

The Personal Competencies
**Through the Eyes of the
Classroom Teacher**



by
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Students bring attitudes, aptitudes, and behaviors to the learning experience. Personal competencies—cognitive, metacognitive, motivational, social/emotional—help students coordinate and manage new learning. These competencies are enhanced by the teacher. However, the ability of a teacher to enhance these competencies cannot be assumed. The enhancement of student competencies depends on how well a teacher understands and uses his or her own competencies. These competencies are first developed through a teacher’s personal learning of topics of interest to him or her. Curiosity drives a teacher to seek new knowledge (cognitive competency), and a growth mindset sustains the teacher through the process of learning with resilience and persistence (motivational competency). The teacher’s high expectations for success (social/emotional competency) improve the teacher’s self-appraisal of what he or she knows and his or her self-management of selecting the most appropriate strategies to ensure students’ academic success (metacognitive competency). The interplay of competencies that improves personal learning also augments professional learning, increasing the teacher’s ability to enhance the same competencies in students.

A Story of a Teacher—Part One:

The Lifetime Learner

For the first 20 years of marriage and motherhood, Mrs. Thornton described her roles as family scholar, chief problem solver, head cheerleader, and counselor. The role descriptions not only describe what she did on a daily basis, but they also provide exemplars of four personal competencies: cognitive, metacognitive, motivational, and social/emotional (Redding, 2014a, 2014b). When she began her teaching career later in her life, her personal competencies served her well.

As she nurtured her children, Mrs. Thornton expanded her interests to include those of her children. For example, to her own interests of genealogy and sewing, Mrs. Thornton added sailing, beekeeping, and horticulture, which were of high interest to her children. She read voraciously and watched documentaries to learn more about her interests as well as those of her children. She memorized facts and figures related to a topic that enhanced her further learning of the topic. She joked that with her growing reservoir of knowledge, she always had something to talk about and was everyone’s first choice as a teammate for games of Jeopardy or Trivial Pursuit.

When her older son was earning a merit badge for sailing, Mrs. Thornton used mnemonics and adages to help her learn and remember details about sailing. For example, she remembered that the *port* side of a boat is the *left* side because both

port and *left* have four letters. To remember how to tie a reef knot, she used the mnemonic, “Right over left, left over right, makes a knot both tidy and tight.” And to remember when it was safe to sail, she recited, “Red sky at night, sailor’s delight. Red sky in morning, sailor’s warning.” Mrs. Thornton also explained procedures needed for sailing to herself as she ran her errands while ignoring the stares from passengers in other cars. Over time, she relied less and less on her mnemonics, adages, and self-explanations to support her son’s learning.

Her daughter’s hobby of beekeeping proved to be a challenge for Mrs. Thornton because she was extremely afraid of bees because of a traumatic bee attack when she was a child. For the most part, Mrs. Thornton’s daughter attended to the day-to-day duties of beekeeping with assistance from her father. However, when her daughter was at summer camp and her husband was out of town on business, Mrs. Thornton was the one who needed to harvest the honey. Therefore, she had to learn how to do it, and she knew she could do it. Mrs. Thornton admitted that her fear of bees diminished with each harvest, and she was freed to marvel at how bees produce the hives that store the honey.

Mrs. Thornton’s youngest son’s interest in horticulture meant every room in the house and all the flower beds outside were full of flowers, bushes, and trees. Blooms and growing things outside were to be expected, but in the house, they created clutter and mess. Clutter and mess were two things Mrs. Thornton found difficult to abide. Yet when Mrs. Thornton saw the care her son gave each plant and how responsible he was in watering and feeding them, she didn’t have the heart to dissuade her son’s horticultural endeavors. When her mother was hospitalized for an extensive period of time, Mrs. Thornton’s son delivered plants to his grandmother. The joy on his grandmother’s face inspired her son to deliver his plants to other people in the hospital.

Personal Competencies

Competency is an accumulation of related capabilities that facilitate learning. Sam Redding (2014a) proposes a Personal Competency Framework that describes the desired knowledge and applied skills that lead to successful performance. There are four personal competencies in the framework (p. 4):

- **Cognitive competency:** prior learning that facilitates new learning
- **Metacognitive competency:** self-regulation of learning and use of learning strategies
- **Motivational competency:** engagement and persistence in pursuit of learning goals
- **Social/emotional competency:** sense of self-worth, regard for others, and emotional understanding and management to set positive goals and make responsible decisions.

The personal competencies will be viewed through the lens of Mrs. Thornton, who described her family roles as scholar, chief problem solver, head cheerleader, and

counselor. Each role and her pursuit of knowledge about topics of interest to her and to her children exemplify the four personal competencies.

Cognitive Competency

Mrs. Thornton's role as family scholar demonstrates cognitive competency. She had her own interests that she pursued, and she pursued the interests of her children. Through extensive reading and viewing of documentaries, Mrs. Thornton grew and enriched her store of knowledge, which she eagerly shared with others. Her memorization of facts and figures about a topic became hooks for further learning of that topic. As Daniel Willingham (2006, p. 4) states, "It is easier to fix new material in your memory when you already have knowledge of the topic." The cognitive competency is, in short, the foundation of new learning.

Reflections on Your Personal Learning Competencies

- What are your personal interests outside the classroom?
- In what ways do you expand your personal reservoir of knowledge to facilitate new learning of topics that are of interest to you?
- Describe a time when you learned about a topic that was totally new to you. How did you manage learning the new topic? How did you use your new knowledge?



Metacognitive Competency

Metacognitive competency enables students to learn with greater effectiveness and efficiency by thinking about thinking, knowing what one knows, understanding what is to be learned, and determining the best strategies for learning. A student's choice of a learning strategy may be the result of methodical reasoning (logical thinking) or the result of random and creative ideas (divergent thinking). Mrs. Thornton's family role of chief problem solver represents metacognitive competency. A problem solver uses techniques such as goal setting, questioning, divergent thinking, mnemonics, and self-explanation. To support her son as he worked toward earning a merit badge in sailing, Mrs. Thornton set the goal of learning more about sailing. She used mnemonics, recited appropriate adages, and generated self-explanations to aid her learning.

