to write everything down, I could listen better and understand better. I also had the chance to think about whether what my teacher said made sense or not. It was amazing how changing only a few things improved my learning significantly. My grades in my last three semesters were so much better than those in my first three years.

I wondered if being happy had something to do with my better grades, and I found evidence that supported my idea. A study by a lecturer at Harvard Graduate School of Education, Christina Hinton, Ed.D., correlates happiness with students’ GPAs. Hinton studied students in grades K–12 at St. Andrew’s Episcopal School near Washington D.C. She analyzed both qualitative and quantitative data and interviewed students. She found that happiness correlated with intrinsic motivation, extrinsic motivation, and GPAs. When Hinton asked students what helped them learn, many students said that being happy and having a positive attitude promoted their learning. My favorite year in college was my senior year. Good grades had nothing to do with my choosing my fourth year as the best. I liked my fourth year best because it was the year that I really got to enjoy myself. I got to laugh with my friends more. I did things that I did not normally do, like reading novels and listening to music. I joined a nature club and went on a field

trip. I made new friends and also established stronger relationships with my current friends. None of those things happened in my first three years of college. The big lesson for me was that learning was not limited to what was in the textbooks. Learning is about everything around us. I cannot learn only in class and ignore everything else. Outside of formal learning, we all have lives to live. That was why I had to think about how to balance my school and my life.

## **Reflections on High School and College**

My life during high school and college was not smooth as silk. I had to work hard, live on limited money, and study hard to get into a good high school and college. I did not do as well as I did when I was in middle school. I thought about quitting because I was trying really hard, yet my learning was not going as well as I expected, but I told myself, “No matter how much you want to quit, you just cannot do it.” I used to ask myself why I kept fighting. I did not get a clear answer, but I knew that there was something worth fighting for. I had more than just myself to consider. My parents and siblings needed me. I am the eldest child and my parents hoped that I will be the one they could rely on: their hopes depended on me. I am also the big sister of the family, and I wanted to be a good role model for my little sister so she could follow my footsteps.

I studied hard when I was in high school and college. I spent most of my time reading books and doing homework. I learned without really understanding that no matter how hard I study or how much I read, I would not do great in school. But even though I knew that trying harder was not going to change things that much, I still kept trying. Although my academic record was not impressive, I was developing a habit that would bring me success in the future. I found out that all that time that I had spent studying strengthened my resolution.

I see that the things that kept pushing me forward and preventing me from giving up was not only my own but my family’s as well. I may not be the greatest student in school but I am a child whom my parents do not have to worry about. That is what I am proud of myself.

## Chapter Three - Unlocking the Power of Mindfulness

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After I graduated from college, I felt that my life was very empty. I felt like I had to do something. I wanted to keep myself busy like I was in college. I did not want to stop learning — just like when I was in school. Back in school, I used to hang out at the library every single day when I was in college. I was busy with my studies, both day and night. But after I graduated, I did not have a job for three months. I was very sad and I did not know what to do with my life. I told myself that I have to do something soon. Then I applied to work at a hotel. My close friend said that I was crazy. She thought a person who had a bachelor's degree should get better job than that. I agreed with her but I had a good reason. Working at a hotel was another way to improve my English skills; that was my idea. My goal was not to work in the hotel for the rest of my life; I wanted to study abroad. It was fine however, to work at a hotel for a temporary period of time.

I applied for a job with almost 27 companies, went to many interviews, but I did not get offer from any of them. I applied to be a flight attendant, a foreman, a factory worker, a secretary, a sound engineer, a math teacher, a waitress, a house keeper, a maid in England, a customer service representative, a grocery store manager and many others. I traveled all over the capital of Thailand (Bangkok) hunting for a job. I was scared of getting lost in Bangkok because it is not a good city to get lost in. It can be dangerous for someone who does not have street smarts. I remember one day while I was on the bus, I did not feel well. There was a man sitting next to me. He asked me if I needed any help. I did not trust him. He continued trying to talk to me, so I decided to get off the bus. While I was at a bus stop, the same man showed up and asked me if I wanted to go have lunch with him. I said that I had to go see my boyfriend who was a police officer at the station right around the corner. He then disappeared instantly. Sometimes, I would walk for an hour looking to find a job because I did want to pay for the bus. It was really hot, and I was thirsty, but I had to keep walking and looking for a job. Looking for a job and failing to get one was not easy for me, but I did not look at all the rejections as my being a failure; I looked at the applications as something that I had to do, and I wanted to give it my best. If they did not want me, it was their loss, not mine. I thought of the difficulty of finding a job as a challenge. What about my emotions? I was stressed sometimes, but I did not let it get me down. I left my

emotions behind. I dusted myself off, and then I went out to find a job the next morning.

Whenever I went to a book store with my sister, we would go to the sections that had books we liked and my sister never had to worry about where she would find me. She knew that I would be at the section which contained job magazines. I did not get a job at first, but I kept looking and looking until I got a job with a hotel. It meant that my hard work in searching for a job was not in vain.

I applied for a job at a couple of hotels, and the Novotel Hotel in Bangkok hired me as a waitress. I was very happy to get a job with Novotel because I knew that I would have the opportunity to practice English. This job was a temporary position and the pay was very low. Even so, I took it because it was worth it for me. I got two meals for free at the hotel and I got to practice speaking English with the hotel's guests. The downside of this job was that I had only one day off a week. Most of the guests at the hotel were foreigners, and most of them were engineers or architects. I knew this because my coworkers told me. It made sense because the hotel was not far from the new airport that they had just started to build. There were also hundreds of factories not very far from the hotel.

Whenever I saw foreign guests who had no one taking care of them, I would walk quickly toward them and greet them with a smile. Then I would ask them if I could help them with anything. I would ask about their work and their country of origin with my broken English. The guests seemed to understand me well and we could carry on a conversation smoothly. I did not know if they really understood me or if they were simply trying to be polite. I did not only talk to guests from Europe and the West, but if they spoke English, then that was a bonus. I liked when my hotel was busy because I would be afforded the opportunity to talk to many people. But whenever we were slow, I got bored. My coworkers asked me why I was so good at speaking and understanding English. Do not get me wrong. My English was not that good, but my coworkers were Thai, and they did not really hear nor understand what I said to the guests. They just assumed that I spoke well because I just was not afraid to talk to the customers. I wanted to learn so I could not be shy. I told my coworkers that I did not understand every word that the guests said to me, but if I understood just a few words, that was enough for me to have a conversation.

My contract was over after three months. I was satisfied that I had learned English from the hotel clientele. I missed talking to my guests. Besides learning to speak English at the hotel, I also learned that I did not really like being a waitress that much. I was too slow for the job. My boss said that he wanted to see me work faster. It was true. My coworkers walked so quickly when they carried food to customers, I thought they were walking on roller blades! I thought they worked way better than me because they had worked there much longer. Most of them had worked there five years or more. Another reason might be that they loved their jobs more than I did.

I landed a new job about four weeks later, after walking until my shoes wore out. I remember the day I found this job, I had been walking since early in the morning, and I was really tired. I went to look for something to eat. I saw a "Now Hiring" sign next to the building that I was going to look for food in. I did not worry about food anymore. I got in an elevator and walked to the office that had put the hiring sign up. I filled out the application and took a math test. I did well on the test, but I had no idea why math had something to do with the job that I applied for. This recruiting company said that they liked me, and they would send me to work for a Japanese company near Bangkok as a purchasing manager. I had not applied to do that job; I had applied to be a quality controller to check if products produced by the factory met production standards, but they offered me the job of purchasing manager instead. I took it because I did not want to continue looking for a new job, and I had almost run out of money. I had two days off there per week, and it paid twice as much as my previous job. I thought I would be very happy at this new workplace.

I was too optimistic about that job. I had many problems there. My assistant did not like me and was upset that the company had given me a higher rank than her. She had been there for five years but she had not been promoted because she had less education. That is a drawback of the work system in Thailand. People with better education are guaranteed to have better jobs and earn more money compared to people who have less education. My assistant was mad for the wrong reason. I could not help that. My assistant was supposed to train me because I had zero background for the position. I learned later that she intentionally taught me only half of what I needed to know so that I would make mistakes. And when I did, she would yell at me and tell my supervisor. It was like that for my entire first year. It was rough.

I learned to be a stronger person because of her. I tried to learn everything I could so I did not have to rely on her. I adapted, and I was careful when I had to cooperate with her. I wrote down everything that she told me so she could not blame me later. I wrote what I told her too, so she could not say that I had forgotten to let her know anything. I later established a good relationship with two other coworkers. They always watched my back. Then the three of us moved to the research and development department. I was a quality controller there. I learned how to be a good worker from my two coworkers. They taught me how to take my work seriously. They worked hard and they were one hundred percent devoted to their work. They would not go home until they finished their work. They taught and shared everything that they knew with me. I was so fortunate to have them as my coworkers.

When I was free from work, I had time to think and wonder a lot. Many questions arose in my head. I asked myself, what is happiness? I looked back to my school days. When I was in elementary school, I told myself that I would be happy if I got into a big high school. When I got in, I made a new goal and told myself that when I got into college I would be very happy. Then I found out that college was not an easy life, and I was not as happy I had imagined I would be. When I was in college, I said to myself that I would be very happy if I graduated and got a job. But when I got a job, I looked for other things to make me happy. I thought I would be happy if I had someone special to share my life with. I thought that if I had someone, then I would be happy. I looked very hard to find someone whom I could love and who would love me back. I had bad luck with most of the men that I spoke to; many already had girlfriends, or they did not like me, or I did not like them. When I found out that a person that I liked was in a relationship, I would walk away with a broken heart. When my heart broke, I would cry for weeks. I was able to compartmentalize these emotions so that I could go to work and did not let my problems interfere with my work life, but when I got home, I would cry.

One day, I was sick of chasing after happiness, and thought about fixing myself. I wanted to find a way out and did not want to live the same way anymore. As a Buddhist, I knew that if I followed the Lord Buddha's teachings, I would suffer less. I had learned of the Lord Buddha's teachings but I never applied those teachings in my life, so I thought that it was a good idea to refresh my memory and to learn more about The Buddha's teachings, or Dhamma (Dhamma are the teachings of The Buddha). The person we refer to as The Buddha was not a god, but he was a person who discovered ways to end suffering. I would like to make it clear here that all of the

Dhamma I learned were from Thai sources that I cannot recall each and every book I read. I read hundreds of books and I took a special course. All of the knowledge that I share here is from my experiences and my analysis. Buddhists learn The Buddha's teachings and practice Dhamma so they can live happier — or at least to suffer less. I looked for a Dhamma website and learned to meditate. I met a person from a Dhamma website who became my life-mentor. He coached me on how to live a happier life. I still keep in touch with my mentor, but not often. He told me that I had learned so many things from him and others already, and that it was time for me to practice what I had learned seriously. My mentor taught me that I was not strong because I was always feeling too sorry for myself. He suggested that I change my focus to others. He said to me, when you look around, you will find that there are people who suffer more than you and have more problems than you. He also said that, "If you want to be stronger then help a lot of people. Then you will feel powerful and grateful." When I first heard that from him, I did not really understand why helping others would make me stronger, but I was not reluctant to try it. I went online and searched for a school where I could volunteer to teach during the weekends. I found a school for the blind that needed a person who could help students with math and science homework. Without hesitation, I offered to help during the weekends. Helping students made me realize that I had a reason to be on this earth. I am here to help others. Doing good deeds for others makes me happier.

After I started to study Dhamma more seriously, I began to travel to different places that offered meditation courses and retreats. Sometimes I would stay overnight at a temple for two or three days to practice meditation. There I met many people who had similar goals: we wanted to cultivate peace in our minds and we want to be aware of our thoughts more. When we are aware of what is going on in our mind, we realize that there is nothing permanent for us to hold on to. Happiness is temporary, but so are unpleasant feelings. When we start to realize this, we will suffer less. In order to realize and be aware of what is going on in our minds, we have to practice mindfulness and meditation. When I practice mindfulness, I see myself as an observer. I watch, but I do not judge or intervene. Because the point of mindfulness is to observe, to let things go, and to be familiar with all the kinds of emotions that take place in my mind. An ideal goal will be that when unpleasant emotions show up at my door, I will not go to get hurt much or I can overcome these unpleasant feelings more easily.

Meditating is slightly different than being mindful. Meditation refers to an action and focuses on one thing at a time such as breathing, body's movement, or looking at something and focusing on that one thing. Most people think meditation is simply sitting with both eyes shut, my mentor taught me that the goal of meditation is to have a peaceful mind so we can see the truth and be able to look at the world more wisely and not be a slave of our own desires. When we become a slave of our desires, we have a high chance of getting ourselves in trouble. For example, when a person cannot stop himself from gambling because it is fun and he wants to win, he runs out of money to gamble. Then he borrows from others. As a result, it comes to the point where he cannot afford to pay and he has to sell all his property. However, desire is not necessarily a bad thing. We can use our desires to do positive things like the desire to help others as much as possible.

When I first started to practice meditation, I would wake up every day at 4:00 AM, stretch my body, and then meditate for an hour. After practicing mindfulness for a while, I discovered that I was not as good a person as I had thought. This might be a surprise to someone who has never practiced mindfulness, so I would like to elaborate a little more here. People who do not practice mindfulness will not see their emotions clearly as people who do. Practicing mindfulness is like having a special mirror that reflects all kinds of moods, and thoughts that we cannot see with our eyes. This mirror helps me see that I have many things that I must work on. I was an emotional person for my whole life, but I never noticed it. I was hot tempered; I could get offended easily, and I did not like to share. I have learned from the Buddha's teachings that these habits hold me back from happiness. The more I practice mindfulness, the more can see what my bad habits are. I started to learn how to get rid of them. I received some good advice from my mentors and studied on my own by reading and listening to Dhamma talks. I started to donate some of my money to charities, temples, and homeless people. I have learned that whenever I give, I do not regret it, but I feel my heart is lighter. When I am possessive of my belongings, my heart feels heavy and I am not happy. I like the feeling of giving better than having possessions. I started to monitor my hot temper and I noticed that feeling that way made me uncomfortable. I also started to work on my emotions. Now I pay attention to my feelings. I know what triggers me to become angry, and sometimes I find out that I become angry at things that are nonsensical. Little by little, I started to see that if I do not make a big deal about things that I typically get angry about, I will not experience the negative feeling of anger so much. Nowadays, I am calmer than I was in the

past. Sometimes I still get angry, but not easily. I will continue to practice mindfulness and cultivate good habits.

Since I started to practice mindfulness, I have come to know myself much better. I know what makes me happy and what makes me unhappy. I have also learned how to confront things that make me unhappy and I no longer run away from them.

I believe that I will never find peace for my mind if my life consists of only knowledge that I learned from school. Learning Dhamma, practicing mindfulness and meditation are important aspects that lead to peace in my heart. I can say that I am better than I was in the past. I am more calm and kind. I still have many flaws that I am working to solve. It will be a lifelong project. It will never end, because I will always want to be better than I was yesterday. I have learned that working helps me grow and develop. I acquire knowledge that I cannot find in school. It made me think that when I was a child, I learned through play. As an adult, I learn through doing work. I never get bored when I am learning. I was born to learn.

Not only have I learned to not give up, I have learned to be mindful of my thoughts and emotions. I have started to understand that I am a person who has a lot of flaws that I would like to work on. Nobody has told me that I have to fix myself, but I think that it is my own responsibility to take care of myself and make sure that I become a better person.

## Chapter Four - Being an Outsider

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### First Time Outside My Home Country

It was always my dream to come to America, and I never abandoned that dream. I knew that it would be difficult to get a scholarship because my grades were not good enough and my English was terrible, but I found out that there was another option that would allow me to come to America. I saved up money for three years after I finished college, and then I became an au pair in a program in America. Au pairs are most often a young foreigner who lives abroad with a host family. Most au pairs are female. Au pairs help their host family take care of their children and any work related to their children such as driving them to school and picking them up, helping them with their homework, doing their laundry, and cooking for them. Au pairs are not expected to provide services for the adults like cooking or laundry. Au pairs get room and board and an allowance for personal use.

I applied for an au pair position with an agency near where I went to college. I was not accepted because my English was not good enough. I then went to another agency and I made it to the interview round. The interviewer asked me about how I would say no to a child who asks for candy. I said I did not have to say no, I would just hide any candy there might be and not let kids it because when they do not see it then they will not want it. I think the interviewer did not like my answer that much. I did not do well in the interview. I was really disappointed that I failed twice in a row, but I never thought about raising the white flag of surrender and giving up. I looked for another agency and I found one. This time I made it. I passed the English test. I passed because I had been practicing my English using a chat program.

After I pass the English test which was heavily based on simple conversation, I paid the au pair company's fee and waited for a family in America to select me. I receive a call from a couple of families but they did not select me. I decided to apply with another agency to give myself a better chance to go to America. I could not wait any longer because my age was a problem. One important condition for an au pair 10 years ago was that she could not be more than 27 years old. I had only one month left before I turned 27. I decided to apply with another agency. I had to

take an English test again and I passed again.

I had to submit a lot of documentation, and on top of that I had to learn to drive a car. A close friend recommended a driving school to me. I took a one-week driving lesson. I told my teacher that I needed to know how to drive before I went to America. The last day of my lesson, my teacher said to me, "I think that you should not drive in America because you suck at driving and you may die in America." When I heard, that instead of get sad, I thought about taking an additional course to make sure that I drove better. I decided to learn to drive with them for one more week. My teacher said to me that I still need a lot of practice before I hit the road on my own. Two weeks later I went to take a driving test. My father went with me. I passed the written test, but I still had to take the road test in the afternoon. I did not have a car, so my father asked a stranger if we could borrow his car so I could do my road test. He said yes. I got my driving license that same day.

But the hardest part about applying to be an au pair was not being able to drive car, it was all about my bank statement. I had enough money but I could not sponsor myself. My father said that maybe we can ask someone to help me. I thought no one would be able help me and I almost cried, because I had done everything I could think of and now I was stuck. Then I did some more searches and found I could transfer my money to someone who was close to me and arrange their bank to send money to me every month. I shared this idea to my father and he told me that his sister could help me with that. I almost did not make it. That was a good lesson for me. If I do not quit I will always find a way. It might take a long time, but all I have to do is to let go up and let go easily.

When I came to America in 2006, it was the first time in my life traveling outside of my homeland. I did not know anyone in America. The only thing that I had in my mind at that time was to come here for a better education and to make my dream come true. When I was 17 years old, I remember a time when I was reading a newspaper in a cornfield. The section that I read that day was about education. It was about a girl who went to get her higher education abroad. She talked about how much she learned and what it was like to be outside Thailand. This was not the first time that I had read about Thai students studying abroad. I read her story and I wanted to know how it would feel to live and study abroad. I wanted to know if I could make a life outside

of my homeland. I read these kinds of stories very often, thinking they were going to help me get in a school abroad one day. I told myself that one day I would do what the people I had read about did. I was aware that my path would not be an easy path like that of the people that I read about in newspapers. Most of the people who can afford to study abroad are people who receive scholarships or who have parents who are really rich. I had neither. The only option I had was to work hard and save money to go to abroad by myself.

I was matched with a family in Virginia. At that time, my English skills were very poor. I could have basic conversations with my host family and their children, but that would be it. I could talk to other people too. There were many times that I would have to ask for help from strangers, such as asking for directions to the restroom and asking to borrow their cell phones to call my host family. My host family children were kind to me; they would try to help me to pronounce words so that I could say them correctly. I did not feel bad that I had to learn English from children who were way younger than I was at all. I think that learning is not about ages, and we should never stop learning. I had signed a one-year contract with the EurAupair program. Most au pairs will try to stay longer than that if they can. If au pairs match with a good family they will not need to find a new one. I, on the other hand, was not so lucky. I had to be matched three times. My first family was nice to me, but I did not know how to handle their spoiled children, a seven-year-old boy and four-year-old girl. The two children that I took care of were spoiled by their grandparents. The grandparents would always say yes to anything the children wanted. I felt like I was useless because I could not get the children to listen to me, nor their grandparents. There was always a war going on between me and the two children in the morning. I had to wake them up and get them ready for school. The girl never wanted to go to school and she would always run to her mother's bedroom. Then her mother would fuss at me and complain that I could not handle her daughter. I wanted to tell her that it would be easy if she would only close her bedroom door. Then her children would just have to be with me and would not bother her. I was very frustrated and tired. I felt like I wanted to just give up and go home. I had not learned any child psychology and my English was not good enough, so it was just chaos. I was too afraid to tell the parents and grandparents that they should not let their children do whatever they wanted, and more importantly, that we needed to work together as a team. I worked with this family from March, 2006 until May, 2006. In June, 2006 my host family went to China with their children. I was supposed to go with them, but I asked my au pair friend if it was a good idea

to go to China. She told me that I should not go because China was not a safe place, bathrooms were super dirty, and people were very loud. She said she had gone there and did not like it at all. I listened to her, and I made the decision to not go.

In June, 2006, after my first host family traveled to China, I was re-matched and I was placed with a family in Maryland. This family had 17-year-old daughter and 15-month-old girl. That was a big gap. The mother was an oncologist and the father was soldier. The first daughter was in junior high school. I liked these two children. I did not have to take care of the 17-year-old girl. I would just have to look after the little one. When I first started to work with this second family, I thought that this family would be easier than the first one. It turned out that I was wrong. The mother was very annoying. When she got home, she did not want to take charge of her baby. She would sit in the kitchen until 8:00 pm. I was very tired with such a long work schedule. I did not know how to refuse people when they asked me to do something that I do not want to, so I ended up working 50-60 hours every week. Sometimes, they would ask my help with shopping as late as 10:00 pm, and then I would not go to bed until 1:00 am because I had to put the groceries away. I knew that it was not fair. I was supposed to work only 40 hours per week. I knew that I had to stand up for myself. I asked my European au pair friends if this happened to them what they would do. They told me that they would talk with their host family and they would not allow their host family to do that to them. But I was not brave enough to go talk to them. I was afraid of them. In my life, I can't remember a time when I told an adult that I did not approve of what he or she did. I was taught to respect adults and not talk back to them. I also thought that if I complained to them about not being fair, they would not treat me nicely. I did not know what to do so I thought about finding a new family. I looked for a new family on my own on the Craigslist website. I ran into one of the agents who worked for the EurAupair program. The agent called me and talked to me on the phone and I told her why I did not want to stay with that family. The agent asked a coworker come get me, which she did two days later. That was a very quick rescue mission. I was happy that I was able to leave the family that I was not belonging with. I was not sure if I would find a good family or not. I had only four or five months left before I finished the program. While I was waiting to be matched with a new host family, I stayed with the family of one of the other agents in Maryland. Thankfully, that agent found a new family for me.

