New Science Teacher Identity Development in a Texas Disciplinary Alternative Disciplinary Education Program

by

John R. Middleton M.S., M.Ed.

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Approved

Dr. Patricia Patrick
Chair of Committee

Dr. Mary Frances Agnello

Dr. Clint Carpenter

Dr. Joseph Claudet

Mark Sheridan
Dean of the Graduate School

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DEDICATION

The work presented herein is dedicated to my father, Dr. Robert Aaron Middleton, M.D., who although lived a long and fruitful life, passed too early upon this Earth. A cowboy, sailor, a true scholar, poet, physician, an officer and a gentleman, my father blessed all he knew with his presence and his philosophical mannerisms which few understood, but all appreciated.

Perhaps the hardest thing I ever had to do was to write my father's obituary. It was a physically and emotionally draining experience that I do not wish on any one. But, it was probably the most significant event that led to my accepting the role of a man, and assuming the role that my father had possessed for so long. There were people who did not like my father, and I am sure he probably could have cared less. He always believed that we must assume the life we are given, and assume its hardships with total disregard of how we are judged. Judgment is reserved for the Almighty; another man's judgment shall not dictate the purpose of our existence.

I cannot write adequate words to describe my father. If I tried I would easily surpass the length of this entire dissertation. He always told me that we cannot live for the now, we have to live for tomorrow because the now is already in the past. To his honor, I recall the words he recited to me so many times to which I never listened until he was gone, articulated through his favorite poem; the prose of which he lived his life by and by which I shall now live mine. I dispense those words in hopes that my father's legacy shall forever be immortalized in these few verses, and in hopes that I may one day become the man he wanted me to be:

If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or being lied about, don't deal in lies,
Or being hated, don't give way to hating,
And yet don't look too good, nor talk too wise:

If you can dream—and not make dreams your master;
If you can think—and not make thoughts your aim;
If you can meet with Triumph and Disaster
And treat those two impostors just the same;
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build 'em up with worn-out tools:

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: 'Hold on!'

If you can talk with crowds and keep your virtue,
Or walk with Kings—nor lose the common touch,
If neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run,
Yours is the Earth and everything that's in it,
And—which is more—you'll be a Man, my son!

- *Rudyard Kipling* (1910)

In Loving Memory
Dr. Robert A. Middleton M.D.
1922-2013

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ABSTRACT

Professional identity development in teachers has emerged as a subfield of identity theory research (Luehmann, 2007; Beijaard, Meijer, & Verloop, 2004). Using professional identity theory as a research lens allows personal experiences to be analyzed through the professional practices, values, beliefs and commitments of teachers (Luehmann, 2007). No teacher identity research has been completed in Texas Disciplinary Alternative Program (DAEP) setting; therefore, a gap within the literature pertaining to DAEP science teacher identity development is apparent. The purpose of this study was to investigate the professional identity development of a first-year science teacher by focusing on the central research question: What factors in a Texas DAEP affect the development of a first-year science teacher's identity? Using a qualitative case study methodology that adopts identity theory as an interpretive lens, the current study follows a first-year science teacher as she develops her science teacher identity while working in an alternative setting. This study incorporates the use of teacher interviews, written and visual narratives, and classroom observations to explore how student demographics and the institutional characteristics of a DAEP influence the development of professional identity in a first-year science teacher. The findings indicate the case under study experienced the same challenges and hardships as teachers in mainstream public schools; only in a DAEP she experienced them more frequently and at a higher intensity. The implications of this study suggests teacher education programs should include training in DAEP and other alternative settings, as well as further research into DAEP administration and leadership.

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CHAPTER I

INTRODUCTION

In recent decades, teacher identity has become recognized as a distinct area of educational research. In particular, new science teacher identity has become increasingly popular as teacher education programs move to train reform-minded teachers (Davis, Petish, & Smithey, 2006). Concurrently, education reform and research into special populations have revealed the unique classroom dynamics and demands of teachers in alternative settings. In Texas, public school districts are required to provide alternative settings for the most behaviorally disruptive students who violate state or local statutes. In order to address this need, Disciplinary Alternative Education Programs (DAEP) were developed and designed to modify negative behaviors of students. Some programs have proven themselves successful and gained support, while others have been scrutinized for lack of consistency and accountability (Metze, 2012). These educational settings have historically been identified as diffucult and challenging for teachers (Booker & Mitchell, 2011; Dempsey, Toohey, & Martinez, 2007; Coleman, 2002); however, the effects of these settings on the development of teacher identity has yet to be investigated.

The concept of science teacher identity development in any environment is not a fixed attribute, but a relational phenomenon that answers the question of "Who am I at this moment?" Situating student learning within the broader context of the school and community during the initial phases of teacher identity development is particulary challenging as attitudes towards educational reform and personal, and professional

experiences contribute to teacher identity development (Beijaard, Meijer, & Verloop, 2004). During these critical stages of identity development, the vulnerability of new teachers combined with their inability to overcome obstacles has been linked to high rates of attrition (Davis et al., 2006; Enyedy, Goldberg, & Welsh, 2006; Ingersoll & Smith, 2003). Taking into consideration that common classroom dillemas are magnified within DAEPs (Dempsey et al., 2007), the task of forming a new science teacher identity appears to be a daunting one. Therefore, the purpose of this study is to evaluate how a DAEP environment affects a new science teachers' identity development.

Background of the Study

Reading the literature on teacher identity has opened a theoretical construct within my personal teacher identity and given me a lens through which to analyze my own identity development. As I reflected on my teaching, I realized I have been described by other teachers as "a great teacher" and a "teacher of social justice". In reality, these descriptions are of no matter, as it is how we view ourselves that is most important. How I visualize my own competency in the classroom and my ideas of self-efficacy have played a major role in my ability to provide students with the education they deserve and a fighting chance to make it in a 21st century global society (Bolshakova, Johnson, & Czerniak, 2011).

The most challenging assignment I faced as a science teacher was at a Juvenile Detention Center in West Texas. Even though there were severe limitations on the curriculum and resources I was allowed to use, I overcame those challenges to provide my students with a quality education in science. The ability to resolve these

dilemmas allowed me to create and define my science teacher identity in that environment, and gave me a stepping stone to modify my science teacher identity in my current classroom (Enyedy et al., 2006).

Shortly, thereafter, I took a position as a principal intern in a secondary DAEP in West Texas (The Parson School of the Parson School District, both psuedonyms). My main focus was to improve classroom instructional practices so the practices would better serve the students while meeting the needs of the teachers. Even though my initial intent was to devise a model of Best Practices for Texas DAEPs, I quickly realized the instructional practices I implemented were unsuccessful. I began to look for ways to modify the practices to best suit the needs of the students. During this work, I became aware that the instructional method was not flawed. Instead, the teachers were unsuccessful because they believed they could not succeed with the students no matter what methods were implemented. I watched as both young and old teachers fought daily with students and became frustrated to the point of exhaustion. The science teachers, who had 20+ years of teaching experience, had lost all interest in teaching and resorted to showing videos to the students three to four times a week. Both science teachers were veterans of the field, with multiple years experience in public schools, however, they were relatively new to the DAEP with less than five years teaching in this setting. When the science teachers attempted to carry out a formal lesson, the students would revolt and derail instruction. When I asked the science teachers why they showed movies, they would say “it is the only way to keep the students quiet and in their seats”. The DAEP science teachers became frustrated because they believed that their prior experiences in public schools were in opposition

to the DAEP environment. The science teacher identities that they had relied on in prior teaching settings were failing them and they made no effort to modify their identities. After observing these veteran teachers and their inability to adapt to the new DAEP environment, I became interested in defining how a new DAEP science teacher, with no previous teaching experience, would build an identity. How would a first year teacher shape or be shaped by this type of classroom? If this type of classroom was the only classroom a science teacher ever knew,would they take ownership and mold this classroom so that it could be effective, or would they lose hope just as the veteran teachers did? Would this environment prove too difficult for a new teacher or would the difficulty present the new teacher with experiences to shape his/her teaching identity?

Statement of the problem

Although the literature in traditional classroom settings is robust, little to no research addresses science teacher identity development in alternative settings, especially in a Texas DAEP. The current atmosphere of Texas education considers DAEPs simply as an institution in which to place the most problematic students so that instruction in the mainstream classroom is not interrupted (Cortez & Cortez, 2009). Educational researchers have yet to explore the intricacies of science teacher identity development in a DAEP where the constantly changing institutional demographics can present teachers with daily challenges. As a result, this research study is designed to contribute to the literature of science teacher identity development by analyzing the experiences and daily challenges of Sarah (pseudonym), a first year Texas DAEP science teacher.

Purpose of the Study

Professional identity development in science teachers has emerged as a subfield of identity theory research (Luehmann, 2007; Beijaard et al., 2004). Using professional identity theory as a research lens allows the experiences of a person to be considered through analyses of their professional practice, values, beliefs and commitments (Luehmann, 2007). Teacher identity research in DAEP settings is non-existent; therefore, a gap within the literature pertaining to science teacher identity development is apparent. The purpose of this study was to investigate the development of a first-year science teachers' professional identity focusing on the central research question; What is the science teacher identity of a first year teacher in a Texas DAEP? Specifically, this study seeks to understand how a beginning science teacher negotiates entry into teaching at a Texas DAEP.

Using qualitative intrinsic case study methods that adopt identity theory as an interpretive lens, this study followed a first-year science teacher as she developed her professional teacher identity working in an alternative setting. This study incorporates the use of teacher interviews supplemented by written and visual narratives to explore how the context of a DAEP influences the development of teacher identity in a first-year science teacher.

Research Questions

Understanding how science teacher identity is formed within alternative/specialized settings has the potential to influence teacher education programs to better prepare teachers to work with special populations. A well prepared teacher workforce has the potential to reduce recidivism in DAEPs or promotion into

the Juvenile Justice System. Unfortunately, first year DAEP teachers are left to fend for themselves as few teacher education programs address alternative classrooms (Ashcroft, 1999). Based on the potential for identifying science teacher identities in DAEPs, the following questions guided this inquiry:

1. How does the literature define science teacher identity in reference to teachers in mainstream public schools?
2. What is the science teacher identity of a first year teacher in a Texas DAEP?
    a) What factors or experiences in a Texas DAEP influence the development of a first-year science teacher's identity?
    b) What factors or experiences are unique to DAEPs?
3. How does a Texas DAEP science teachers' identity development in a DAEP setting compare to that of science teacher identity found in the literature?

Significance of Study

Science teacher identity literature is devoid of studies in alternative settings. As a result, a gap exists within teacher identity literature as well as in teacher identity theory. Additionally, given the lack of literature on teacher identity in alternative settings, first-year science teachers entering this area of education have no blueprint for what to expect and the unique hardships they will face. Teacher education programs do not adequately address the unique challenges of alternative schools, therefore, new teachers are entering alternative schools unprepared (Houchins et al., 2010).

DAEPs are seldom studied in scholarly research; therefore, little is known about their internal practices, and unique policies. The results of the study reported herein and resulting recommendations will provide first year science teachers in alternative settings with a blueprint of common hardships as well as guide teacher educators to reform certification programs to be more cognizant of the possibility of teacher candidates to enter the profession in a DAEP.

Organization of the Dissertation

Chapter I provides the purpose and rationale for studying science teacher identity development in a Texas DAEP as well as the theoretical framework guiding this inquiry.

Chapter II presents a review of relevant literature concerning identity development in science teachers. Split into two sections, the first section aims to answer the primary research question concerning the main tenants of science teacher identity development in the literature. The second section provides a brief history of the DAEP system in Texas and the policies that gave rise to their existence and govern their existence.

Chapter III outlines the methods for conducting this study.

Chapter IV introduces the case study, the case site, and presents the findings through the analysis of the narrative data collected.

Chapter V provides a discussion of the research findings, implications of the research, and areas of future research.

Additionally, terms used in this study are defined herein.

Disciplinary Alternative Education Program (DAEP) – An alternative education program for students with discipline problems that require the student's removal from the home campus; required of all public school districts in Texas by Texas Education Code Chapter 37.

Discretionary Removals to DAEP – Those reasons for which students are removed, when removal is not required by state law because of violations of discipline management policies that the district has chosen to enforce by DAEP placement (Coleman, 2002).