Reflections on Your Personal Learning Competencies

- In what ways do you build your metacognitive competency by reflecting on and managing your personal learning about topics that are of interest to you?
- Are you more likely to use logical (critical) thinking or divergent (creative) thinking to solve a problem? Does your choice of thinking depend on the situation? If so, how?



Motivational Competency

Motivational competency involves engagement and persistence in the pursuit of learning. In her role as head cheerleader in the family, Mrs. Thornton understood that learning something new requires a growth mindset, which is the belief that abilities can be developed through dedication and hard work. New learning also

requires the constituents of purpose, passion, connection, and grit. Learning how to harvest the honey from the beehives meant not only learning how to remove the honey; it also required her to persevere despite her fear of bees. She had the belief that learning how to harvest the honey was attainable. From her beekeeping experience, Mrs. Thornton learned that persistence leads to mastery, greater confidence, and eagerness to learn more.



Reflections on Your Personal Learning Competencies

- Describe the last time you were so deeply engrossed in learning that nothing could interrupt you.
- In what ways do you demonstrate a growth mindset in your personal life?
- What causes you to stretch your interests and your aspirations?
- How do you deal with barriers (e.g., time demands, limited access to information) to your learning outside the classroom?

Social/Emotional Competency

For her role as family counselor, Mrs. Thornton needed to possess a sense of self-worth, regard for others, and the emotional understanding to set positive goals and make responsible decisions; that is, she needed social/emotional competency. Although Mrs. Thornton was uncomfortable with clutter and mess in her house, her sense of self-worth helped her realize that she was not defined by the orderliness or cleanness of her house. Allowing her son to grow his plants in the house demonstrated her regard for her son and his keen interest in horticulture.

Reflections on Your Personal Learning Competencies

- In what ways do you demonstrate an understanding of your emotions?
- How do you manage your emotions in your personal life?
- How do you set and maintain positive personal goals?
- How do you show empathy for others in your day-to-day encounters?



A Story of a Teacher—Part Two:

Enhancing Student Learning

When her youngest child began high school, Mrs. Thornton began her teaching career.

Mrs. Thornton's honed personal competencies served her well in her third-grade classroom. She was able to use her personal competencies to develop the same personal competencies in her students to build their capacity for learning. This is illustrated in the following scenario (Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007, p. 70):

Mrs. Thornton begins the reading lesson by asking, “What time is it when an elephant sits on a fence?” The class laughs and responds in unison, “Time to fix the fence.”

“What makes the riddle funny?” Mrs. Thornton asks. The students discuss the image of a big elephant climbing up onto a fence and the multiple meanings of the word time as the reasons that the riddle is funny.

“Today you’ll read an informational passage and learn more about elephants. First, let’s see what you know about elephants,” says Mrs. Thornton. She then asks a series of questions: How tall are elephants? How much do they weigh? What do elephants eat? and How do they use their trunks? The students jot down their answers to these questions at the top of their individual whiteboards.

Mrs. Thornton writes a word on the board and says, “This is the word versatile. It means can be used in many different ways.” She writes the definition on the board under the word versatile and circles it. “What words do you know that mean the same or almost the same as versatile?” The students call out words such as useful, flexible, and handy. “What words mean the opposite?” The students respond with words such as inflexible, limited, and restricted. Mrs. Thornton webs the students’ responses on the board. The synonyms are webbed to the left of the definition, and the antonyms are webbed to the right.

“In the passage you’ll read, the word versatile is used as an adjective. An adjective describes a noun. What are nouns that could be described as versatile?” Mrs. Thornton asks. The students respond: a tool, a person, a jacket, a scarf. “What might be described as versatile in a passage about elephants?” In unison, the students respond: the elephant’s trunk. “Good thinking!” says Mrs. Thornton. “You probably thought: ‘Hmm, Mrs. Thornton asked us to jot down how elephants use their trunks. If they use their trunks in different ways, then their trunks must be versatile.’”

Before moving onto the next part of the lesson, Mrs. Thornton notices that Dijohn has a puzzled look on his face. “Dijohn, do you have a question?” she asks. He replies, “I don’t have a question. I just was thinking that the word trunk has a lot of meanings.” “Good thinking!” Mrs. Thornton exclaims. She has the students turn to a partner and quickly generate different meanings of the word trunk. The students share the meanings they generated.

Mrs. Thornton returns to the prepared lesson and asks the students to write a sentence with the word versatile at the bottom of their whiteboards. Students hold up their individual whiteboards when they finish writing their sentences. Several students read their sentences out loud.

“Now it’s time to read the passage. As you read, think about the answers to the questions I asked you earlier. I want to hear you thinking as you read. If you were right about something, let me hear you softly say ‘yes.’ If you need to correct information, let me hear you softly say ‘oops.’ If you learn something new, let me hear you softly say ‘wow’ or ‘aha,’” says Mrs. Thornton.

The passages are distributed, and the students begin reading silently. As Mrs. Thornton monitors the students subvocalizing their connections, corrections, and collections, she notices that only Caitlyn reads without any interaction with the text and makes a quick note in her reflection notebook. When the students finish reading the passage, she asks a variety of questions that require the students to analyze, synthesize, and evaluate the information from the passage.

Next Mrs. Thornton reviews the elements of informational text and asks them to identify the important elements of the informational passage they have just read: the main idea, the supporting ideas, and the details. She writes the elements on the board.

The students then write a summary paragraph. Mrs. Thornton reminds the students that the summary paragraph must have one quarter the number of words of the original passage, so they must decide what information is really important. When the students begin to write, Mrs. Thornton slips over to Caitlyn's desk and asks Caitlyn to verbalize the main elements of the passage. With some prompting and scaffolding, Caitlyn summarizes the passage as Mrs. Thornton scribes. Mrs. Thornton scans the room to gauge the students' progress as Caitlyn silently reads her finished summary several times. When it looks as if all the students have finished, Mrs. Thornton asks for volunteers to read their summaries. Caitlyn is the first one to raise her hand.