My third family was in Bethesda, a city in Maryland. Most of the houses in this city are huge. My new host family had three daughters, who were six, four, and three years old. These girls had Italian names. It was hard for me to remember their names because they sounded similar to me: Mano, Roman, and Marco. These girls kept me very busy. These three girls had their own personalities. I almost pulled my hair out every single day because they fought all the time and they did not listen to me. I was very stressed, and upset that I did not know how to get them to listen to me. I thought to myself, that if I wanted like to keep this job, I would have to pay more attention, so I started to observe and study these girls. Little by little, I tried to get to know all of them better. Knowing them better helped me understand their strengths, weaknesses, what they liked, and what they did not like. Then I was able to come up with better strategies, and I knew how to deal with each them differently. Later on, my job started to get easier, and decided that I would stay with this family until the end of the au pair program.

I have learned that I would never have finished the au pair program if I had just given up and returned to Thailand. But I decided to fight and overcome the obstacles. I learned an important lesson here too. If I would like to better deal with people, I will have to know who they are and what they like and do not like. This helped me to better control the three girls. I also learned that I would not grow if I ran away from my problems. I have to face them and find ways to work on them.

### **Becoming an ESL Student**

After I finished the EurAupair program at the end of 2006, I attended an ESL school in 2007. I took a test and was placed in the upper beginner level. Can you believe that there are lower beginner and upper beginner levels? I was so proud that I was better than the students who were in lower beginner. My classmates came from all over the world. I did not have to worry about being different here. Many of these students seemed very nice and friendly. Some of them were younger than I, some of them were older, and a few of them were my age. Whenever I did not understand something, I would ask anyone who sat next to me, and no one ever refused to help me. Our teacher asked the students about our current jobs and what our purposes in learning English were. One man who came from South Africa said that he wanted to be a medical doctor one day.

I learned reading, writing, speaking, and listening. When I got home I tried to finish all the assignments that I had from school. There was nothing much that was challenging until I attended the upper intermediate level and the TOEFL preparation course. I had to memorize at least 40 vocabulary words per week. I discovered two techniques from reading various books and articles. These two techniques were drawing and singing. I adapted a drawing technique from the mind-map approach that was invented by Tony Buzan. A mind map is a very colorful and powerful tool. The map starts from the center and there are various lines that come out from the center with different colors and names. Basically, the topic or main idea will be in the center and the other elements will be on lines that come out from the center. For me, the lines look like a tree's branches. Each line will have pictures and a few words that describe it. For instance, if I were to draw a concept of the Six Thinking Hats by Dr. Edward de Bono, I would draw a big hat in the middle of the map and also add a strip of each color on this hat. Then I would draw six branches and on each branch would be a white, red, black, yellow, green, or blue hat with its name and its meaning. When I drew a picture to help me remember the meaning of new vocabulary words that I was learning, I did not draw a whole mind map. I would just draw pictures that described the meaning of each word that I was learning. For example, if a new word that I had to memorize meant "happy," I would just draw a happy face. Nobody told me to adopt this technique but I happened to figure it out one day when I started to realize that I can recognize people's faces well. It implied that I should be able to memorize pictures well too. Therefore, I tried this idea out one time and it worked excellently. Since then, when I learned new words, I would draw a picture to help me remember. I did not have to spend a long time memorizing new words like the other students did. All I needed was just 10 to 15 minutes to learn ten new words. I do not think that I am more special than anyone else; I just know that it worked for me. People have different learning styles and they just have to find out what the best way is for them to learn. For teachers, they should teach in accordance with what Lev Vygotsky explained in the Zone of Proximal Development (ZPD). According to ZPD, there are three zones. In the first zone, children can do things on their own. The second zone is a higher level than the first one; children will need help from adults at this level. The last zone is the zone where children cannot do things even with help. In order to teach more effectively, teachers have to teach at the level appropriate to the student.

## Learning Style

UMass Dartmouth gathers tips for educators to support different learning styles. It says that individuals prefer different learning styles and there are three types of learning styles: visual, auditory, and kinesthetic. Visual style refers to people's abilities to learn via visual representations and/or graphics. Someone with a visual learning style will prefer to see things that they can observe or see like diagrams, pictures, films, etc. People with an auditory style can learn better through sounds and noises such as getting information by listening to a taped lecture. The last learning style is kinesthetic and refers to someone who can learn best when they involve their body in learning such as touching, feeling, holding, and hands-on experiments. College lectures typically appeal to the first two types of learners, but those who learn kinesthetically are at a significant disadvantage outside of the laboratory.

On the other hand, an article written by Sophie Guterl in the Mind section of Scientific American in 2013, entitled "Is Teaching to a Student's 'Learning Style' a Bogus Idea?" Guterl reported that psychologists stated that currently, there are at least 71 learning styles out there. Some parents refute the idea that a particular learning style will help their children learn better, while some teachers have used learning styles to their advantage by teaching students differently according to the students' learning styles. Some psychologists do not buy the idea of learning styles at all. Guterl also reported on researchers who conducted studies on learning styles. They had teachers teach students by applying the knowledge of cognitive psychology and teaching according to the learning styles of individual pupils. The findings demonstrate that this teaching method helps boost pupils' learning. And they concluded that learning style was the main factor that made learning better. Daniel Willingham disagreed with the findings of this study (Strauss, 2009). He said that researchers have been working for about 50 years to find out if students learn in different ways and that the researchers did not find much evidence to support their ideas. Willingham gave an example of children on a field trip in a museum. He said that students will stop and look at different things. This does not imply that they have different visual abilities. Children are interested in different things because they have different backgrounds. He explained further that it was like learning in school. Some topics are easy for some children but they may be harder for others.

Willingham said that cognitive ability clearly affected the ability to learn, but that an individual's learning style did not (Guterl, 2013). Willingham also gave an example to support his idea: two basketball players who play basketball in different styles can have same ability. What Willingham believes is reasonable. I believe that learning styles reflect the different ways in which people process incoming information, and that does not imply that they have abilities that make them better than others. For me, learning style helped me to memorize more easily and helped me save time memorizing things.

The researchers in Scientific American (Guterl, 2013) suggest that it is the teachers' job to think about simple and efficient ways to deliver lessons to the students. In other words, teachers should not turn a simple lesson into something that is too complicated and too hard for the pupils to learn and understand. It would be even better if teachers could make a complicated lesson into something simple and easy for the learner to understand. I agree that teachers should do this, and I would also encourage teachers to think about learning styles. When teachers keep this in mind, they will have to think about how to come up with various types of teaching aids in their lesson plans and not focus too much on one particular style. I am aware that this does not sound practical for teachers because it will be a lot of work for them. Different learning styles require different resources in terms of teacher support and/or teaching aids, e.g., use of multi-touch digital devices to help kinesthetic learners learn science. However, I do not see that this would be impossible to do once in a while.

When I started to use drawings to help me learn better, I started to fall in love with drawing all over again. I had the idea that I would never be able to draw like others when I was in first grade. But when I started to draw so I could memorize new words, I was able to do it with ease. I did not have to worry what others thought about my drawings because I was drawing for myself and for my old passion. I think that when I stop thinking about rules and others too much, I can do better and enjoy it a lot more. And that is probably because I do not have to worry about critiques on my drawings that help me memorize better.

I also learned how to relate new words and information to my prior knowledge. I find the more funny something is, the more I am able to remember it. While I was an ESL student, I saw one movie that gave me a new learning technique. I do not remember the name of the movie or even the main theme. All I can remember is the part about an old man from abroad who lived in

America who was trying to pass the American citizenship test. He had a younger friend who offered to help him because he saw the old man struggle with memorizing all of the facts and information, so he told the old man that he should make studying fun and enjoyable. The old man asked the young man, “How?” The young man said he would turn the information the old man had to memorize into a rap song. After I finished watching the movie, I tried out this new idea immediately with my TOEFL preparation class and my ESL class. I did not really know how to write music so I came up with my own way. My way of learning is making relationships between new information and my prior knowledge. I try to come up with something that makes them relate to each other that makes sense to me. For instance, if I have to memorize that George Washington is the father of the country and the first president of America, I would relate George Washington to God because George and God have the same initial letter and I have heard about God before. I also heard one of my Christian friends say “Father” when she talked about God. And here is how I will memorize it: “Oh my George! You are the father of America just like God is the father of everything.” The way that I memorize is called semantic encoding. People tend to focus on the meaning of words (semantic encoding), visual representations—seeing the objects in certain arrangements, for example, (visual encoding), or organizationally (e.g., grouping items into subgroups) because it is easier for people to memorize meanings of words and pictures that are meaningful to them to remember (Brown & Craik, 2000).

The Oxford Royal Academy suggests 10 ways to harness the power of your brain and two of them are slightly different from what I did: mnemonics and making up stories. For example, you could create a mnemonic for a long list of names by making up a new word or phrase from the initial letters of the words you would like to memorize. For example, to remember the colors of the rainbow: red, orange, yellow, green, blue, indigo, and violet, you might come up with the name “Roy G. Biv.” Mark A. Gluck, the author of *Memory and Learning* also recommends 10 ten tips for a better memory. One of the tips that I have adopted is creating associations, such as my relating George with God. The concept of this method is associating what you are trying to learn with what you already know. I did not know before that this method is one of the most efficient ways. I think I used my own intuition to come up with same method.

I am aware that I myself do not really like having to teach subjects in which the learners have to memorize a lot of information. But I cannot deny that we will need to use our brains to remember things. I think it depends on the field or the subjects that we need to learn. Learners do

not have to memorize as much when they learn physics compared to some other subjects. All they have to do is try to understand the concepts first, then memorize some rules, formulas, and theories in order to solve physics problems. Based on my experience, the teachers who taught physics when I was in high school and college taught students the things they needed to solve physics problems in a test. I do not understand why we cannot learn to appreciate and understand what physicists have discovered. When learners understand and see the beauty in physics or the other subjects they learn, they will be eager to learn more in-depth. If students try to memorize how to solve a problem about an object falling from a building, they will probably fail if the teacher changes the problem just a little bit. I read a book that was written by David Perkins (2010). He said that his colleague teaches physics. When he taught students to find a velocity of an object that falls from a building, the students had no problem understanding it, but when he posed a similar question on a test, there was a problem. After the test, one of his students came to meet with him and complained that she could not figure out how to find the velocity of an object that was falling into a hole.

Students need to memorize much more when they learn languages. When learning a new language, students will have to memorize so many things, such as new vocabulary words, grammar rules, consonants, and vowels. The point here is whatever makes sense to me, works. I believe that everyone has their own ways to help them memorize things better. All we have to do is seek out the ways that will suit us. Come up with your own ways, try them out, and have fun. I still agree with Thorndike that learning is trial and error. The more we learn, the more we will be able to find more ways of learning. I enjoy myself every time that I discover new a technique for learning.

Learning should involve thinking more than memorizing, especially higher order thinking. Higher order thinking involves analysis, synthesis, and evaluation, based on Bloom's Taxonomy learning approach (Teaching as Leadership, 2011).

This process requires a lot of thinking and planning. We can see that higher order thinking can help students learn and understand their lessons more deeply because it involves many kinds of thinking skills. Higher order thinking requires students to use their thinking skills more compared to a learning approach that requires only memorization. When students involve a lot of metacognition they tend to understand more than students who learn by just memorizing. There

will be no point in learning if learners only receive information, and do not analyze and find out whether the information makes sense or not. Learners should at least ask questions such as how and why while they are learning. Brookhart (2010) defined the meaning of higher order thinking as knowledge transfer, critical thinking, and problem solving. Knowledge Transfer is about how one can apply the knowledge that they have in other contexts. Critical thinking refers to reasoning, questioning and investigating, observing and describing, comparing and connecting, finding complexity, and exploring viewpoints (Barahal, 2008). Problem-solving refers to the process of figuring out how to get to an outcome, like making a learning plan ahead of time.

### **Getting ready for the Test of English as a Foreign Language (TOEFL) Test**

When I finished my TOEFL preparation course, I had to take the TOEFL test. To get into a good school, I needed to get at least 80 out of 120 points. There were many schools out there that did not require students to have a TOEFL score, but I was not interested in those schools. I wanted to do something more challenging. There were four sections in the test: reading, writing, listening, and speaking. I did not have any money to waste. The only thing that would push me to study hard was to apply for the test and count down how much time I had left. Then I felt the pressure and it made me uncomfortable if I let up. I did not want to have to take the test over and over because the fee for the test was expensive. Every time test takers reapply for a new test they must pay the full fee. I did not want to pay a lot of money. Therefore I studied hard. I bought different texts from various companies; I thought that it would be nice to see different techniques. I did not know if that was the most efficient way to prepare for the test. The way I chose was to study sample tests. The practice exams helped familiarize me with the real test. After I practiced and studied for an hour a day for a month, I went to take the test. I got 78 out of 120 points. I was not sad that I did not get 80 because one month of practicing was not enough. I told myself that I would take the test again and this time I would give myself more time. The second time I studied for two months before the test. The second time I got 76 points. It was worse than the first time. I was upset because I expected that I would get a better score than my first time.

Before I thought about taking the test for the third time I sat down and looked at which sections of the test I did well on and which sections I needed work on so I could do better the next time. I found out that my reading and my writing were not so good. I needed a lot of practice in these two sections. I got an almost perfect score on listening and did well on speaking. After I figured

out what I needed to work on, I made a plan to read and write more each day. This time I practiced for about four months before I took the test. I was not nervous like the first and the second time. I was more confident. I spent all of the time that I had for each section. I was so sure that I would make it this time. Two weeks later, I got a letter in the mail. I was so excited, I almost dropped the envelope. I opened the envelope slowly because I was scared to see my test score. I told myself that I would just have to open it. Then I saw the number 81 on the report paper. I was so happy that I finally made it. If someone were to ask me why I did not just give up when I did not make it the second time, I would tell them that I knew that it was worth it to try because I believed that there was something better for me on the other side when I made it. I needed to have a decent TOEFL score so I could use it to apply for graduate school.

### **Applying to Graduate School**

My next step was to apply to graduate school. I thought about getting into a school that would train me how to teach students to have better thinking skills. I thought about this because I knew that the education system in Thailand still relies heavily on standardized tests and memorization. I hoped that a graduate school would prepare me to be that kind of teacher. Before I sent out my applications, there was only one thing that worried me. I did not have a good GPA; even though I did very well in my last three semesters they could not fully offset the first five semesters where I did not do so well. My GPA was lower than any graduate school would accept. I knew I had a slim chance to get in, but I still gave it a try.

The first program that I applied to was the Educational Psychology MS program at George Mason University, but they did not accept me. The second program that I applied to was the Mind, Brain, and Teaching certificate program at Johns Hopkins University. This time I had three people help me work on my statement of purpose letter. I made it to the interview phase of the application process. On the interview day, it was a little chilly. I had dressed up like a businesswoman and I wore a black suit. I brought one folder with me. Fortunately, I got there on time. I liked the buildings at Johns Hopkins. The buildings were a dark brown color and they looked like they were built a hundred years ago. I looked at the piece of paper that had the address of my meeting to check and see which building I should go to. I was not far from the building that I had to go to. I arrived at the building and opened the giant door. I saw one lady who sat three to five meters from the door. She seemed very friendly. She smiled at me and

asked what I had come there for. I told her that I had an interview with a professor. She told me to write down my name in a notebook. I guessed it was a book that they kept a record of visitors in. She gave me a visitor pass and asked me to put it on my shirt. Then I walked up to the second floor of the building. I saw a young male professor. He walked over to me and greeted me. He invited me to sit down and he asked me why I was interested in the Mind, Brain, and Teaching certificate program. I told him that I was curious to know how teachers use neuroscience to help students learn better. That was the only question that I remember and then he asked me if I had any questions to ask him. I asked so many questions about the program such as: “What do most students do when they finish the program?” and “How do they run the classes?” My English was not that good at that time, even though I passed the TOEFL test. After the interview, I went home and waited for two weeks for the result. Then I got a letter from Johns Hopkins. It turned out that it was a rejection letter. I think that one big reason that I did not make it was my English skills. I might have had a lot of problems when I got into the program. I did think that they were interested in me and that was why they asked me to go to the interview. It was a failure, but it was not that bad; at least I made it to the interview.

I had failed two times, but I did not think about quitting and going back to Thailand, my home country. Failing to get in to the graduate school did not stop me from wanting to go to a graduate school. I thought of how to impress a graduate school admissions committee, and then would trust that I would be able to make it through the whole program. I did some research and found good advice in a Thai article that was written by a Thai professor in New Jersey. This professor said that even if students did not do well in undergraduate school, they still had a chance to get into a graduate program. They can take one or two graduate-level courses get A’s or B’s, and then apply to a graduate program. The other option was to apply to a certificate program and get good grades there. This article gave me new hope and I really thought that it was again possible.

### **Joining an Academic Program in America for the First Time**

I decided to go with the second choice. I thought about getting a certificate in Early Childhood Education because I was interested in children and their early education. I had some hope that this program would help me get used to the American learning system and that my English skills would also get better by the time I finished the program. My hope was to get all A’s in every

subject in the Early Childhood Education certificate program. I went to Northern Virginia Community College (NOVA) and talked to one of professors who taught the course. After I talked to the professor and learned about the courses, I decided to enroll in the Early Childhood Education certificate program there. The first two courses that I registered for were Early Childhood Language Arts and Early Childhood Education and Philosophy. The day I registered, I bought two textbooks that I needed for my two classes. They were thick and giant books. The part that scared me was not the size of the texts but that they were in English and there were many technical terms in the text. I have a degree in Physics and most of the technical terms that I knew at that time were terms in physics such as quantum dynamics, momentum, force, alpha, beta, atoms, and matter. I knew from the beginning that this path could be very challenging for me. There were so many things that I would have to learn.

The first day I went to Early Childhood Education and Philosophy was the first time I sat in a lecture hall in the academic setting of an American school. I was astounded by the way the teacher instructed her class. She talked and had conversations with her students. She did not tell us to just listen to her, rather, she invited us to share our opinions and speak up. I was so nervous about my English; I did not say a word. I understood most of the things that were going on in the class and I had ideas to share, but I was not confident enough to say something. I was afraid that I might make a mistake and my classmates might not understand me. I felt like I was in a strange place. I was in a classroom that was full of Americans and this classroom was on the opposite side of the world from my hometown in Thailand. Everything was so different from anything I had experienced the entire time I was in school in Thailand. I am not the only one who thinks that Asian and Western cultures have different education systems, and that we also have different points of view about education.

Kim (2005) stated that Asians place a very high value on education while Westerners have a very high rate of students dropping out of school during their high school years. Asian parents also believe that good grades come from hard work and diligence. As a result, Asian students have higher scores on the International Assessment of Mathematics and Science tests than American students. Kim also mentioned that the hierarchical system in Asia does not allow teachers to be flexible and it limits students' creativity. Students have to obey and do exactly what their teachers tell them to do. Lingle (2001) confirms that education in the East limits creativity while education in the West promotes creativity. People in the West innovate new things more than

people in the East. Acadsoc (2004) also stated that Asian students spend a lot of time on their homework and studies. They are taught to memorize and respect adults and their teachers. Therefore, they tend not to disagree with their teachers. Western schools are the opposite; students learn to understand their lessons and they do not have to think about seniority in the classroom. Jim Stigler was a graduate student from Michigan University and he did a study about learning and teaching in Japan in 1979 (MindShift 2012). Stigler observed a fourth-grade classroom. He discovered that struggle is something that is acceptable there and it means that students learn some things by trying hard, while students in America tend to view that smart students should not struggle in their learning. This belief also makes students believe that if they have to try hard, they are not smart. Li (2012), the author of Cultural Foundations of Learning: East and West stated that Asian education systems are based on teacher-centered styles and they rely heavily on examinations. A teacher's main goal is to teach students how to pass their exams. There are some positive sides of the Asian education system; students believe that learning is the most important thing in their life and that learning is a lifelong endeavor. It is clear that in the two educational systems, East and West, each has its own drawbacks and benefits.

### Allowing Myself to Fit In

Even though I lived with a host family, it was not a big change for me because my host family was Chinese who had moved to America. Thai and Chinese have similar cultures so I was very comfortable with them. I thought about how to get myself ready for something different. I first told myself that I would be open to new things. In that case, I would have to get my mind and my attitude ready for change. If I would like to get along and blend in with the new culture and new learning styles, I would have to be willing to open my mind more. In Thailand there is a proverb that says, **เข้าเมืองตาหลิ่ว ต้องหลิ่วตาตาม** which is similar in meaning to “When in Rome do as the Romans do.” I definitely agree with this proverb. I do not have to change who I am, but I do need to allow myself to experience new things in new places. On the academic side, I thought about how to be ready for my classes and to be a successful student. I made a plan for myself before I started my classes. Here are some of the strategies that I came up with. First, I would read the text before I attended class so I would know what I would be learning ahead of time. Second, I would try to be an active listener by analyzing, validating, and summarizing what I heard. Third, I would study at home and do all of the assignments that I was given. Fourth, I would observe my classmates and learn how they learned best. I would keep my eye on those who seemed to learn better than others.

I tried to keep up with my plan and I gradually adapted myself to the western education system. I read the text in each chapter I would be studying three times and I would look up words that I did not understand. I used a mind map technique to summarize what I read in each chapter. I enjoyed drawing and designing my mind maps. I used this technique because 50 percent of my grade was to come from memorization-based tests. The other 50 percent would come from papers and other assignments. It was not very difficult for me to memorize material for the tests, but I wish that schools would abandon this type of testing soon. Why is it so important for students to memorize something in a short period of time and then forget almost all of it after a year or so? I like experientially-based assignments such as writing a lesson plan and presenting it to the class, making observations, and writing a paper about the process. After that, I would summarize what I found and relate it to a theory that I learned in the classes. Even now, I still understand the concepts from all of the things that I have learned from hands-on activities.

After I finished two courses at NOVA, I had to relocate to Massachusetts. I transferred my credits to a community college near where I live in Framingham. Here I did not have to adapt myself to anything except for the weather. When I first moved here, I did not have a car. I had a scooter that I brought with me from Virginia. It was a pretty small scooter but it could fit two people on it. I used this scooter to get to school. In October, it was not that bad riding a scooter, but November and December were terrible for me. When I got on my scooter I felt like I had got on a torture machine. When I rode the scooter in the cold wind, my hands felt like I was being poked by hundreds of needles at the same time. My legs would feel like they were burned by acid. When I got to school, I would bring my helmet in with me too. I walked into the classroom with a helmet, a big white coat, thick pants, and big boots. When I set foot in the classroom, I felt like I had just finished a mission for NASA and was coming to say “Hi” to the people on earth waiting to greet me. I was not ashamed that I did not have a car like most of my classmates. I just did not have the money to buy a car that was why I had to put up with it. I knew that I would not have to do that for long. I still followed my four strategies that I had used at NOVA. I was not shy about asking my professor or my classmates when I did not understand something.

