

## Artifact Q

Analysis of Teaching: How Belief, Teacher Knowledge, and Identity Interact with  
Each Other

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“It’s an important job. It’s difficult”, said Mrs. Asbell when she spoke of her profession. It was not my first time to talk to this 3<sup>rd</sup> grade teacher in Eakin Elementary School. Last year, I was assigned to her classroom to observe how an English language learner learned (ELL) English. My focus was primarily on my learner then, and my overall impression of her is that she’s good. She is kind and her students love her. This time, however, the shift of focus paints a totally different picture before me. Through observing her classes and conducting personal interviews, I see a complex but richer teacher image different from my old impression. In this article, I will use coded data collected from observation and personal interviews to describe her teaching and analyze her practice through three lenses – belief, teaching knowledge and identity. Then, in light of her inspiration, I will give my understanding of how these lenses interact with each other.

***Belief of Teaching***

According to the interview, the ultimate goal, for Mrs. Asbell, of being a teacher is to teach students how to think and to be discerning and critical. In her view,

*“ Teaching is guiding students to discover and inquire about the world that they live in so that they will better understand the world and their role in the world.” (Mrs. Asbell, Personal communication, March 6, 2014)*

From her description, students are the center of her teaching. A teacher’s role in the classroom is

more a facilitator than a manager. Students are not led to achieve academic heights, but to explore and inquire the world they live in. She stressed the importance of being an explorer and inquirer, which points back her idea of developing students into critical thinkers in her philosophy. In terms of making students better understand their role, she indicated it's her responsibility to tap students' full potential and know themselves better.

In general, Mrs. Asbell is practicing her belief in teaching students. In Rokeach's (1968) research, it is argued that all beliefs have a cognitive component that represents knowledge (Pajares, 1992). Her teaching belief underlies and guides her teacher knowledge on one hand, and is influential in her professional identity on the other.

### ***Teacher Knowledge***

#### **Subject matter knowledge**

Subject matter knowledge includes knowledge of the major facts, concepts and the relationships among them within a field, in addition to the various paradigms that affect how the field is organized and the evaluation of knowledge claims by members of the discipline (Grossman, 1990). Third graders are expected to learn literacy with social studies and science integration, math and English language arts. Unlike middle or high school studies that require specific reading routines or language uses, elementary study is more constrained on generalized knowledge. However, this means teachers had better know something of everything. As for Mrs. Asbell, she shows a good mastery of content knowledge. When she taught students meta-awareness of reading, she listed multiple reading strategies, from prediction to clarifying, from making connections to asking questions. And she modeled how to use all of them. Besides, she is also able to use extracurricular knowledge to enrich her class content. One time the topic was how technology helps the disabled in sports. She mentioned something she heard from news that athletes wearing specially designed swimming suites did not win a medal in the Paralympics.

This fact provides another picture for students to critically think about the issue.

However, the biggest problem for elementary school teachers to deal with is you never know when and what students will jump out and question. As she said, students often think of questions that she never thought of. But she believes it's appropriate and important for teachers to say "I don't know." So students would not worry about asking questions as their teacher may not know the answer either.

### **General pedagogical knowledge**

Her belief in teaching expresses itself even louder in class. When students initiate questions relevant to the topic, she often says, "I like you are asking questions". Even though sometimes the students' questions are off the topic, she still gives positive feedback by saying "I like you are thinking". Her affirmation shows her encouraging students to be inquirers, just as her belief goes. I noticed in her classroom, students are able to move around. They could read, sitting on the couch or lying on the carpet. This is how she described her ideal classroom as an open environment "where students can move around and still do their work". Regarding class management, she has her own fixed languages in disciplining children and gaining back their attention and concentration. For example, she would say, "give me five" to ask children to stop talking and attention on her. Or she would say, "Let's be respectful" to require kids to listen to others' opinions. In literacy class, she grouped students based on their reading levels and gave different instructional time for each group. On the first advanced group, she only spent six minutes; while on ELL group, she spent almost half an hour.

More interestingly, she brought her own life into class as a way of transition. As we all know, it is not uncommon for teachers to lead students doing dancing or exercises before another class begins. Mrs. Asbell did the same thing to better transit students to another topic. Meanwhile, she showed something more exciting. When the class was learning measurement, she was trying

to explain a new word “capacity”. She took out her homemade cookies with a high sense of pride and used them as an example. She walked around the classroom and made students to smell it. The class immediately lit up. Personally, I could not think of any better idea to animate students in a last class of a tired morning. This might sacrifice some instructional time, but it is conducive to building meaningful relationships with kids and improving their concentration. Mrs. Asbell told me she calls her students my children. She regards students as her family and class as home where she could show off her personal success.