Environmental Characteristics – The types of special services available at DAEP schools – such as tutoring, training in life skills, social counseling, and emotional counseling – as well as the discipline policies, and specific instructional strategies and techniques (Coleman, 2002).

Identity development- A fluid, dynamic, recursive and discursive process in which an individual within a community of practice creates a set of endorsable stories as a means of recognition of self or others as a particular kind of person at a particular point in time in a particular environment.

Juvenile Justice Alternative Education Programs (JJAEP) – Facilities that are required to be operated by the juvenile boards of counties with populations greater than 125,000, for the placement of students who have been expelled from school, placed on probation, placed on deferred prosecution, or who have been ordered to attend by a court with jurisdiction (Coleman, 2002)

Mandatory Removals – Those reasons for which students are removed because state law requires DAEP placement (Cortez & Cortez, 2009).

New Science Teacher- A person who is a professional educator and is currently employed by a school district, but has no previous classroom experience other than teacher candidates field experiences.

Personal identity- An ongoing process of viewing oneself as a certain kind of person in a given context (Beauchamp & Thomas, 2009; Gee, 2001).

Public Educational Information Management System (PEIMS) – The electronic data collection system operated by the Texas Education Agency for collecting information from districts throughout the state.

Science Teacher Identity- The ways in which a teacher represents herself through her views, orientations, attitudes, content knowledge, knowledge, and beliefs about science teaching, and the ways in which she acts within specific contexts (Avraamidou, 2014).

Self- An organization of theories, attitudes and beliefs about ourselves (Beauchamp & Thomas, 2009).

CHAPTER II
THEORETICAL FRAMEWORK AND LITERATURE REVIEW

In order to answer the research questions, this chapter provides theoretical framework guided by the research question: how does the literature define science teacher identity in reference to teachers in non-disciplinary, mainstream public schools? This chapter then evaluates the research literature in science teacher identity development and concludes with a section on the background of Texas DAEPs.

Theoretical Framework

This study was driven by the theory of identity and how identity relates to the development of teachers' science teacher identity. Authors of teacher identity studies commonly avoid providing a solid definition of teacher identity (Beauchamp & Thomas, 2009; Beijaard et al., 2004). The lack of a solid definition and describing identity development as an evolving process allows the researcher to position the teacher as an active agent in the dynamic construction of their professional identity (Davies & Harré 2001; Søreide, 2006). However, this reluctance to define teacher identity has complicates investigation because the researcher becomes trapped in a labyrinth of theoretical constructs and interpretations that range from a set of stories told in the first person (Sfard & Prusak, 2005); "a fluid dynamic, recursive, discursive process" (Enyedy, Goldberg, & Welsh, 2006, p. 71), to; long-lived relations within a community of practice (Lave & Wenger, 1991; Lemke, 2000); and "recognition by self or others as a certain kind of person" (Gee, 2005; Luehmann, 2007, p. 826-827).

Early scholars of psychology, philosophy and sociology viewed personal identity as a stable and singular entity that is little affected by context or personal

biographies (Day, Kington, Stobart, & Sammons, 2006). Cooley (1902) focused the construction of self on the ability of the individual to arrive at a defined collection of concepts within the personal context. Remaining constant through the lifetime of the individual, these concepts were constructed through interpreted feedback from peers and were unique to the individual. The progressive construction of self then would be dependent on the opinions of others in a phenomenon referred to by Cooley (1902) as the "looking glass self" which indicated that one's identity was developed through a reflexive process over long periods of time (Day et al., 2006)

Narrative psychologists have argued that our identities only begin to take shape as our life stories evolve. Through narrative analyses identities are conceptualized as teachers live the stories they write and researchers work to understand them by investigating the relationships between various elements of identity (Kroger, 2007). Consistent with this idea, Meade (1934) postulated that self can arise only in a social setting where the exchange of discourse is present. Through these discourses we learn and analyze the actions of others so that we may assume them as our own (Beijaard et al., 2004; O'Connor, 2008). Utilizing the social concept of self, then self may be defined as a structured illustration of our philosophies, attitudes, and opinions about ourselves (Beijaard et al., 2004; McCormick & Pressley, 1997). Furthermore, the self is an ongoing reflective process to be recognized as "a certain kind of person" (Gee, 2001, p. 100).

The goal of this study was not to discredit one definition of identity development upon the adoption of another. The adoption of a narrow definition based upon one or a few authors risks limiting the interpretive and theoretical lens of this

study to the point of inadequately investigating and analyzing the case under study. However, the adoption of a holistic definition affords the researcher a foundation of interpretation to conduct a holistic study. As a result, I adopt a definition which encompasses numerous ideas and theories, while at the same time allowing me to focus on the singular case under study. For the purpose of this study, *science teacher identity* is defined by Avraamidou (2014) as: "the ways in which a teacher represents herself through her views, orientations, attitudes, content knowledge, knowledge, and beliefs about science teaching, and the ways in which she acts within specific contexts" (p. 224).

To examine science teacher identity development, I follow Avraamidou (2014) and Saka, Southerland, Kittleson, and Hutner (2013) by utilizing Gee's (2001) framework which acknowledges the socio-cultural and environmental influences on identity development. Gee (2001) indicates four types of identity: nature, institutional, discourse and affinity. "Nature-identity" (or N-identity) forms when a person assumes an identity as a result of a genetic or naturalistic predisposition. This is a way of looking at "who I am" in terms of a "state that I am in, not anything I have done or accomplished" (p. 101). Examples of N-identities include a person being identified as belonging to a certain cultural group or being identified as an identical twin (Gee, 2001). N-identities are influenced by other types of identities and must therefore be meaningful to the institutional, discursive context, or affinity group affiliation for that person to be recognized as such (Luehmann, 2007). This study used the *nature* viewpoint to investigate how Sarah's identity was influenced by her gender (Avraamidou, 2014; Saka et al., 2013).

Gee's (2001) "institutional identity" (I-identity) is directly correlated with the position a person holds within a particular institution. A teachers' I-identity is being a teacher but, as Gee states, this is also influenced by "how actively or passively the occupant of a position fills or fulfills his or her role or duties" (p. 103). Gee goes on to explain that the I-identity is also influenced by the type of institutional role of the occupant. For example, a teacher may assume the identity of a *teacher of special populations* if they work in an alternative setting, a case which Gee describes as either being a calling or an imposition based on reasons for the institutional affiliation (either by choice or forced). The institutional perspective is used to interpret Sarah's identity as seen through the eyes of her institutional superiors while taking into consideration the unique environment and classroom structure (Avraamidou, 2014; Saka et al., 2013).

The third theme, called discursive identity (D-identity), is a description of an individual trait that is determined by the "discourse or dialogue of other people" (Gee, 2001, p.103). A teacher may be identified as compassionate or charming based upon their actions within the institutional position they fill. The identity is then recognized by the institution through discursive dialogue of its members and the associated affinity groups of the teacher. Similar to I-identities, D-identities are influenced by the level of activity or passivity in the assumed role of the teacher. The level of activity must be recognized by peers for the identity to be sustained, and thus is described by Gee as an "ascription or achievement" (p. 104). The discourse perspective examined Sarah's identity development in terms how others viewed her as a teacher through her

discursive interactions with co-workers and students (Avraamidou, 2014; Saka et al., 2013).

The fourth and final of Gee's (2001) identity themes is the affinity identity (A-identity) which is a way of looking at who a person based upon a set of shared idiosyncratic practices. The source of the A-identity is therefore "not nature or an institution, or even other people's discourse and dialogue alone, but an affinity group" (p. 105). Gee states that there are two types of A-identities, those which are chosen by the individual those which are institutionally sanctioned. An institutionally sanctioned A-identity refers to those groups a teacher is required to be active in as a result of his/her institutional affiliation. For example, a school may require a teacher to be a member of a specific professional association, whereas a non-institutionally sanctioned affinity group may include a book club or the specific example given by Gee of being a "Trekkie" (Gee, 2001, p. 105). Affinity was used to examine Sarah's identity development through shared experiences and her relationships with others (Avraamidou, 2014; Saka et al., 2013).

Stages of identity development

The theory of identity provides a framework for this study, because identity theory allows the researcher to interpret teaching experiences as a process through which the teacher develops their teacher identity. By identifying and defining the origin of teachers' experiences and the meanings which are assigned to those experiences, I will be able to define the development of teacher identity of a first year DAEP teacher. Identity is a multi-dimensional unit influenced by numerous subcategories, but the individual also possesses multiple sub-identities for different

contexts (Lemke, 2003). In other words, a person has a personal identity which is active in personal or social contexts, and a professional identity which is active in an institutional context. The two identities may or may not be completely independent of each other. The difference between a professional and personal identity potentially could be clear as night and day, but the identity development would be affected by the same mechanisms. In this section, I explored the aspects of identity development research, which led to the theoretical framework I utilized for this dissertation.

Erikson devoted a considerable amount of time to investigating the concept of identity and identified three stages of identity development (see Erikson 1968, 1959), which are introjection, identification, and identity formation. Erikson postulated that the three stages aided in the growth of the ego as more mature interplay occurred within the available models (Erikson, 1968). Kroger (2007) elaborated on Erikson's three stages in terms of how an infant develops an identity. Initially, the infant begins to establish a sense of self through introjection—literally the incorporation of another's image based on the (hopefully satisfactory) experience of mutuality in early relationships. An ideal experience of early relationship thus gives the infant a haven of safety from which to begin exploring further relational potentials beyond that with the primary caregiver. Through later identifications, the child becomes like those significant others with characteristics or features that are admired. Kroger (2007) would conclude, however, that identity formation does not begin until a person stops looking to others to model their identity after. Applying this description to science teacher professional identity formation, we may define teacher introjection as the formal teacher education experiences where the pre-service teacher candidate is the

infant, and the teacher educator is the primary caregiver. The caregiver extends their image on to the candidate in hopes of adequate preparation for entry into the teaching profession. Each teacher educator has his or her own unique professional identity, thus giving the candidate multiple images to incorporate by the time the program is completed. Upon entry into the teaching profession, the student now turned teacher explores images beyond that of the caregiver, searching for admirable qualities in professional peers that may be adopted as their own (identification). Through professional discourse, rejection and accepting various identifications, formal identity formation of the science teacher begins (Billett & Somerville, 2004).

Gilmore, Hurst and Maher (2009) describe stages of teacher identity development based upon the work of Fuller and Brown (Fuller, 1969; Fuller & Brown, 1975). In this circumstance, new teachers are subject to four stages, each characterized by unique challenges and trepidations; fantasy, survival, mastery and impact. The initial fantasy stage occurs prior to any teaching during the field experience stages of student teaching programs. During this stage, teacher candidates have positive outlooks on their future teaching careers and are able to better personalize with student perspectives than the supervising teachers. Unfortunately, during this stage, teacher candidates are also very critical of other teachers during classroom observations and of themselves during reflections of their own lessons. The survival stage occurs when new teachers first enter the classroom and encounter dilemmas related to curriculum, content, and/or classroom management issues. During this stage, teacher struggles generally revolve around conflicts between classroom procedures and wanting to be liked by students, feelings of low self-efficacy, and a desire to be accepted by fellow

teachers and administrators. Independent of student learning indicators, the mastery stage is initiated as teachers begin to master instructional content and adapt pedagogy to various learning environments, allowing a more reflective practice on personal instructional practices. Finally, the impact stage is characterized by a more experienced teacher being able to meet the needs of individual students as a result of more refined and focused instruction. During this stage, teachers are less concerned with the notion of acceptance by colleagues and more concerned with reflection and improvement of their own instructional practices (Fuller, 1969; Gilmore, Hurst & Maher, 2009; Volkmann & Anderson, 1998).

Research in science teacher identity-Subject affiliation

A science teachers' sense of professional and personal identity is moderately influenced by subject matter association (Chemistry, Biology, Physics, etc…) and devotion to their respective fields (Pedretti et al., 2008). These loyalities give science teachers a feeling of belonging to a community while participating in the pedagogical practices within their disciplines. Unfortunately, these loyalties can also lead to feelings of isolation and conflict when teachers experience lack of administrative or collegial support (Little, 1993). New science teachers are particularly vulnerable to isolation when they feel as if they may be the only teacher using a new instructional method learned during pre-service field experiences. Differences in instructional praxis can create self-identity conflicts as the new science teacher looks to gain support from co-workers without insulting an opposing teaching style (Pedretti et al., 2008; Pedretti, 1993; Solomon, 1993). The new teacher is then trapped in a paradox between being trained to question new information systematically as a scientist and

being expected to accept new pedagogies and curriculum changes unreservedly (Pedretti et al., 2008) .