### **Working Hard**

I studied so hard, one of my classmates asked me, “Wipa, Why do you study so hard? I never see you skip any classes and you always turn assignments in on time” I replied, “I need all A’s so I

can go to a graduate school!” That was the most straightforward answer that I could think of. Even though I thought about getting straight A’s, I did not forget to enjoy what I learned in that program. I learned from the past not to think only about grades. This time I learned because I wanted to know and gain more knowledge. Thinking about getting all A’s did give me a headache sometimes because there were times when I did not get perfect scores on my assignments. Imperfect scores encouraged me to work harder to try to fix what I did wrong. According to Dr. Carol S. Dweck, the author of *Mindset: The New Psychology of Success*, I had started to have more of a growth mindset than when I was in high school and college. People with a growth mindset believe that when they work harder, they can get better. I was happy that I was able to encourage myself to think that way. It helped me move forward and keep trying. In addition to my work at school, I also had other jobs. While I was in the Early Childhood Education Program, I had three part-time jobs: I worked at a daycare center as an assistant teacher, I worked at Lord and Taylor in a mall in Natick as a sales associate, and I gave Thai lessons online. I was exhausted at the end of every single day.

I got around on my scooter everywhere. I had to ride my scooter on rainy days and on frigid ones. One day, a school bus driver saw me as I paused at a bus stop. He told me that he had never seen anyone in the area ride a scooter in the winter. I gave him a thumb’s up. He had no idea I that actually hated riding my scooter in the cold. I did it because I did not have a choice. My father had told me, “You are the daughter of a mixed martial arts fighter, so be patient and never give up.” I told him, “I will never give up, father.”

## **What Did I Learn?**

### **Self-discipline**

I have a strong belief that discipline is one of the factors why I was able to get all A’s when I finished my Early Childhood certificate program just like I planned. I was proud of myself because I kept my own promises and took the program seriously enough. I have to thank my mother, the person who started giving me responsibilities when I was only five years old. Her lessons became a significant thing that helped me succeed later on in my life. When I was in

college, I was very self-disciplined about how I spent my money. When I was in the Early Childhood program, I followed all of my plans strictly.

### **I Can Do This**

The thing that I was proud of the most was not about getting excellent grades, but how I was able to learn completely new fields of study and being able to learn them using a second language. I had more challenges than my classmates who were native English speakers and who were already working in the childcare industry. I did not let language and my experiences become obstacles or excuses. The right way to deal with obstacles is to get over them or tackle them. I believed that I had the potential to do it. I think that belief in oneself is extremely important. I did not really know whether I could do it or not, but I gave myself credit before I started. I learned this from a coworker in Thailand. Before I came to America, I worked for a Japanese company. I was a purchasing manager. I had zero experience and my company hired me to be a manager. One day my supervisor asked me to do something that I never done before. I told him that I did not know how to do it. My coworker overheard that conversation and she talked to me privately later on. She said, “When our boss asks you to do something, do not say that you cannot do it. He does not like that. You should say that you can.” I said to her, “That will be a lie.” She said, “No!” I replied, “Why not?” She said, “Because you will have to make it happen, you will ask others to teach you until you can, or you will have to learn how to do it by yourself if it is possible.” I thought about what my coworker said to me and I thought what she said made so much sense. Since then, I always think that I can do anything, and that all I have to do is learn how, and do it. This is also one of the reasons that I keep trying, even though I have failed many times. The man who is my role model of a person who was not afraid of failure is Thomas Edison. Many people know his phrase, “I have not failed 10,000 times—I’ve successfully found 10,000 ways that will not work.” I like the way he looked at failure. Instead of spending time being sad and complaining about a failure, he would say, “Oh my God, we spent a fortune on that, and we had fun spending it.” If everyone would look at their failures like Edison did, I believe that people would be willing to try, and not be afraid of failing, because failures should not carry a stigma.

## **My Intrinsic Motivation and Curiosity**

I believe that I am my own best motivator. A strong power that drives me forward comes from within me. I am always curious to see if I can do better than what I can now. Even if I excel at something, I will still ask myself, “What else can I do so I can do it better?” The power of curiosity is very strong in me. My curiosity always keeps me continuing to work to feed it. When I want to know about something, I will find every single way to figure it out. It is like I have a curious streak somewhere in me. When I am curious about something, I cannot really stop myself. I will always do something otherwise it will keep bugging me. The obvious example is I went to college and got a degree in physics. I did not want to be a physicist; I just wanted to know why physics was so hard to understand. If people ask me, “What do you think about Physics?” I am going to tell them this: “Physics is not hard; it only seems hard because people who understand the concepts do not know how to make it easy for others to understand them.”

I know that if I work hard I will be happy with myself and I will not regret it if I do not make it. On the other hand, I know that I would regret not giving it a try. Psychologists refer to self-motivation as intrinsic motivation (IM). IM is an internal desire that drives individuals to perform their tasks. On the other hand, extrinsic motivation reflects the desires of individuals that are influenced by external factors such as different kinds of rewards. There are a lot of studies conducted in classrooms that confirm that intrinsic motivation has a positive relationship with learning, and students learn better and are happier when they are interested in the subject, and not just the grades or the outcome (Larson, 2001).

The reason that I enrolled the Early Childhood Education certificate program is not only because I wanted to get good grades so I could pursue a graduate degree, I also wanted to know if I could learn in another country and use a language that I was not completely familiar with. If I could, it would mean that I would know that I would be able to do many more other things too.

## **Planning and Strategies**

I did well in the Early Childhood program because I had a good plan and strategies. I planned each step out clearly. Without a plan, I might not have done as well as I did. Before I thought of my plan, I had to think of my goals first. It was like going shopping. First, I had to know what I wanted and then make a plan to get where it was. I could get to the store by driving, walking, by

bus, or having someone drive me. It is the same as when I planned to do well in school. I knew that I was not fluent in English; therefore I had to read and study harder than others. I would look at my syllabus and try to do the entire requirements for each course. I would try not to miss any assignments and tried to turn them in ahead of time or on-time.

### **What Would I Like to Change?**

Even if I could go back and change anything about my experience in the Early Childhood program, I would not go back to change anything. I like the way it was. I did only a few things that I regret. I made a few minor mistakes such as picking the wrong song to present for my big project, choosing a misbehaving child to be a line leader, and forgetting to establish a network while I was in the program. Otherwise, I enjoyed my time in the program very much. I found myself not afraid of failures or mistakes. I learned this from children that I observed and taught while I did my teacher practicum. I noticed that the children did not care much if they made a mistake. They just laughed fixed things up, and then moved on quickly. Some of them could be very patient and did not give up easily. They were very flexible and they had senses of humor. They showed me that something that looks impossible is possible if you do not give up. For instance, a four-year old boy showed me how he figured out how to make a tunnel from different sizes of plastic tubes. He connected the tubes together so it looked like an underground plumbing system. When I saw it, I was amazed and I asked him how he did it. He told me, "I just did it." I have to give all of the children that I interacted with a lot of credit because I have learned so much from them. They did not know that they were giving me important lessons in learning, but they were. I also learned from them that I do not have to be mad at myself when I make a mistake. I should forgive myself and spend time thinking about how to make things better next time.

### **An Important Lesson**

I started to see that the things I wanted in life, I would not to get easily. I would have to work hard to earn them. I made it to America and I did well here because of hard work. This is like what my father told me: that he had to run, exercise, and practice boxing every day. He said that if he ever stopped he would not fight well. I think I have a lot of my father's blood in me. I do not quit; I work hard to get what I want. In the past, I did not have plans or strategies, but I started to form them when I came to America.



I worked hard to come to America. I was an au pair for a year. I received a certificate in Early Childhood Education (ECE). I had a decent TOEFL score and perfect grade from the ECE program. But, I had not accomplished my highest goal that had made me decide to come here. I wanted to get a master's degree from a university in America, so I decided that it was a time to take that next step toward my goal.

After I finished my Early Childhood Education certificate program, I applied to three graduate schools. The three programs that I applied to were slightly different. The first one was a STEM — STEM stands for Science, Technology, Engineering, and Math— program. The second program was Mind, Brain, and Education. The last program was Critical and Creative Thinking (CCT). I applied for the STEM program because I have a background in Physics and a degree in STEM would strengthen it. I love science, math, and technology, and the degree would qualify me to be a STEM teacher in Thailand. I saw no reason not to apply to that program. I was interested in the Mind, Brain, and Education program because I was interested in how to use neuroscience in teaching. I am fascinated about how the mind and brain work. When I read the details of the CCT program, and I discovered that it offered advanced psychology and critical thinking, I thought that I might like those two subjects because they relate to the mind and brain. There were also many other classes that were very interesting, such as metacognition, philosophy, and critical thinking.

I would have been happy to get into any one of these three programs, and very disappointed if I was not accepted by any of them, because applying to these three universities was my last shot. I told my family that if I did not get into a program, I would have to do something else. I had been trying many times over the years. I could not bring myself even to have hope; I did not see any signs that I would make it. But then, I received an acceptance letter from the third program. I arrived in America in 2006, and I was accepted into graduate school in 2014; it took me eight years to get here. I was very happy that I had finally made it to a graduate school like I planned. It was a very long process compared to those who come here and start their schooling right away. I could not do that because I did not have the money. I had to work, go to school, and I needed to

give some of the money I earned to my family back in Thailand. I was satisfied that I could help my family and get closer to my goal at the same time.

The administrators of the Critical and Creative Thinking program at UMass Boston were very generous to give me a chance to join their program. I do not know what the people who were involved in the admissions process thought about me, but I would like to thank them. They might have seen potential in me that other schools did not. I believe that everyone has potential; we just have to figure out what kinds of potential are hidden within us. Since this school was very nice to me, I told myself that I would make a commitment to myself and this program. I was going to take it seriously. During the time that I was applying to graduate schools, I was working at a large preschool 13 miles away from where I lived. I planned to attend graduate school in the evenings and work during the days. After I heard the good news from the CCT program, I was so happy that I told everyone at the preschool I had been accepted to graduate school, including the principal, who also was the founder of the school. She smiled at me a little bit, and she told me that she wanted to talk to me the next day. I was a bit worried that she might ask me to do something that I did not want to do. The next day, I went to talk with her. She told me she knew that going to graduate school would be hard work because she herself had been a graduate student. She told me that I would have to choose between continuing to work at her school and going to graduate school. I was a little bit shocked to hear that. How could she know that I would not be able to do both? She did not truly know me. She had no idea that I worked three jobs while I was in the Early Childhood Education program. She told me that she would give me time to decide. I told her that I would like to think about it. Actually, I wasn't going to do that at all. I already knew what I wanted to do, but I did not want to be rude. The next day, I went back and let my boss know that I had decided to go to graduate school. She looked a little bit upset, but she wished me luck. I said to her, "Thank you for everything." I was not mad at her for what she did. She wanted someone who could devote their full attention to working at her school, and she was worried that I might be too tired during the days after going to graduate school in the evenings.

### **Scientific and Political Change**

The first two classes I took in my first semester were Scientific and Political Change, and Advanced Psychology. My advisor suggested that I take these two courses first. I thought that it

was not a bad idea at all. I thought that I would get to learn about the brain and mind in the Advanced Psychology class, plus I would learn more about science in the Scientific and Political Change class. I was very excited about these two classes. It felt good to start my school with classes that I liked. It was good to begin with positive feelings.

The Science and Political Change class was conducted via Problem-Based Learning (PBL). There were four cases in the course. Students would learn about the cases and do their research on one case at a time. The four cases were chosen by the instructor of the course.

I was very excited about the first case, because I am interested in how we can protect our world from climate change and how to minimize the damage. I care about the world that I live on. It is a tenet of my culture that we must not hurt someone who is good to us. Earth gives me fresh air, clean water, land to run and walk on, and so many other things. I learned from the first case that there are many people out there that do care, and who take actions to take care of this world. They do not just try to find temporary fixes to problems; they focus on making things work for the long term. In this first case about global warming and its effects, I learned that scientists have to work with policymakers to effect change. For instance, when scientists tell people that plastic bags are harmful to wildlife and the environment, people know that they should not use them, but some people continue to do so anyway. However, if policymakers pass a law requiring grocery stores to use only paper bags, people will have to use them because the stores will not have plastic ones.

When I worked on the second case, I did not really know what I was doing. I was not comfortable working on something that I was not very clear about. I finally understood what I had to do in the last week of the case. The idea of a self-guided e-trail is pretty simple. It is like a milestone chart. It is about keeping track of an activity or project that you are working on. You cannot just write the dates down on a piece of paper; you draw a chart with timelines to make it easy for anyone to understand. In this particular case, the project took a number of years. I think presenting information about long-term projects in a timeline or e-trail makes it much easier for readers to understand than presenting the data in a table.

In the third case, I compared European and American attitudes toward stem cell research. I had to read many papers about this topic. Reading each page consumed a lot of time because I had to try to understand terminology that I was not familiar with. It was difficult, but I enjoyed the

assignment. I felt like I was learning something new with each article I read. I wonder if it would be easier for learners to learn if they relaxed a little bit and opened themselves more to new things. I know that I am a person who can be reluctant to try new things. I feel safer doing the same old things. I changed many topics many times while I was working on this case. I almost did not have enough time to write the paper. I knew that it would not be good if I did not finish the assignment on time. If it happened once, it might happen again. I did not want that, so I managed to finish it just in time.

I loved the fourth case the most. In working on this case, I felt like I was a successful scientist who was doing what she loved. I had never thought about inventing something before; I just thought that I couldn't do it. In this case, the students in the course would get to choose their own projects. The point of these projects was to have other people be part of their project. We did not have to do a real project; it was a practice exercise. Students would have to think about what they would like to do for their project, make a plan, think about how much time it would take, and assign tasks to other people. I was very serious about this project. I thought about inventing a phone application that could detect the amount of carbon dioxide (CO<sub>2</sub>) in the atmosphere in Thailand, and especially in Bangkok, the capital. Many people in Bangkok own smartphones. My idea was to attach a small device to a smart phone. The device would measure the amount of CO<sub>2</sub> in the air and send the result to the application in the phone to be displayed. Like I said, this was just an idea. I did not know if it would be possible to do. However, in presenting my idea to the class, I pretended that I was the project manager and my classmates were my team. I assigned two people to work on a slogan for my project, two people to work on how to advertise the app and encourage people to participate in this project by downloading the app, and two people to work on launching a website. My team and I spent about 30 minutes working out the details. We accomplished everything that we wanted. My classmates told me that they felt like my project was so close to reality. They took their tasks seriously. I thought that I was real project manager too.

The four cases that I studied gave me a good idea of what the rest of my graduate courses would be like. Understanding the big picture of the whole program could count as a very important step in learning. I would know how much I would have to read and write. When I read and write, I cannot just read and then write and be done with it quickly. I have to digest and organize my thoughts before I write them down. I have to make sure that people can understand what I write.

And every time I went to class, I would have to contribute something to the class. I could not just sit and listen to others, because if I did that, I would not learn much. If I was going to share ideas with the class, it meant that I had to study the topics in advance. Then I would have to organize my thoughts and think about what I would say to the class. These processes took a lot of effort and strengthened my learning ability.

Changing topics too often almost made me fail to submit my assignment on time. I needed to learn how to make decisions faster and stay focused. Sometimes after making a random decision, I would regret it later on. I wanted this problem to go away, so I did some research and discovered many good suggestions. For instance, Katherine L. Milkman and two of her colleagues researched the topic and wrote the article, *How Can Decision Making Be Improved?* (Milkman, 2009). Milkman and her team pointed out those bad decisions have a high cost and we often make decisions based on our biases. I agree with the two points that they made. Sometimes I waste my money on brand-name products, mostly food, without getting higher quality. They argued that there are two key ways we make decisions, which they called System 1 and System 2. These two systems refer to our cognitive functions. We are not necessarily aware of which system we are using when we involve it in making a decision. System 1 is based on our intuition. When we rush to make a decision quickly, we use System 1. System 2 is the opposite of System 1. When people use System 2 to make a decision, they think carefully, harder, and use logic more. I think I use System 1 too often when I make decisions, and it makes me have to change my ideas more often. Now I think that making decisions faster does not really work in my case. I should think more carefully and make a plan before I decide to do something; then I will be able to make a better decision and not have to change my idea over and over again.

I appreciated the fourth case the most because I got to take full ownership. I like when I get to do things on my own. I think I am that way because of how I was raised. My mother encouraged me to be independent since I was very young. I am very happy when I can do things without help from others. It means that I am not dependent on others. When I got to design an entire project from beginning to end, I devoted my time and energy toward it as much as I could. After I finished the fourth case, I felt like I could do more things than I expected. Just having thought of inventing a device to detect CO<sub>2</sub> was pretty a big deal for me, because I never gave myself the chance, or allowed myself to think, that I could be an inventor. I believed that I did not have the potential to do something like that. My underestimation of myself was preventing me from doing

great things. If I think more positively about myself, I believe I will be able to do more things than I expect.

## **Advanced Psychology**

Advanced Psychology was like love at first sight for me because I liked this class as soon as I saw the name. From just the name, I thought that I would learn a great deal about the mind and brain. I told myself at the very beginning of the class that I would study as hard as I possibly could.

I still remember the first day that I went to this class. I arrived at the campus early. I walked to a big building standing tall facing the harbor. I went inside the building straight to my classroom. I got there a little early and I did not see anyone there. I waited about five minutes. Then I looked at the piece of paper that had the location of my class. I was stunned for about two seconds. I could not believe that I went to the wrong room on my first day. I looked at the room number of my class carefully before I went in search of my class. I walked without looking at anything else other than looking forward. I found my class. My instructor stood in front of a chalkboard and there were about 8 students sitting in one row facing the teacher. I walked into the classroom as quietly as I could. There was an empty seat in the front between two of my new classmates. I sat down and smiled at both of them. Then the instructor invited everyone to introduce themselves to the class. I learned that half of my classmates already had a master's degree from another school. I was very nervous; I was afraid that I would not be able to do as well as they would. My worry faded away as I gradually discovered that my classmates were very friendly, and we were all there to learn from each other.

Our learning style was based on discussions. The instructor would give us the reading assignments ahead of time so we would be ready for the discussion in class. I read most of the assignments the instructor asked the class to read. Most of my classmates were very enthusiastic about sharing and contributing their ideas to the class. I could see that many of my classmates wanted to speak. Whenever the instructor posed a question, I would see my classmates ready to respond; their hands rose up in the air. Sometimes, I even felt that my class was like a game show, where my classmates were the contestants and I was the audience. Everyone tried their best when it was their turn to speak. The awards were chances to get to speak. I liked the dynamic of this class. Everyone seemed like they wanted to be involved. Everybody seemed to

be an expert on this subject even though we were only at the beginning of the course. One of the reasons my classmates knew so much was that they read a lot. They would share an idea and refer to at least two or three books. Noticing my classmates had learned so many things from reading induced me to do the same. I needed to be able to articulate every single point that I wanted to share. But all I did was to just keep rehearsing what I wanted to say in my head over and over. I was afraid that my instructor would not understand me and then ask me more questions. The more I liked the class, the more I was afraid that I might make a mistake. I was like that for the first half of the semester, but then I stopped being as shy and spoke up a little more. I started to speak up because I felt like I was not contributing enough. It was not that bad after all. I did just fine and everyone seemed to understand what I said.

### **What Did I Learn from This Class?**

Before I took this class, I had some basic knowledge about the brain; such as how the left and right brains work differently. The left brain relates to logic and reasoning, while the right brain relates to creative thinking and emotions. I got to know the brain and its functions much better while I was taking the Advanced Psychology course. I was very satisfied because I gained a deeper understanding about the brain. Each part of the brain has different jobs, but they work as a team — and they work together well. If one part of the brain can no longer perform its job, another part can make up for it by working harder and strengthening its abilities. For instance, deaf people can use their eyes to help them hear sounds. A neuroscientist calls it “the hearing eye” (Lewis, 2013). If I ever have to explain to preschoolers how our brains work, I will ask them to imagine that our brains have tiny people in them, and each person has work that they have to do. For instance, one person will help us make plans and another will manage our memory (Knapp, 2013).

I discovered that the more we know about the brain, the more we can get out of it. We can strengthen our brain’s power and abilities, such as memory. We know that our brains remember better when we group things together. Therefore, when we have to memorize a long list of things or numbers, we can combine them into groups. This technique is called chunking. For instance, if we have to memorize the sequence of digits 499259877, we should try to remember them like this: 499, 259, and 877. Remembering the chunks is much easier than trying to remember the whole string. The limitation of the chunking technique is that it helps us remember only for a

short period of time. Another cool technique that I learned is using top-down influences. The concept of top-down influence is about relating new knowledge to something that we already know. This technique helps us strengthen our ability to memorize. For instance, when I first learned about nuclear fission, where atoms are bombarded by other particles until they explode into pieces, one of my friends said that we can think of this action as frying fish in a pan. It is very common in Thailand for people to fry a fish whole without removing the skin and bones. When a whole fish cooks in a hot pan of oil for about three or four minutes, the skin starts bursting and making noise. This is a perfect time to cover the pan with a lid so as not get hurt by flying fish meat. My friend thought of this because fish sounds like the first syllable of fission and it has a similar reaction: exploding when set off by a triggering action. I learned this concept 10 years ago and I still remember it today. These are just a few examples of what I learned in this course. It was an eye-opener for me. I have had my brain since I was born, but I never really understood it until I took this class.

### **What Do I Think About What I Have Learned in This Class?**

What I learned about the brain was just small segment of it. I think that it was very fun to learn about the brain. By taking this course, I know more about the brain than before. I believe that there are still more things for me to discover. Learning about the brain tells me that nothing that we get out of this world is free. This saying is very true about the brain. I learned that if we want to strengthen and extend our brain's abilities, we will have to do something to make it work more efficiently. For instance, we can use the chunking technique to help us memorize more easily. I like to compare our brains with computers. Imagine that everyone has a computer, and they all are the same brand and they operate the same way. Now, in order to make your computer run faster, smoother, and have better memory, you will have to understand the nature of your computer, just like we have to understand the nature of our brain. Since we know the nature of our own computer, we can learn how to manipulate it. We can improve it in the ways we want. The computer will not get any better if we just let it sit there. It will be as if we keep using our brains in the same old ways and never understand their nature. There is no way that people can help themselves think faster by doing nothing.

In this course, I discovered that many researchers are interested in how we can get the most out of our brains and understand them in more depth. I wonder if we can learn other things about our

brains that are more sophisticated than just knowing our brains' functions and how to improve their abilities. I was very excited to learn what I did about the brain, but when I finished the course, I realized that I did not want to know more about the brain just so I could remember better, be able to acquire knowledge better, or make decisions more effectively. This phrase echoed in my head all the time: "You can remember and learn more effectively, so now what?" Based on the fact that our brains are very complex organs that perform tons of work all day and all night, I believe that there are more mysterious things about the brain, hidden features and things that are more meaningful, that await our discovery.