At the end of the lesson, Mrs. Thornton gives students an opportunity to join one of five project-learning groups. The topics for the groups included the ecosystem of elephants, how elephants communicate, elephants as working animals, conservation issues concerning elephants, and cultural depictions of elephants. Mrs. Thornton has checked out books, magazines, and other rich reading resources from the library. An electronic tablet is available for each group. Each group will gather information about their topic and prepare a presentation. The presentations are due in two weeks.

Cognitive Competency

Cognitive competency encompasses the knowledge a learner holds in memory and the learner's manipulation, analysis, and assimilation of current and new information. Cognitive competency is the reservoir of knowledge that enables new learning. The deeper the reservoir and the more relevant the reservoir of knowledge is to the learning task, the easier it is for the learner to acquire new knowledge.

To enhance the cognitive competency of the students in her classroom, Mrs. Thornton:

1. Used informational text to increase her students' knowledge of elephants.
2. Explicitly stated that the goal of reading the passage was to increase knowledge.
3. Asked a series of questions to activate background knowledge before the students read the passage.
4. Introduced a new vocabulary word that would be helpful in understanding the passage.

5. Encouraged the students to connect the new word to words—synonyms and antonyms—they already knew.
6. Asked the students to write a sentence using the new vocabulary word.
7. Asked questions that required students to analyze, synthesize, and evaluate information from the passage.
8. Asked the students to review the elements of informational text and identify those elements in the passage.
9. Provided rich reading resources on topics related to elephants to further the students' knowledge and to encourage curiosity.



Reflections on Enhancing Students' Personal Learning Competencies

- In what ways do you expand your students' reservoir of knowledge to facilitate new learning?

Metacognitive Competency

Metacognitive competency enables the learner to assess what he or she knows and then select the best strategy for learning new information. The learner continuously evaluates his or her learning and adjusts the strategy as needed. Strategies may include thinking aloud, self-explanations, self-testing, and summarization.

Three activities in Mrs. Thornton's classroom demonstrate the enhancement of the metacognitive competency of her students:

1. When Mrs. Thornton asked her students what part of an elephant could be described as versatile, the students had no difficulty answering the question. She specifically complimented their "good thinking." Although the students knew the answer, Mrs. Thornton used the opportunity to model "thinking aloud." She said, "You probably thought: 'Hmm, Mrs. Thornton asked us to jot down how elephants use their trunks. If they use their trunks in different ways, then their trunks must be versatile.'"
2. The answers to the questions the students answered at the beginning of the lesson suggested what they knew about elephants. As the students silently read the passage, Mrs. Thornton encouraged them to connect with or correct their background knowledge with the information in the text and to collect information that was not part of their background knowledge. Through this activity, the students confirmed or corrected what they knew and highlighted new learning.
3. As the culminating lesson activity, the students wrote a succinct summary paragraph that required them to select the most important information from the passage.

Reflections on Enhancing Students' Personal Learning Competencies



- In what ways do you build your students' metacognitive competency to enhance their capacity to direct their own learning?

Motivational Competency

Motivation is wanting to do one task when there are competing tasks available. The learner believes that the task is important and has a belief in his or her ability to master the task through dedication and hard work. The learner persists even when mastering the task becomes difficult.

In the classroom, Mrs. Thornton enhanced her students' motivational competency by:

1. Establishing an organized learning environment.
2. Exuding confidence that the students could complete the tasks.
3. Beginning the lesson with a riddle to stimulate students' interest.
4. Explicitly stating the purpose of the lesson.
5. Momentarily pausing the planned lesson to take advantage of a "teachable moment" that was generated by a student.
6. Encouraging Caitlyn to persist when a task became more difficult for her.
7. Allowing students to choose a project group.



Reflections on Enhancing Students' Personal Learning Competencies

- Describe a time your students were so deeply engrossed in learning something new that they couldn't be interrupted.
- In what ways do you encourage a growth mindset in your students?
- How do you help your students stretch their interests and aspirations?

Social/Emotional Competency

Social/emotional competency is marked by a sense of self-worth, concern for the welfare of others, and the emotional understanding to make responsible decisions. It is evidenced in traits such as resilience and grit. Social/emotional competency is fostered in a learning environment that encourages questioning and seeking and offering help.

Two interactions in Mrs. Thornton's classroom demonstrate her enhancement of her students' social/emotional competency:

1. When Dijohn had a puzzled look on his face, Mrs. Thornton addressed Dijohn's puzzlement. Mrs. Thornton's response showed her regard for Dijohn's learning, supported his sense of self-worth, and demonstrated a safe

and encouraging learning classroom.

2. When Caitlyn did not interact with the text as she read silently, Mrs. Thornton noted this and then moved to Caitlyn's desk. She guided Caitlyn's responses and scribed the summary paragraph. Mrs. Thornton displayed a caring teacher–student relationship and supported Caitlyn's sense of self-worth by providing an adjustment to the task that allowed her full participation in the learning activity.

Reflections on Enhancing Students' Personal Learning Competencies

- In what ways do you help your students understand and manage their emotions?
- How do you help your students set and maintain positive goals?
- How do you help your students show empathy for others?



A Story of a Teacher—Part Three: The Knowledgeable and Skilled Teacher of Reading

For all her demonstrated acumen in teaching literacy, Mrs. Thornton did not begin her teaching career with the knowledge and skills she needed to teach literacy well to all students. She is the first person to admit that she was ill-prepared and ineffectual in her literacy instruction. Her preparation in college, 20 years before she began her career, focused on lesson planning and classroom management. Although helpful to successful teaching, this knowledge alone was not sufficient to teach literacy. The in-service workshops she attended as a teacher focused on fostering students' love of books as the key to helping them learn to read. Mrs. Thornton faithfully implemented this book appreciation strategy derived from the workshops. Most of her students learned to read, though not well, in spite of this affective method. As a result of her students' less-than-satisfactory development of reading skills, Mrs. Thornton was never sure if her implementation of professional development strategy was correct, and she didn't know where to turn with questions. These were the problems that kept her up at night. Her motivational competency led her to seek professional development that would better prepare her to teach literacy effectively. She knew she had students who needed help, and she knew she could find a way to help them.