Internal struggles, personal feeling, and content knowledge.

Internal struggles may develop as new science teachers battle with conflicts between their personal and professional identities (Berman, 1994; Kompf, Bond, Dworet, & Boak, 1996; Schubert & Ayers, 1992; Smith, 1996). For example, Volkmann and Anderson(1998) investigated how a first year female chemistry teacher named Maria struggled to create a professional science teacher identity. The authors noted multiple quandaries in resolving the struggles between her personal identity and the role she was required to fill. The authors reported that her personal identity was in direct conflict with what the institution expected her to be and pointed towards mentoring programs to aid in new science teachers in developing their teacher identity (Volkmann & Anderson, 1998). Maria faced three identity dilemmas during her first year of teaching: (1) transitioning from being a student to a professional, (2) wanting to care for students versus the expectation to be tough, and (3) personal feelings of inadequate content knowledge versus the expectation to be an expert. In order to resolve these dilemmas, Maria incorporated aspects from her personal identity to construct her professional identity. When conflicted between feeling like a student and being expected to be an adult, she visualized herself as a role model and transformed her teacher self to an intermediate assuming a role in between a parent and a friend. But, Maria was conflicted with taking charge and dispensing discipline in her classroom while at the same time showing the students she cares for them. She was finally able to resolve her conflict in feeling incompetent in content knowledge by re-

evaluating her own fantasy image of being a teacher. Dispensing with the expectation to be an expert and viewing herself as a human that is capable of making mistakes she was able to become tough in her teaching practice and curricular decisions, an identity that Volkmann and Anderson (1999) defined as "built on the knowledge of the discipline, the knowledge of caring for the students, and on the expectation that students know and do their best the entire year" (p. 305). Her lived experiences conflicted with her initial professional identity of wanting to be every student's favorite teacher, to being the best teacher for her students. It was evident that Maria's new science teacher identity formation and feelings of inadequacy were mostly influenced by her scientific content knowledge.

Helms (1998) investigated identity and scientific content knowledge using a case study methodology with a modified constant comparative analysis (Strauss & Corbin, 1990). Helms interviewed six science teachers in various institutions and reported that identity is a multi-faceted and fluid concept and defined in terms of four dimensions: (1) actions, (2) institutions, cultures, and social expectations, (3) values and beliefs, and (4) the kind of person people want to become (the future self). When science teachers were faced with constructing their own professional identity, the core dimension was personal values and beliefs about science in both a social and cultural context (see Helms, pg. 829). This core component directly affects the other three with little influence in between. Based on this rationale, Helms postulated that the future self is not affected by present actions or the expectations of others unless those expectations are consistent with an individual's core beliefs. In addition, Helms determined that science teacher identities were constructed in direct relation to the

scientific subject that was being taught, which later drew support from Pedretti et al., (2008). Although Helms concluded that the study could not possibly encompass the entirety of dimensions that work to construct science teacher identity, the author concluded that further research was needed in how personal feelings towards content knowledge impacts identity development and how teacher preparation programs may aid in developing aspects of identity prior to entering the field.

Experiences in scientific research. Experiences in scientific research for teachers are another variable that has been found to influence new science teacher identity development. Using a narrative phenomenology case study with grounded theory methods, Varelas et al. (2005) evaluated three beginning teachers identities as practitioners of science and practitioners of teaching during and after participation in a 10-week apprenticeship funded through the Department of Energy. During the apprenticeship, teachers (called fellows) were given a choice of projects to participate in and record their experiences in a weekly logbook. In addition, four sets of interviews were conducted at the 3rd and 7th weeks, at the end of the apprenticeship, and one year following. Teachers who participated in the apprenticeship added a new dynamic to their professional science teacher identities. In addition to their ideas, beliefs, and actions as teachers, teachers were taking into account what it meant to be a scientist and how those ideas should be incorporated into their classrooms. Specifically, the case study group reported a newly found A-identity (described above), especially when it came to the notion of scientists taking risks and exploring alternative actions when conducting research. The teachers also reported the discursive nature within the interplay of data and theory, which was described in the study as the

"scientist D-identity" (Varelas et al., p. 502). Through dialogue with fellow researchers, the teachers were able to understand the theory behind the data, and in turn, collect more data of various types at the same time. Applying their new D-identity and A-identity to the classroom, the authors indicated that the teachers moved to make their classrooms more like a scientific community that embraced collaborative work, encouraged dialogue between students, and fostered the ability of students to pursue their own interests in project ideas (science fair projects). "Notions of collectivity in the sense of large multidimensional projects (p. 508) " and "are part of a larger community that shapes and validates their work, were not part of the fellow science teacher identities" (p. 508). By engaging in formal scientific research, the teachers came to appreciate the actions, discursive nature, and tools of the scientific community and the teachers incorporated these ideas into their classrooms and science teacher identities (Varelas et. al., 2005).

Personal experiences in teacher education and personal identities may support the ability of a new science teacher to adapt to curricular materials (Davis et al., 2006; Forbes & Davis, 2008). A resource that each teacher possesses is his or her curricular role identity, or the "dimension of their professional identity specifically focused on the use of curriculum materials" (Forbes & Davis 2012, pg. 268). Influencing science teachers use of materials is their personal identities and the practice-specific domain of a teachers' identity (Forbes & Davis, 2008) as curriculum materials are the boundary between instructional planning and classroom pedagogy (Wenger, 1998). By investigating science teacher candidates, Forbes and Davis (2012) measured curricular role identities using quantitative survey data and found that teacher candidates

attributed their role identities to more experienced teachers, unfortunately, the ability to interact with experienced teachers through thorough discourse was lacking during teacher education programs. Here, the authors placed the difficulty of science teacher identity development within the teacher education system by affirming the lack of concrete professional practice in teacher education experiences. However, due to the constraints of university-based, formal teacher education programs, it was challenging to place the teacher candidate's classroom teaching at the center of teacher education experiences (Forbes & Davis, 2012).

Experiencing informal science opportunities during science teacher education programs have shown promise in shaping new science teacher identity development towards reform-minded teachers (Anderson, Lawson, and Mayer-Smith, 2006; Jung & Tonso, 2006; Katz, McGinnis, Riedinger, Marbach-Ad & Dai., 2012). By examining student-teacher drawings and interviews, Katz et al. (2010) used case study phenomenology to investigate the impact of an after school informal science program (internship), as part of a science methods course, on their teacher identities. As the student-teachers worked alongside mentor teachers teaching students, the authors reported that the teacher identities shifted towards "capable, reform oriented science teachers". In a follow up study using the same methodology and analysis of teacher drawings, Katz et al. (2013) followed their subjects throughout their first year in the science teaching profession. Investigating how the after-school internship from the previous study influenced science teacher professional identity development, Katz et al. utilized two goals for science learning from Taking Science to School (National Research Council, 2007) and four goals from Learning Science in Informal

Environments (NRC, 2009) in their analysis (see Katz et al., 2013, Appendix 1). Katz et al. reported that the internship experience contributed to the participants' confidence and enthusiasm to teach science. In addition, the experiences helped move the participants' science teacher identity towards one possessing reform-based characteristics (Katz et. al., 2013).

Challenges facing new science teachers

First year science teachers are expected to be effective, knowledgable and perform the full spectrum of responsibilities starting from day one (Wong & Wong, 2009). Unfortunately, many science teachers are ill-prepared for the demands of the classroom even after completing university teacher-education programs (Day, 2012).

Inadequate academic coursework and the nature of science. Studies have shown that as many as 39% of new science teachers lack at least 18 hours of undergraduate science courses and 26% lack proper science teacher certifications (Davis et al., 2006; LaTurner, 2002; Young & Kellogg, 1993). This lack of adequate content knowledge has revealed that unprepared science teachers possess innaccurate beliefs of basic scientific concepts (Ginns & Watters, 1995; Ginns & Watters, 1999; Stofflett & Stoddart, 1994; Trumper, 2003). This trend appearred to be more prominent at the elementary levels as one study of 52 elementary teacher candidates revealed that 60% of teacher surveyed felt they had weak scientific content knowledge (Rice & Roychoudhury, 2003). Though these studies do not follow their subjects through future teaching experience, studies suggest that teachers' science knowledge does improve with years of service (Davis et al., 2006).

The knowledge that novice teachers have is also a concern of various researchers. According to Lederman (1992) and Lederman, Gess-Newsome and Latz (1995), new science teachers have been shown to posses misconceptions concerning the nature of science and the scientific method. The nature of science and the scientific method are tentative, uncertain, and have limitations when attemtpting to explain natural phenomena in natural terms (Flammer, 2006). The notion that science is fixed an is aimed at proving a "truth" is referred to as "naïve relativism". Unprepared science teachers thought that scientists may alter their data to prove their opinions concerning particular phenomena such as the extinction of the dinosaurs (Abd-El-Khalick, 2001). Having an unsophosticated belief about the nature of science has been tied to negative attitudes towards science and discussions of those attitudes may be rather emotional for some new science teachers (Cobern & Loving, 2002). A few studies have pointed towards a religious factor in anti-science feelings (Ebenezer, 1996), whereas others indicated that new science teachers believed science textbooks presented a truth, as opposed to theory supported by research, they did not agree with (Arellano et al., 2001).

Learning styles and navigating the curriculum. Prior research has shown that new science teachers grapple with understanding diverse learning styles, students ideas, and backgrounds. For example, Abell, Bryan, and Anderson (1998) investigated 51 elementary and secondary science teacher candidates and concluded that the common focus was on student interest and motivation to participate in learning activites, not the learning styles or ideas. When new teachers were presented with diverse learning styles, they were often lost in how to provide proper instruction. The

scope of instructional methods learned in pre-service teacher programs generally did not address the diverse learning community of a classroom, nor did methods address planning instruction with the student as the main focus (Zembal-Saul, Blumenfeld, & Krajcik, 2000). The literature indicated that one method of coping with the lack of instructional knowledge when new teachers encountered a range of student learning abilities is to categorize their classroom based on student performance (Southerland & Gess-Newsome, 1999). Once these categories were made, however, teachers tend to not revisit them and thus, the categories are reinforced over time (Davis et al., 2006).

Moreover, new science teachers often feel overwhelmed when expected to cover large amounts of content within a relatively small timeframe (Tabachnick & Zeichner, 1999). Often, teachers will not question the curriculum and sift through topics that do not need vast amounts of time to cover, and instead will accept the curricular scope and sequence as written (Southerland & Gess-Newsome , 1999). Other reports indicated that simple steps such as common planning with mentor teachers' curriculum analyses allow teachers to make reasonable adjustments while allowing for student input in classroom instruction (Lynch, 1997; Davis et al., 2006). Without proper support, new science teachers lack the ability to determine effective instructional practices or to develop their own (Yerrick et al., 2003) and tend to engage in low-risk teaching methods, avoiding cooperative learning and student-centered instruction (Mulholland & Wallace, 2001). Studies have shown this arises from a fear of losing control of classroom management . Appleton & Kindt (2002) observed nine new elementary science teachers and found they engaged students in learning activities which made maintaining classroom management protocol more

manageable. In an extreme instance, teachers were found to not be teaching science at all, avoiding engaging instruction all together.

Creating positive learning environments for science students is most closely related with classroom management techniques. For new science teachers, this is most difficult when establishing classroom procedures, rules, and applying discipline (Davis et al., 2009). Classroom management is an enormous struggle for new science teachers, especially during scientific inquiry activities, student-centered lessons, and laboratory exercises (Siry & Lara, 2012). Zimmerman (2000), reported that new teachers tend to either avoid responding to classroom management issues, or attempt to force compliance to guidelines from the student. As a result, the instructional practices were teacher-centered, very little lesson planning was conducted with student input, and often times instruction was derailed completely. Simmons et al., (1999) presented an alternative view in a study of 69 new and early career science teachers. These authors found that the first-year teachers embraced and utilized student-centered instruction even though they appeared to struggle more with maintaining discpline. The second and third year teachers, on the other hand, had almost completely given up on using student centered instruction and used methods that were more teacher centered to maintain classroom management.