### **Pedagogical content knowledge**

Pedagogical content knowledge, to put it simply, is the knowledge of how to teach subject matter within a certain discipline. Mrs. Asbell believes herself as a teacher knowledgeable of using a lot of strategies. First and foremost, she asks questions. Combining my observation of both literacy and math class, I conclude three purposes of her asking questions: 1) to encourage students’ independent thinking and help them explore concepts. For example, when a student interrupted and asked her why people want to find gold. She did not answer immediately; instead, she asked the student “What do you think why they want to find gold?” Unlike teachers who ask questions in order to elicit items that will subsequently be used as part of the teaching plan (Gee, 2011), the way she responded avoids traditional question-asking mode and encourages more creativity. 2) to make sure students understand her instructions and expectation. Normally, after assignments, she typically says “Understand what you are gonna do?” to elicit doubts students might have. 3) to animate the learning climate. Due to the language barrier and lack of background knowledge, ELLs have difficulty in understanding teachers’ questions and class content. When she was modeling how to activate prior knowledge by using the book *Rushing for Gold*, she said, “Before reading, what do I know about the gold? What do I know about California? Have I ever heard of California?” Then she started to explain California

is a state of the States. With ELL groups, in particular, she asked a lot of rhetorical questions to propel her pace or make transitions.

As she said, she uses visual teaching often. When she talked about gold rush, she took out a globe to show ELLs where San Francisco is. In another case, she was mentioning a dramatic change of population. When she found students did not respond to the numbers, she immediately picked a whiteboard and wrote them down.

In her literacy class, I discovered her preference to model thinking process and to share her experiences with students. The group was talking about one of the reading strategies – responding emotionally. Mrs. Asbell told us her own story of reading a novel that made her cry. Her modeling of thinking process is instrumental for students to understand the concept and to be able to use it as a reading strategy.

In terms of knowledge of students' understanding, it largely depends on how teachers get access to students' prior knowledge (Grossman, 1990). She informed the role of morning meeting in her understanding of students. "It helps as during the meeting they share things they've done at home. So that gives me a little bit insight about what they are interested in and what they might already know", said Mrs. Asbell. During that period, her students would share their life with her. Besides, her consistent cooperation with students enables her to monitor students' progress and learn what students already know about a topic and what they may feel puzzled. In the book *Rushing for Gold*, there is a map that Mrs. Asbell made use of to recall students' prior knowledge of map skills that they studied last semester.

### **Knowledge of context**

Knowledge of context means teachers must adapt their classroom practice to specific students and the demands of districts (Grossman, 1990). Mrs. Asbell has five ELL students in her class. Her grouping methodology presents her good mastery of general pedagogical knowledge

as well as her knowledge of a particular group of students. She received training in ELL education and got her endorsement. In small group teaching, she talked at a much slower speed to ensure students' understanding. She used dramatized voice and exaggerated body languages more frequently. The effect was fruitful that all students focused their eyes on her, listening attentively. For another, she chose a different book for them based on their level. With the ELL group, she first read the pictures with students together. In the following instruction, she connected the content and students' responses to reading strategies they learned that day. Compared with other two groups, she modeled more examples and repeated the concepts often to better illustrate her point. Her instructions of teaching ELLs reminds me of a fundamental principle in ELL education, "same does not imply equal".

In addition to knowledge of a particular group, she knows students as an individual. Cindy was a Chinese girl new to Mrs. Asbell's class last semester. When I talked to her about Cindy's progress, she informed me that Cindy likes writing in spite of her errors and fears to talk in public. She even noticed if there are only Cindy and her, Cindy prefers to talk more. Based on this context, she told me she spent her lunchtime with Cindy individually for a while. Other than English language learners, she learns other students as well. She knows one is going to have a little brother or the other just got a new bicycle. As she said, "I'm trying really hard to know my students." Her relationship with parents builds on her knowledge of students and she received high praise from parents. She believes mutual respect is the key to build a meaningful relationship with parents.

### **Self-knowledge**

Mrs. Asbell is a good actor in her class. She is gifted in imitating sounds. She learned it in her high school theatre and her college major was music then. "I didn't expect it would help me teach", said Mrs. Asbell. While Grossman's model of teacher knowledge centers on the

teaching field, knowledge not relevant to teaching doesn't get covered in the model. Mrs. Asbell brings in personal special skills, unexpectedly to strengthen her pedagogy and hence enriches students' learning experience. Besides, her imitation often makes everyone laugh. It builds a good teacher-student relationship as well.