Mrs. Thornton learned about a professional development workshop designed to teach students with dyslexia—a difficulty in accurate and automatic word recognition skills. Although most of her students were not diagnosed as having dyslexia, she thought that knowing how to teach students who struggle to learn to read might give her strategies that could be beneficial to all students. She attended the workshop and confirmed that there were definite gaps in her knowledge of researched-based literacy practices. Mrs. Thornton's cognitive competency went into hyperdrive as she

was introduced to the structure of language and was required to learn concepts she had never heard of before. The workshop introduced procedures to help students read and spell unfamiliar words and to comprehend different genres of text and write a variety of essays. The use of procedures appealed to her metacognitive competency. There was a lot to learn, and there were many times that Mrs. Thornton felt overwhelmed and ready to quit. Fortunately, her learning was sustained by her motivational competency. Her social/emotional competency was nurtured by observing an expert coach teach, by sharing the teaching of a lesson with an expert coach, and by teaching a lesson with the guidance and feedback from an expert coach.

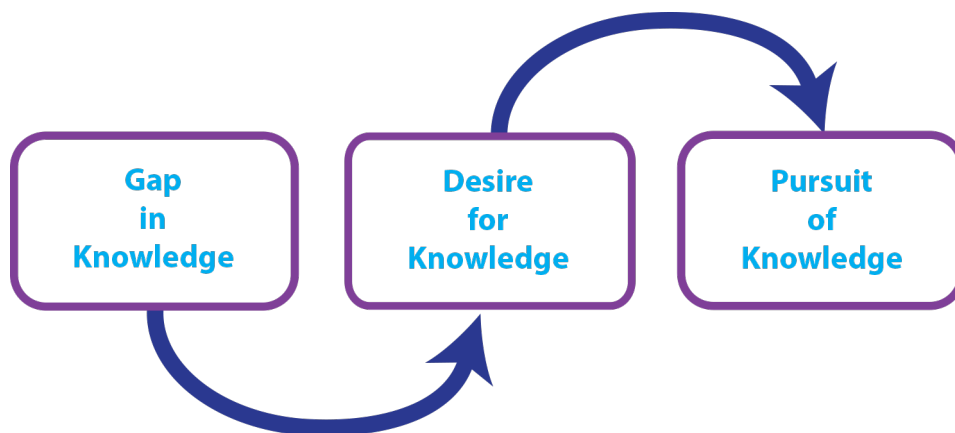
Curiosity and Learning

Mrs. Thornton did not begin her teaching career as a highly knowledgeable and skilled teacher of reading. Rather, she became a highly knowledgeable and skilled teacher of reading because she perceived a gap in her knowledge about literacy instruction. Her desire to learn more to help the students in her classroom who were struggling readers led to her pursuit of new knowledge. In short, Mrs. Thornton demonstrated curiosity.

Curiosity is an innate inclination to seek knowledge (Litman, 2005) and an interplay of personal competencies as illustrated in Figure 1. The knowledge that is gained through curiosity is the domain of cognitive competency. The perception that there is a gap in knowledge taps into metacognitive competency: “I know I do not have the knowledge to teach all students to learn to read well.” Desire to learn exhibits a growth mindset—believing a specific ability can be developed with dedication and hard work (Dweck, 2006). This is the key to motivational competency: “I can grow as a learner.” The pursuit of knowledge speaks to social/emotional competency: “I am worthy of improving myself”; “I can improve myself by questioning and listening to others.”

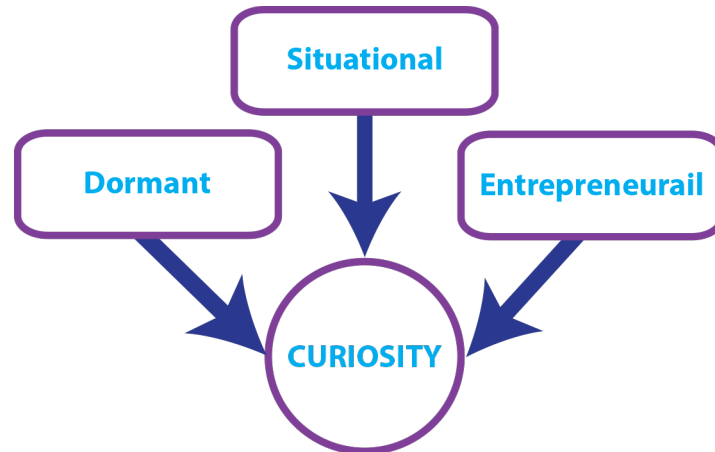
New learning can be approached with different levels of curiosity. Jordan Litman (2005) describes curiosity as a combination of wanting and liking. How a learner approaches a task in terms of curiosity influences how well he or she learns new

Figure 1. The Interplay of the Personal Competencies in Curiosity



information. There are different ways to describe levels of curiosity (cf., Litman, 2005). Figure 2 illustrates levels of curiosity that include the descriptors of *dormant*, *situational*, and *entrepreneurial*. On occasion, new learning is imposed on a learner (e.g., a mandatory professional development workshop). Without a sense of need or relevancy, the learner's level of curiosity may be dormant, that is, underdeveloped or inactivated. When approaching new learning, a learner's level of curiosity may be situational, that is, the learner has heightened curiosity because of a perceived gap in knowledge that is needed for a particular purpose. When approaching any new learning, a learner may have an entrepreneurial level of curiosity, that is, the learner is

Figure 2. Different Levels of Curiosity



Reflections on Curiosity

Appendix A contains statements that depict a level of curiosity with which a learner might approach an opportunity for new learning. Decide the level that best describes the curiosity expressed by each statement.

- Describe a situation when you approached new learning with dormant curiosity. What do you remember learning from that situation?
- Describe a situation when you approached new learning with situational curiosity. What do you remember learning from that situation?
- Describe a situation when you approached new learning with entrepreneurial curiosity. What do you remember learning from that situation?
- Can you modulate your level of curiosity? If so, how?
- In summary, how do different levels of curiosity impact your learning? How might thinking about different levels of curiosity impact your instructional practices?



eager to acquire new knowledge about something that he or she knows nothing about.