Texas DAEPs

In the 1990's, a growing concern for school safety indicated the need for alternative settings for students that exhibited difficulty with the regular school program (McCreight, 1999). In 1995, The State of Texas Legislature adopted the Safe Schools Act, or Texas Education Code (TEC) Chapter 37, which required all school

districts to provide (a) DAEPs that focus on the core curriculum subjects (ELA, Math, Science, History), (b) self-discipline, (c) supervision and counseling for students, (d) assistance for educational and behavioral needs, and (e) employ qualified teachers under TEA Subchapter B, Chapter 21 (TEC §37.008). DAEPs may be housed on campus or be self-contained in an off campus location. Many DAEPs utilize preventive safety measures such as metal detectors, student searches, and preventing students from bringing certain items to school such as backpacks, purses or forbid students to wear jackets inside the building (Levin, 2005).

Chapter 103, Subchapter CC, of the Texas Administrative Code (TAC) provides standards for the operation of DAEPs including the statute that each school district is responsible for "ensuring that the board-approved district improvement plan and the improvement plan for each campus include the performance of the DAEP student groups for the respective district" (TAC §103.1201). Districts are required to provide students in DAEPs academic and self-discipline programs which include the currently enrolled curriculum necessary for the student to meet graduation requirements. DAEPs are required to maintain the current academic program from the home campus of each student. DAEPs must also adhere to TEC §25.082(a) by providing a school day which lasts at least seven hours but may not exceed 10. TAC §103.1201 states that DAEPs are resolved of student performance accountability, which remains with the student's home campus. Moreover, each school district is responsible for maintaining the safety of students placed in a DAEP by maintaining a DAEP student-teacher ratio of 15:1 and preparing DAEP staff to respond to health and issues and emergencies (TAC §103.1201).

Student placement in Texas DAEPs. Texas Education Code (TEC) Chapter 37 requires that all school districts adopt a student code of conduct which specifies the circumstances in which a student may be removed from a classroom, campus or transferred to a DAEP. Under the TEC, districts are required to give consideration of self-defense, lack of intent, disciplinary history and student disabilities as a factor when arriving at a decision to remove a student to a DAEP (Walsh, Kemerer, & Maniotis, 2010). An important note is students that are enrolled in a special education program under TEC Chapter 29 may not be removed to a DAEP until a full admission, review and dismissal (ARD) committee meeting has been held to review the conduct (TEC §37.001); the majority of students placed in DAEPs are for 8th and 9th graders (Cortez & Cortez, 2009).

TEC §37.0081 outlines behaviors that warrant mandatory placement of a student in a DAEP and includes but is not limited to: (a) a felony offense under Title 5 of the Texas Penal Code, (b) possession, sale, or being under the influence of marijuana, (c) possession, sale, or being under the influence of alcohol or a volatile substance, (d) public lewdness or indecent exposure, (e) terroristic threats, (f) assault against a school employee, volunteer, or non-district employee, and (g) a felony offense that occurred off-campus.

School districts may place a student in a DAEP by discretionary means when a student commits a range of negative behaviors including: (a) behavior that warrants the permanent removal of the student by the teacher from the classroom, (b) criminal mischief, (c) possession, purchase or use of a tobacco product, (d) fighting; (e) truancy, and (f) violation of the student code of conduct (TEC §37.003; Turner, 2010).

Table 1 indicates the average length of stay for a student placed in a Texas DAEP is 34.2 days in 2009 and ranged from 30.7 days for white students, to 35.9 days for Hispanics (Texas Education Agency, 2010). The State of Texas does not provide restrictions on the length of DAEP placements and only requires that districts establish guidelines for placement length in the Student Code of Conduct. Districts cannot place a student indefinitely, and must meet three state provisions to address long-term placements: (1) the school must review the student's academic status, including a graduation plan, at intervals not to exceed 120 days (TEC §37.009didn't), (2) a student may be kept in the DAEP beyond the end of the school year only if the school has determined that the student's presence on campus is a threat or if the student has engaged in serious or persistent misbehavior (TEC §37.009(c)), and (3) a student may be kept in a DAEP longer than one year if the district has determined the student to be a threat to the safety of others and it is in the best interests of the student (TEC §37.000(d)). To ensure that students in DAEPs are not denied free and appropriate public education, school districts in Texas must allocate the same per pupil expenditures for students in DAEP as students in regular campuses (TEC §37.008(g)).

Table 1
Frequency and Length of Texas DAEP Assignments

Group	**Average Number of DAEP Assignments**		Single Assignment (%)	Average Length of Assignment (Days)
	Discretionary	Mandatory		
African American	1.27	1.06	78.3	34.3
Hispanic	1.28	1.09	78.2	35.9
White	1.23	1.05	82.9	30.7
Economically Disadvantaged	1.27	1.08	79.0	35.0
Special Education	1.28	1.09	76.6	34.5

Female	1.21	1.05	82.8	31.7
Male	1.28	1.08	78.2	35.1
All	1.26	1.07	79.4	34.2

(TEA, 2010)

Texas DAEP students as at-risk youth. The State of Texas has 13 definitions amended to TEC §29.081 by the 77th Legislature in 2001 which identify a student as "at-risk". These definitions for students under the age of 21 years are as follows: (1) was not advanced from one grade level to the next for one or more school years; (2) is in Grade 7, 8, 9, 10, 11, or 12 and did not maintain an average equivalent to at least 70 on a scale of 100 in two or more subjects in the foundation curriculum during a semester in the preceding or current school year or is not maintaining such an average in two or more subjects in the foundation curriculum in the current semester; (3) did not perform satisfactorily on an assessment instrument administered under TEC Chapter 39, Subchapter B, and has not in the previous or current school year subsequently performed on that instrument or another appropriate instrument at a level equal to at least 110 % of the level of satisfactory performance on that instrument; (4) is in prekindergarten, kindergarten, or first, second, or third grade and did not perform satisfactorily on a readiness test or assessment instrument administered during the current school year; (5) is pregnant or is a parent; (6) has been placed in an alternative education program in accordance with TEC §37.006 during the preceding or current school year; (7) has been expelled in accordance with TEC §37.007 during the preceding or current school year; (8) is currently on parole, probation, deferred prosecution, or other conditional release; (9) was previously reported through the Public Education Information Management System (PEIMS) to have dropped out of

school; (10) is a student of limited English proficiency, as defined by TEC §29.052; (11) is in the custody or care of the Department of Protective and Regulatory Services or has, during the current school year, been referred to the department by a school official, officer of the juvenile court, or law enforcement official; (12) is homeless, as defined by Title 42 of the United States Code, §11302, and its subsequent amendments; or (13) resided in the preceding school year or resides in the current school year in a residential placement facility in the district, including a detention facility, substance abuse treatment facility, emergency shelter, psychiatric hospital, halfway house, or foster group home. Students placed in DAEPs are by definition considered at-risk and according to 2012 AEIS data, 45.4% (2,262,066) of the total student population in the State of Texas met at least one of the criterion above.

Research in Texas DAEPs. The literature that encompasses Texas DAEPs indicated that the subjects taught within the schools do not make the greatest difference in student achievement or success; instead, the school community and climate are the largest factors in the success of the students (McCreight, 1999; Boss, 1988). McCreight (1999) surveyed 101 on-campus and 291 off campus Texas DAEPs and compared common practices from the surveys to an extensive literature review. This study reported that the most common professional development provided for teachers was diversity training (64.9% of responding districts) and that 60.1% of districts placed new teacher hires in alternative settings. Student-teacher ratios commonly ranged from 5:1 to 15:1 with 4.8% of respondents reporting a ratio of 20:1 or more. Almost 80% of DAEPs required parental involvement at entrance and/or exit conferences and the most common form of determining program success was found to

be “no return trip to the alternative school (76.6% of reporting districts). Through her study, the author recommended eight “Best Practices” for Texas DAEP program improvement and are as follows: (1) focus on rehabilitation not discipline; (2) funds to aid districts in implementing programs to help students succeed in life as well as academics; (3) increase parental involvement; (4) provide professional development for teachers for working with “troubled youth”; (5) increase counseling services for “troubled youth”; (6) implement transition programs for students returning to home campus from DAEP; (7) ensure comprehensive instruction in behavior management; and (8) create programs to determine success of DAEPs (McCreight, 1999).

Reeder (2005) evaluated the effectiveness of one Type II DAEP by analyzing attendance, student grades and behavior of students post-placement upon return to the mainstream classroom. Reeder, who was also a DAEP administrator, reported that he met with numerous parents and students during the course of his study and found that many variables outside of the academic environment are affecting student achievement. Reeder (2005) pointed out that interviews with DAEP students commonly revealed much greater problems at home and within the community than what they were experiencing at school. Many students reported sexual abuse, drug abuse, depression, and a sense of helplessness when they were not able to deal with these problems. In addition, Reeder (2005) would conclude that their lack of success was not completely indicative of a lack of desire, but rather it seemed that school was not as high of a priority as their need to survive.

Reeder (2005) also reported that overall attendance for students did not improve upon return to the mainstream classroom. During the first semester, students

did show a 2.1% increase; however, by the end of the school year there was an overall decrease of 8.9% in student attendance. Course averages also saw a sharp decline of 3.5%, and behavioral infractions increased 6.2% during the first semester upon returning to the mainstream classroom. Of the 86 students surveyed, 53 remained enrolled in the mainstream for the entirety of the study, 22 returned to the DAEP (41.5% recidivism), 39 withdrew from school with 10 being coded as dropouts (11.6% dropout rate) as defined by PEIMS (Reeder, 2005).

Dempsey, Toohey and Martinez (2007) surveyed the 1,032 Texas school districts to identify best practices and characteristics of students/staff of DAEPs. Districts were asked to list best practices utilized on their DAEP campuses as applied to four categories: behavioral, instructional, transition practices, and a combination of two or more areas. Of the districts surveyed, 144 districts responded and reported that the most common instructional best practice was the use of a computer-based program (n = 6) and the most common behavioral best practice was the use of a point system. Best practices in transition included “the level system while another school district had an elementary transition” (pg. 38). The most common best practices that combined multiple categories were fairness and consistency of rules (n = 11), a formal intake process (n=8), incentive programs for model students (n=8) and staff being respectful of students (n=6). Participants also reported they used alternative methods of measuring success in their DAEP including recidivism rates, student grades and Benchmark tests (Dempsey et al., 2007).

Randle (2008) described the effects of the Boys Town Education Model (BTEM) in four urban DAEPs and based his analysis on student discipline records,

academic performance in core subjects and student attendance during the 2005-2006 school year. Comparing this data to archival data from 2002-2005, Randle reported that negative behaviors increased following DAEP placements as much as 3.48% in one study site, overall attendance rates declined 6% and student grades declined in core subjects. Randle concluded that the BTEM was not effective in producing positive student outcomes when used in a DAEP and recommended that districts conduct studies which evaluate their behavioral modification systems for desired student outcomes. Additionally, the recommendation was also made to evaluate the effectiveness of items identified by Toohey et al., (2007) as best practices of which no significant research exists indicating their value (Randle, 2008).

Turner (2010) reported that the most lacking feature of Texas DAEPs was the behavioral or social component of education. In her study focusing on improving student behavior, Turner evaluated the effects of using the Thinking Errors program which consisted of weekly hour long classes where students were taught methods of addressing poor decisions (both academic and personal), and re-evaluating their positions so they could make a more appropriate decision. The author compared treatment groups to the behavior data from the previous year and found that there were no statistically significant changes between experimental groups in student behavior while enrolled at the DAEP or after students returned to their home campus. Turner (2010) concluded her study by recommending that the state of Texas adopt standards in reporting test scores and log-term follow up of students placed in DAEPs (Turner, 2010).

In summary this chapter provides a look at the research literature in science teacher identity development guided by the research question: how does the literature define science teacher identity in reference to teachers in non-disciplinary, mainstream public schools? The literature review above identifies key research in identity theory which lays the foundation for the theoretical framework in Chapter One. Common challenges facing new science teachers and a brief overview of the DAEP system in Texas was also given to provide a foundation for comparison of the case study to existing knowledge. In the next chapter, I outline the methods used for data collection analysis, and triangulation for the case study of Sarah.