Other than knowledge about personal strength, likes or dislikes, Alsup (2006) maintains teacher knowledge must be expanded to include knowledge about how one processes, sees, or makes sense of the world, which can be traced to metaphorical understandings of experiences that underline beliefs or philosophies about teaching. In her belief, the world is waiting to be explored and everyone living in it has his or her own specific role to fulfill. Therefore, in her teaching she keeps encouraging students to ask questions and in our interview she continuously emphasizes her desire to develop students into inquirers. How she responds to the world is consequential in structuring the classroom.

### *Analysis of Teacher Identity*

Gee (2011) introduces four ways to view identity, they are, nature-identity, inquisition-Identity (I-identity), discourse-identity (D-Identity) and affinity-identity (A-identity). They are subjective to different sources of power (see Appendix 2, Table 1). In this session, I'm going to use I-Identity, D-Identity and A-identity as analytical tools for studying Mrs. Asbell's teaching philosophies. Meanwhile, I will compare Mrs. Asbell with an intern teacher in her classroom, Ms. Steele, to show tensions within their professional identity and how Mrs. Asbell moved from a novice to an expert.

#### **I-identity**

I-Identity is labeled from the perspective of institutions (Gee, 2011). Mrs. Asbell used to be a kindergarten teacher for ten years. Now she is a 3<sup>rd</sup> grade teacher in Eakin Elementary School. I asked her what inspired her to be a teacher. She couldn't figure out a reason, but she

said, “When I teach, I feel the Lord’s pleasure. I feel like this is what I was created to do.” Being a teacher sounds like a sacred profession to her. She enjoys teaching children and attempts to fulfill the duties of the position. Gee (2011) sees this I-Identity as a “calling” rather than an “imposition”.

However, this is not the whole picture. When she talked about school and district policies, she blurted out, “What they ask students to do is not developing appropriately. The testing is wrong.” Part of the reason she left kindergarten is she was unhappy with what she was asked to do with kindergarteners. Obviously, she does not like to see her I-Identity imposed by external forces that violate her teaching belief. If the *calling* and *imposition* exist in one’s I-Identity simultaneously, tensions or contradictions are created. They must be remedied, transcended, resolved or ignored (Gee, 2011). She resolved her tension by leaving her first position as a kindergarten teacher. Now she is not powerful enough to reform a national education policy, but she is trying to remedy it by practicing her belief, such as encouraging students to ask questions. Her success in addressing the tensions provides the impetus, as Gee suggests, for her identity development.

### **D-Identity and A-Identity**

D-Identity means traits that are recognized by individuals through discourse and dialogue with them (Gee, 2011). I asked Mrs. Asbell and Ms. Steele respectively about their intern teacher experiences. What Ms. Steele is going through is actually what happened to Mrs. Asbell then. Mrs. Asbell took over class from another teacher and children kept asking when would that teacher come back. She was really upset and said, “I never felt they were my class. It was hard.” Ms. Steele expressed the similar concern, “It’s really hard, me coming in the middle of the semester. And they’ve already known all their expectations. I’m just somebody completely new coming in, trying to teach them.” Both implied their lack of sense of belonging to the classroom.



Mrs. Asbell talked about her fear and nervous of managing the classroom at that time; while Ms. Steele's struggling in noise control and class management. It seems their failure in discourse and dialogue with students impeded their development of D-Identity. However, now Mrs. Asbell is already the expert in the teaching field. She is admired by her students and treats the class as her family. She is knowledgeable of teaching strategies and consistent in her expectations. She shares her teaching experience and insights with the intern teacher, trying to help her out. What makes the transformation in her D-Identity growth?

Based on my understanding, other than her cumulated teaching experience, her establishment of A-Identity was another contributor. A-Identity means identity shown in an affinity group, a group of people who share a set of common endeavors or practices (Gee, 2011). When she came to Eakin, Mrs. Asbell received assistance from experienced teachers, what she called "my mentors". They helped her go through the most difficult time and gave her advice on how to balance school and home life, how to play the role of a teacher as well as a mother. Now she is paying that forward. Therefore, it can be seen that A-Identity growth helps transit the tensions and shape a positive D-Identity.

### ***How Belief, Teacher Knowledge and Identity Interact with Each Other***

Regarding Mrs. Asbell, her belief of guiding students to discover and inquire about the world influences her development of teacher knowledge. For example, as mentioned above, she likes asking questions and affirms students' curiosity. Now this belief is not easy to alter. Unlike newly acquired belief that is most vulnerable, with time and use, it will become deeply held (Pajares, 1992). That's the case for Mrs. Asbell. Her philosophy of teaching is already internalized and makes the teacher who she is. She embraces practices that reinforce her teaching belief while dismisses those that don't. She figures out how to remedy those policies that violate

her belief to overcome the tensions. She received help from other veteran teachers, succeeding to balance her role as a teacher in class and a mother and wife in family.