Figure 3. The Fixed Mindset

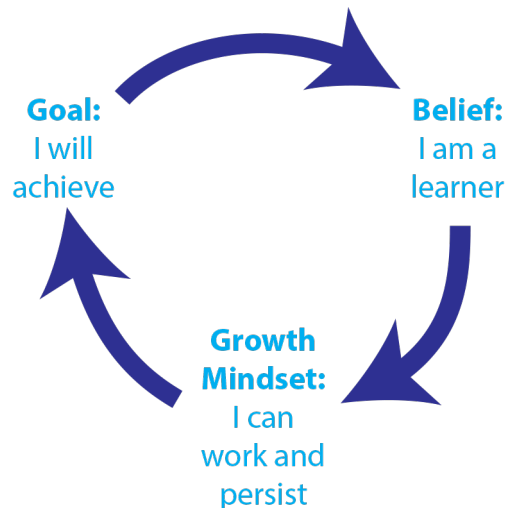


Teacher Beliefs and Mindset

A belief is an idea, concept, or proposition that an individual holds to be true. Mrs. Thornton believed that all children could learn to read given appropriate instruction. This contrasts with a belief that learning to read is fixed by intelligence as illustrated in Figure 3 (Dweck, 2006). A belief that ability is fixed leads to a self-repeating sense that learning and achieving are beyond one’s control.

Although Mrs. Thornton did not possess knowledge about the most appropriate instruction for all students, especially those who struggled, she believed she could learn. She possessed a growth mindset, or an attitude that abilities are not fixed. A growth mindset can be developed and changed over time. Through dedication and hard work, she believed she could learn to teach all her students to read and that she could infuse the idea in her students that learning to read is an ability that can be acquired through dedication and hard work. Although there were times when Mrs. Thornton was overwhelmed with the amount of information she needed to learn, her growth mindset motivated her to persist. As she was learning about learning, she shared her challenges and successes with her students. Mrs. Thornton’s

Figure 4. The Growth Mindset





Reflections on Teacher Beliefs and Growth Mind

- Appendix B contains statements about teacher beliefs and the growth mindset. On a scale of 1 to 10, rate your agreement or disagreement with each statement.
- Do you believe that an ability is innate, or do you believe an ability can be developed?
- Do you believe that a fixed mindset can be changed to a growth mindset? If so, how?
- Contrast your instructional practices with a fixed mindset versus a growth mindset.
- How might a growth mindset impact learning goals?

growth mindset enabled her and, ultimately, her students to achieve their goals. Figure 4 illustrates the recursive effect of the growth mindset (Dweck, 2006).

Conclusions

Learning is a lifelong endeavor. A curious learner constantly seeks new knowledge because of a perceived gap in prior knowledge. The curious learner's growth mindset holds that the ability to learn is not fixed by intelligence but can be achieved through dedication and hard work. The achievement of gaining new knowledge motivates the learner to learn more and develops the sense that all learning is within his or her grasp.

This continuous cycle of learning is the hope teachers have for all students. The cycle begins with teachers' personal competencies. Intentional enhancement of teachers' cognitive, metacognitive, motivational, and social/emotional competencies increases their ability to enhance the same competencies of their students.

Appendix C through Appendix F outline theories of action and logic models for enhancing teachers' personal competencies as part of their job-embedded professional development. The models suggest that teachers allot time to engage in school-based book clubs or interest groups on topics that are of interest to the teachers. These topics may or may not be related to instruction. Rather, the book clubs or interests groups deepen the teachers' reservoir of knowledge (cognitive competency) that increases their other competencies for personal and professional learning. Ultimately, augmented teacher competencies will be evidenced in teachers' classroom instruction and will enhance students' personal competencies. Appendices C through Appendix F include examples of specific evidence of teachers' personal competencies related to their literacy instruction.

Sam Redding (2014b) refers to personal competencies as "the something other," necessary for both learning and life. Teachers who have honed their personal competencies through personal learning pursuits as well as professional pursuits can improve the competencies of their students through more personalized learning. Students' malleable competencies support learning in school and continued learning in life.

References

- Boulware-Gooden, R., Carreker, S., Thornhill, A., & Joshi, R. M. (2007). Instruction of metacognitive strategies enhances reading comprehension and vocabulary achievement of third-grade students. *The Reading Teacher, 61*(1), 70–77.
- Dweck, C. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.
- Litman, J. A. (2005). Curiosity and the pleasures of learning: Wanting and liking new information. *Cognition & Emotion, 19*(6), 793–814.
- Redding, S. (2014a). *Personal competency: A framework for building students' capacity to learn*. Philadelphia, PA: Temple University (Center on Innovations in Learning).
- Redding, S. (2014b). *The something other: Personal competencies for learning and life*. Philadelphia, PA: Temple University (Center on Innovations in Learning).
- Willingham, D. T. (2006). *How knowledge helps: It speeds and strengthens reading comprehension, learning—and thinking*. Retrieved from <http://www.aft.org/periodical/american-educator/spring-2006/how-knowledge-helps>.

Appendices A–F

Appendix A. Levels of Curiosity

I totally immerse myself in learning whenever I am learning something new.

Dormant

Situational

Entrepreneurial

It's not that I don't want to learn new information; it's just there's never enough time to learn.

Dormant

Situational

Entrepreneurial

I spend as much time as I can to gain new knowledge when I need that knowledge.

Dormant

Situational

Entrepreneurial

I did all my learning when I was in school, so now I just want to enjoy life.

Dormant

Situational

Entrepreneurial

Learning new things is important and invigorating; I'll never stop learning.

Dormant

Situational

Entrepreneurial

Although something may pique my interest, I'm not likely to pursue learning about it on my own.

Dormant

Situational

Entrepreneurial

I'm very interested in learning new information when it has relevance to me.

Dormant

Situational

Entrepreneurial

I'll probably learn something if I am guided by someone who is knowledgeable and engaging.

Dormant

Situational

Entrepreneurial

Appendix B. Teacher Beliefs and Growth Mindset

I can instill in my students the need to learn for academic and career success.

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

I can enhance my students' motivation in learning even when something is complicated to learn.