CHAPTER III

METHODS

Type of study

Naturalistic qualitative case studies seek to uncover the human experience by examining the emotions of the case to uncover some epistemological phenomenon (Stake, 2008). The interactions between the case and the researcher may be increasingly sensitive as the study progresses and emotional strain affects both parties (Erlandson, Harris, Skipper, & Allen, 1993). The case study method works to understand the case itself and should not be emphasized for generalization, but rather as a small step towards such (Campbell, 1975; Flyvbjerg, 2001; Stake, 2008). This study is well suited for the case study method because it provides a holistic, in-depth investigation (Creswell, 2007; Tellis, 1997; Yin, 1994) into a contemporary phenomenon where relevant behaviors or environments are not well understood and cannot be manipulated (Yin, 1994). In addition, narrative case studies provide a structure to relay the experiences of the participant under study, which allows both the researcher and the subject to understand actions and organize them into themes and meanings (Chase, 2011). Following the example set by Katz et al. (2013), this study employs qualitative narrative case study methods in addition to a quantitative exploration of quantifiable data.

Study Participant

The single participant in this study was a Caucasian female science teacher in her first year in the profession. During the study, she was a Doctoral student in Curriculum and Instruction, held a Bachelor's Degree in Human Development and

Family Studies, and a Master's Degree in Curriculum and Instruction with an emphasis in Science Education. She had Texas Teacher certifications in Science grades 4-8, and Generalist grades 4-8. She was chosen based on her unique position as a first year science teacher in Texas DAEP setting. To protect her confidentiality, the participant shall be herein referred to by the pseudonym "Sarah".

Sarah completed her teacher education program as part of a master's program in curriculum and instruction emphasizing science education. Prior to becoming a teacher, Sarah worked for three years as an assistant with the Mental Health and Mental Retardation (MHMR) center after completing her undergraduate degree in Human Development and Family Studies. She decided to become a teacher during a state of transition in her life. She had resigned from her full-time position at MHMR to enroll in prerequisite courses for nursing school and began working as an attendance clerk at a local high school. It was in this setting that Sarah indicated she felt the calling to become a teacher.

I first met Sarah during the last semester of her graduate program. She was actively seeking a teaching position, but was having problems securing employment because of her lack of teaching experience as well as geographic restrictions. Sarah did not have the financial ability to move to another area and nearby employment opportunities were becoming scarce. Sarah then applied to for the science position at Parsons. From what she knew of DAEP's, she was confident that the highly structured atmosphere would give her a chance to provide students with safe learning environments and build their scientific knowledge. Her interview took place during the summer when no students were present, and she was assured that her knowledge of

curriculum and instruction would make her a great asset to the teaching faculty. She accepted the position to teach middle and high school science courses for the upcoming school year and immediately began to plan her lessons.

Study Site

Sarah was a science teacher at The Parson School (pseudonym), a DAEP that serves a large school district in West Texas. This school employs 14 teachers and 2 administrators, and daily student populations in grades 6-12 may vary greatly. Students at this school were placed in a DAEP by their home campus through discretionary or mandatory means resulting from violations of the District Student Code of Conduct (see TEC, Chapter 37). Though there is evidence within the literature of the differences between the regular classroom and the DAEP classroom (Cortez & Cortez, 2009; Dempsey et al., 2007; Intercultural Development Research Association, 1999; McCreight, 1999), they are not considered here as they were not recognized in the discursive narratives that were constructed by the study participant (Gee, 2005).

The Parson School is the DAEP serving Sarah's district. The Parson School is located in a small former elementary school building with about 20 classrooms, a gym, and a small cafeteria. The principal implemented a modified boot camp structure in which a drill instructor maintained student discipline and order. Students were organized into grade level groups and moved from classroom to classroom as a single unit. Core curriculum classes were offered along with physical education and Positive Behavior Intervention and Support (PBIS) classes. The school schedule consisted of seven 50-minute class periods with one 30-minute lunch period. All students were

enrolled in Math, Science, English Language Arts, Social Studies, Art, PE, and a PBIS class.

Student behavior was recorded on daily point sheets designed by the campus principal. The point system operated on a 30-point daily tally, with points removed for negative behaviors; students were able to accrue bonus points through extra work, modeling consistent positive behaviors, and parental participation in school activities. Students with a minimum 30 day placement must receive 1100 points in order to return to their home campus from the study site regardless of whether they have completed their placement. The point system has been shown to apply immediate consequences to decrease negative classroom behaviors and develops intrinsic motivation for students through external variables (Turner, 2010; Randle, 2008). In other instances, the point system has been identified as an anitiquated practice that is detrimental to the the operation of DAEPs and their diverse student populations (Metze, 2012).

Demographic data and campus reports for the Parson School during the time of this study (2013-2014 school year) are unavailable, and the highly mobile nature of the student population makes estimating student characteristics of the school difficult. The Texas Education Agency had the previous school year's data available for The Parson School and was used here to describe the demographics of the school. During the 2012-2013 school year, a total of 729 students received DAEP placements at The Parson School (25.6% African American, 61.2% Hispanic or Latino, and 12.3% Caucasian); 72 students (9.8%) received multiple placements in the same school year. Nearly a quarter of the district DAEP placements (22.4%) were for special education

students, 90.1% of placements involved students classified as economically disadvantaged and 72.1% involved at-risk students. Demographic data for the teaching staff was unavailable and previous years data was not used as there were high teacher turnover following the 2012-2013 school year. In addition, during the course of this study six teachers out of the staff of 15 either resigned or were terminated and the head principal also resigned.

After a student has been placed in a DAEP, they are required to be present at a formal intake process. I was able to attend a few of these events at Parson at the beginning of the school year. During intake, students are fitted with a school uniform which consisted of khaki pants, a black belt, and a blue polo shirt with the Parson logo. Parents and guardians were required to accompany the students during all the stages of the intake process, which was led by the school counselor. After receiving their school uniforms, the students and their parents assembled in the school cafeteria where a presentation was given by the counselor stating the rules and expectations. A behavior contract was then passed out and read to attendees, with parents and students being required to sign. Teachers and principals did not attend the intake processes that I witnessed, and it seemed that they were not taken very seriously by either the students, their parents, or the counselor. The counselor would often pause after reading a rule from the behavior contract and imply that it was not a big deal.

In terms of student achievement ratings from the Texas Education Agency, The Parson School is not rated as a DAEP and is responsible only for submitting financial records for transparency. However, during the initial faculty meeting of the year (I was present at this meeting), the adminstrative staff conveyed to the teachers

that the academic nature of the school needed to be improved. The administrators had adopted a classroom organization and instructional model called the “Fundamental Five” (Cain & Laird, 2011) and provided books on the model for all of the teachers to read. I had previous experience using this model with incarcerated students and I was asked by the school principal to give a workshop on using the Fundamental Five. The principals were determined to raise the academic achievement of the DAEP students, and modifed the Fundamental Five as they saw fit, making certain portions of the model manditory for each lesson and requiring teachers to fill out paperwork indicating use of the model in their classrooms. The students would also be required to fill out lesson frame statement forms at the beginning of each class, indicating they were aware of the topics to be covered in class and the goals to be reached. All paperwork and lesson frame forms were designed by the assistant principal, who was also in charge of maintaining discipline expectations at Parsons.

Data Collection

Data collection was generated using multiple sources following Katz et al. (2013) during the spring semester of the 2013-2014 school year. The first source of qualitative data was collected in the form of written and visual teacher narratives. Written narratives took the form of reflexive journals where the participant had the ability to construct, deliver, and interpret their own narratives and construct their teaching identities (Luehmann, 2007). Prompts for written narratives were adapted from the basic outline provided by Katz et al., (2013) to better fit the focus of the case study and are as follows:

> *As a new science teacher, could you please share an example of what you taught today? What was successful? What were come challenges you faced? What questions do you have?* (p.1364).

Teacher journals were collected weekly (on Fridays) during the spring semester and delivered via email. Journals were not collected during weeks in which an oral interview was conducted to allow for thorough analysis of previous journals to develop interview questions. On occasion, Sarah was not able to produce a journal due to illness, therefore, 16 written narratives were received.

Visual narratives followed prompts from Katz et al. (2013): "*Draw yourself teaching science*" (p. 1363) and "*Draw your students learning science*" (p. 1363). Following these prompts, Sarah was asked to provide three drawings depicting her classroom on the first day of school, the first day back from Christmas break, and the last day of school. Serving as quantifiable data, these visual narratives were designed to illustrate the classroom environment through Sarahs' eyes and to help determine any noticable changes in how she viewed herself (Mensah, 2011). Additionally, drawing has been shown to reflect the correlation of personal identity and teaching philosophy (Carnes, 2009) as well as being appealing and supplementary to other kinds of data (Katz et. al, 2013). The methods for analyzing the visual narratives are explained in the analysis and triangulation section of this chapter.

Erlandson et al. (1993) indicated that an interview is more than just a single person asking another person questions; rather, it is a form of discourse that allows the researcher to "reconstruct the past, interpret the present, and predict the future" (p. 85).

The person being interviewed is the expert of his/her thoughts and feelings, and it is the task of the interviewer to access this vast quantity of data without imposing his or her own clarifications (Fetterman, 1989). The decision to maintain an open and flexible interview format allowed Sarah to openly participate in discursive dialogue as opposed to answering a predetermined set of questions. Interviews for this study were conducted via weblink, and when possible, in person. Interviews were recorded by a digital audio device (Sarah did not want to be videoed) and later transcribed for analysis. Sample interview questions taken from Katz et al.(2013) included:

> "*To what extent do you identify yourself as a teacher of science? How close are you from your ideal vision of a teacher of science; how do you think others see you as a teacher of science; and what would strengthen your identity as a teacher of science?*" (p. 7).

In addition to previously scripted questions, the submitted teacher visual narratives were also used as exploration prompts and interview questions concerning the development of science teacher identity. Any statements revealing true names of the case were removed and replaced with the psuedonym "Sarah" to protect her confidentiality. Interviews generally lasted 45 to 90 minutes and were conducted on the first week of the each month during the school year and one week after the school year ended for a total of five interviews.

Data Analysis and Triangulation

For case studies, the most important use of data is triangulation and support from other sources (Yin, 1994). Qualitative analysis in naturalistic inquiry is an on-

going process that requires constant reviews and interpretations (Erlandson et al., 1993). This study adopts a constant comparative method of analysis using key point coding by revisiting data and comparing it to previous data and existing literature. Analysis of data follows Braun and Clarke's (2006) six phases of case studies: (1) getting familiar with the data, (2) producing initial codes, (3) looking for themes, (4) reviewing the themes, (5) defining and naming the themes, and (6) generating the report.

Written narratives and transcribed interviews were analyzed on a line-by-line basis using key point and open coding (Allan, 2003). Coding allows the researcher to build an analytical scaffold to discover new themes during data analysis and determine their applicability in earlier data (Charmaz, 2008). Codes are short, descriptive definitions of the action leading to categories of data for comparison. Within each code are key points given a data source identifier attributed chronologically starting at the first interview (indicated with an "I") or journal (indicated with a "J") (1, 2, 3, …) and continuing on through subsequent data. For example, the first key point identified in the first journal would have the identifier J1-1, indicating journal entry #1, key point #1. Conversely, if the same key point was present in the first interview, it then would have the identifier I1-1; the two key points would also share the same initial open code. Initial review of the data established the primary codes in which to define common themes, and each successive piece of data was coded to indicate repetitive or new themes. When new themes arose, previous data sources were revisited to determine earlier existence and given proper codes and key point identifiers (Charmaz, 2008). In order to avoid weakened analyses, key points were categorized into a

primary theme and removed from additional themes of marginal contribution (Erlandson et al., 1993).

After the main themes were established, alpha-numerical identifiers were used to represent sub-themes within each category (Charmaz, 2008). For example, the third sub-theme catagorized under major theme two would be represented with the identifier "2c". Once the entire dataset was analyzed, the key points and their corresponding codes were organized into a table, chronologically listing the occurance of key points within a major and sub-theme. The key points were then re-labeled to indicate which theme they represented and the order of which they occured. Using the examples from above, the new key point identifer for J1-1 occuring chronologically first in the second major theme, third sub-theme had the idenfier 2c-J1-1. This ensured that key points could only be categorized once within the entire analysis. Since the data source identifier (J1) indicates its place along a timeline, it is also the unique identifier for chronological occurrence within sub-themes.