Let me make a metaphor to illustrate the interaction between belief, teacher knowledge and identity. Teaching belief or philosophy is a root of a tree while teacher knowledge and identity are the trunk and leaves (see Figure 1). The root is responsible to provide nutrition and energy for a tree to grow up and it determines how a tree looks like eventually. A person's identity, like the tree leaves, is the fruit and outward manifestation of teaching belief; while teacher knowledge scaffolds the development of one's identity. Further explained, within each part, teacher self-knowledge is formed by one's past learning experiences and influenced by philosophy of teaching.

Considering education is political inherently (Alsurp, 2006), knowledge of the context requires teachers to teach under state, district and school policies. It also means teachers need to learn students' strengths and weaknesses. Self-knowledge and knowledge of context offer a context for the growth of I-Identity. Adequate or insufficient subject matter knowledge, general pedagogical knowledge and pedagogical content knowledge will either facilitate or disturb the discourse with students, thereby influences one's development of D-Identity. In addition, they are the common practices and values shared among teacher groups, the exchange of which between novice and expert teachers could help form one's A-Identity.

Belief, teacher knowledge and identity are not visible, but they can be inferred from teachers' practices and behavior in classroom and their metaphorical understanding of teaching. As time passes by, they become more and more internalized and rooted, but have more and more power and word to determine what makes one's good teaching.

**References**

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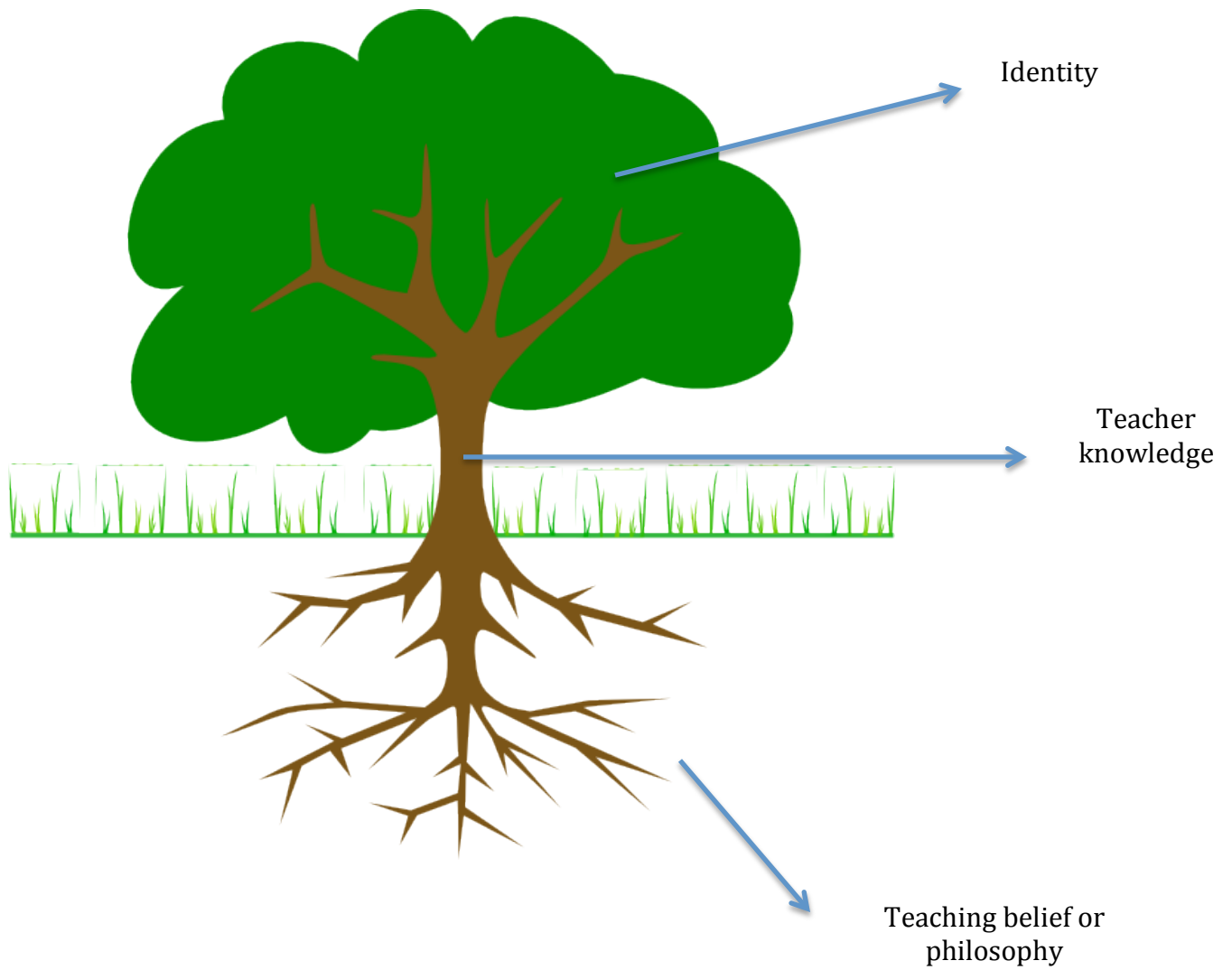
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messy construct. *Review of Educational Research*, 62(3), 307-332.