I liked learning about the brain so much, I wrote a poem:

*Dear, my dear brain,  
you are always with me,  
but I do not really know you.  
I always use you,  
but why do I not really know you?  
You always work hard for me,  
but I do not really know you.  
Even when I learn more about you,  
I still do not really know you.  
I think you work for me;  
maybe I am wrong.  
I think I can manipulate you;  
maybe I am wrong.  
You are a mysterious thing.  
I will find a way to connect with you.  
I will find a way to know more about you.*

## **Philosophy**

Before I took this class, I did not have even a basic knowledge of philosophy. I actually planned to take Philosophy 501/CCT 603 as my last course before finishing the program. I thought that this class would be the hardest class for me, but I ended up enjoying it. I liked that the instructor was very open and flexible, and that his class was well organized. Imagine this: I am one of three

foreign-born students in the class. English is my second language and philosophy is like a whole new language to me. But I do not feel any pressure while I am taking this course. The professor and my classmates are always there and willing to support me.

I learned a lot from this class. I think that philosophy is very important, especially the questions that philosophy poses. I realized just how important questions can be; they are the foundation of education. When I was young, I remember asking a lot of questions. As I grew up, I asked fewer and fewer questions. I do not know what happened to me. Perhaps it was because I thought I knew the answers. However, when taking this class, I learned just how little I knew. I felt more humble, more eager to learn, and I ask more questions now.

I will be sure to carry all of the experience and knowledge that I obtained from this class with me. First I am going to develop myself, and then I will try to develop other people. I would like to be an educator or an education professional. I would like to renovate the education system we have nowadays. It is my dream to build my own school. I hope that it will be an enjoyable place that students love to go to. True education is not about grades or memorizing information for tests. Educational institutions should be places where students learn and experience things, and they should be able to take the lessons they learn with them after they finish each course. I believe that this philosophy course has guided me in this direction. It will help me make sound decisions that will help me as an educator in the future.

Every student in college should take this basic philosophy class when they are freshmen. Philosophy is a fundamental subject that teaches students to question what they learn. I think this subject is the foundation of all other subjects we learn in school. I should have taken this course when I was studying for my undergraduate degree. I am lucky to have had the chance to take this course now. I am going to get as much out of this course as I can.

Philosophy opened a door to a world that I had not seen before. I enjoyed reading *Twenty Questions: An Introduction to Philosophy* by Robert C. Solomon and others. It covers many topics; I do not know if any other book covers as many as it does. There are stories about love, war, death, torture, emotions, souls, virtue, and more. Some of the most enjoyable assignments that we did in this class were the weekly reflections. After reading the passages that the professor assigned, I had to think about what I was going to write about in my reflections. I had the freedom to choose whatever I wanted to write about. Our professor, Dr. Arthur Millman, taught

us about liberty in our first class. He gave us lots of freedom to do our work. That was real liberty. The freedom and flexibility he gave his class allowed me to be very creative with my reflections papers. The writings made me happy, and I enjoyed participating in every single class. Overall, I am really happy with this class. I like it so much that I do not want it to end.

## **Conceptual Change and Learning**

### **What Was This Class Like?**

The description for this class said it would focus on factors that affect how children learn science. However, I was not wrong to register for this class. The instructor told the class that the course would be mainly about conceptual change and learning in general and not as much about children and science as the description said it would. There were eight students in this class, including me. Four students were from the CCT program and four students were from the honors program. I was very excited to know that I would be in a class with smart students. All of my classmates were successful in their fields: one worked for Apple, one was a director at her organization, and one was on a full scholarship from her country. I was just an ordinary student who needed to learn more. I told myself that I would take advantage of having excellent classmates. I would learn from them while I was taking this class.

### **What Did I Learn? What Did I Do?**

#### **My Big Lesson**

My paramount lesson in the class would be about contributing. What I worried the most about this class was that participation was very important. My professor stated in the syllabus that 25 percent of the grade would come from participation. Participation did not refer to how often a student showed up in class, but rather how often the student contributed to the class. It meant that if I wanted to get the maximum score in participation, I would have to share my ideas and comments frequently. I was shy, and scared that my professor and my classmates would not understand what I said. I was very quiet, but paid full attention in the previous three classes that I took before this one. I told myself that in order to get 100 percent of the participation score, I must speak up. I admit that I was concerned about my grade. My GPA will be very important for me if I ever plan to pursue a doctorate. I could not pretend that I did not care what my grade would be, because I did. If schools do not use grading systems, students will be able to learn

without being stressed over their grades. However, I think that sometimes people do need some kinds of incentives to keep them working hard. Incentives encourage people to change or take action to get what they want. In my case, had my professor not graded his students on their contributions to the class, I would never have tried to speak, knowing that I would be just fine whether I shared my ideas with the class or not.

It turned out that I only received 76 percent in participation, while I did very well in the other parts. Receiving that 76 points pulled my grade down significantly. I could not blame anyone but myself. I think that it was a good lesson for me to learn. It took me quite a long time to start to warm up and change the way I behaved in this class. I did not start to speak up until we were halfway into the course. It was a little bit late to speak up in this course, but it was not too late for the rest of the classes in the CCT program. I was sad, but I learned something. Sometimes, we do not learn until we get hurt. When I was about three years old, I learned from getting hurt. We did not have electricity at that time. One night, I watched my mother light a lantern to light our house. When I watched my mother strike the match on the matchbox, I saw the match burst into flame. It was sparkly and beautiful, and to me it was like my mother had performed some kind of magic. She had made fire out of a tiny box and a small stick with a red dot on it. I wanted to do that too. That same night, I waited until no one was looking, picked up the matchbox, and ran into my mother's bedroom. I held the matchbox firmly with my left hand and struck the match with my right. It did not work the first time, and the second time it did not work either. It worked the third time. The match burned quickly, I dropped it, and it landed on my left wrist. Then it bounced off my wrist and fell on the floor. There was a burn on my skin the same size as the head of the match. It was extremely painful for a three-year-old. I cried out loud and ran to my mother. There were five or six people in the room where my mother was sitting. No one seemed to feel bad for me. They all said that I should not have played with matches in the first place. I was too hurt to think. If I had had the brain that I have now I would have told them this: "It is okay to make a mistake if you learn from it. I got hurt today but I learned something. I learned that fire is very hot and I should be very careful when I am around fire." I think that it is not necessarily a bad thing to learn from something that disappoints me or hurts me, as long as it does not kill me. These things help me grow stronger. If it were not for my teacher requesting his students to contribute to the class, I would have continued to be a very quiet student and rarely share my opinions.

## Time Management

There were many reading and writing assignments in this class. Every week I had to write in a journal to reflect what I had learned from each class. I would also have to do 10 observations, and a final paper. Writing the journal was a piece of cake for me because I love to write and reflect upon my experiences.

The challenging part for me was conducting the observations. At first, I did not know who I could observe because I did not have a full-time job. I did not think about making observations until the fourth week of the class. I thought I had plenty of time. Meanwhile, many of my classmates had already started to do their observations. At last, I figured that since I was a volunteer teacher at a Thai Sunday school at a Thai temple in Bedford, I could observe the children that I taught. I could design my lessons and experiences any way I preferred. I would have conduct ten observations and relate them to what I had learned in class. I knew that starting my observations a little bit late was a mistake. Yet, I had to move on and think about how to manage the limited time that I had so I could complete all ten observations before the semester ended. I taught only once a week, so one observation per week would not be enough. As a result, sometimes I had do two observations in the same day. I felt tense, worried, and excited at the same time. I had mixed feelings: I was worried about time, yet I was excited that I would be able to do many fun experiments with my students. I felt like I had taken on the roles of psychologist and researcher at the same time. I had to design studies and observe people's behavior in them. I was very lucky to have my sister to help me with these assignments. She has a strong background in research, while I had almost none. Each experiment and lesson took a long time to design and plan. This made me think of what researchers had to do to conduct the studies I read about. Whenever I reviewed a research paper, I read it for the concepts, the process of their studies, and their findings. I never thought of how hard it was to come up with the concepts and methods required to conduct those studies.

I would like to give one example out of the ten experiments that I had to design based on what I had learned from the lectures. In this particular lecture, we learned that change can be seen as a threat and be very stressful because we do not know what will happen after a change occurs. For instance, are we capable of taking a new shortcut? If we change, do we have to find our own ways of operating new things? If we do not know the world around us, how should we act? My

objectives in the study were to find out whether or not change makes people uncomfortable or threatens them. I had to plan how to proceed with the study, how to collect the data, how to present the data, how to interpret the data, and make a conclusion. Here is the whole experiment:

### Experimental Procedure

1. Blindfold the students.
2. Have all of them line up and hold on to the shoulder of the person in front of them.
3. Have a teacher hold the hand of the student at the head of the line to guide the students.
4. Have the teacher take the students on a walk around the temple and into the wooded area next to it.
5. Ensure the teacher tells the students to be careful when they walk close to trees, on steep hills, and near big rocks.

### Results

One student didn't want to do this activity. She cried the whole time. We let her walk with the group without a blindfold. The rest of the students concentrated deeply while they were walking. Some of them screamed when we walked through the wood, when they encountered a small hill, or if they walked into a branch. After we finished the walk, we interviewed the students to see how they felt while they were walking blindfolded. One student joined in the activity when we were half-way into it. She didn't wear a blindfold. Another student wore a blindfold at the start, but took it off soon after.

### **Interview Results**

Students	Feelings
Student1	Excited, but a bit worried
Student2	Worried
Student3	Scared
Student4	Scared
Student5	Enjoyed

Student6	Happy
Student7	Worried
Student8	Worried
Student9	Scared and worried

## Findings

The students who were not blindfolded were not stressed, and were happy about the experience. The rest reported being worried or scared a mixture of excited and worried, or scared and worried.

## Conclusions

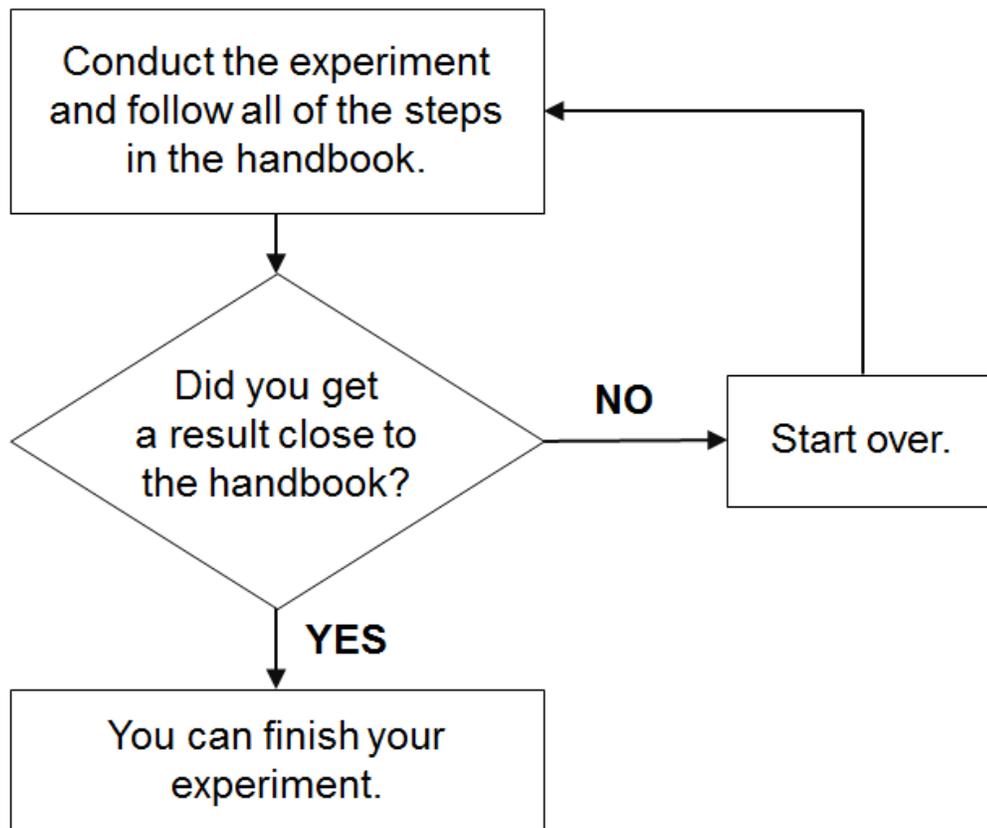
All of the children who had blindfolds on were worried and/or scared. On the other hand, the children who did not have blindfolds on were happy. The children who could see did not feel uncomfortable because the activity was not usual for them. For the children that could not see, a sudden change had happened to them, and it made them uncomfortable. Even the students that could see could not predict what was going to happen, and that stressed them a little. It is the same with other changes, too.

When changes take place, people may seek to manage their cognitive and behavioral responses by initially expressing concern and presenting their initial reaction. Initial concern is associated with the need to be safe, and seeks explanation and evaluation. Initial reaction, in people who have to confront change, may be expressed by asking themselves questions such as, “Will I be OK?” and “What is going to happen next?”

## Lessons Learned from Observations/Studies

What I learned from all of my 10 studies was that time management is important and I should not make the mistake of thinking that I have a lot of time. It is better to start something earlier, not later like I did. I think that it is hard to catch up with tasks that are behind schedule. It will be easier when we start our tasks early — that means we will always be ahead of schedule. I was very happy with the 10 studies I conducted. This assignment would not have been a success without my sister’s support and my lovely students at the Thai temple. My students had so much

fun, they wanted me to do a special project (when I referred to my studies with my students, I called them special projects) with them every week. The 10 studies were totally opposite from all of the experiments that I performed when I was a physics student. All of the experiments that I did back then were pre-designed. My job was to follow the procedures in the lab book. When I conducted an experiment, I had to try to get my result as close to the theory as possible. For instance, in class I learned that oil has a higher viscosity than water. The point of the experiment that I had to do was not to test the theory, but to confirm that what I was told in class was right. If I were to find out that water had a higher viscosity than oil in my experiment, it would mean my experiment was wrong. Whenever my lab partner and I encountered a situation like that, we would have to start the procedure all over again. We had to conduct each experiment until it agreed with the theory. Sometimes my lab partner and I had to make up numbers so they would be closer to the numbers in the lab handbook they gave us. This was one of the reasons why I did not enjoy learning physics when I was in college. Based on my experience, performing an experiment in physics was like following this flow chart:



I do not think that I learned much this way because I did not have to do much. I would just have to follow directions to make the experiments turn out right. It was not that different from being a soldier or a robot. There was no need to be creative or use critical thinking skills. I think that I learn better when I have to design my experiments on my own, like I did in the Conceptual Change and Learning course.

## **My Instructor**

At first I was afraid of this professor. I felt like I was in a school with a mean principal who had many rules for his students to follow. He was very unique, and he had his own teaching style. He was a very straightforward person. He was very comfortable telling students what he liked and did not like. For example, my professor told us not to pretend to know about an assignment if we had not read it. When I heard this, I was worried a little bit that I might say something that would make my professor think that I had not studied an assignment when I actually had. I knew that I did not always understand everything that I read. There were times when I shared my opinions and they did not sound right to others. Later on, I learned that my professor could tell who was faking it, and who was not. My worrying was just a waste of time. I liked the way he implemented his class. He used a Socratic approach. My professor would keep posing questions to his students until we were on the right track. He helped me understand myself better as well. The third week of the class, the professor asked the class what they thought was the most special thing about them. I told the class that I am a person who does not give up easily. I gave the class an example about my taking the Test of English as a Foreign Language (TOEFL) many times. He asked me to give a reason why I did not give up. I could not explain why. So he showed the “mortal chess game” on YouTube to the class. In the game, player 1 was in big trouble. It looked like player 2 was going to win the game easily, but player 1 did not give up, and by sacrificing his most important piece, his queen, eventually beat player 2. After watching the video, I immediately knew how to answer the question. I knew that my effort was worth it in order to have a better life. Sometimes we must sacrifice something we have in order to get something better.

He also helped the class see each other’s value. Sometimes, people do not see how awesome they really are. Everyone should know that they are special. Many people do not like each other because they forget to look for the good things in other people. We may overlook the fact that we

all have good qualities. We can easily see what we do not like about others, but sometimes it's hard for us to see the good in people. Seeing the good in people is an important skill for teachers, coaches, and managers to have. Using this approach, teachers are able to help students enhance the skills they have, moving them from good to great.

The professor made 2 hours and 45 minutes fly by. I never remember a time when I stared at the clock or my watch. That never happened, because I was constantly thinking about what my professor and my classmates were saying, and what I would say to the class. If anyone wanted to respond or comment, they had to think carefully before speaking, and have good reasons to back up their statements. Otherwise, the professor would ask them endless questions. I think that every department should have a professor like him to balance out the super nice ones. I hope that students who talk nonsense, or pretend they know something that they do not, take a class with this professor. Hopefully, they will give more reasoned responses in the future.

Overall, my professor was not as scary as I thought he would be. He was like a coach. He pushed his students forward by asking questions that forced us to use our critical thinking skills. He extended his students' abilities by asking questions that challenged us to think more deeply and more broadly. He was a very fair professor. When he saw that students were devoted and had worked hard, he gave them full credit. He could tell who worked hard and who did not. On some assignments I got 100 percent because I worked so hard. I spent two weeks working on my final project; he could tell. He seemed to know his craft very well. I can say that he was one of most awesome teachers in the CCT program. I was happy to be in this class even though it was tough.

## **What I Think About This Class**

### **Foremost Lessons from This Class**

This class not only changed me, it gave me a new perspective when I look at myself and others. I now understand myself more. I know why I decide to do certain things or think in certain ways. The culture and environment that I grew up in and the era that I was born into shaped how I think, what I believe, and how I communicate with others. I also learned that people who were born in different generations think and believe differently. Each generation has different traits. Dealing with people from different generations requires various strategies. For example, knowing what is important to people enables us to find the best ways to motivate them. I learned that employees from Generation X tend to need to hear their bosses give them compliments (at

least once in a while). If a manager or executive wants their Generation X employees to be happy, they need to tell them how much they appreciate the work that they have done. When employees are happy they work hard.

When I understand myself very well, I can also understand others well. My professor pointed out that we are all special. Culture, family background, and sets of belief are things that we all grow up with. They shape us to be different than others. These things make us think, see, and understand things in different ways. For instance, when Thai people smile, it does not necessarily mean that they are happy. A Thai smile can be used to express many other feelings, such as guilt, anger, regret, and shyness. Knowing that we may differ in many ways allows me to understand others better, respect who they are, and to try to understand them instead of judging them.

## **Creative Thinking**

### **What Was This Class Like?**

This was an online class but we would meet every other week. We used blackboard as the online tool to view our assignments and exchange ideas. Although the workload was heavy due to the many assignments, I was delighted to do them. I took this class in the spring of 2015. I still have very vivid ideas about most of the things that I did in the class. There were about 12 students in this class. I was very excited to learn that my classmates were from many different backgrounds. One was an artist, one worked as a marketing officer, one was a teacher, one already had his Ph.D., and so on. I no longer view my classmates as competitors like I did when I was young. Rather, I view them as people whom I can learn from.

The professor who taught this class was very well organized. All of files, materials, and assignments were very easy to find. She put them in different categories with titles. I never had a problem locating information that she asked the class to look at or work on. If she were a librarian, I would never have a hard time finding a book that I wanted because her books would be well organized and her system friendly to use. Besides the regular assignments that we had to do, she provided extra homework related to her lessons. There were three parts of this homework: watching a video, responding to it, and exchanging ideas with our peers. This extra homework had great motivational stories. It made me want to go out and do good things for others just like the people in the videos. She also made what she expected us to do on the assignments very clear when she assigned them. She made comments and gave feedback on

everything that I submitted. She was the one who inspired me to believe that everyone has the potential to be a creative person. I liked the way she ran the class. She was very calm, but fun to learn from. She is definitely the kind of teacher I would like to be. She was the opposite of my father in that regard. I think that calm and fun teachers are more fun to interact with. I felt relaxed when I was in her class.

### **What Did I Learn?**

If I had to evaluate my creative abilities before I took this class, I would have given myself 20 percent out of 100, because I did not consider myself to be a creative person. Yet I can find many ways to solve problems, and I am good at finding replacements for things I do not have. For instance, one time that I went to see a fireworks display, it rained. I did not have an umbrella with me, but I had two big plastic bags that I had brought to sit on. I cut holes in the corners that were big enough for my arms, and a bigger hole in the middle of the bottom of the bag for my head to poke out of. I held the other bag over my head. I think that this is a simple skill that everyone has. I am not good at painting or drawing. I am just not good at art.

When I think back to the first week of my class, I struggled with creativity. When I read what I needed to do to complete each assignment, I used a lot of effort in coming up with my answers. I made it difficult for myself. I didn't give myself enough time to think. For example, when I had to think of a list of things that "bug" me, I initially could not think of any. Later on, when I was more relaxed, my ideas came out more readily. While I was taking a shower, I thought of three things that bug me. I think that when we allow ourselves to take a break, it is good for our brain. It is better than trying to force thoughts to come out when our brains are tired.

One of assignments the first week was to think of words that are related to creativity. I thought it was important to know the definitions of the words in the course title before diving deep into the course. I thought of a couple words that relate to creativity, such as: unique, novel, meaningful, and above and beyond right and wrong. I was a little more comfortable when I could think of words that conveyed the meaning of creativity without looking them up in a dictionary.

In doing the assignments for this subject, I learned from my instructor that I should loosen up and allow myself to express my feelings and be flexible as much as I could. These techniques enabled me to enjoy learning this subject very much. Before I began an assignment, I would read it carefully and make sure I understood what I had to do. Then I followed the procedures in the

assignment. The procedures in the creative thinking class were not the same as in many other subjects. I think they were more like guides to help students to use their imaginations. I think that was very helpful for a novice like me. I was new and I needed to learn before going off on a journey on my own. This made me think of many old-time Chinese movies, where the main character does not know how to fight in the beginning of the movie, so he travels to seek a master who can teach him. When he finds a master, he learns and practices before he goes out and fights with others, just like I had to learn to exercise my imagination and creativity before I became good at it. In one of the assignments about using our imaginations, my instructor asked us to imagine a workplace environment that we would enjoy working in. Visualizing one's preferred working environment is a great tool for people who need to escape the same old boring one. When I did this assignment, I allowed myself to imagine my ideal work environment. I followed each of the guidelines within the assignment. I saw that I could imagine anything I wanted when I allowed myself to do so. The place that I visualized for this assignment was a room with glass walls and a glass ceiling in a house located in the mountains. The sun shone through the glass. I felt its warmth and saw a blue sky with no clouds. There was a round wooden table with two chairs in the middle of the room. There were various types of succulent plants in tiny pots. They looked fresh and lively. I could see two blue-throated barbet birds singing on a branch of a mango tree. A dark blue butterfly was sucking nectar from a blooming yellow rose. This activity gave me a delightful experience.