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

I can connect to my students in special and personal ways that inspire them to learn.

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

I can use a variety of instructional modes to enable my students to use multiple approaches to learn.

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

I can individualize my instruction to build each student's self-efficacy perception or growth mindset.

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

I can help my students understand that mastery of knowledge comes from strategy and effort rather than "smartness."

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

I can help my students understand that mastery of knowledge is a long-term process and requires tenacity.

1	2	3	4	5	6	7	8	9
Disagree			Neutral			Agree		

Appendix C. Theory of Action: Teacher Cognitive Competency

Premise	If teachers intentionally expand their reservoir of knowledge and facilitate new learning personally, then the enhancement of this cognitive competency increases their ability to enhance the competency of students	
Goal	The cognitive competency of teachers will be enhanced by their efforts to build a growing reservoir of accessible background knowledge about a topic or topics of interest to them	
Logic Model		
Indicator/Objective/Evidence	Strategy	Resources/Technology
<p>Indicator/Objective: All teachers work individually and together to reinforce elements of mastered knowledge on a topic of interest to them that can be retained in memory through ongoing personal reading, written summaries, conversations, and original writing</p> <p>Evidence: The creation of school-based book clubs or interest groups on a variety of topics that may or may not be related to instruction but are of deep interest to teachers and that will augment teachers' reservoirs of knowledge</p>	Provide mentoring to support ongoing personal learning that builds the teacher's reservoir of accessible background knowledge on a variety of topics	<p><i>Resources:</i> Protocol for professional development to increase knowledge on a topic of interest</p> <p><i>Technology-Aided Resources:</i> Mentoring, synchronous and asynchronous; interactive learning modules</p>
	Provide access to teachers for ongoing learning and opportunities for teachers to share their new knowledge with others through school-based book clubs or interest groups	Curriculum library of supplemental materials about pertinent topics for ongoing personal learning
<p>Indicator/Objective: All teachers include vocabulary development as an element of the book clubs or interest groups</p> <p>Evidence: Copies of book club's or interest group's schedules, agendas, and meeting minutes or summaries; copies of teacher's personal learning plan and reading logs</p>	Set personal learning expectations for all teachers relating to vocabulary on a topic of interest	<p><i>Resources:</i> Protocol for personal learning expectations; library of supplemental materials</p> <p><i>Technology-Aided Resources:</i> Face-to-face and online delivery of professional development and mentoring, synchronous and asynchronous; interactive learning modules for vocabulary development</p>
	Provide incentives for teachers to build personal vocabulary about a topic of interest	

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Appendix C. Theory of Action: Teacher Cognitive Competency (cont.)

<p>Indicator/Objective: All teachers undertake rich reading and reflect reading in written summaries and presentations to peers and other members of school community in conjunction with teacher book clubs and interest groups</p> <p>Evidence: Copies of teacher's personal learning plan; reading logs; journal of peer conversations or reading reflections</p>	<p>Set personal learning expectations for all teachers relating to rich reading and written summaries and application of rich reading</p> <hr/> <p>Provide incentives for rich reading and written summaries and application of rich reading</p>	<p><i>Resources:</i> Library of learning for teachers</p> <p><i>Technology-Aided Resources:</i> Subscriptions to online journals</p>
<p>Specific Evidence of Teacher Cognitive Competency Related to Literacy Instruction in the Classroom</p> <ul style="list-style-type: none"> • Explains objectives and outcomes for daily literacy lessons to students • Demonstrates understanding of the content students will view and practice • Reviews previous learning before introducing new learning • Determines baseline knowledge of students through initial questioning • Leads students to discover a new reading or spelling pattern • Prompts students to verbalize new learning of a pattern in their own words • Uses recitation of concepts to build understanding; for example, "A closed syllable ends in at least one consonant after one vowel. The vowel is short." • Provides adequate practice to develop mastery • Communicates clearly and articulately • Prompts students to respond in complete sentences • Prompts students to write responses and reflections • Connects new learning from professional development and readings to literacy instruction <p>Specific Evidence with Colleagues and Mentors</p> <ul style="list-style-type: none"> • Explains the two major components needed for skilled reading comprehension • Explains developmental stages of reading, spelling, and writing and implications of these stages on instruction • Explains objectives, rationale, and outcomes for daily literacy lessons • Writes specific goals for professional development on literacy instruction • Demonstrates curiosity in learning new information that arises from a perceived gap in knowledge or a continuous quest of new knowledge on how to teach literacy • Demonstrates readiness to benefit from professional development on literacy instruction 		

Appendix D. Theory of Action: Teacher Metacognitive Competency

Premise	If teachers intentionally build metacognitive competency by reflecting on and managing personal learning, then the capacity to teach students to manage learning is enhanced.	
Goal	The metacognitive competency of teachers will be enhanced by efforts to reflect upon and effectively manage their personal learning.	
Logic Model		
Indicator/Objective/Evidence	Strategy	Resources/Technology
<p>Indicator/Objective: All teachers actively reflect on and implement the metacognitive process (goals, strategies, monitoring, and modification) and specific learning strategies and techniques as they engage in book club or interest group activities</p> <p>Evidence: Copies of teacher’s personal learning plan; logs of conversation with peers and mentors; reading logs; journal of personal reflection on learning and learning goals</p>	Provide mentoring to support the teacher’s personal implementation of the metacognitive process and specific learning strategies and techniques	<p><i>Resources:</i> Protocol for personal learning related to the metacognitive process</p> <p><i>Technology-Aided Resources:</i> Face-to-face and online delivery of workshops and mentoring, synchronous and asynchronous; interactive learning modules specific to the metacognitive process and specific, personal learning strategies and techniques</p>
	Provide professional development to teachers for ongoing implementation of the metacognitive process and specific learning strategies and techniques as they apply to personal learning goals	<p><i>Resources:</i> Curriculum library of supplemental materials on personal application of the metacognitive process to personal learning goals and indexed by metacognitive strategy level</p> <p><i>Technology-Aided Resources:</i> “Recommended” lists of vetted software and apps designed to enhance teachers’ ongoing personal learning, critical thinking, and planning, and support the analyzing, evaluating, and creating levels of Bloom’s taxonomy as it relates to personal learning of a topic of interest</p>
<p>Indicator/Objective: All teachers will practice self-checks, peer checks, and documentation of learning strategies as part of personal learning objectives</p> <p>Evidence: Copies of teacher’s personal learning plan; logs of conversation with peers and mentors; reading logs; journal of personal reflection on learning and learning goals</p>	Provide professional development and individual mentoring to support the teacher’s personal implementation of the metacognitive process and specific learning strategies and techniques	<p><i>Resources:</i> Protocol for personal learning expectations, the aid of self-checks, peer checks, and documentation of learning strategies</p> <p><i>Technology-Aided Resources:</i> “Recommended” lists of vetted software and apps designed to enhance teacher use of self-checks, peer checks, and documentation of learning strategies</p>
	Provide incentives for teachers to build and demonstrate metacognitive competency through self-checks, peer checks, and documentation of learning strategies	