Once all key points were categorized and given a unique alpha-numeric identifier, each was given an additional code indicating which of the four identity views from Gee (2001) they belonged to (Avraamidou, 2014; Saka et al., 2013). Many key points possessed the elements of multiple identity views, in this case the key points were assigned primary, secondary, and tertiary views which were used to organize them into separate tables for further analysis. Only the primary indentity view was considered when seperating the dataset into four sub-sets containing all key points relating to discourse, institutional, affinity, and nature identities (Appendix D).

Visual narratives were analyzed for six overall themes following the rubric outlined by Katz et al. (2013); (1) students experience excitement, interest, and motivation to learn about phenomena in the natural and physical world; (2) students come to generate, understand, remember, and use concepts, explanations, arguments, models, and facts related to science; (3) students manipulate, test, explore, predict, question, observe and make sense of the natural and physical world; (4) students reflect on science as a way of knowing; (5) student participate in scientific activities and learning practices with others, using scientific language and tools; and (6) students think about themselves as science learners and develop an identity who knows about, uses and sometimes contributes to science. Scoring rubrics provided by Katz et al. quantified the visual narratives to determine differences in how the teacher viewed her classroom environment and self-efficacy as her sense of professional identity evolved. Each drawing was analyzed and each theme was rated on a scale of zero to four; a score of zero indicated a total absence of the theme in the drawing, a score of four showed evidence of the theme in the presence of thought bubbles, comments, or activities. Chronological changes in scores for each drawing were evaluated to indicate further development of science teacher identity concerning how Sarah viewed herself as a teacher and how she was able to interact with her students. Katz et al., (2013) specified that themes four and six are not easily analyzed or illustrated in teacher drawings, therefore, visual narratives were evaluated using themes one, two, three, and five (see Appendix C).

Researcher Bias

Sources of bias are unavoidable in any study (Maulucci, 2013). Investigation of phenomena require interpretation, but even the most subjective of researchers has personal opinions and interpretive lenses that shape clarification of events (Stake, 2008). I identify myself as teacher for all students, not necessarily in a Social Justice sense as I do not take into account socioeconomic hardships of my students when gauging their ability to learn science. My philosophies of education and learning are independently liberal in some regards, yet highly conservative and old-fashioned in others. I do not believe that all students will enjoy science, nor do I believe that all students will understand, or be able to understand, the tenants of scientific inquiry. I do not adhere to any single instructional approach, philosophy, or teaching theory (i.e; constructivism or behaviorism). I do not believe that all students should pursue a career in science post-high school and I do not feel that the scientific field is superior to any other. I do, however, believe that all individuals are entitled to their opinions. I believe that my students may have social, communal, and religious influences that prohibit them from fully accepting the power that scientific knowledge holds for them. Because of this, I present material in my classroom as a non-biased teacher in order to provide my students with a safe environment to learn where they may feel free to ask questions and not feel threatened. I conducted myself as a non-biased researcher in my questioning of Sarah, but I understand that an inevitable personal bias is present given my familarity with her school culture and environment. I wanted her to feel free to express herself and her feelings as she saw fit. I did not confine her comments to a

time limit, nor did I attempt to steer her answers to my questions in any particular direction.

During the intial course of data collections, Sarah often struggled to produce what she thought to be useful artifacts and would ask for clarification on writing and drawing prompts. To prevent my personal interests manifesting themselves in the data, I could only offer Sarah my assurance that whatever she produced would be vital to this study as long as she followed the written prompts. There was one instance in which I asked Sarah to redraw a visual narrative as it did not follow the prompt; instead of drawing herself teaching science and her students learning science, she provided a schematic of how her classroom was organized. To reduce researcher bias I looked for multiple representations of each theme within Sarah's story and existing literature. In my analysis and discussion of Sarah's experiences, I present interpretations that are supported by previous research and do not look to generalize the findings beyond the scope of this report. In the event that research concerning a particular theme could not be located, I offer only a description of the event and no interpretation beyond what is offered by Sarah.

Establishing Trustworthiness

To establish fidelity, I followed Avraamidou (2014) use of Guba's (1981) four elements of trustworthiness: credibility, transferability, dependability, and conformability. To achieve credibility I provide thorough descriptions of the narratives that Sarah provided and triangulate her experiences between data sources and existing literature. In addition, I asked Sarah to read the findings of this dissertation to identity

any interpretations of her narratives that she disagreed with. We then discussed those interpretations until an agreeable interpretation could be made.

As suggested by Guba (1981), I achieve transferability by providing detailed descriptions of the study sight and the study participant. To address dependability, I provide an in-depth report of the study methods for data collection, analysis, and interpretation. Finally, to achieve conformability, I offered a description of the possible sources of bias relating to my own experiences and beliefs (Avraamidou, 2014).

Limitations

As a single participant case study in a very unique environment, the current study is not generalizable to other environments including other Texas DAEPs. I acknowledge the fact that the study site and the study participants were very unique and I do not look to generalize the findings beyond the parameters of this dissertation.

CHAPTER IV

FINDINGS

The purposes of this study were to uncover the main tenants of science teacher identity development found in the literature, identify a DAEP science teacher's identity, and compare teacher identity as defined by the literature and a DAEP science teacher's identity. This study incorporated teacher journals, drawings, and interview data to reveal the development of new science teacher identity. In this chapter, I analyze the teacher drawings separately based on the scoring rubrics by Katz et al., (2013), and then teacher journals and interview data together through the lens of identity.

Teacher Drawings

Sarah was asked to provide three teacher drawings throughout the course of this study; one depicting the first day of school, the first day after Christmas break, and one drawing illustrating her classroom towards the end of the school year. The purpose of choosing these timeframes to illustrate was to provide Sarah's personal ideas of how her classroom had changed throughout the school year. By comparing each drawing to the previous one, Sarah would reveal through her visual narratives how she felt about her own science teaching and how her identity was developing. Unfortunately, Sarah's teacher drawings were largely uninformative in regards to defining how she developed her science teacher identity.

Sarah's initial drawing (Appendix B, Figure 1), depicting the first day of school, scored low on all themes analyzed. For the first theme (students experience

excitement, interest, and motivation to learn about phenomena in the natural and physical world), Sarah's initial drawing received a score of one, indicating a lack of student interest or motivation in science. The drawing received a score of zero for theme two (students come to generate, understand, remember, and use concepts, explanations, arguments, models, and facts related to science), revealing no evidence of the use of concepts, explanations, arguments, models or facts. The third theme (students manipulate, test, explore, predict, question, observe and make sense of the natural and physical world) was also not present in the first teacher drawing and a score of zero was also given in this area. Finally, concerning theme five (students participate in scientific activities and learning practices with others, using scientific language and tools); Sarah's first drawing received a score of one, showing that students were not participating in a science activity or practice.

Sarah's second and third drawings (Appendix B, Figures 2 and 3) received the exact same scores as her first in all themes analyzed. This revealed that Sarah's view of herself as a teacher, and how she interacted with her students, did not change according to the drawings. Each drawing clearly shows Sarah attempting to lead instruction and giving the class objectives for the day, however, students are illustrated as defiant, profane and non-participatory. This would continue to be a common theme throughout her journals and interviews, and she would not be able to focus on positive classroom experiences until the data collection process neared the end.

Sarah's First Year Science Teacher Identity: Journals and Interviews

In this section, I focus on Sarah's identity to understand the exent of the difficulties she faced and the emotions she exeperienced in her first year teaching. This section focuses on the four aspects of identity from Gee (2001) as described through Sarah's own narratives. I used the affinity identity lens to examine Sarah's experiences shared by others with similar interests, discourse identity lens to describe Sarah's development for science teaching as constructed through the discourse with others, institutional identity to describe Sarah's identity that was put in place by authorities in the school, and nature identity to examine how her science teacher identity development was influenced by her gender (Avraamidou, 2014).

Affinity identity: The impact of relationships and science learning experiences. I utilized affinity identity to examine how Sarah's relationships with others and her prior science experiences influenced her science teacher identity development. Through the lens of interaction and continuity, her past relationships with her own science teachers and her relationships with co-workers were examined to determine the influences to her science teacher identity (Avraamidou, 2014; Saka et al., 2013).

Science learning experiences. I used the lens of continuity to examine Sarah's science learning experiences focusing on her past stories of learning science in high school and at the university level. During our interviews, Sarah indicated she was not always interested in science, but she did recall a specific science teacher which she viewed as a good teacher. She could not remember this teacher's name or what

particular subject he taught, but she did recall some positive characteristics which made his class memorable:

> He was just kind of goofy and dorky, he liked science, and he liked what he did. And I mean it kind of made his class fun. And we could ask him questions and when he presented it he did it in a fun way that fitted his personality (Interview #3, Lines 60-62).

Sarah stated that she was not particularly interested in science as a student, perhaps the reason she could not remember the name or the subject taught by this particular teacher, but her atmosphere in his classroom was what she strived to recreate in her own. She wanted to make her classroom a safe environment for students to learn, and for them to not feel ashamed to not know all of the answers or to ask questions:

> I wasn't particularly interested in the class. But you could tell that he enjoyed what he was doing and that he was trying to make it fun for the class. And he made it to where if you didn't know what you were doing that you weren't intimidated to come to him with questions or ask for help. And he was always available; you could make an appointment for tutoring. He wasn't scary or mean, there was always that opportunity to get that extra help that you needed. (Interview #3, Lines 79-83)

Sarah felt that science class should not only be informative, but it should be fun for students. Her high school science teacher made an extra effort to make science

learning fun and to establish positive relationships with students. As she worked to incorporate these concepts in her classroom, Sarah quickly realized that the environment at Parsons would make those tasks very difficult. She discussed one lesson from her high school science class in particular when she indicated that the DAEP classroom was not conducive to building positive relationships with students while conducting fun science lessons. The mobile nature of DAEP students, restrictions on lesson components, as well as on laboratory and inquiry-based activities would prove to be one of her biggest sources of work related frustration:

> Well he would make it fun for us. There was this one time that he froze a hot dog in liquid nitrogen, pretended it was his finger and then smashed it. It's really cheesy but it was fun. He would open the lab with something like that, then say, "well this is what we are going to be doing today." But I am not able to do any of that stuff. We were told we can't watch movies, and even when I want to show little experiments and stuff of things that we would be doing if we could do labs, we were told that we can't show movies. So I can't do that. Also, since the kids are only there for a certain amount of days, I can't build relationships with them because sometimes I can't get to know them enough to create a safe learning environment for them (Interview #3, Lines 95-102).

Not all of Sarah's prior school science experiences were positive, however, and she remembered a particular professor from her undergraduate courses that displayed

the kind of teacher she did not want to be. This professor presented material in a very teacher-centered manner and gave no thought to the needs of his students or the difficulties students had with his instructional delivery:

> He was my physics professor. He was just awful, he gave us a lot of work but no additional help, his personality was flat. He really didn't care if you understood it or not. He presented one way and one way only and that was it (Interview #3, Lines 74-76).

What is important to emphasize, apart from the fact that Sarah could not remember much from her days as a student in science courses, is the nature of her positive and negative views of particular teachers. Her positive view of her high school science teacher indicated that she was more responsive to a learner-centered environment and appreciated the manner in which time was taken to ensure students felt safe and unintimidated. Her negative views of her college physics professor demonstrates her view of a negative learning environment and the type of teacher she did not want to become. She wanted to be the kind of teacher that cared for her students and gave them the tools to be successful. Relating to her positive experiences with her high school science teacher, she describes her idea of a good teacher:

> Well I think that no matter what, you can go to that person (the teacher) and ask them a question; they are always there for you, as far as discipline issues, they are like a parent. They are not disciplining you because they are angry; they are disciplining you because it's something that needs to be directed in the classroom.

> They create a safe learning environment for you, because you can't learn if you don't feel comfortable. They present the material for you; they don't just give you a quiz on it. They help the students discover the best way for them to learn, so they feel comfortable to ask questions. They don't give the students the answer, they give the students the tools to discover the answer. (Interview #3, Lines 37-44).