After I finished the visualization assignment, I thought about using imagination in learning. I wished I could have done this when I was a physics student in college, because many physics courses have abstract concepts that students need to be able to visualize to understand. For instance, when we learn about the application of force described in Newton's third law (for every action, there is an equal and opposite reaction), we have to think of the directions of action and reaction. We cannot see it; we have to imagine it. This can be very frustrating for students who are not good at imagining or visualizing. Theoretical physicist Frank Wilczek, in the video "*Why Science Needs Imagination and Beauty*," stated how physicists have come up with many equations in order to try to explain the properties of particles. Many of these equations cannot be solved yet. In order to really understand how particles might behave, physicists need to use a lot of imagination to think of how particles are likely to act (bbc.com, 2013). I think that it would be a lot of fun to encourage students to exercise their imaginations at a very young age. Actually, I

tried this out with three-year-old children at a summer day camp last year. Every afternoon, I would tell a story that I had not prepared in advance. I would invite the children to add some ideas to my story. For instance, I would say to the children, “A young boy went into the woods and suddenly he saw something moving behind a bush. What should that thing be?” Then the children would tell me what they thought it should be, and I would add it to my story. It was fun for me and the children. Sometimes the children preferred my story over a story from a book. One boy said to me, “Wipa, can you tell us a story of your own?” I will continue to engage my students’ imaginations in my lessons whenever I can.

I learned that I can apply creativity in any type of setting or context. In the past, whenever I thought about what related to creativity, I would think about different forms of art like painting, drawing, and poetry. It never occurred to me that creativity can help us see problems better. I also never expected that I would get to learn problem-solving skills from this creative thinking class. One problem-solving technique that I learned from this class was how to redefine a problem. When we redefine a problem, we can see additional aspects of that problem. If we can identify all of the aspects of a problem, we will understand the problem better. The problem that I picked to discuss with my class was my messy apartment. The question I posed was “How can I manage the limited space in my apartment more efficiently and in a manner that looks nice at the same time?” When I took a closer look at my problem, and asked myself what had caused this problem in the first place. I came up with five statements that defined the problem:

1. I have a lot of things that I do not need.
2. My apartment is too small.
3. I do not want to move to a new apartment.
4. My stuff is disorganized.
5. I do not want to spend money to solve this problem.

When I analyzed these individual problems, I was able to find these solutions for them:

1. Throw away things I do not need.
2. Reorganize furniture and things in a way that gives me more space.

3. Search the internet for ideas on how to organize a small space.
4. Donate things that I do not use anymore, but might be useful to others.

Another technique that my professor taught the class was to imagine talking to the creative person we admire the most and ask them for advice. I chose Richard P. Feynman to be my favorite creative person. Before I pretended to have a conversation with him, I read his stories to get to know him well. I read a couple books about him. Then I pretended I consulted with him. I had to write down the questions that I asked him, and what he said to me. When I was writing what I thought Feynman would have said, I had to be careful not to say the things that I would say. I would have to think based on Feynman's thinking habits and his traits. Then I could write what I thought Feynman would have said to me. I was a joyful experience for me. It was fun to try to think what another person would say to me. I think having the skill to understand others better is a very good skill. It can help us show our understanding toward others and it also helps us better connect with each other. But in my case, it helped me see the root of my problem. After I finished my imaginary dialogue with Feynman, I was able to identify that the root of my problem was me: it was because I had put things all over the apartment without thinking about making them look nice. If I pay attention to how I arrange my things, I do not think living in a small space will be a problem.

Another important skill that I cultivated during this class was being flexible. It made so much sense that flexibility relates to creativity. When people are flexible, they can think of more ways to design things because they do not stick to only one idea. While I was thinking about being flexible, a story from when I was nine years old popped into my head. My teacher had assigned the students to plant flower seeds in soda cans. The teacher told the students to poke a couple of holes under the can, put some soil in it, then plant the seed and bring it to school. My father helped me with this project, but he cut strips into the soda can instead of making holes in it, which made the can look totally different from what the teacher had told us. I just wanted him to make holes. I was mad at my father, and I refused to bring the one that he made for me to class. My father was the one who demonstrated that he was flexible. I was the opposite. I did not want to be different; I wanted to follow the instructions. It was very obvious that my teacher did not

consider involving any creativity in this project. Otherwise, she would have asked us to decorate our soda cans any way we wanted.

The assignment where I learned to be flexible with my ideas was called “Cup Activity.” I had to think of as many ways to use a cup as I could. I was instructed not to think only of the usual ways to use cups. I think that this directive was very reasonable. It encouraged students to think more broadly, of something new, of something silly, or to think of something adventurous. I thought of 14 ways to use a cup. My classmates were able to think of many ways too. I think that other people can do what my classmates and I did. I did not know what my classmates thought about themselves, but I was satisfied and happy that I could think creatively like that. I never knew that I was capable of thinking creatively like that before. I will continue to cultivate this way of thinking.

I believe that when we let ourselves think freely and without constraints, we enable creativity to emerge. This is so true. We can see much evidence for this on the internet. I noticed that there are many tutorial videos that share cool and different ideas that many people never think of. One example of a creative idea is a citrus sprayer. It is a small apparatus that looks like a spray atomizer attached to a short pipe full of holes. When the pipe is inserted into the top of a lime or lemon the juice that seeps into it can be sprayed out by pressing the atomizer cap. Have you ever thought of modifying something that has already been invented? If not, then you should. At the very least, you will get to exercise the creative part of your brain.

When I thought about famous and successful creative people such as Charles Darwin, Wolfgang Amadeus Mozart, and John Milton, I thought that they were born with talent and did not have to work hard to achieve in their fields. But when I looked at their daily routines, I discovered that they spent most of their time on creative work, sleeping, and eating/relaxing, respectively (<https://podio.com>). It was clear that my supposition was incorrect. Creative people work hard to create their masterworks. Pablo Picasso said, “Our goals can only be reached through a vehicle of a plan, in which we must fervently believe, and upon which we must vigorously act. There is no other route to success.” Charles Dickens also believed in hard work. He stated, “I never could have done what I have done without the habits of punctuality, order, and diligence, without the determination to concentrate myself on one subject at a time.” (<https://podio.com>). Many more

creative people in the world believe that practice and hard work are the only ways that will bring them success.

### **What Do I Think About This Class?**

This class revealed that I have some creative skills hidden in me. I would never have found them out if I had not taken this class. All of the activities that I did in this class helped unlock and strengthen some of my creative skills, like problem solving. I used to think that there was only one way to solve a problem and that was just attacking that problem directly. I totally ignored the fact that problems have many aspects and dimensions. I was also afraid to be different, but I learned that being different is safe and fine. This class taught me that being authentic is creative and it is not a bad thing. Therefore, I allowed myself to be silly, be myself, and think differently. I feel so much better to not have to worry what others are going to think about me and what I do. I should care about what I would like to do and what makes me happy. If the soda can that I use to plant a flower seed looks way different than others, it is okay because I like it, and it represents me.

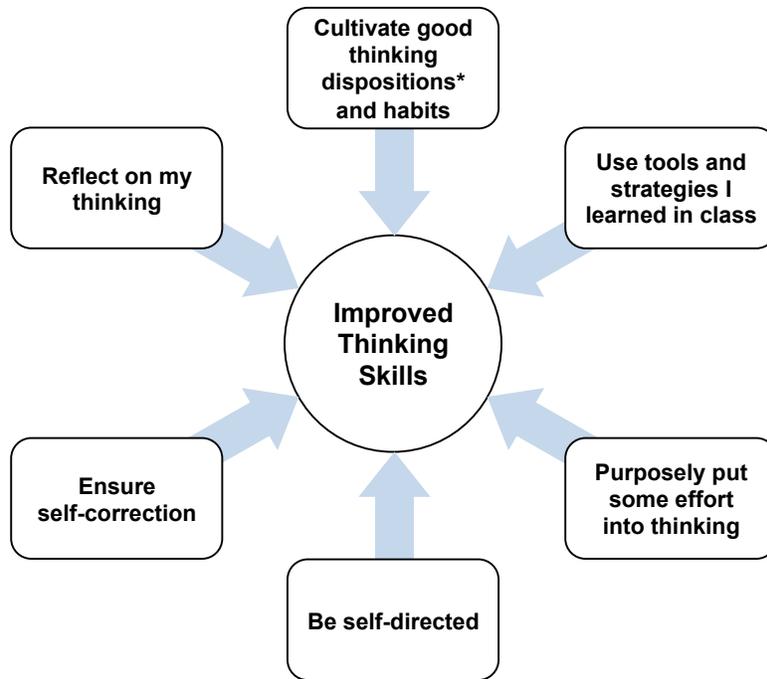
### **Critical Thinking**

When I took the advanced psychology course, I learned the brain's functions and how we can strengthen our brains' abilities in order to learn better. For instance, how to better recall memories or knowledge. When I finished the course, I wondered if there were any higher purposes in our brains than just storing and retrieving memories. Most people know that we use our brains to think, but how many people know how many kinds of thinking there are, what types of thinking they have, and which of those thinking habits are good and which are bad? For me, I can simply say that I barely know what types of thinking I have. But I am aware that I tend to believe too easily. Plus, I think that I know some things well when actually I do not. For instance, one bad thinking habit of mine is tending to make conclusions about what I hear and believe them quickly. As a result, I tend to make false assumptions. But after I took this critical thinking class, I learned to undo many of my bad thinking habits. For example, I learned to pause and think carefully before I decide whether I should believe something or not. I became a person who thinks twice and double checks before I believe things. I used to believe satirical or fake news stories on the internet easily. I have learned to create a filter and ask myself questions like, "Is it true?"

I used to think that being smart and having a high IQ was sophisticated and charming. I later learned that if a smart person has a bad thinking habit like narrow thinking, which refers to a tendency to stick with only one idea and not be open to, or even listen to, other kinds of ideas. I know one person who is very smart but is narrow in his thinking. When he hears any idea that is better than his, he is not happy. He takes any idea that opposes his own as an insult, and will refuse to consider that idea. Having this thinking habit prevents him from learning new things. Therefore, I now believe that having good thinking habits is more sophisticated and charming than just having a high IQ. I noticed that the professor who taught this course had many good thinking habits. He didn't believe what he heard right away. He paused and thought about each thing his students said to see if it made sense. He is a good example of a person who is sensitive to thinking opportunities. When students shared their ideas, he mostly provided feedback, or otherwise added on to what they had said. One particular response of his I still remember to this day. A question came from one of my classmates. She asked the professor, "What do you do when you have to listen to comments that sound silly or that do not make sense to you?" My professor suggested that we think of it in this way: "If you think that you are smarter than others, then you have to try to understand what others are trying to say." I told myself that I will remember that lesson my whole life. I want to keep it to remind myself that whenever I think that I am smarter than someone else and do not want to listen to them, that I should be humble and listen well.

### **Can We Improve Our Thinking Habits?**

If you think that we cannot improve and learn to think better, you have to think again. I have learned from this class that thinking skills are things that we can cultivate over time. But we do need a lot of practice and good planning. Here is how I am going to improve my thinking skills: I created a list that shows my plan to improve my thinking skills. It is not mandatory to do the steps in the sequence shown. The list is composed of the lessons I have learned in this course.



Remark: Thinking dispositions are types of thinking. Many scholars have categorized thinking dispositions. Sorting thinking dispositions and putting them into groups makes them easier to understand and recognize. I gathered together four different types of thinking dispositions that I discovered in Tishman and Andrade's paper (Tishman, 1996), and then I reorganized them by divided them up into four types.

Sufficiency	Mindfulness	Searching	Critical Thinking
<ul style="list-style-type: none"> <li>▪ is well-informed</li> <li>▪ seeks as much precision as the situation requires</li> <li>▪ is effective</li> <li>▪ makes plans and is strategic</li> </ul>	<ul style="list-style-type: none"> <li>▪ is careful</li> <li>▪ is determined and maintains focus</li> <li>▪ tries to be reflectively and is aware of ones' own beliefs</li> <li>▪ is self-confident</li> <li>▪ is conscientious</li> <li>▪ is intellectually careful</li> <li>▪ is metacognitive</li> </ul>	<ul style="list-style-type: none"> <li>▪ takes into account the feelings and thoughts of other people</li> <li>▪ seeks out and offers reasons</li> <li>▪ is open-minded</li> <li>▪ seeks truth</li> <li>▪ is flexible</li> <li>▪ is interdependent</li> <li>▪ is broad-minded and adventurous</li> <li>▪ is wondering, problem finding and investigative</li> <li>▪ evaluates own reasoning</li> </ul>	<ul style="list-style-type: none"> <li>▪ uses critical thinking abilities</li> <li>▪ takes total situation into account</li> <li>▪ withholds judgment</li> <li>▪ is inquisitiveness</li> <li>▪ thinks critically</li> <li>▪ seeks explanation and understanding</li> </ul>

Below are my final thoughts about this course:

### **The Evolution of My Thinking**

*I used to learn by memorizing  
I tried to remember almost everything  
I recited laws and facts;  
memorizing had such a big impact*

*I couldn't recall most of what I learned  
I had to admit that this was my concern  
I asked myself, "Was I that stupid?"  
tons of information; why couldn't I recognize it?  
I forgot things and my test scores were bad  
I was really mad, I thought it was so sad  
I blamed myself for my stupidity  
memorizing more means better scores — this is such a pity*

*I later learned how the brain works  
parts of the brain perform like clerks  
I know many techniques to memorize simply  
chunking helps the brain retrieve more easily*

*In graduate school I do a lot of reading  
memorizing is not a way of succeeding  
learning should not be all about memorizing  
that is what I learned from critical thinking*

*In my critical thinking class our mission  
was doing a lot of discussion  
I learned to be a better thinker  
and as a result my brain got bigger*

*We looked at the language of thinking  
it has value for learning and teaching  
powerful words make a crucial difference  
elucidate, deliberate, and postulate sound brilliant*

*Thinking dispositions are the habits of the mind  
and yes, there are so many kinds  
the disposition to be curious and questioning  
the disposition to organize one's thinking*

*I cannot mention all of them  
they all are beautiful like a gem  
if I would like to master them all  
I must first write them on my wall*

*Reflecting on one's thinking is metacognition*

*I think of it as an exhibition  
I can observe how my thinking goes  
I can pause, take a look, or let it flow*

*Making plans for something challenging  
having a system makes for easy managing  
we call it "the strategic spirit"  
with strategies, I can go beyond my limit*

*Using knowledge in another context  
it does not sound so complex  
I can use my math skills in physics  
transference does not have to be specific*

*I have learned so much about thinking  
my next steps are to do something  
evaluating and reflecting about what I know  
bad thinking habits, I will let them go*

*I really appreciate what I have learned from this class*

*I would like to make my knowledge last  
I shall cultivate my thinking habits every day  
meditate and speculate on what I have to say*

*The more I practice and exercise it  
one day productive thinking will become my habit  
so think wide, think carefully, and think far  
the way we think defines who we are*

## Research and Engagement Process

In this class, I learned to do research for the first time in my life. When I was in college pursuing my bachelor's degree, I did not do research or write any papers. The most I did was to study a topic that I liked and then gave a presentation to the class and a panel of eight professors from the Physics department at my school.

Since I did not have a background in it, conducting research was really alien to me. I was a bit nervous about this class. I thought that conducting research would be a big deal for me and I wanted to do it well. I invited my sister to observe my research class because she has a background in research from her studies in school. Bringing her with me to my class was a good idea because she would see what my class was like, and then she would be able to give me advice. After she observed my class for 3-4 weeks, she gave me feedback based on what she had observed. She said that this class would not be easy for a novice researcher like me. She gave me an example from when she studied research at her school. She told me that it took a whole semester for her to learn how to ask adequate questions for a research project. She said that it was very important to have good questions before proceeding further. She would learn how to conduct a research project the following semester. I absolutely agree with her, because asking the right questions leads to success. If I set an ambitious goal and ask vague questions, I will likely have to go back and spend a lot of time clarifying them. It would be great if I or my professor could see that my questions were too broad early on. It would be bad to realize that when the semester was almost over.

My very first governing question for this course was, “*What kind of classroom design promotes creativity, learning, and happiness for young children?*” My professor told me that this topic was too complex and it might take me more than a year to finish. I was a little bit upset because I liked the topic and I thought it worthwhile to research it. However, I had to listen to my professor's advice. I had to consider what he told me. My sister and a friend of mine said the same thing when they read the question. I came up with at least 3-4 new questions before I settled on the last one, which was “*Why should adults support play as a component in early childhood education as much as they support academic instruction in early childhood education?*” I liked my last question as much as the first one and I learned that asking the proper questions has an important role in research.

I sought support and advice from others. I was not reluctant to ask for help from my sister, friends, peers, and an expert in the field. I could not just work on my own; I had to cooperate with others to make my project work. I needed to reach out to an expert in the field to get information and advice. I went to visit a play-based school, made observations, and interviewed the director of the school. One thing that almost derailed my project was not reaching out to people whom I wanted to interview early enough. I was fortunate to find a play-based school in Cambridge. The director was very kind to me. She told me everything about her school and gave me all information that I needed. My big lesson about reaching out to others is that I should make a plan ahead of time and not wait until the last minute. Planning and time management are very important and are things I have to work on.

I have revised my work thoroughly whenever my professor or my peers gave me feedback. I know that it is good to have others read my work and make comments because they may see things that I missed and they may understand some things that I do not. I tried not to hold on to my ideas only. When others make reasonable suggestions, I tend to take their advice. I think that being an open-minded person is a good quality to have in learning. We can learn better when we open our minds to learn from others, but it does not mean we should forget or ignore ourselves; we should just try to be humble and flexible. We can hold on to our original ideas after evaluating suggestions from others, but we must do it without bias.

I have learned how to use all of the engagement research tools in this course. There were so many I was overwhelmed by it. There were many sub-steps, and sub-sub-steps under the major ones. It was like a set of Russian nesting dolls where each doll had a smaller one inside it. Some of the tools made me confused instead of making my research easier. I spent a lot of time trying to understand each tool and why I had to use it. Sometimes, I understood how to use a tool but did not see why I had to use it. One of the tools I had to use was Component Propositions. The description of the tool was almost 1000 words long. I read it three times and then I asked other people. I did not get a clear answer. I asked my sister why I had to learn and use all of these stupid tools. She told me that I needed to learn them in order to know how to conduct research and prove to the professor that I can use all of the tools that I would need. If that was the case, why couldn't it have been a little bit simpler?

When I look back at the whole course, I can say that I now know how to do basic research. A good researcher needs not only a good plan, but self-motivation and persistence throughout the whole process. I have to keep in mind not to be afraid to reach out to others who can help me. I also need to plan ahead and give them enough time to help me.

### **Action Research for Change**

Since I was a bit familiar with research, I was no longer nervous when I started the Action Research for Change course. I was very confident that I would do well. I learned from the previous research class that I have to focus on small topics and make a good plan. I tried to avoid the mistakes I made in the previous research class, and give myself enough time to plan and work on this project. I tried to finish all of the assignments on time and do everything that my instructor asked me to do, such as editing my papers and meeting with my partner each week. I worked as hard as I could. It turned out that I got a B+. I did not bother to ask my instructor why I got this grade. I asked my sister to see what she thought. She told me it might be that I did not make a good connection with the instructor. Maybe the instructor did not like what I did or what I did was not what my instructor expected to see. I understood it then. Did I agree with it? Absolutely not. I believe that when students do everything in the syllabus they deserve a better grade. In the conceptual change course, I did very well on observation so I got a perfect score, but I did not contribute enough, so I got a bad score in that. That seems to make more sense than when the teacher's opinion of the student's work determines the grade. An important lesson that I learned here is not to be mad about receiving a bad grade. I should keep in mind that when I think something is good, my opinion might not be shared by others. Thinking this way, in the future, I will not be as upset as I was in this class.

I was very disappointed because I did not know what I could have done better. I did not think that my work was perfect, but I knew that I had worked hard. I was even pretty sure that I did well. The actions in the research I did were related to my work. I teach Thai and I wanted to improve my students' reading skills. Therefore, I thought of a fun way to improve my students' abilities to read. I adapted a speed reading tool on the internet to use in my reading class. I adjusted the speed of the tool based on each student's ability, so that it was not too slow or too fast. We used this tool a couple of times and then I created questionnaires and a test to find out if the tool had worked well. I had one of my assistant teachers observe my students and me while

we were using the speed reading tool. She took notes and gave them to me, along with her feedback. I compiled the data, test scores, and the observations of my assistant teacher. I interpreted the data. The results demonstrated that the tool worked quite well and the students liked it. At the end of my report, I suggested a way to make this reading approach more fun and more effective: I would give them scores to make the readings more exciting, as if they were playing a game, and I would record myself reading the passages aloud and send the recordings to my students so they would know the correct pronunciation of each word when they practiced outside the classroom.

The important lessons from doing this project are:

- In order to make change, we need to understand our situation clearly.
- Having a good plan and strategy is important for effecting change.
- Change will not happen without action.
- Time management is important.
- Reaching out to others for help made a big impact on my project. I learned so much from them.
- Evaluation was very important because it indicated whether my practice worked or not.

### **What Will I Do With the Experience That I Have Gained from Doing This Project?**

I am definitely going to continue doing what I did well in this project and improve in the areas that I did not. I will continue to do Action Research to improve my teaching.

### **Dialogue Processes**

I used to think that dialogue is a just a conversation or discussion. This class changed my view of dialogue dramatically. From what I understand, dialogue takes place when more than one person communicates, shares their thoughts without judgment or bias, includes others in the conversation, values the group/organization point of view, and the conclusion or result of the dialogue is reached by consensus, rather than by an individual. Moreover, people learn and grow together as a group and they learn from each other.

In this class we used a book written by Otto Scharmer. His book is called "*Theory U: Leading from the Future as It Emerges.*" This book was the main material that we used in this class besides articles. I had a difficult time understanding this book. I thought my difficulty with this book was because of my English skills. Therefore, I asked two of my classmates if they had a difficult time with it too, and they had. Whenever I read *Theory U*, I thought I was reading a poem with a lot of beautiful words that were hard to understand. Here is an excerpt from *Theory U*, page 163: "*Presencing, the blending of sensing and presence, means to connect with the Source of the highest future possibility and to bring it into the now.*" I was frustrated, but I tried not to be. I put a lot of effort into understanding what Scharmer was trying to say. I could not ignore this book because it was used throughout the entire course. I had to establish a connection to this book so I could understand it better. I told myself that I did not have to understand every word that he wrote. I needed to use my intuition to guide me and help me understand this book. I had to use my creativity and imagination. Then I changed my perspective about the book; I thought of it as a work of art. I noticed that when I looked at some works of art, I had to think and analyze in order to understand the messages in them. After I changed my perspective, and used my art appreciation skills with a positive attitude, I came to understand this book more. If I had not tried to find a way to understand it, and refused to read it, I would never have uncovered the beautiful message hidden in this book. I have learned that sometimes, when a thing is difficult to understand, it does not mean that it is impossible to understand.

Since this class was a dialogue processes class, I did not expect to that our class would be mainly "discussed" on a blackboard. I never heard my classmates' voices except for the two that I had to meet with every week. The class would have been better taught via a video call like Google Hangouts or a similar channel. I did not know why the instructor set up his class that way. Learning dialogue without seeing and hearing the people to whom we were talking was like learning to dance by reading a book without any music. We may learn the steps but never learn to dance to the music. How can a person know when they get the rhythm right or not? That was how I felt about this class. I knew how to have a dialogue but I did not really know if I would be able to be good at it. I practiced some of the techniques that I was learning with my family and some of my classmates. However, it would have been more exciting to get to practice with the whole class.