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Appendix D. Theory of Action: Teacher Metacognitive Competency (cont.)

<p>Indicator/Objective: All teachers will use methods of logic, synthesis, evaluation, and divergent thinking in personal learning in book club or interest group activities</p> <p>Evidence: Copies of teachers' personal learning plan; logs of conversation with peers and mentors; reading logs; journal of personal reflection on learning and learning goals</p>	<p>Set personal learning expectations for all teachers relating to the use of logic, synthesis, evaluation, and divergent thinking; provide professional development and mentoring for the same</p>	<p><i>Resources:</i> Protocol for personal learning expectations, highlighting the use of logic, synthesis, evaluation and divergent thinking.</p> <p><i>Technology-Aided Resources:</i> "Recommended" lists of vetted software designed to enhance teachers' use of logic, synthesis, evaluation, and divergent thinking in personal learning</p>
<p>Specific Evidence of Teacher Metacognitive Competency in Literacy Instruction in the Classroom</p> <ul style="list-style-type: none"> • Demonstrates the use of "think-alouds" when modeling new literacy activities or routines • Demonstrates the use of gradual release while students are learning new literacy activities and routines • Distributes practice of new concepts, skills, and routines over time • Assesses student learning and periodically checks for understanding while teaching • Prompts peer checks such as "think-pair-share" or "turn to your neighbor" • Uses student self-check tools such as "Wh- question cards" or a "card pyramid" during and after reading • Asks a variety of questions that require application, evaluation, and synthesis of text information • Encourages students to write a précis of what has been read • Uses mnemonics; for example, "'Silly Cats Are OK' represents the elements of narrative text (Setting, Characters, Action, Outcome)" • Uses pictorial representation of steps in a procedure (e.g., the steps in dividing a multisyllabic word) • Prompts students to sort spelling words according to the reliability of patterns within the words (i.e., regular, rule, irregular) • Puzzles over words that do not follow the expected or reliable patterns with students or on one's own • Acknowledges students' notice of words that do not follow expected or reliable patterns • Adjusts instruction while teaching based on monitoring and checks for understanding • Encourages students to ask questions and provides time for discussion <p>Specific Evidence with Colleagues and Mentors</p> <ul style="list-style-type: none"> • Identifies personal learning needs • Explains goals and anticipated outcomes for self and students • Reflects on and assesses quality of own instruction • Adjusts whole and small group literacy instruction based on formal and informal data • Determines if goals and anticipated outcomes are in line with ongoing progress monitoring 		

Appendix E. Theory of Action: Teacher Motivational Competency

Premise	If teachers develop a growth mindset, stretch their own interests, and connect their personal learning to their aspirations, then they more readily engage and persist in personal learning and grow in motivational competency and the ability to enhance it in students.	
Goal	The motivational competency of all teachers, including a growth mindset, value of mastery, and connecting learning tasks with personal aspirations, will be enhanced through a school culture that fosters it in the school community.	
Logic Model		
Indicator/Objective/Evidence	Strategy	Resources/Technology
<p>Indicator/Objective: All teachers demonstrate a growth mindset by attributing personal learning success to effort and self-regulation and hold themselves to the standard of persistence to mastery in activities related to book clubs or interest groups</p> <p>Evidence: Teachers share new learning from book clubs or interest groups at professional learning communities or faculty meetings, in the school newsletter, or on the school website to illustrate that teachers are lifelong learners</p>	Provide mentoring for teachers on the growth mindset and how it applies to their personal learning	<p><i>Resources:</i> Protocol for personal development on a topic of interest</p> <p><i>Technology-Aided Resources:</i> Face-to-face and online delivery of mentoring, synchronous and asynchronous; interactive learning modules</p>
	Provide incentives (e.g., book coupons) for teachers to demonstrate a growth mindset in their own personal learning plans, their interactions with the school's community, and students	
	Provide resources and tools that support and encourage adoption of growth mindset within a school community	<p><i>Resources:</i> Library of supplemental materials</p> <p><i>Technology-Aided Resources:</i> Digital catalogue of materials, agendas, programs to enhance growth mindset</p>
<p>Indicator/Objective: All teachers will stretch their own interests to find value in new topics and connect their personal learning to their personal aspirations</p> <p>Evidence: Copies of teacher's personal learning plan; logs of conversation with peers and mentors; reading logs; journal of personal reflection on learning and learning goals</p>	Provide mentoring for teachers to stimulate interest in new learning topics and connect personal learning tasks with personal aspirations; allow for personalization of development according to teacher goals	<p><i>Resources:</i> Protocol for personal development on topic of interest</p> <p><i>Technology-Aided Resources:</i> Mentoring, synchronous and asynchronous; interactive learning modules that differentiate personal development based on interest and need</p>
	Provide incentives for teachers to demonstrate their interest in new topics and connection to their personal aspirations	
	Provide resources and tools that support and encourage teacher identification and enhancement of personal aspirations	<p><i>Resources:</i> Library of supplemental materials</p> <p><i>Technology-Aided Resources:</i> Use of online learning communities</p>

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Appendix E. Theory of Action: Teacher Motivational Competency (cont.)