Relationships. I used the lens of interaction to examine the ways in which Sarah's relationships with co-workers and prior relationships with others influenced her science teacher identity. During our third interview, Sarah reminisced about the conversations she would have with students when she worked as an attendance clerk, and how they would ask her questions about her nursing classes and specifically about science. It was clear to Sarah that many students did not have a clear grasp on basic science concepts, and that was directly affecting their lives as far as health and decisions that they made. Sarah told me that it was these conversations about science that changed her mind about attending nursing school and she became interested in teaching science. After two years working as an attendance clerk, she was now concerned with helping people in a different way. Instead of treating them as a nurse, she would share her love of learning and teach them scientific knowledge and skills in the classroom.

Sarah's teacher education program did not prepare her for the perils of working in a DAEP, however, and as our interviews grew in number and the school year

progressed, so did her frustrations. She simply answered “no” when I asked her during our first interview if anything in her teacher education program prepared her for working at Parsons, and was especially critical of the classroom management techniques she learned:

> Really none of the classroom management stuff, I haven’t been able to utilize here. They tell you, “use your signals” and “do this”…If I try to use a signal I usually get the middle finger…give me a break (Interview #1, Lines 34-37).

In our second interview, Sarah expressed that she was lost when trying to find an instructional method that was effective with her students. Even though she was knowledgeable of various instructional techniques from her teacher education program, she felt none of them worked:

> As far as instructional methods, the only ones I know are from my education classes, none of them really work. I mostly just wing it (Interview #2, Lines 270-271).
>
> I do not feel as though I have any questions at this time unless it would be how to develop a better instructional model for students and teachers in this type of school setting (Journal #11, Lines 18-20).

Sarah also felt that she was unprepared for entering the teaching profession and her teacher education program should have provided field experiences in DAEPs. She did not specifically indicate that this would have deterred her from accepting this position,

but she insisted it was the culture of the institution and the culture of the student demographic that was the most challegning aspect. During our fourth interview, I asked for Sarah's view:

> Middleton: Do you think it would have been beneficial for you, in your educator certification program student teaching to have field experience in the DAEP.
>
> Sarah: Absolutely
>
> Middleton: Do you think that it would have scared you away from teaching here?
>
> Sarah: I think that it would have helped me make an informed decision before I accepted the position.
>
> Middleton: so you wouldn't have accepted the position?
>
> Sarah: I'm not saying that. I did work at MHMR for three years before going into education field. I think it would have helped me make a more informed decision because I didn't know much about the environment, but it would've helped me be more or better prepared with the environment of the DAEP. Because I wasn't familiar with the kinds of students that would be there or the duration and it was kind of like a crash course during orientation (Interview #4, Lines 140-150).

Sarah's tone and confidence in her prior experience working at MHMR reveals that she was not deterred from working with DAEP students. One the contrary, she looked

forward to working at Parsons and accepted the position self-assured that she could be successful as a science teacher in this environment. Unfortunately, her frustrations would continue to grow and more obstacles would present themselves as she worked to make positive working relationships with her co-workers.

Sarah believed her fellow teachers at Parsons viewed her in a positive way, stating that they would compliment her organization skills and subject knowledge (Journal #2, Lines 20-21). Unfortunately, it was apparent early on that she did not feel the same about her co-workers. During our first interview, Sarah stated that many of her fellow teachers had given up teaching altogether with many of them resorting to showing movies every class period. In addition, she was encouraged by fellow teachers to do the same as well as simply give students a passing grade so they could return to their home campuses. When I asked why she had not given up on teaching and why she did not show movies every day, she had a very stern response:

> Because, a) I would like to try and teach them something; b) the one time I showed them a video from Discovery Learning someone jumped down my throat. It wasn't even a movie, and; c) I didn't become a teacher to show movies, I came here to teach (Interview #1, Lines 198-202).

Sarah began to feel alone in her endeavor to continue instruction at Parsons. To her, it seems as if every teacher but her had given up and she was the only one teaching. She grew increasingly frustrated in her tone during our interviews, often citing specific instances and specific teachers whom she knew were not conducting instruction:

> I mean, the reading teacher next door shows movies every day…the reading teacher shows movies, I can hear them every day through the wall and no one says anything to her (Interview #1, Lines 198-203).

Sarah even felt isolated within her own department. By the second interview (late February), she was planning lessons alone without the aid of the more experienced science teachers and she believed that she was the only person she could rely on:

> I don't have anyone to collaborate with; the more experienced science teacher there is coming to me and asking me what I am doing for Biology. And she is supposed to have taught Biology before. I don't have anyone to plan with, so I am kind of sink or swim out there by myself" (Interview #2, Lines 368-370).

Throughout her journal entries, Sarah would convey that the relationships she had with fellow teachers at Parsons were a source of frustration and stress for her. As a result, she began a process of self-isolation away from the rest of the faculty. She believed that seperating herself from the other teachers was the best method for her to stay resilient and continue her quest to conduct classroom instruction without interference. She became depressed also suffering from sleep depravation and migraine headaches and sought medical treatment for her work related stress which she blamed partly on her co-workers. She was also convinced that everyone, but her, had given up on enforcing the discipline policies and no one was working for the students' benefit:

> I feel as though I am the only teacher who is trying to follow the rules and it is impossible to do when it is clear that it is not being done anywhere else in the building. I have started keeping the door to my classroom locked from the outside so that wandering students cannot enter and it has helped tremendously. I think the only thing that is going to help me get through the end of the school year is the fact that I have started on an antidepressant which has helped to improve my mood slightly. It has also helped to reduce my stress level because I am not constantly worrying or upset about things I cannot change at my job. Socializing at work with my co-workers is a source of stress as well which I have tried to reduce because I don't like to hear them complain about each other or work. The result is that I mostly keep to myself. Instead of offering insight into how to better work with the students, they just complain, which adds to my stress and frustration (Journal #12, Lines 11-21).

Sarah's narratives reveal a negative shift on her science teaching identity from the beginning of our converstations. However, she was able to overcome these issues and never became a teacher that showed movies every day. She stayed positive and resilient, never allowing her frustrations and work related stresses to impede her desire to continue teaching. She continued to plan lessons and carry out instruction in spite of her fellow teacher's suggestions to the opposite. She refused the advice given to her by

administrators to drink alcohol to relieve stress (Interview #2, Lines 46-49) and held her ground with her students when her fellow teachers rescinded:

> Being firm, fair and consistent. I know I say that a lot, but that was supposed to be our motto at this school and it seemed like at times I was the only one doing it. You come into my room a certain way, you act a certain way, and I don't care what the other teachers are doing because this is my classroom and, no, we aren't going to watch movies every day (Interview #5, Lines 52-55).

Her ability to stay firm, fair, and consistent gave Sarah the tools to become a more resilient teacher and the negative experiences she faced in her relationships with other teachers at Parsons only added to her excitement when she was appointed to a new position in a different school. In our final interview, Sarah stated that she was excited to start over at a new school where she would be working with teachers in a collaborative atmosphere that would be appreciative of her strong work ethic and firmness in the classroom.

In summary, the experiences Sarah had as a science learner impacted the development of her own science teacher identity. The analysis of her narratives showed that her experiences as a student influenced what kind of teacher she wanted to be. This is in agreement of Avraamidou's (2014) statement that prior science experieneces, whether negative or positive, are crucial in the development of one's own science teacher identity. Sarah had litte interest in science in high school, but her interest in the nursing profession and conversations with students while she was an

attendance clerk led her to chose teaching as a profession. In addition, Sarah chose a different route when relationships with co-workers caused her stress. Contrary to Pegg, Schmoock and Gummer's (2010) ascertation that science teachers feel isolated because of their teaching field, her isolation was intentional and self-imposed because she felt she was the only person teaching. Her negative views of her co-workers caused a major shift in her science teacher identity development as she stayed resilient in maintaining structure, discipline, and instructional integrity.

Institutional identity: The role of the environment. In this section, I use the instutional lens to describe Sarah's identity as set by her superiors through her narratives. This perspective of identity is fixed through the aspects of situation or context, specifically, how the role of her mentor teacher and school administrators at Parsons and the policies they implemented affected Sarah's science teacher identity development.

Sarah had negative experiences with her mentor teacher and viewed this person the same as her other co-workers. The district policy at Parsons requires that first-year teachers be placed with a mentor teacher to guide her through the trials of their induction period, but Sarah felt that her mentor teacher had given up as well; Sarah was left to fend for herself:

> Well, first of all, my mentor teacher wasn't even a science teacher, I think she taught or was supposed to teach a computer class. No surprise, she had issues with the kids using the computers inappropriately and getting on Facebook or watching movies. And I was supposed to do planning with the other science teacher

> during our common planning period. And she was supposed to have all this experience teaching and she was coming to me, the brand new teacher asking me what I was going to do or what I was going to use; asking me for help in planning lessons. She eventually stopped teaching too, showed movies, and didn't come out of her room during our planning period. So I basically was alone during planning times. I felt like I was the only person trying to teach in the whole school. I stopped eating lunch with the other teachers, I stopped leaving my room because I felt like an outcast (Interview #5, Lines 232-241).

Sarah's lack of support at the fundamental level from her mentor teacher would prove to be just the beginning of her frustrations and conflicts with administrators at Parsons. In our third interview, Sarah explicitly stated that her primary source of frustration teaching at Parsons was the lack of support from her principals. She initially came to Parsons with the assurance that it was a highly stuctured and controlled atmosphere, but Sarah would quickly learn that this was not true. Not only did she feel isolated from other teachers, she felt underappreciated as a teacher:

> I think that administrators (principals and higher up) view my efforts as minimal and poorly because they are always in their offices, avoiding dealing with the students that we see all day every day, but they have no problem telling us that we are doing things wrong (Journal #2, Lines 21-24).

Sarah's instructional practices suffered as her principals avoided enforcing the disciplinary policies at the school as well as interacting with the students in general. Furthermore, she viewed her principals as incompetent, and blamed them for many of her classroom management issues:

> The students know that nothing will be done when they misbehave, and that reinforces the misbehavior" (Journal #1, Lines 48-49).

> The kids know that they can get a pink slip and leave class and not have to do the work and get sent right back to the next class with no consequence, and they lose all respect for the teacher because they know nothing is going to happen to them" (Interview #1, Lines 135-137).

> Nothing is done to students when they are written up and no teaching is going on (Journal #6, Line 28).

As Sarah wrote journals entries and our interviews continued, it became very apparent that she faced daily battles with her principals and lack of discipline enforcement. Eventually, she indicated that she had stopped writing pink slips and sending students to the office because she knew the principals would send them right back. On numerous occassions, Sarah would be come very agitated when I would ask her questions concerning her principals. Oftentimes, she would take the opportunity to diverge away from unrelated questions and vent her frustrations directed at school

adminstrators. Aside from their lack of disciplinary support, Sarah noted many times that the principals blamed the teachers for their lack of classroom management skills. During a faculty meeting following an incident in February when a teacher was assaulted by a student, Sarah stated that:

> The principal stated that the teaching staff is confrontational and took no responsibility for any of the situations that were discussed (Journal #4, Lines 20-21).

There were three more instances in which a student assaulted a teacher at Parsons during the course of our interviews, and Sarah saw this as a serious issue. The discipline at Parsons had become lax to the point that she did not feel safe in her own classroom:

> I do not feel safe in the classroom and have requested an additional person in the room or to have the students' schedules changed to have fewer students in the class" (Journal #3, Lines 10-12).

Sarah's request was denied, and as the number of students at Parsons grew, she stated that the level of unpredictability led to an overwhelming level of stress. Sarah pointed to the disciplinary point system being flawed as the main culprit in this problem. She had strong feelings towards the point system and insisted that it could be effective if used properly, but the principals as well as the teachers at Parsons were not consistent in doing so:

> I think the point system is stupid. The point system is supposed to be based on the behavior in the classroom, but there is no

> consistency between teachers. Their grades and their behavior is supposed to be separate; some teachers will combine them on the points. I think it's stupid, there is no consistency. They (the principals) threaten the students with removing points but there is no follow through" (Interview #1, Lines 239-245).