**Figure 1 “Tree”**



**Table 1 Performance Displayed by Mrs. Asbell's Professional Identity**

Identity*	Power	Performance	
I-Identity	Eakin Elementary School	<ul style="list-style-type: none"> <li>• A 3<sup>rd</sup> grade teacher</li> <li>• <i>Calling</i>  <i>"When I teach, I feel the Lord's pleasure. I feel like this is what I was created to do." (Mrs. Asbell, interview, 3/6)</i></li> </ul>	
		<ul style="list-style-type: none"> <li>• <i>Imposition:</i> Feel when personal teaching philosophy is violated by school/district policy  <i>"The testing we do with all the kids were nuts. It's wrong." (Mrs. Asbell, interview, 3/6)</i></li> </ul>	
D-Identity	Discourse/dialogue with students	Past <ul style="list-style-type: none"> <li>• Nerve-wrecking</li> <li>• Felt alone in the classroom</li> <li>• Afraid of being in charge</li> <li>• Lack of sense of belonging</li> </ul>	Present <ul style="list-style-type: none"> <li>• Kind</li> <li>• Feel at home</li> <li>• Knowledgeable of teaching strategies</li> <li>• Consistent in expectations</li> <li>• Dramatic</li> </ul>
	Discourse / dialogue with parents	<ul style="list-style-type: none"> <li>• Respectful to each other</li> <li>• Know children  <i>"I have parents coming, and...You really know my child, and that makes them feel comfortable." (Mrs. Asbell, interview, 2/4)</i></li> </ul>	
A-Identity	Teacher groups	Past  Used to have experienced teachers help her	Present  Go to new teachers; Talk to them and help them

Note: \* Gee, J. P. (2000). Identity as an analytic lens for research in education. *Review of research in education*, 99-125.

**Table 2 Performance Displayed by Mrs. Asbell's Teacher Knowledge**

Type of Knowledge*	Performance
Subject matter knowledge	General knowledge content : <ul style="list-style-type: none"> <li>• Literacy</li> <li>• Writing and reading;</li> <li>• Math;</li> <li>• Science/social studies content</li> </ul>
General pedagogical knowledge	<ul style="list-style-type: none"> <li>• Belief concerning learners- to be inquirers</li> <li>• Aim of education-"<i>teach individuals how to think</i>" (Mrs. Asbell, interview, 2/4) <i>and</i> to be discerning to understand the credibility of learning source</li> <li>• Classroom management - a very open environment</li> <li>• Equitable academic learning time</li> <li>• Small-group instruction</li> <li>• Interesting transition</li> </ul>
Pedagogical content knowledge	<ul style="list-style-type: none"> <li>• Knowledge of strategies               <ol style="list-style-type: none"> <li>a) Ask questions</li> <li>b) Visualize</li> <li>c) Model thinking</li> </ol> </li> <li>• Knowledge of what students already know</li> <li>• Knowledge of curricular material</li> </ul>
Knowledge of Context	<ul style="list-style-type: none"> <li>• Respond to the needs of ELLs</li> <li>• Knowledge of specific students and their strengths and weaknesses</li> <li>• Meaningful relationship with parents</li> </ul>
Self-knowledge (not included in Grossman's model)	<ul style="list-style-type: none"> <li>• Personal likes and dislikes</li> <li>• Strengths: Drama play</li> <li>• How one processes, sees, makes sense of the world</li> </ul>

Note: \* Grossman, P. L. (1990). A tale of two Hamlets. *The making of a teacher: Teacher knowledge and teacher education*, 1-18.