An important skill that I learned from this class was listening. This class has helped me to become a better listener. I practiced being in the present, to focus on what I heard, and not to worry about what I am going to say in return. When I am in the present, I devote all of my attention to the speaker. When I do not worry about what I would like to say or how I would respond, I am not distracted. I can listen to a speaker with my full attention. When I have tried it with my students and my family, I felt that I could understand them better. In the past, I did completely the opposite: all the while I was listening, I was thinking about what I was going to say in return. As result, I did not hear everything that others tried to say to me.

Another fancy technique that I really like is to let go of one's self when having a dialogue. What I mean here about letting one's self go is to forget who we are, what we believe in, forget our cultures and other things that remind us of ourselves. Because when we hold on to these concepts of who we are, we tend to be biased and judge others based on our own beliefs. When we listen to others this way, we listen to find something wrong with what they are saying or about to say. We do not listen to understand. It is like listening to people who have a different religion. It is hard for me to listen and not to judge. I do not speak my thoughts out loud but I say them in my mind. When I hold on to myself, I cannot fully open my mind and really listen to others. I will be able to hear others better when I forget everything about me and just listen.

I learned a lot from the other two classmates who were in my group for the whole semester. Our group had to discuss topics that were assigned by our professor. The topics we would discuss were related to what we had learned in class each week. I met with them via Skype one person at a time. Both of them were different. One had a background in science, the same as I did. We could have a conversation and connect with each other well. My other classmate had a background in business. I could understand him just fine, but we did not have great conversations like those I shared with the other one. I did not have any bias, but it felt that way. Overall, I learned a great deal from both of them. They had many more life experiences than I did. They both were teachers, so when we talked, it felt like I was listening to a lecture. I did not have anything to complain about, because I think it was to my advantage. I was delighted that my professor placed me with these two classmates.

## Metacognition

I had heard about metacognition from my adviser and my classmates a couple of times. I thought it sounded a bit strange. When people mentioned it, I did not know what they meant. People said that it was related to psychology. I actually did not mean to register for this class at first. I wanted to learn more about critical thinking, but that class had been canceled for some reason. There was no other class that I could take that semester, which was why I signed up for this class. I felt like I was being forced to marry to a man that I barely knew, but after we got married, I got to know the man and came to love him. The same thing happened with this class. After attending class for two weeks, I knew that I was not going to be disappointed. The main reason was that this subject relates directly to thinking. I missed a chance to learn more about critical thinking, but I had an opportunity to learn new things about how we think. I did not lose anything here. I was happy to realize that I would get to learn something new that I would really enjoy.

Many students signed up for this class. They all had different backgrounds: soldier, instructor, comedian, artist, language teacher, science teacher, marketer, and so on. I was very excited, because I saw an opportunity to learn from them. Every time one of my classmates or my professor said something, I would pay attention to what they said closely. I did not want to miss anything. I did not forget to listen to them without self and without judgment. I liked to hear my classmate sharing their work experiences because I got to learn new things about different fields that I might not get a chance to work in, or learn about on my own.

I liked this class so much I read everything that the professor assigned. I made notes and wrote down questions. When we met in class, I would have everything ready at hand. I spoke up every chance I got. I did not try to show off, or prove that I was better or smarter than anyone else; I just wanted to participate as much as possible. I know that when I keep my ideas in my head, no one else benefits. But when I voice my thoughts, and articulate them clearly, people hear me. They learn from me and help validate my ideas.

Metacognition simply means thinking about one's own thinking. (Cooper & Sandi-Urena, 2009) It also includes being aware of the kind of thinking you are doing, describing what kind of thinking you did, describing how you did your thinking, evaluating your thinking, and planning how you will think. I have learned how I can apply metacognition in my learning and my life. In

a school setting, I can ask my students to think about their thinking processes and I can ask open-ended questions that will stimulate them to think more. I can ask questions such as, “How did you come up with that answer?” and “Can you please describe the process to me step by step?” and “What other problems could you solve this way?” Teachers can track their progress by reflecting upon their own teaching each day. Students can use metacognition as a guide to become their own teachers. Metacognition helps learners not to rely only on teachers. Moreover, students will be able to apply their knowledge in new and different contexts.

For me, the most valuable use of metacognition is to understand my own thinking and strengthen my abilities to think better. I tend to answer questions too quickly and my ideas are sometimes too random. I am going to use metacognition to train myself to get rid of bad thinking habits and get better at organizing my ideas before I respond. Before I respond to something I will be aware of my own thought process. Before I say something, I am going to make sure I pause and think well before I say it. About organizing my ideas, I am going to ask myself: “What you want to say and how many points do you have to back it up?” If I can slow down before I say something and manage my ideas before I open my mouth to speak, I will be much better at communication.

I am very happy with this class. I am very hopeful that I am going to be better at thinking and I would like to use my knowledge of metacognition to help me become a great thinker. For now, I want to be better aware of my own thinking and be able to manage it first. When I master these two skills, I will set a new goal for myself. I am definitely not going to stop learning and practicing skills that relate to thinking.

## Chapter Six - Assessing Progress So Far

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### My Learning Development Before I Joined the CCT Program

When I look back to my path to get to the CCT program, it was not an easy thing. I had to study English hard; I became an au pair for one year and overcame many obstacles. I almost gave up on my quest for graduate school when I had to take the TOEFL several times before passing it. I applied to many graduate schools without being accepted, but I told myself, “Please give it a try one more time to see how it goes.” Getting into the CCT program was not that easy, but getting through the program was even harder than trying to get in. I had to study hard and take it seriously. I had to adapt to the instructor of each course, because they had different styles. Some of them were really hard to deal with, but some of them were reasonable and easy to interact with. I certainly preferred the second kind of professor. I do not like to learn with professors who only pay attention to what my work looks like instead of looking at what I am really saying, but I could not choose whom I wanted to interact with, just like in the real world. I had to deal with different kinds of people whether I liked them or not. The main reason I made it through the program was not a miracle — it was my determination. It is my dominant trait, and the one that I am most proud of.

### What I Have Done Well

#### Self-Discipline

I learned to be a very disciplined person because of my mother. She was the one who implanted self-discipline in me. I did not know that all the things she had me to do when I was very young would influence who I am today. Because I have discipline, I am able to control myself better. When I want to buy something that I do not really need, I will ask myself if I really want it. If the answer is no then I will not buy it. When I am lazy, I will tell myself that laziness is not an option. So whenever I hear my alarm go off, I immediately jump out of bed. I feel the same about schoolwork. I love to turn my work in on time or even before it's due. I do not like to be late. I know that self-discipline can drive me forward as far as I want to go unless I lose interest. Without self-discipline, I would not be able to achieve my goals.

## **Bravery**

I have learned that if I am scared or shy, I miss many chances. Both my father and my mother motivated me to be brave. If my father had not encouraged me to ride a motorcycle that day, and if my mother had not left me 10 minutes after she dropped me off on my first day of preschool, I would not be brave enough to be in America today. What they did on those days had a very big impact on my life. My mother always told me that being scared was not going to make things better and it will not help me. She is absolutely right. If I am scared, I may as well hide behind a curtain. My mother gave me a lesson one very dark night that I will remember for the rest of my life. It was around 8:00 pm, and everyone had already closed their doors and was staying inside their houses. My mother forgot to bring one of her belongings inside the house and she asked me to go outside and get it for her. I refused and told her that I was too afraid to go outside. She asked me, “What are you afraid of?” I told her, “ghosts!” She said, “Between ghosts and me, who are you afraid of most?” I thought about it. Then I took a deep breath and asked my mother to give me a flashlight. I ran out of the house quickly, grabbed her belonging, and then ran back into the house. My mother asked me, “Did you see anything?” I told her, “It was too dark and did not care to search for it. I just looked for one thing and that was it.” The event that night ignited within me the idea that I do not have to be scared of what I do not see. The thing that I should be scared of is whatever is in front of me at the moment. I should not be scared of what I do not see because the things that I am afraid of may not exist or will not happen. Thanks to my parents who helped me become a person who is not afraid of failure or what is yet to come. Most importantly, I am brave enough to change myself whenever I find out that I need to work on something to get better.

## **I Am a Determined Person Who Does Not Give Up Easily**

Ever since I was young, I have seen myself as a person who does not give up easily, no matter whether it is work or school. If I want to know something, or be able to do something, I will make it happen no matter how long it takes. I remember the time I tried to solve a math problem that was part of my homework. I worked on it from the time I got home from school until late at night, but I could not solve it, so I woke up early and solve it the next morning. Another example of not giving up easily happened when I was 10 years old. I noticed that most of my friends had bicycles and knew how to ride them, but I did not have one. I told my mother that I wanted to get

a bicycle. My mother told me that I had to save money and buy a bicycle on my own because she could not afford to get one for me. I worked during the weekends and got enough money. I bought a bicycle, but I did not know how to ride it. My father, mother, and my brother tried teaching me how to ride only once before they gave up on me. They said that I was too scared and they were too tired to teach me. So they told me that I had to learn on my own. Back then there was no internet, so I could not learn to ride a bike on YouTube. I learned by observing people riding their bikes past my house. I observed everything that people did while they were biking for about a week. Late one morning on a weekend, I told myself, “Today, I have to be able to ride a bike.” I walked my bicycle to the big space in front of my house. I threw my right leg across the seat. I placed my left foot on the left pedal while my right foot remained on the ground. I did not sit on the seat yet. I used my right foot to move my bicycle forward while my left foot was on the pedal. I did that for almost half day without taking a break. In the afternoon, I tried to sit on the bicycle seat and pedal. I fell over and over again. The hardest fall was when I fell, and my stomach smacked into the handlebar. It hurt so much I could not breathe. I got up, brushed myself off, and tried again. By late afternoon, I was able to ride my bike. But I looked terrible. My arms and legs looked like the face of a boxer who had just finished a world championship match with bruises and blood all over his face and his eyes barely open. I was lucky that my eyes and face were perfectly fine, but I had scrapes all over my arms and legs.

My hard life taught me that there is nothing that I can get easily, or without a sweat. There are no shortcuts waiting for me. I have to work hard and take the long route to get where I want to go. Whenever I fail, I always tell myself this: “You almost did it, and you should definitely try again.” That was the reason why I did not give up when I did not pass the Test of English as a Foreign Language (TOEFL) the second time. It is the same reason why I never gave up on the idea of joining a graduate program in America. I knew that if I tried again and again I would make it one day. I tell myself this: “If you want to achieve your dreams, do not give up when you fail.”

### **I Love to Learn and Develop Myself**

I am a person who has loved to learn since I was very young. I would like to excel in academics and also become a very smart person. I love to learn about everything around me. I asked my parents and other people who were around me so many questions. I wanted explanations about so

many things. When I was eight years old, my grandmother told me one evening that when the weather is hot in the evening, there is a very good chance it will rain. I was surprised that my grandmother knew this. How do people predict what is going to happen? I asked her, “How do you know that grandma?” She said, “Because I know it is so. I have seen it happen many times in my life.” What she said that evening came true that night. It rained heavily. I thought about what she said all night long. I wanted to be able to predict the rain like my grandmother.

When I was about seven years old, I was friends with a girl who loved to read. Her name was Sugaandaa. When she read, she would be very quiet. I thought that when a person is reading quietly, they look very smart and charming. I spoke with her because I wanted to talk to someone. She told me that she liked to read and sometimes she would tell me what she read about. When she told me things, she seemed to know a lot. I said to myself, “If I want to know more than she does, I will have to read more than she does.” I think I like to compete with others — even my sister — because it is fun, and like a game to me. Another reason is that it is a challenge for me. Whenever I had a lunch break, I would rush to the school library. I wanted to read and learn more than Sugaandaa so when I saw her I could tell her how much I read. I wanted her to know that I was smarter than she was. From that day on, I loved to read. I would borrow books from the school’s library or buy them if I had extra money. I never regret buying books. I think that the knowledge in them will always be with me, unlike clothes that eventually get old and worn.

I did not stop developing myself and learning, even after I was out of school. Whenever I hear about a good book, I try to get that book so I can read it. Most of the books I read are related to science because they have the answers to many questions that I am curious about. I have read a lot of books, but unfortunately, I tended to believe what the authors wrote too easily. I thought that people who can write books must know their subjects very well, so I should accept what they write at face value.

## **Independence**

I came to realize that I have been a very independent person since I was young. I did not care much if I would have to play alone. One day, my older cousin, younger cousin, my younger sister, and I went to a store and we bought the same snacks. This snack was made from broken up wafers and came in a clear plastic bag. Some of the snack bags would have broken pieces of

chocolate in them. Everyone hoped that they would get a big piece of chocolate in their bag and we hoped to get lucky too. After we bought our snacks, we all walked home together. We could not wait to go inside our house to open our bags, so we stopped in front of it and opened our bags there. I opened my bag last. My sister and two cousins had opened their bags and found they had couple of pieces of dark chocolate in theirs. They laughed and clapped their hands and then they all looked at me. My older cousin, who was the oldest in our group said, “Now it is your turn to open your bag.” I opened my bag and found a big piece of white chocolate in it. It was the biggest piece chocolate that I had ever seen in my life. I was so happy that I jumped up and down. Then my cousin said that he wanted me to trade my snack bag for his. I said no. He then said he wanted some. I said no. Then he got mad and said that if I did not share it with him, that no one — not he, my sister, nor my younger cousin — would play with me. I was a little sad, but I said it was fine; I did not want to play with them, and I wanted to play alone anyway. So I ran away from the three of them and ate my snack alone. Nowadays, when I see white chocolate, I always think of my older cousin. I would like to buy some white chocolate and give it to him and tell him that I am

When I grew up, I started to think that if I depended on others, I would have to wait for them and might end up losing a chance to do something. When I was in college, I would travel to different places by myself. I was the only one who registered for basketball, and I studied with students who were in different programs. Meanwhile, the rest of my physics classmates registered to learn taekwondo. They were very surprised that I did not care what most of students in the class did. I did not dislike them; I just wanted to do the things that I wanted to do, made sense to me, and made me happy. Everything was fine, and I did not have any conflicts with my classmates. I do not wonder why I am sitting here writing my project in America. I am independent and I know what I want to do and accomplish. I do not have to wait for a friend to invite me to do something. I can take the initiative and do things on my own.

## **Optimism**

When I was about 10 years old, I read a story about a man who was robbed. His mother told him that at least he was safe and still had a home. I thought that this woman was smart. I also thought that if I could find something good in a bad situation, then my life would be happier and I would suffer less. From then on, I started to look for things that I can cherish, and be cheerful about my

life and family. No matter what happens, I will always try to find what is good about it. For instance, there was a time when I was unemployed. I told myself that it was fine because it was like a long vacation. I knew that when I returned to work, I would not have time to chill out and relax. I also thought that if I were very rich, I would never have time to sit with and enjoy my family because I would be very busy managing my business and running around trying to expand it.

I look at all of my mistakes and failures as lessons. I do not look at it as my bad luck or blame myself that much, because nobody wants mistakes or failures to happen. Looking at the world this way, I will not waste time whining and complaining. Instead, I will look at what I learned from my mistakes and how I can avoid making the same mistakes again.

I never live without hope. I always think that something good is going to happen to me and others. I just wait for the right time. Whenever people around me lose hope, I tell them not to stress out too much. They have already done their part as best as they could. There is nothing that worrying afterward can fix — all they can do is to wait for a good result to take place. I do the same as I what I tell others. I believe that everything that happens in my life happens for a good reason. I am on this world for a good reason. I believe that if I look at everything positively, there will be good things waiting for me to discover.

## **My Mistake**

### **Losing the Real Point of Learning**

When I look back at what I have learned, I see myself starting to learn with passion. I learned from everything that I interacted with, such as people around me, environments, and cultures. When I began learning, the only goal I had was to acquire new knowledge. But when I turned 12 years old, I started to focus on competing with the other students. I did not really care about the subject matter I was studying. I just wanted to be the best student academically. School was like a racetrack to me. I wanted to go to school just to compete with everyone else. I believed that the student who got the best grades was the smartest. I wanted to be the smartest student because I thought that being smart made you better than everyone else.

Thinking like this made me no different than an artist who forgets his real passion so he can become famous. I learned that getting good grades or being the best student in the class is not

what really made me happy. When I competed with others and worried too much about my grades, I was stressed. I did not really care about any subject I was studying. All I cared about was learning how to get good grades. I learned in my junior year in college that I should be more relaxed and think about what my goal was when I first wanted to learn physics. My goal was not to get good grades but to learn why physics is hard to understand. I believe that if I cared about learning physics to understand and did not care what grade I would get, it would be so much better for me. Then I would study physics with passion and seek to understand physics in-depth. I ended up with no passion for physics because I did not do it well. I regret that, but I will not spend too much time moaning about the past. I will use it as a lesson.

### **Being Too Extreme**

I went to extremes when I studied. I would shut down almost everything around me. I ignored my family and my friends. I just studied hard whenever I had the time. I spent most of my time doing my homework and reading. All I had in my mind was getting a good grade. I thought reading a lot was going to make me a smart person and who got good grades. I did not have time to enjoy myself and do other things like other students did. I never went to see a movie. A library was the only place people would see me. I did not take good care of myself because I was too busy studying. I had to go to the hospital every month because I did not exercise at all. I was so stressed I had pimples all over my face. I spent a lot of money on medical bills because I did not realize that my body was giving me a signal that it was not okay. The stress and my extreme behavior did not help me do well in school.

### **I Did Not Know How to Reach for Support or Get Help Properly**

Every school that I went to had resources and counselors that I could have reached out to. I did not know what they could offer, so I did not bother to reach out to them to ask for advice. I remember that when one of my classmates went to see a psychologist, I thought he must have had a very big problem. That is how Thais view people who go to mental clinics. In Thailand, going to see a psychologist is something to be ashamed about. That people still think like that is sad.

When I struggled with any subject that I was studying, I would only ask the professor to explain how to solve a problem that was a part of an exercise. I did not ask for advice on how to learn that subject better or more efficiently. It is no wonder I did not know to ask critical questions like

that. I know exactly why. I was taught to be a receiver and absorb things. I was not taught to think critically. To raise questions like that, I needed critical skills. I was like a baby bird waiting for its mother or father to feed it. I did not know how to ask my parents how to find my own food. All I asked was, “How can I chew this food better so I can eat more?”

### *Lack of Good Plans and Strategies*

I have learned that without strategies and plans I will not do well. If I were a soldier, I would get killed right after I stepped foot on the battlefield because I did not have a plan. When I do not have a plan, I tend to do things randomly. I assumed that by reading a lot and studying hard, I would be fine. Things did not turn out the way I expected. I wanted to be one of the top students, but I was in the group of average students. Now I know that if I want to be successful, I need good plans and strategies.

The plans that worked for me in elementary school did not work in high school or college. But I did not know any better, so I kept using the same technique of reading and studying a lot. It worked when I was in elementary school because the tests were almost completely based on memorization. But when I went to high school and college, the tests were based on understanding as well. As Charles Darwin might have said, I did not thrive because I did not adapt myself to my new environment.

I also did not know how to reflect upon and check if I understood what I read or was taught. I believe that if had I tried to find a way to learn better, I would have done better than just rushing to read and study without understanding.

### *Consistency*

Although I can be very extreme in some things that I do, I am not that way with everything, especially things that are important in my life like maintaining my health. One major concern I have is that I lack consistency. I have many good ideas in my head that I want to do to develop myself. For instance, I would like to exercise more so I will be healthier. I will be very enthusiastic in the beginning but I will start to lose interest and put less effort in the middle of the process. Lacking a consistent routine made me miss a chance to succeed and become great at something. I have learned that many world famous athletes work hard to be at the top of their game. Michael Jordan is one of the legendary basketball players, yet he had to practice his jump shot hundreds of times per day to perfect it. Jordan believed that he was not a naturally talented

player, but he believed in working hard to be one. I think I have to think and do like Jordan if I want to be successful. I should not stop until I get it perfect.

Things take time to change from one state to another. Arthur B. Markman, a professor of psychology at the University of Texas at Austin said that we have to give ourselves enough time to accomplish our goals. In my case, I see that I have to give myself more time and ensure it will be enough time.

I heard from one of my friends and a blogger that if we do something for 21 consecutive days, then that thing will likely turn into a habit. That means if I meditate every day for 21 days, then I will meditate every day easily. Dr. Maxwell Maltz, known for his book *Psycho-Cybernetics*, also confirms this belief. He said that if a person spends time imagining herself being brave 30 minutes a day for three weeks, she will become a brave person. After these three weeks this self-image will become something that is spontaneous. Dr. Maltz explains that when we keep sending the same signal to our brain over and over, we make our neurons store a new memory about ourselves (Maltz, 2015). I think this is why people say “fake it until you make it.” I am going to imagine that I am a person who is very consistent, but I am also going to practice actually being consistent. I want to ensure I become consistent by using both techniques in case one does not work for me.

### *A Misconception*

I had the misconception that being smart meant working less and trying less in school. When I was in high school and college, I noticed that many of my classmates did not study as hard as I did, but still got much better grades. I thought that these classmates were born smart and that was why they did not have to study hard like everyone else. I thought there was nothing I could do to fix that. I was frustrated and really believed that matter how hard I worked, I would never be at the same level of those who were smarter. One day I told myself that whether I worked hard or not did not matter, because I would never get better. Why bother to go beyond what everyone else does?

Nowadays, I know that I misunderstood and I made an assumption on my own. I actually never saw how my classmates studied outside school. I should not have assumed that they did not study hard. I did not know their learning strategies, their mindsets, and their metacognition

abilities. Since I could not see all of the times my classmates studied, I did not really know their thinking processes. I jumped to a conclusion that I had not made a good case for.

### **How the CCT Program Turned Me Around 180 Degrees**

Many schools that I have attended in the past gave me knowledge but the Creative and Critical Thinking program (CCT) has given me more than knowledge. It has taught me how to think by myself and see the world differently. I wonder what would have happened if I had learned to practice good thinking skills before I entered elementary school. All I know now is that I learned a lot from this program and it has changed me in many ways.

If I were a robot, I would have two versions of myself by now. I would like to name my first version before I went to the CCT program “W001” and my latest version after I joined the CCT program “W007.” The reason that I skipped over versions 2–6, is that the CCT upgraded version W001 so much and made it way better than the original one.

### **W001: Before I Joined the CCT Program**

#### **I Did Not Practice Using Knowledge Outside the Classroom**

I have knowledge that I learned in school and studied on my own, but I did not use or think about what I learned after I finished each course. I think that it is useless to learn something just to pass a test, or because it is a requirement of a program. I have ignored what I had learned, and did not seek the opportunity to exercise my knowledge from the time I was in elementary school through college. I have already let that chance go, so I will not waste my time pointing my finger at anyone — even myself. I think if I had known better, I would have done differently. I would have changed my attitude toward learning and I would have learned with a serious love of knowledge. I never thought about using my knowledge of physics to make something useful. I wasted all of what I learned by doing nothing with it.