<p>Indicator/Objective: All professional development for teachers will be differentiated to provide the right balance of challenge and attainability for each adult learner to increase personal learning of topics of interest to them</p> <p>Evidence: Copies of each teacher's personal learning plan and record of ongoing and completed lessons; documentation of professional development offerings indicating opportunities for differentiation</p>	<p>Use professional development strategies that allow for differentiation of content according to teachers' personal learning goals or differentiation of delivery according to teacher preference and choice of topic</p>	<p><i>Resources:</i> Library of learning resources for teachers that allows teacher choice</p> <p><i>Technology-Aided Resources:</i> Subscriptions to online workshops and content that allows differentiation according to teacher interest and need</p>
<p>Specific Evidence of Teacher Motivational Competency Related to Literacy Instruction in the Classroom</p> <ul style="list-style-type: none"> • Organizes the classroom and instruction materials and equipment for optimal learning • Uses data to identify student profiles and plan literacy instruction • Groups students according to strengths and instructional needs • Identifies at least one area of interest for each student to incorporate in instruction or to choose reading materials • Expands interests of each student • Shares new learning from professional development and readings with students • Uses technology to assist student learning <p>Specific Evidence with Colleagues and Mentors</p> <ul style="list-style-type: none"> • Demonstrates a commitment to the profession of teaching • Demonstrates desire to deepen knowledge of reading development • Designs an individualized, sustained plan of professional development that includes best practices to meet the literacy needs of students • Observes other teachers' literacy instruction through schoolwide or grade-level walk-throughs • Shares new learning about literacy instruction with colleagues 		

Appendix F. Theory of Action: Teacher Social/Emotional Competency

Premise	If a teacher helps to build a school culture that embraces quality, job embedded professional development, clear and high norms for personal conduct and caring attention, then the teacher will grow in social competency and in the ability to enhance it in students.	
Goal	The social/emotional competency of a teacher will be enhanced through the full participation in quality job-embedded personal development, high personal expectations, and a caring attention that build the teacher’s self-respect and responsibility as well of that of colleagues and students.	
Logic Model		
Indicator/Objective/Evidence	Strategy	Resources/Technology
<p>Indicator/Objective: All teachers maintain high personal expectations, including positive social skills, self-respect, relationships, and responsibility for the consequences of decisions and actions; teachers express themselves authentically, and they feel they belong to a group</p> <p>Evidence: Copies of teacher personal learning plan; agendas and minutes for book clubs or special interest groups</p>	Provide professional development, including mentoring, for teachers on maintaining and modeling high personal expectations, including positive social skills, self-respect, relationships, and responsibility for the consequences of decisions and actions in personal learning	<p><i>Resources:</i> Protocol for teacher personal development</p> <p><i>Technology-Aided Resources:</i> Face-to-face and online delivery of professional development and mentoring, synchronous and asynchronous; interactive learning modules</p>
	Provide incentives for teachers to maintain and model high personal learning expectations	
	Provide resources and tools that encourage and enhance teachers’ social skills, self-respect, and responsibility for the consequences of decisions	<p><i>Resources:</i> Curriculum library of supplemental materials</p> <p><i>Technology-Aided Resources:</i> “Recommended” lists of vetted software and apps designed to enhance teacher social skills, self-respect, and self-responsibility, including positive online social networking for educators</p>

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Appendix F. Theory of Action: Teacher Social/Emotional Competency (cont.)

<p>Indicator/Objective: All teachers will model school norms for responsibility, cooperation, and concern for others</p> <p>Evidence: Copies of school norms for responsibility, agendas and minutes from leadership team and professional learning community /instructional team meetings, documentation of teacher observations and evaluations</p>	Provide professional development, including mentoring, for teachers to maintain and model norms of responsibility, cooperation, and concern for others	<p><i>Resources:</i> Protocol for personal development</p> <p><i>Technology-Aided Resources:</i> Face-to-face and online delivery of professional development and mentoring, synchronous and asynchronous; interactive learning modules</p>
	Provide incentives for teachers to maintain and model personal responsibility, cooperation, and concern for others	
	Provide resources and tools that support and encourage personal responsibility, cooperation, and concern for others	<p><i>Resources:</i> Curriculum library of supplemental materials</p> <p><i>Technology-Aided Resources:</i> Digital catalogue of teacher responsibility, cooperation, and concern for others</p>
<p>Indicator/Objective: All teachers participate in shared leadership and collaborative teaming to learn together with colleagues, seeking help from colleagues, and offering help to colleagues</p> <p>Evidence: Teacher personal learning logs</p>	Provide mentoring for teachers to participate in shared learning, seeking help from colleagues and offering help to colleagues	<p><i>Resources:</i> Protocol for personal development</p> <p><i>Technology-Aided Resources:</i> Mentoring, synchronous and asynchronous; interactive learning modules</p>
	Provide incentives for both teachers who seek help and for those who offer to help through participation in shared and collaborative learning	
	Provide resources and tools that support and encourage shared and mutual support	<p><i>Resources:</i> Curriculum library of supplemental materials</p> <p><i>Technology-Aided Resources:</i> Digital catalogue of supports for shared leadership</p>

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Appendix F. Theory of Action: Teacher Social/Emotional Competency (cont.)

Specific Evidence of Teacher Social/Emotional Competency Related to Literacy Instruction in the Classroom

- Provides a safe learning environment
- Exhibits established group norms
- Interacts, verbally and nonverbally, with students
- Fosters collaboration that engages students with similar and different backgrounds and experiences
- Allows discussion to be student focused and not teacher focused
- Demonstrates seeking help from others; for example, “I don’t know the answer to your question, but I know someone I can ask.”
- Demonstrates self-learning; for example, “When I want to know more about something, I go to the library or do an Internet search.”

Specific Evidence with Colleagues and Mentors

- Sets realistic goals and time frames for reaching goals
- Demonstrates tenacity in making sure all students learn to read well
- Focuses on solving problems that are within one’s control
- Does not rely on self for entire outcome
- Communicates with mentor and colleagues about student growth and challenges
- Seeks and offers advice and suggestions to colleagues
- Participates in peer critiques of literacy instruction and shares critiques
- Evaluates the value of professional development on performance

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