#### **I Depended on Teachers Too Much**

I can see that in the past I depended on teachers like a baby bird depends on its mother to give it food. I did not learn to think and do things independently. I did not have projects where I took initiative on my own. I thought it was safer to wait and do what teacher said. If someone asked me to give a definition of a good student, I would have said, “Good students must be good listeners and do everything that teachers tell them to do.” I thought if I listened to my teachers

well, then I would not have any problems with my teachers, and the teachers would all like me. I think that this misunderstanding about being a good student led me in the wrong direction. Being a good student does not mean only listening to everything and doing everything that teachers say. Good students should think about and verify what they hear before making their own judgment on what they are being taught. By always waiting for a command from a teacher, I did not dare to think about doing something on my own. I should have taken the initiative to do something on my own, but I did not have enough courage.

### **I Did Not Know How/Was Scared to Ask Powerful and Probing Questions**

I did not even think about asking my teachers any kind of question, let alone asking powerful or probing ones. Only if I did not understand would I ask them to explain a concept to me again. I did not ask questions because I grew up in a culture where we have to listen to and obey those senior to us. To question elders means that we doubt them, so I did not know what to ask or what not to ask. Many other students decided not to ask questions either. Whenever I did ask questions, they were closed-ended questions, or I would ask my teachers to verify that I understood them correctly. Being afraid to ask kinds of questions other than these did not help me get to know things at a deeper level. I asked shallow questions so I got shallow answers. It sounds like I got what I asked for. The fewer questions you ask, the less you learn.

### **I Was Rigid/Narrow Minded**

Whenever I thought of something, I tended to think that there was only one way to do things and I would try to hold on to my idea and not listen to those of others. For instance, if I already had in mind that roses have the best scent, and one day one of my friends tells me that jasmine flowers smell just as good, I would listen to what my friend was saying, but I not really open my mind to consider it. I would be reluctant to smell jasmine because I still would think that my idea was right. However, there were many times when I did consider another person's idea, where I ended up agreeing with them. But still, I would not consider the ideas of others easily, partly because I was stubborn and I did not want to listen.

### **W007: After I Joined the CTT Program**

My latest version is a much better version than the first. My big development in this version is that I know how to think better and I do not wait for someone to tell me what to think or how to

think. The CCT program has taught me how to get out the most out of my thinking abilities and has revealed some abilities that were hidden. I think that the CCT has shaped me well and given me a strong foundation in teaching and learning in other fields.

### **Creative Thinking**

I discovered that I actually can be a creative thinker. The CCT program has helped me see that I have the potential to be a creative person if I allow myself to explore, and be in an environment that will foster my creativity. There are many things that I have tried that I can do well. I write short stories and poems. I have started to enjoy drawing and painting. I have written many poems in both Thai and English. I rarely did these things before I joined the CCT program.

Not only have I enjoyed using my creative skills to do artwork, I also enjoy solving problems using creative thinking. I have been using my creative thinking skills to solve problems like how to manage the time that I have and prioritize the things that I would like to do so I will not miss a thing. For instance, when I visited my family back in Thailand for only a short period of time, there were many things that I wanted to do. I wanted to see a doctor, stay overnight at a temple, get an id, pay respect to the body of the late king of Thailand who recently passed away. I managed to do everything that I wanted to do because I used my creative thinking and critical thinking skills to come up with a plan.

At my work, I apply creative thinking to plan my lessons and create games so my students will enjoy their learning more. I can see that I am more flexible than I was in the past. I can see that the more I think, and the more I positive I am, the more ways I can think of to manage and solve problems. I learned that when I give up or think that there is no way that I can solve or deal with a problem; I let that problem conquer me.

When I think creatively, I enjoy myself more. I gained self-confidence after I found my creative thinking skills. I am happy that I can do many more things than just listen to others and follow their directions. I am not limited to only solving math problems the way the teacher showed us; I can think of new ways of my own. I can do more than I can imagine if I only give myself the chance to learn more and explore more things.

## Critical Thinking

I used to think that smart people were perfect and did not have to worry about anything. This is how I thought in the past. I did not have logic behind this hypothesis. I guessed and I believed it was true. When I listened to others, I did not spend much time to think about or analyze what I heard. I rushed to conclusions and made judgments as quickly as I could. I thought that was characteristic of smart people. That was entirely my own idea. To think in a shallow way like that made me see the world in a way far from how it really is. The world is not there for me to just look at and make judgments right away. When I looked at things around me without thinking deeply, adventurously, and widely, I missed facts and the real hidden truths behind what I perceived. That was because I did not think well enough and I thought that the world was simpler than it is. I thought that people will do what they said they will and hide nothing. Because I was naïve like this, I became a victim of someone who took advantage of others. In 2015, I went to pick up my sister at the JFK airport in New York. Her airplane landed at 9:15 pm, and she did not get out of customs until about 10:00 pm. She had three giant suitcases. I was pretty sure that I knew where to take her and how. I told my sister that we would take a shuttle bus to our hotel. While we were walking to find a shuttle bus, a man in a uniform and wearing a name badge approached us. He told us he worked there and could tell us where to find a shuttle bus. I assumed that we could trust him because he worked for the airport. We followed him and he led us to a big van that did not look anything like the shuttle bus I expected. We got on the bus, and when it was halfway to the hotel, I asked the driver how much the fare was. The driver told us that it was \$100 per person. I was shocked that it was so expensive. The legitimate shuttle buses were only \$13 per person and that was what I had paid every time previously. I then realized that I had been fooled by the man who said he worked for the airport and his driver. This story demonstrates that I did not think thoroughly enough. I assumed that people in uniform must be nice people. The reality is not like that. I have awakened and I understand our world a little bit better now.

I have learned from the CCT program not to judge what I see too quickly. I have to think twice and think of reasons and evidence to support my ideas. I will have to analyze and evaluate my thoughts and ideas before I come to a conclusion about something. I am a little bit different than I was before. Now when I hear or see something, I try to analyze it and find reasons whether or

not I should believe it. I will also check what others say about the same thing and see if their ideas make sense as well.

I became a person who thinks wider. I let myself think of things in many different ways as much as I can. When I think wider, I give myself the opportunity to have more options and alternative ideas. When I used to stick with the only idea that I had, I caused myself a lot of stress. When I think wider, I see a wider and different view of the world, because I do not just look and judge things from only one side or only the thing I see. I will try to look at things in many ways as much as I can.

I think more than once before I make a decision and decide whether I should believe something or not. I have learned that I cannot believe things that I see or hear right away. I can become a target of people who prey on others. There is a lot of fake news and falsehoods that are shared on the internet every day. Now, I tend to look for two or more sources before I decide if that news is legitimate or not. When I hear someone say something, I think about what they said to see if they have given me enough reasons to believe them.

### **My Thoughts Became More Organized**

I began to be able to organize my thoughts better. I used to have a difficult time telling someone about my ideas or telling a simple story. Most of the time I assumed people understood my story or my thoughts, but I learned that they often had difficulty understanding me. I would skip the introduction and forget important details. I sometimes would tell the story in random order because I did not organize what I wanted to say step-by-step.

When I took the metacognition class, I got to observe my thinking. I noticed that I had problems sharing my thoughts and ideas in front of groups of people, especially when I had to say them in English. When I am in front of people and I have to speak English, I can be very nervous. And when I am nervous, I tend to forget what I want to say, or lose track of my thoughts, or perhaps repeat myself. I have learned to ask myself these questions: “What do I want to say?” “What is my purpose in saying that?” and “How I am going to share my ideas?” I now know that when I am nervous or excited, I may forget my ideas. Writing my ideas down can help, because whenever I forget I just can glance at my notes and continue on.

## **Analytical Skills**

One of my bad thinking habits in the past was that I did not want to think about why things happened the way they did. I let things be and did not pay much attention to them. For instance, when I did not do well in math in college, I did not sit down to think what the reasons were and how I could improve myself so I could do better the next time. I did not ask myself these questions.

Now I can analyze what is going on better. When something goes wrong or happens in a way that I do not expect, I will try to find ways to understand and correct the problem. Then I will think about how to handle it better in the future. When I analyze a problem and understand it better, I can find the root of the problem and why it exists in the first place. For instance, I often had a hard time falling asleep on Sunday nights. When I thought about what I was thinking about while I was lying in bed, I realized I was worrying about my teaching, my students, and traffic. When I found out my insomnia was mostly due worrying about my work, I knew how to fix my problem. Nowadays, before I go to bed, I tell myself that there is nothing to worry about, and that I already have everything that I will need for the next day. I no longer have a hard time falling asleep on Sunday nights.

## **Becoming a Better Listener**

I had been listening to people the wrong way my whole life. When I listened to others, I did not listen to understand them. I listened to them only to give them feedback or judge them. When I did not really listen to others so I really understood them, I could not really connect with them. I have learned that some people just like to be heard and are not asking for my comments. I am that way too; sometimes I just want someone to listen to me, but I forget that they might want the same thing. I thought I always knew best, so I wanted to give advice instead of listening carefully.

In the Dialogue and Process course, I learned how to listen to others more effectively. After this class, I started to practice being a good listener. I listened to others fully. I did not worry about giving advice or suggestions. I found that I can understand people better when I pay attention to what they say. I let people finish telling me their ideas. In the past, I interrupted people too often because while I was listening I was thinking about responding at the same time.

### **Ability to Probe and Raise Metacognition Questions**

I have learned how to ask better questions. Questions that require others to use their metacognition skills. I often ask my students to reflect on a lesson with questions like, “What was in your mind when you said that?” “How did you arrive at that answer?” and “Can you think of other ways to say that?” I enjoy asking people questions like these because I get to learn how other people think. If I were to ask them only closed-ended questions like “Do you like Spiderman?” I will get to know either yes or no, but if I ask, “Why do you like bananas?” I will get to see what that person really thinks of bananas. It is the same thing when I ask students in the classroom. If teachers would like to promote students’ thinking skills, they should ask questions that make students think more, questions that reveal more about their thinking processes.

### **Starting to See the Benefits of Plans and Strategies**

I used to do things without planning ahead of time. Unlike my younger sister, I was a person who tended not to make plans. I did things compulsively. There were many times when not having a good plan cost me. For instance, at the beginning of 2017, I traveled to Thailand. I told my sister that I wanted to see a doctor while I was there. I wanted to consult with a Thai doctor because they can understand me better than doctors in America. My sister told me to make an appointment early but I did not listen to her. Going to the doctor in Thailand is normally much easier than in America. In Thailand, you can usually just walk in without an appointment and wait in the queue. But it turned out that I did not get to see a doctor because I did not manage time well enough. I have learned that it is not good to do things without a plan. I ended up seeing my primary physician in America instead.

A year ago I told the professor who taught the critical thinking course that I would like to improve my thinking skills. My professor told me that I cannot simply want to do it; I needed to have a plan and a strategy. That was an eye-opener for me. I wrote a paper about how and why I wanted to strengthen my thinking skills. However, I did not really bring it into practice. Now I have begun to plan — now I love to plan. I feel more confident when I have plans and strategies.

The synthesis project is the project where I first began to develop a plan seriously. I wrote down how many pages I wanted to write, I set up how much time I would need to work on my project each day, I made sure that I had everything I needed for this project such as editors, materials,

and someone that I could ask for advice. I have learned that plans and strategies are very important, starting with the first step of anything that we do.

### **My Perspective in Learning Changed**

I used to care only about getting good grades, or memorizing things better, or how I could become a smarter person. I thought that these things were so important. I thought having good grades was cool. I thought if I could memorize things better than others then I would be special. I thought if I were smarter than others I could do anything I wanted.

When I took the creative and critical thinking course, I started to see that grades, rote memorization, and appearing smarter than everyone else were not my ultimate goals in learning and in my life anymore. My goals have changed to honor the ability to think more effectively and more creatively. I see that critical thinking skills are crucial for me. I use critical thinking to make decisions, to plan, and to solve problems. I also use my creative thinking skills to do what I love — like writing and solving problems. I no longer believe that good grades, having a good memory, or being smart can help me solve problems better or make my life happier. The way I think now and how I look at this world are much more important than getting good grades.

### **Knowing Myself Better**

Being in the CCT program helps me see who I truly am. I know that I am a creative person and I love to do things that require a lot of thinking skills. I discovered that I enjoy creating artwork and other things that require creativity like problem solving, writing, and dancing. I like to think about solving problems. Problems that I think about include my personal problems and the world's problems. I believe that I was born to use my creative skills and problem-solving skills to help others. For me, problems are an attractive challenge.

I actually loved using my creative skills to solve problems a long time ago, but I did not realize it until I joined the CCT program. The assignments in this program helped me see that I enjoy using my creative skills to solve problems. For instance, in one assignment I had to create a device that copied an animal's behavior. I thought of cats. Sometimes cats clean themselves by licking different parts of their bodies. I thought of a way for a device that could clean itself. It sounded like a good idea — if my idea worked, people would be able to clean themselves automatically — without even having to push a button. However, there was a problem with my idea: it was too complicated to actually work. Although I knew that my idea would not work, I

would still love to think of another way to work on this problem, and I still like the idea of using my creative ideas to solve problems or to invent something.

### **Applying Metacognition**

One of my favorite things to do while I was in the CCT program was to reflect on what I learned each week. When I did that, I could see the way I thought, why I thought what I did, and how I could improve my thinking the next time. In elementary school through college in Thailand and through a certificate program that I attended in America, I have to say that I had never done that before. That was about 17 years of learning. That was such a long time to not take advantage of metacognition. I think that metacognition is important in learning. When students use metacognition to check their teaching and plan their learning, they will learn better. They will get to see what kind of thinking processes they use, and they will get to see what they good at and what they have to work on.

I use metacognition to reflect upon my teaching each day. I ask myself what I did well and what I have to work on. I also ask my students to reflect on the lessons that they have with me. I make it a point to ask my students about my lessons every once in a while. I ask them to tell me about what they struggle with and what they would like to do about it. I always tell my students that we are a team, and that in order to make our team work better, we have to give each other feedback. Then we can all do our parts to make our team work better.

I have learned so much from my reflections. Every time that I write my reflections, I spend a good amount of time reflecting about what happened in class. Normally when I wonder about my future or my past, it will be something that does not benefit me much. The times that I have wondered about the past and my future that have had the most value for me so far is the times that I have used metacognition to make plans for my future and reflect upon my past.

### **Last Thoughts About the CCT Program**

After I joined the CCT program, I came to cherish things that have value to the heart and mind. I started to develop the way I think. I want to be able to think for myself. I want to think better. I want to be an independent thinker; I want to be a great thinker. I would like to be able to rely on my own thinking so I can tell myself what I should do, what I should not do, and make good choices for myself.

The CCT program has made me become a better thinker, listener, planner, doer, creative thinker, and problem solver. I progressed much further than I expected I would. I just wanted to get a master's degree here so I could prove to other graduate schools that I was worthy to be accepted into their programs. Instead, I ended up changing myself completely. I have learned that I had set my goals in learning wrong in the past. Now my goals are to love to learn and love the subjects I study — but not to care about the grades. Aiming to get high grades did not take me far; I only went as far as my grades took me. I do believe that if I learn with passion, I will be able to make a better future than I expect. My passion and my curiosity are my intrinsic motivations that will drive me forward as far as I want to go. All graduate programs promise to give their students' knowledge, but the CCT program has given me self-resilience. This is a big deal for me. It means that not only can I rely on myself, I can help others learn to grow and be able to rely on themselves like I did. This is the way I have always wanted it to be.

## Chapter Seven - Challenging Myself

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I have learned an important lesson: I cannot just work hard and be a resolute person who runs around attacking the problems in front of me without good thinking. Good thinking habits can help me come up with good plans. When I have a plan, I will be able to work more efficiently. If I were a boxer, I could not just walk over to my opponent and throw a punch without planning about how to block myself after I threw my first punch. I will have a slim chance of winning by just being resolute; I will need superior thinking skills than my opponent. I remember the time when I spent a lot of time reading and studying but still did not do well in school. Because of this, I would like to work on strengthening my abilities to think better. When I can think better, I will be able to do things more efficiently. I can take advantage of the strengths that I have to develop some skills that I would like to have in the future. During the time that I was working on this project, I discovered that I have many flaws that I would like to work on. I want to work on my thinking first, because I am fascinated with the idea that a person can develop their thinking skills to become a better thinker. When I do something that I love, I keep working on it until it is finished. If I can do this, then I will be motivated to fix other problems. According to Bloom's Taxonomy, in order for me to create original works, I will have to remember, understand, apply, analyze, and evaluate myself. The main purpose of Bloom's Taxonomy is to describe the cognitive process (Anderson, 2001). In my case, I applied the Taxonomy to find out what I have learned in the past, from chapter one to chapter six: I recalled what I have learned in the past; I made myself understand why I did what I did by asking myself questions such as, "Why did I do that?" or "What drove me to do that?" I applied some of the things that I have learned in the past and I analyzed and evaluated how I have learned. Now I must find out what my strengths and my weaknesses are. From this point forward, I would like to discuss what I would like to do to develop myself further.

### What I Would Like to Do

I would like to integrate my knowledge and experiences in order to help myself become a better thinker. In the past, I always wanted to be the smartest student in the class. However, when I learned about thinking, I became fascinated with the idea of thinking and how individuals can develop their thinking in order to be smarter. I do not really know how to practice being a

smarter person, but I have learned from the CCT program that I can become a better thinker. For me, it makes so much sense to rely on something that is practical and something that I can practice and get better at. This is the reason why I am not really interested in being smart as much as being able to think better. I am aware that thinking relies on cognitive skills. However, having the ability to think does not guarantee that a person will think better compared to others if they do not seek opportunities to develop and exercise their abilities.

### **Why I Chose to Work on My Thinking**

For me, being a better thinker is better than being smart. I know someone very close to me who is really smart. He can learn and understand things quickly. However, when he is faced with a complex problem, he will say that he cannot do it. He will give up after the first try and not try a second time because he thinks that there is no way that it can be solved.

I have known this person for 10 years, so I know why he thinks that way. I will call him John. He knows he is smart. He thinks that a smart person should be able to solve a problem quickly. If he cannot solve it, he believes it is impossible to do so. For instance, I asked him to solve a problem entitled, “The Missionaries and the Cannibals.” The problem is from *The Eureka Effect: The Art and Logic of Breakthrough Thinking*, by David Perkins. The problem is how three missionaries and three cannibals can cross a river by boat safely. The boat can only take two passengers at a time and the cannibals can never be allowed to outnumber the missionaries, otherwise they will eat them. John made a good start: he used three dimes for the missionaries and three nickels for the cannibals. After one attempt, he told me the puzzle had something wrong with it. He said, “It is impossible.” I was positive that there was a way. I imagined that I would be able to do it, although I did not know exactly how. I gave it a try. I solved it on my fourth attempt. I was able to solve it because I had a positive attitude and engaged in positive thinking. That is why I focus on the process of thinking rather than the idea of being smart. I would like to be a great thinker. I think that knowing how to think is better than having a good brain and not knowing how to use it. Not everyone with the ability to think is interested in engaging themselves in problem-solving, adapting, and developing their thinking. I noticed that when I asked my students to think or challenged them to think, many of them would remain silent or say that they did not know the answer. My questions were not yes or no questions; they were open-ended ones. For instance,

when I asked one of my students, “What do you think about people who try to make their eyes look bigger by wearing special lenses?” all the student said was, “I don’t know.”

### **What I Need to Do**

I believe that I am the architect of my own mind. I would like to design ways to become a better thinker. I have learned that the basic knowledge an architect of the mind must have is the ability to engage in problem solving. An architect’s designs depend on what their customers require. Customers tell architects what they want their buildings or houses to be like. The customer’s requirements are a problem that the architect has to solve in order to come up with an appropriate design. In my case, I design for myself. My requirement is that I would like to be a better thinker. As a result, my question/problem is, “How can I become a better thinker?”

Below are my design and its elements:

**1. Things that I would like to have in my thinking (design).**

Knowledge from the CCT program and prior experiences	Purposes (Qualifications)
Creative Thinking	<ul style="list-style-type: none"> <li>• I will apply creative thinking by letting myself think freely and allowing myself to get out of my comfort zone. When I stay in my comfort zone, I tend to think of things that I am familiar with or things that are topical. Allowing myself to be outside of my comfort zone means letting myself think of things that I have never thought of before, things out of the norm, and things that I think are weird. I will think adventurously. When I apply creative thinking, I will think more broadly, more curiously, and ask more questions.</li> <li>• I will visualize problems and their solutions (Borich, 1997).</li> </ul>
Metacognition	<ul style="list-style-type: none"> <li>• I will apply metacognition by reflecting on my own thinking (Tishman, 2010).</li> <li>• I will monitor my own thinking</li> <li>• I will be mindful and aware of my own thinking</li> <li>• I will organize my thinking.</li> <li>• I will check if I am thinking clearly and carefully.</li> <li>• I will ensure self-correction.</li> <li>• I will purposely put more effort into thinking.</li> </ul>
Dialogue Process	<ul style="list-style-type: none"> <li>• I would like to use my knowledge of dialogue and process to develop my thinking in order to be a more mindful listener. I have learned from my dialog course to listen more deeply and not to worry about trying to think what I would like to say when I listen to</li> </ul>

	<p>other people speak.</p> <ul style="list-style-type: none"> <li>• I will focus only on what is directly in front of me; I will forget who I am, what I believe, and just fully listen. I believe that in order to become a great thinker, I have to be a good listener at the same time. When I listen more, I learn more. Knowledge that I learn from others will be part of my thinking foundation. When I think, I have to rely on the knowledge that I have.</li> </ul>
Cognition	<ul style="list-style-type: none"> <li>• Helps manage thoughts and ideas.</li> <li>• Organizes information.</li> <li>• Comes up with strategies to think better.</li> <li>• Recalls information.</li> </ul>
Perception	<p>Helps me to think broadly.</p> <p>Helps me understand that things may not be the way I think they are or the way I see them. Therefore, I have to think carefully and not judge too quickly.</p>
Learning (by reading or listening to others)	<p>When I read a lot and I will know a lot. I will have more information and know more techniques to strengthen my thinking skills. (Borich, 1997).</p>

## 2. Things that I have to be mindful/careful of when I am thinking.

- Not giving up easily when faced with a difficult thinking task.
- Paying attention to the process of thinking.
- Taking time to think. When I take time to think, my thinking is more effective. On the other hand, if I am too lazy to think, I will not come up with good ideas and answers, or I may say something that I do not mean and regret it later.
- Listening to others carefully before I speak and share.

- There is a lesson about what to pay special attention to when listening or learning about something called *Kalama Sutta 10* by the Lord Buddha (*The Mindful Word*, 2013).
  1. Do not accept and believe something just because it has been passed along and retold through the years.
  2. Do not follow a practice just because it has become traditional.
  3. Do not accept and believe something merely based on reports and news spreading throughout your village, or even throughout the world.
  4. Do not accept and believe just because something is cited in a Pitaka — one of the Buddhist scriptures.
  5. Do not believe just because something fits within the reasoning of logic. Logic can fail through incorrect data and/or faulty methods.
  6. Do not believe just because something is based on probability, statistics, or guesswork.
  7. Do not believe or accept something just because it appeals to your common sense.
  8. Do not believe something just because it agrees with your preconceived opinions or theories.
  9. Do not believe just because the speaker appears believable.
  10. Do not believe just because the Samana — or preacher — is your teacher.

### **3. Thinking Strategies/Standards (Design Strategies).**

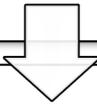
- Think of as many ideas as possible in order to discover ideas that might be hidden.
- Think in questions rather than statements so I can break through to new ideas. Instead of thinking in a statement like this, “I will avoid using plastic bags so I can help save the environment,” I will think like this, “How many ways are there for me to help save the environment?” Then my ideas might include recycling, avoiding buying

bottled water and using a water filter at home instead, bringing my own bags when I go shopping, and wearing pre-owned clothes.

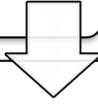
- Write a note reminding me to be a good thinker and put it somewhere obvious so I will see it.
- Seek opportunities to exercise my thinking. When I listen to something or read something, I should think about it. I should not let it go by without thinking, wondering, and asking questions.
- Pay attention to things that are odd. A big obstacle in thinking is that people tend to overlook irregularities (Perkins, 2011). For instance, recently I heard in the news that approximately 60 Thai people lost about \$2.6 million to a Thai woman who posted on her facebook page that she had gold for sale at a price much lower than market value. The criminal duped people into paying for memberships so they could bid on the gold. Only a few people got the gold they paid for. The victims fell into the scam because they did not pay attention to the fact that the price was odd and too good to be true.
- Think positively so I will not give up easily.
- Connect my prior knowledge to new ideas.
- When I have to think about something that is complex or difficult, I will develop mental imagery so I can see a picture in my head and think better. (Wilson, 2014).

**4. Thinking Steps (The steps of my design): Adapted from *The Thinking Classroom* by Shari Tishman et al., 2010**

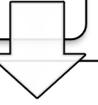
1. My very first step should be getting myself mentally prepared by being mindful in the present, taking a deep breath, and visualizing how I would like to solve the problem and how I would like to think.



2. Setting goals of thinking and using standards. After getting my mind ready to speak, I should set goals by asking myself what the purposes of my thinking are. Then I will apply some of the thinking standards and strategies.



3. Keep track of my thinking. I will monitor how well I am thinking and check to see that I am following my thinking strategies and standards. I will check to see if I am on track and still have the same goals that I began with.



4. I will review and evaluate how I think. I will pay attention to which thinking strategies work well, and which ones work poorly. I will think about how I can do better the next time I think.

**5. Questions that I would like to use to monitor and assess my thinking  
(Credit: Foundation for Critical Thinking.)**

Clarity	<ul style="list-style-type: none"><li>•Can I elaborate more?</li><li>•Can I give an example?</li><li>•Can I illustrate what I mean?</li></ul>
Accuracy	<ul style="list-style-type: none"><li>•How could I check on that?</li><li>•How will I find out if it is true?</li><li>•How could I verify or test it?</li></ul>
Precision	<ul style="list-style-type: none"><li>•Could I be more specific?</li><li>•Could I give more detail?</li><li>•Could I be more exact?</li></ul>
Relevance	<ul style="list-style-type: none"><li>•How does this relate to the problem?</li><li>•How does that bear on the question?</li><li>•How does that help me with the issue?</li></ul>
Depth	<ul style="list-style-type: none"><li>•What factors make this a difficult problem?</li><li>•What are some of the complexities of the questions?</li><li>•What are some of the difficulties I need to deal with?</li></ul>
Breadth	<ul style="list-style-type: none"><li>•Do I need to look at this from another perspective?</li><li>•Do I need to consider another point of view?</li><li>•Do I need to look at this in other ways?</li></ul>

<b>Logic</b>	<ul style="list-style-type: none"> <li>• Together, do they all make sense?</li> <li>• Does what I think follow from the evidence?</li> </ul>
<b>Significance</b>	<ul style="list-style-type: none"> <li>• Is this the most important thing to consider?</li> <li>• Is this the central idea to focus on?</li> <li>• Which of these facts is the most important?</li> </ul>
<b>Fairness</b>	<ul style="list-style-type: none"> <li>• Am I sympathetic to the viewpoints of others?</li> <li>• Do I give other people enough credit?</li> </ul>

**6. A daily plan on how to exercise my thinking.**

I am aware that changing my thinking habits and developing new skills is going to take quite an amount of time. Since I am already disciplined, the next step will be to come up with a plan for me to follow each day. Since there are so many thinking dispositions (i.e., a person's natural tendencies and habits of mind that are affiliated with good thinking) out there to work on, such as the disposition to think broadly and adventurously, and the disposition to reason clearly and carefully. For now, I would like to work on one thinking disposition per month. I am going keep a journal for each month to document my progress.

***Some of the things that I plan to do to promote my thinking each day.***

Meditate for 15-30 minutes without thinking about anything. It will be a silent warm-up for the new day, and it will be a way to start each day with a peaceful mind so I can spend

the rest of the day with mindfulness, which will help me monitor my thinking, and focus better.

1. I will exercise at least 30 minutes every day. Exercise can help improve mood and sleep, which directly affect cognition. For instance, exercise can reduce stress and anxiety. I will be able to think better if I exercise (Godman, 2014).
2. Think about the thinking disposition that I would like to work on that day. For example, if my chosen disposition is to “think carefully,” I will think carefully and not rush to judge or believe what I hear too quickly.
3. Vigorously seek opportunities to practice the thinking disposition I have chosen. When I read, I will question what I read. When I hear something, I will think, reason, and analyze it to see if it makes sense. There are a lot of opportunities that I have to be aware of — and I need to take advantage of them to practice my thinking.
4. When I have time, instead of wasting it on something unnecessary, I will use it to reflect on my thinking that day. I can use questions from the evaluation section to ask myself, “Can I elaborate more? Can I give an example? Can I illustrate what I mean?”
5. Whenever I find myself too stressed, I will take a break. Twenty minutes of doing nothing is time that our bodies need. People can concentrate and pay attention better after taking a break (Liebertz, 2005).
6. Monitor myself to see if I am taking things too personally, am offended, or if I have a bias that favors myself. These things may prevent me from being open to others.
7. Keep a daily journal. When write in the journal, I will use the metacognitive knowledge that I have learned from the CCT program to help me reflect on my thinking each day. I will write about my situation, reflect on my thinking, and identify what I did well and what I did not, to determine how I can do better the next time.

## **7. Keeping myself excited and taking this thinking project seriously.**

I am a person who constantly has new ideas about doing things, so I have a ton of ideas about what I would like to do. I have started many small projects, but there are only a few that I have seen to completion. I think there are several things that prevent me from finishing my projects, such as, boredom, lack of motivation, and not seeing them as challenges. I sometimes allow myself to think that it is OK not to finish a project. For example, I once learned how to make soap. I studied how to make soap on my own for two weeks, but I have yet to make any soap. It is an interesting project, but I do not know where to get the materials for it — and I think that it might not be worth the cost. But when I look back at the soap project, I think that it just might be possible. If I work hard on finding where I can get all the supplies I need, I will be able to find them. I do not want to falter on my thinking project because I am really interested in improving my thinking skills. I would like to make sure that I am not going to just think about doing it; I want to take it seriously. Now, I am going to discuss how I will come up with ways to keep myself motivated until I succeed. I am going to use the knowledge that I have learned in the creative thinking course to execute a strategy to solve this problem.

**My problem is tending to do my personal projects only halfway, so I am going to consider five possible behaviors that could derail my project.**

1. I think that it will be OK not to finish. For example, if my project is to dance 30 days without taking a day off, I will still be satisfied if I stop on the 20<sup>th</sup> day.
2. I get distracted by other things easily, and forget that I have to finish what is in front of me. When I work at a computer, I constantly take breaks by checking my email, or talking to the person next to me.
3. I don't give my projects enough time — like meditating for only 10 minutes when more time would be better.
4. Sometimes I do not try hard enough, such as when I exercise for only 20 minutes before stopping.

5. I was not motivated to complete some of my personal projects. For instance, four months ago I wanted to make a house for my mother's puppies. I ended up with the house half-finished because I could not find all of the materials.

When take a closer look at these five statements, I can see ways to solve these problems. I am going to respond to these five statements one-by-one, by telling myself:

1. "Wipa, If you want to be a great thinker, you cannot play around. You should give it a shot. If you think it is OK to fail to complete a project, you will be wrong, because it will turn to a habit. You should finish what you start, no matter whether it is large or small. When you take things more seriously, it will become habitual."
2. "You should know what is important for you right now. Is there anything else more important than the thinking exercises that will help you become a better thinker?"
3. "If you make time for your project, then you will have enough time. Don't steal your own time by doing things that are unimportant. "
4. "Take it rigorously and see how it goes. Life is too short to mess around with."
5. "Think of what you want, and imagine what you would like to be. Then find a way to make it happen. Take action. Nobody will do it for you, if you do not do it yourself."

### **How can I keep my thinking project exciting?**

I like to do things that are very challenging and fun. I like to solve puzzles and problems because they keep me entertained. I never get bored doing puzzles, so in order for me to keep my project exciting, I must keep my goals in mind, and make it challenging and fun. Here are some of the ideas that I came up with:

1. Give myself daily challenges and daily rewards. I might choose a challenge from the list of assessments such as accuracy, precision, relevance, and so on. Or my challenge could be anything that will develop my thinking skills, such as trying to think like Albert

Einstein for a day, and at the same time working on the thinking disposition I chose for that month as well.

2. Come up with a system to assess myself each day besides the journal. The purpose of assessing myself is to tell myself how well — or how poorly — I did each day. If I do well I can be proud, if not, then I can work on it.
3. Join a group or club that focuses on developing thinking, like The Critical Thinking Community. That way, I will get to learn from others and get help from them.
4. Read one book a month about thinking. Reading is another way to gain knowledge and information. The more information I have, the more resources my brain has to choose from when I am in the process of thinking.
5. Teach others and share knowledge about thinking. When I teach others, I develop and learn more because I have to review and think about how I am going to deliver my information to them. I have to think about the simplest way to transfer my knowledge to others so they can understand it easily. It is a win-win situation. Others get to learn from me, and I gain experience.

### **Practice 12 Thinking Dispositions in One Year**

Each month, I will focus on one of these thinking dispositions until I have worked on them all:

1. *Reasoning*: Seek out and offer reasons.
2. *Exploring Viewpoints*: Look at things in many ways.
3. *Exploring Complexity*: Break down ideas and use the pieces to come up with new ones.
4. *Comparing and Connecting*: Look for similarities and differences to make connections with prior knowledge.
5. *Observing and Describing*: Make observations and describe what I see.
6. *Questioning and Investigating*: Ask questions and carry out research.

7. *Try to be reflective and aware of my own beliefs:* Keep a journal and reflect upon my daily thinking.
8. *Take into account the feelings and thoughts of other people:* I will consider the opinions of others and be sensitive their feelings.
9. *Seek precision:* I will try to be as accurate as I can.
10. *Seek explanation and understanding:* I will ask others to explain their thoughts, and I will seek to understand the rationales for my own thoughts in order to explain them to others.
11. *Be open-minded:* I will open my mind to listen to others and be flexible. If I see that what others have said makes sense, then I will consider their ideas.
12. *Withhold judgment:* I will not rush to make judgments about others or what I have heard or read about.

**Remark:** Items 1-6 are adapted from *Artful Thinking Final Report*, November 2006; items 7-12 are from my critical thinking course.

**Journal Format:** (Adapted from RMIT, 2006)

*Situation:* I will describe the situation in which I practice my thinking.

*Reflect:* I will look at the situation and ask myself these questions:

- How did my thinking go?
- What was my thinking like?
- What did I do well?
- What I did do not so well?
- Which other strategies could I have used?
- What I have learned?

*Analyze, explain, and gain insight:* I will try to answer these questions in order to understand the situation more fully:

- What was really going on?

- What made sense?
- What did not make sense?
- Why did it happen like that?
- Did I have control over it?

*Conclusion:*

- What can be concluded from this situation?

*Personal action plan:*

- What could I do differently next time?

What are the steps and what would the plan be like?

I now have a good plan that I can follow to improve my thinking skills. My most important task is to implement this plan and take it seriously. I cannot simply like the idea or concept of developing my thinking, because then this whole thing will be just a dream that will fade away over time. I do not want it to be like that. I would like to see how far I can go with the idea about strengthening my abilities to think better.

## Chapter Eight - Evaluating My Synthesis Project

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### What I Have Learned from This Project

I have learned so much from my synthesis project. Since I did this project about myself, I got to see the big picture and some details about myself — especially about my learning development. There are some things that I did well and some things that I have to work on. It is a part of being human. Humans make mistakes and they have flaws. I am a human being so I make mistakes and I am going to work on them. Here are some important lessons that I have learned from doing this project.

### I Should Not Have Spent As Much Time Choosing My Topic As I Did

It took me too long to pick my synthesis project. I did a lot of research and there were many interesting topics that I would like to have worked on. I thought about changing the educational system, and I thought about how to come up with a new teaching and learning theory. I was inspired by many educators who wrote good books such as Dr. Carol Dweck who wrote *Mindset* and Angela Lee Duckworth, the author of *Grit*. I had an idea to combine the concepts from these two books with metacognition and mindfulness. However, it seemed too complicated for me and I did not have much time. I might do it in the future. I realized that because I had so many ideas, it was hard for me to choose a topic. I have learned that I should think about choosing my project earlier than I did.

### I Got to See How Much I Developed

When I looked back to the time I first started to be interested in learning until now, I could see how much I have developed and changed. It is good to know this because it helps me see my abilities and know what I can do now and how I would like to develop myself in the future. I can see that I have learned so much. I used to care how many points I would get. Nowadays, I care about learning how to learn and learning how to think better. I believe that knowing how to learn and think better plays an important role in education. Because, when students know how to learn and think, they will be able to understand their lessons better. When they would like to know something more in-depth, they will not have to rely only on their teachers, because they will be able to study on their own.

## **I Learned to Appreciate My First Two Teachers**

My first chapters made me see how much my parents had influenced me when I was young. I did not really appreciate it back then. It might be because I was too young to understand and see the value in what my parents provided me. I can say that both my mother and father are the most important teachers in my life. If I have a child, I will definitely teach my child like my parents taught me. I would teach my child to be brave like my father taught me. I would teach my child discipline like my mother taught me. I would give my child independence like both my parents gave me. When I look deeper, I can see the love and care my parents have for me. They raised me and taught me well.

## **I Got to See How Much I Learned from the CCT Program**

I learned so much from the CCT program. This program was a perfect fit for me. It shaped me and strengthened some of my skills. I know how to learn and think better and now I can be a much more creative person if I practice more. The CCT also uncovered hidden skills within me and things I did not know I would like and be good at. I found out that I was good at problem solving when I took the advanced psychology, critical thinking, and metacognition courses. I also discovered that I love to think, and I would like to be a great thinker one day. It is very important for me to discover what I love to do. At least I will be able to figure out what to do next so I can become the great thinker I want to be. It will be so hard if I do not know what I like, because then I will not know in which direction I should go.

## **Obstacles and How I Overcame Them**

There were so many things going on in my life during the synthesis project. I lost two lovely puppies in quick succession. I was very sad and did not want to do anything, including this project. My sadness sucked all of my energy, enthusiasm, and motivation away from me. I was able to overcome this problem because I tried to think positively. I tried to think that my two puppies passed away because it was time for them to reborn as humans. I had to be happy that I had a chance to know them and spend time with them even though it was for a very short time. I should not be greedy and want more.

It was also the time that my sister who lives in Boston and our parents back home had problems in their lives. As a big sister and the oldest child in the family, I could not just ignore my feelings

and pretend not to have emotions. I was stressed, I felt bad for them, and I wanted to be able to help them. I did not have the best solutions, but I did what I could. I tried to understand their situations and listened to them. I was able to be happy with myself again because I took actions to help my sister and my parents. I am aware that problems are still going to occur, but I will be ready when they show up at my door again. I know that when I do not let problems overwhelm me, they won't.

I have health problems. I have pain in both of my ovaries very often because of cysts forming in them. I also have a chronic allergy that is really annoying. I do not know the cause of this allergy. I have different kind of rash almost every day. People rarely know that I am sick because I usually do not let them know that I am not feeling well. I went to a doctor several times but she could not help me. When I finish this program I will visit a doctor again. These two health problems are big obstacles, but I don't allow them to be in my way.

### **I Learned How to Use Tools**

I cannot believe that I ignored efficient ways to use tools in Microsoft Word for a decade. I just recently found out how to set styles for different types of my headlines in the last chapter. I had been formatting them manually previously. I have learned that tools are created for our convenience and not to make it harder for people. I often learn lessons the hard way. I think it is about not paying attention. If I do not pay attention well enough I may miss something that can end up making things easier for me. I think that this can apply to anything around us. If we pay attention, we may see something that it is there to see and learn. This is like me having a body but not learning to be aware of my breathing or my thoughts until my late 20s. If I had practiced mindfulness since I was very young and paid attention to my thinking, I might be a much better thinker by now. Having a tool, understanding how it works, and being able to use it in the proper way, can make a significant change in my life. It can save me a lot of time and make my work more efficient.

### **What I Did Well**

I noticed that there are many areas where I have done well. I am happy and proud of what I have done for this project. This project is the project that I spent the most time working on. When I woke up in the morning, I thought of this project first. I thought about what I would like to write

about that day. I thought of my project everywhere I went because I wanted my project to be a good one. As a Buddhist, I have learned that if a person would like to be a success, they must follow the Four Bases of Mental Power (Iddhipada in the Pali language). One of the four bases is to think about what we do all the time. I did not really do it much in the past but I did it with this project a lot. There are more things that I have done well, which I will demonstrate below.

### **I Wrote Every Day**

I have written every day since I started this project. I wrote even when I did not feel like it because I had a personal problem. I wrote even when I did not really have any ideas to put down. At least I would know that I made some progress. There were times when I did not want to write and just wanted to take a break. However, I would tell myself this, “You can take a break, but after that you will have to get back to your project.” Another thing that keeps me writing every day is my desire to finish the CCT program in the spring of 2017. I just cannot afford to stay another semester. I have to support my family. If I take more time to finish, it means that my family has to wait for me longer. Another reason why I keep writing is that I love to tell stories. The stories that I tell in this project are meaningful to me and I never tire of talking about them.

### **I Planned Well**

Since I knew that this would be my last project for the CCT program, I kept telling myself that I must do it well and I cannot play around with it. I then thought about what essential element would make my project a success, and I thought of planning. I think that a plan is important to doing good work, so I had to plan my project carefully. I gradually developed my plan and worked on it for about three weeks before I started to write anything down. I believe that having a good plan will guarantee that I will stay on track and I will not waste my time doing something unnecessary. My plan is like a big map; it gave me an overview of my project. I knew how much work would be needed and what I would have to do. I felt very confident that I had plan.

### **I Learned How to Reach for Help**

I had to write a lot for this project and that meant I needed people to proof my work. I had two main editors help me with my grammar for this project. I was really worried about reaching out to people to help me with this project at first. Then I thought of two people whom I knew very well who would help me. They were so patient and kind to help me. I also reached out to other people to help me with advice. I sent emails to two professors that I knew only by reputation. I

had read their books about thinking, so I thought they could give me some good advice. They were kind to me by providing information and materials that were useful to me. The professor who conducted the synthesis project also contributed and gave me good advice. The two classmates that I worked with during the time I was doing this research gave me good support as well.

### **I Took My Project Seriously**

I was determined to work on the synthesis project seriously. I wanted it to be my masterpiece because this project is really important for me. It will demonstrate what I have learned and gained from the CCT program and what I will walk away with after I finish this program. In my whole life in the business of education, I have never sat and looked back on what I had learned. All I did each year in school was getting ready for exams. What I had learned and memorized for my tests faded away not long after the tests were over, because it had no meaning for me. But the many courses in the CCT program and the synthesis project helped me see myself and know what I am capable of and have the potential to do. That is why it makes so much sense for me to take this project seriously. When I understand my abilities, my strengths, and my weaknesses, I will be able to reinvent myself more effectively.

### **The Main Problem with the Project**

I can see that I have several problems, but my main problem is writing. I think that I do not write smoothly. I would like to work on it. I am thinking about taking a writing class after I finish with the CCT program so I can write better. I still make a lot of grammatical errors which make me have to rely on others to help me fix them. I would like to get to the point where I do not have to depend on others to fix my problem. I would like to be independent. I will have to study English harder and learn from my mistakes and the advice that my editors gave me. I will have to give myself time to work on it if I would like to fix it.

### **What I Could Do Differently Next Time**

The synthesis project is a big project. It will better to start to think about the project a year before I start it. I think I did not give myself enough time to think and plan ahead. I wish I had started this project earlier so I had more time review literature, to plan, and to look for people who could support me. This is a crucially important lesson for me. It is like the famous phrase, “Rome

wasn't built in a day." It is the same with my project. I think it is better to write for 30 minutes a day for a year than to write many hours a day for four months. In a year, I would have had more time to think of ideas and polish my writing. Four months was too short and it made me stressed. I was worried my editors might be too tired to fix such a long paper from me, and I might not finish the project on time. If I ever have to do a big project like this in the future, I will definitely start my project early. I will work on it every day so I do not have to rush myself.

## Conclusions

The CCT program gave me a special lens to see the world the way it really is. This project helped me see who I am, where I am from, where I am now, and which direction I would like to go. I may not discover something great like finding a way to cure cancer, but I know that I will never be a cancer in my society because I know that I was born to learn and to develop myself and to create a better version of me. I am striving to develop my heart, my mind, my body, my soul, and my ability to learn better. I do not only want to improve myself. I would like to help society be better too. I would like to share and teach others what I have learned. It is nice to share, care, love, and not think only about one's self. My actions may not make a big impact on this world, but I am sure that many small actions can.

The essential lesson I learned from this project is how little I know. The more I learn the more I find out that there are so many things that I have been misunderstanding or misconceiving. This is the reason why I would like to keep learning. I wonder what is waiting for me to be discovered. I wonder what else I misunderstand. The most important thing that I have learned is that I know what I do not know and I admit it. I also know what my weaknesses are and I am not going to pretend that I am perfect. I am going to work on them because I would like to get better. I do not strive to be a perfect human being; I just want to be a better one. I do not think I that I am asking too much of myself. I do not think that I am too critical or too tough on myself. I think that if I want to be better than I was yesterday, I will have to work hard to do it. One more important thing that I know about myself is that I am happy with who I am and I am proud to be me.

I have learned from my project that I would not be where I am today without my parents, teachers, friends, family, coworkers, environments, cultures, schools, countries, and this world.

Everything connects to each other and sometimes they rely on each other. I would like to thank everything in this universe for making me who I am today.

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