Sarah felt that frustration with the discipline policy infected the entire teaching staff. She indicated that one of the issues was that her fellow teachers had given up on trying to maintain discipline because of lack of adminstrative support. When teachers would attempt to discipline students by removing points, they were underminded by the principals:

> When the teachers see that they are not being supported by the administrators, they just give up. And another big problem is pink slips and those stupid folders, because they bring them in and tell them they have to have these three things; attendance, points, and your grades to get out. And about two weeks into it the students see that's not true so they start not working. They stop behaving because the can go cry to Mr. (Principals name) and get their points. I've given a student a one before; she didn't like, and she walked out of the room without permission, went to Mr. (Principal), cried about it and he overrode it, gave her a three and some bonus points, all because she didn't like the fact that the teacher gave her a one" (Interview #2, Lines 181-189).

Shortly after our second interview in March, the head principal resigned, an event Sarah thought may have been a forced retirement. She was not sure why this occurred, but she was hopeful that his replacement might make some positive changes. Unfortunately, this would not be the case as the lack of discipline support continued. Sarah placed the majority of the blame for the schoolwide discipline issues on the assistant principal, who was tasked with being the campus disciplinarian:

> Our assistant principal that is supposed to be handling the discipline and those matters. He could take care of the discipline issues but when someone is sent out of the room he just sends them right back or doesn't do anything and waits to send them to the next class period. So now the students think they can get away with anything they want, so we as teachers feel like we don't have any kind of support or authority and the students feel like they run the facility (Interview #3, Lines 138-142).

Although Sarah felt she had lost all authority in her classroom, she never gave in to the mounting pressure to give up and continued to follow the discipline policies; she was resilient on staying firm, fair, and consistent. Once again, Sarah felt alone in her efforts to enforce discipline properly and to follow the policies as they were explained to her when she accepted the position. Her frustrations with administration would soon manifest themselves further as the principals lack of focus and inconsistency would interfere with her instructional practices.

At the beginning of the year, the principals planned to implement the Fundamental Five (Cain & Laird, 2011) instructional method in all classrooms at Parsons. By January, the instructional focus had once again shifted:

> They gave us some other book that we are supposed to be reading, but every day, every time we have a meeting its something different we are supposed to be focusing on" (Interview #1, Lines 97-98).

The principals gave the teaching staff numerous reading assignments at meetings and required that the teachers submit written reflections on the articles and books, often with no indication of the purpose. The reading assignments, as Sarah described, were "all over the place", with no specific focus in mind as to what they could be used for in a DAEP. Soon after, Sarah began to feel as if she was being picked on by the principals. Her narratives indicated that her administrators would aggressively chastise her in front of her students concerning her instructional delivery during classroom observations:

> The one or two times the principal has come into the classroom he doesn't even try to see what I am trying to with the classroom, he just automatically just starts criticizing (Interview #1, Lines 8-10).

Oftentimes, a principal would enter her room and interrupt her instruction to criticize her lesson frame statements, indicating that they were improperly written or posted:

> One time the assistant principal came into my room and told me my objective was wrong when he really didn't understand what it was and when I explained to him exactly what it was he said, "oh, ok I get it now", but he told me in front of the students that it was wrong; he didn't even take me out of the classroom (Interview #1, Lines 23-26).
>
> They come in and tell me that I am doing it wrong, and then they ask me what my objective means, well if you don't know what my objective means then how do you know I am doing it wrong? (Interview #2, Lines 364-366).

They were especially critical of her when she would show video clips from resources her district encouraged teachers to use; citing the no movie policy. In one particular instance, a principal removed Sarah from the classroom:

> He has somebody come in and watch them so he can pull me out and talk to me and tell me that I shouldn't be showing a video. I mean it's not like a movie like everyone else shows that has nothing to do with the content, its actually content specific from Discovery Education; a website that the district encourages us to use with a video quiz at the end that we are going to discuss after they watch it. He tells me that I'm disengaging from the students, that I don't need to be showing movies. It's not a movie! It's a

> video that we are going to discuss! I don't know, it just made me mad.(Interview #1, Lines 13-19).

She felt that perhaps the principals were picking on her because she was a new teacher, but regardless of such, she did not understand why they were so focused on her classroom when in her mind she was the only teacher teaching.

Sarah's conflict with principals would eventually include criticism towards her following the district curriculum. It was apparent to Sarah that the principals viewed the district curriculum as inadequate, as did Sarah, for DAEP students. Desperate to find something that worked, the head principal tasked Sarah with creating her own curriculum and urged her not to use what the district provided. Sarah refused to do such, and felt as if it was a hopeless effort because many of her students simply refused to participate in classroom activities; once again Sarah blames the lack of adequate support and discipline:

> I was told not to do that, not to use what the district gave me, and that I needed to design my own curriculum. What's the point of designing a curriculum when they aren't even going to halfway do any of the work?" (Interview #2, Lines 103-105).
>
> They expect me to get them engaged and follow and provide them with this curriculum, but when I ask them for help when someone is not compliant they don't help. It's a disciplinary school but there is no discipline. I have 20 girls in one class and they are saying inappropriate things to me and when I ask for assistance I don't get

> any. I've called for help before and no one came. I get no support. They give them this contract, they tell them this is what you have to do, they have to dress a certain way and walk a certain way in the halls and it is not enforced. It's supposed to be a disciplinary school." (Interview 3, Lines 209-215).

These statements clearly indicated negative feelings by Sarah towards her principals. Her narratives exhibited that she felt them to be incompetent, and that they viewed her to be an inaquate teacher. But the simple fact that she was asked to build a science curriculum specifically designed to fit the needs of DAEP students suggests the contrary.

Eventually, Sarah's view of her own science teacher identity would take a drastically negative tone. The added pressure of being asked to buid a curriculum and her conflicts with adminstration made her feel as if she was not a science teacher at all. Many times, she expressed that she felt more like a babysitter and that she was ashamed to be working at Parsons:

> This program is a joke and I am embarrassed to be associated with it" (Journal #7, Lines 18-19).

In our very first interview, Sarah stated that her experiences up to that point were negative and she was considering a career change. Soon thereafter, she began to doubt her own ability as a competent science teacher:

> I feel like I hate teaching science and no one feels as though I am a competent instructor and I think that I should have never accepted this position" (Journal #12, Lines 21-22).

In her mind, Sarah was not growing as an educator. The restrictions on classroom instruction, absence of lab activities, and the constant barrage of criticism from the principals made her feel that her teaching abilities were in decline:

> I don't know if I feel anything. I don't feel like I am creative, I feel like if I went to another school I would be awful. I feel like I am becoming more and more stupid every day (Interview #2, Lines 422-423).

She was not able to be creative in the classroom, and when she would try to have fun activities and incorporate multimedia or interactive lessons, she was told not to do so. Her frustration had reached a point in which she felt she was not conducting any instruction whatsoever. In her own words, she felt useless as a teacher:

> I am not doing any instruction at all. That's how I feel. I feel like I am just being put in a room so they can say that they have a teacher and that is all (Interview #2, Lines 429-430).
>
> This is by far the worst setting for an educator (Journal #13, Line 9).

Feelings of hopelessness and being trapped began to overtake her normally firm and hard charging attitude towards working at Parsons. She shared with me that

she was not able to get interviews for open positions for the sole reason that she worked at a DAEP. Sarah believed that other principals at “regular schools” looked down upon DAEP teachers and viewed them as inadequate, unprepared, and unable to conduct normal classroom instruction. She shared with me an instance in which an interviewing principal expressed to her co-worker that he was under the impression that DAEP students were on their best behavior, and as a result, she was probably lacking in classroom management skills. As the school year progressed and she submitted multiple job applications at schools within the same district; she did not receive a single call for an interview. Her feelings of being trapped intensified, and she expressed that accepting the position at Parsons was a mistake.

Sarah’s narratives present the clear message that conflicts with administrators had negative impacts on her institutional identity as a science teacher. According to Bobek (2002), the main reason teachers leave the profession lack of administrative support. Constantly feeling the blame and aggressive behavior by her principals almost brought Sarah to her breaking point and she often thought of walking out and quitting her job. Adamant in her statement that her needs as a teacher were not being met, Sarah’s transition from her student teaching experiences to her induction period as a teacher were filled with personal struggle. The absence of a competent mentor teacher denied Sarah the ability to share ideas and learn effective practices for her students. The lack of support she received from her administrators and mentor teacher are in direct conflict with Watkins (2005) suggestion that first year science teachers transitioning from a different career require more attention and support than others, especially concerning student discipline.

Discourse identity: Finding what works. Sarah started her first year teaching at Parsons with the enthusiasm and vigor that has been documented numerous times in the literature. She felt it was an opportunity to really make a change in the lives of her students that came from underprivelaged backgrounds. It was her opportunity to make an impact that no other teacher had been able to do. Given the impression that Parsons was a highly structured atmosphere in which discipline was the highest priority, Sarah began the year with the highest of expectations for her and her students and looked forward to working with a large numebr of teachers with years of valuable experience working with DAEP students.

At the beginning of the school year, Sarah was given instructions by her administrators to follow the district scope and sequence document to keep her students on track with their home campuses academic schedules. When DAEP students return to their home campuses, they were expected to be on track and caught up with the academic calender. Sarah found this to be increasingly difficult and indicated that many students at Parsons had not been to school for a long period of time and were not on level with their current science courses:

> We are playing catch up all the time; the kids are clearly not on level with reading, math, or anything. They are so far beind, there is no way we can catch them up (Interview #1, Lines 116-118).

Her battle to catch the students up on the district curriculum was uphill and was the source of many of her frustrations. She related her job as a DAEP science teacher to that of a “salmon swimming upstream”, filled with obstacles that would inhibit her to

reach her goal. She felt that the main issue was that the district administration did not understand the severity of the educational deficiencies of DAEP students, and therefore, the curriculum was not appropriate for them:

> With this group of kids,what the district wants me to use is aiming way too high. They can't understand the vocabulary, and the concepts are way too high brow for them. It needs to be brought down and start off with more basic concepts, more things they can relate to (Interview #2, lines 122-125).

Initially, Sarah wrestled with the requirement by her principals to have students fill out and be able to explain the lesson frame forms at the beginning of every class. She found that she was losing valuable instructional time by first getting non-participatory students to complete the forms, and then by explaining the statements for students to be able to identify the daily goals. By February, it had become apparent to Sarah that she could not use the district curriculum verbatim, especially when the home campuses were not sending students assignments or lesson plans. In addition, being prohibited from using laboratory equipement or conducting laboratory exercises prevented her from adhereing to the district demand to use problem-based instructional methods. At the same time, the principals at Parsons enacted a "no video" policy to counteract the number of teachers that had stopped giving instruction and had resorted to simply showing movies to keep the students quiet and in their seats.

In a what Sarah would later describe as a defiant act, she began to look beyond what was provided by the district to enhance her classroom instruction. Instead of

following the distict calender, she would treat her class as an intervention to get her students familiar with the basic concepts and build on their knowledge from there. She did away with many of the instructional checkpoints required by her principals (pre-tests, vocabulary quizzess, etc…) and she started to incorporate learning stations in her classroom to provide multiple different tasks to keep students engaged:

> The most successful aspect has been to incorporate multiple activities to keep students busy, if not interested (Journal #2, Lines 9-10).
>
> I have a variety of tasks for the students so that even the most energetic students seem eventually to become engaged" (Journal #2, Lines 11-12).

Against her principals wishes, she then incorporated videos into her lessons as a way to introduce science material and found that it was an effective way to get peak student interest and engage them in scientific discussion. In her most challenging class, which has mulitple grade levels in a single period, Sarah was faced with designing instruction which focused on multiple subjects at the same time:

> Half of the kids are biology, and the other half are health and nutrition kids, and we were doing human growth and health, and cell repair and things like that. We were watching a clip on discovery education about viruses and disease and they would keep asking me, "is that really true?", and "does that really happen?" So we had a discussion about the topic and that was really fun, when

> they actually paid attention and were interested in the topic. (Interview #2, Lines 213-219).

Although it was not completely successful with all her students, she moved assessments towards a more interactive model in which students collaboratively worked together to complete assignments:

> I changed the manner in which I administered vocabulary quizzes. Instead of matching words to definitions using a word bank, they will utilize the interactive review game together as a group to decide the definitions to the vocabulary. Students are having more success with this method, although those that are intent on disengaging from school are still refusing to participate" (Journal #3, Lines 2-6).

Sarah was also able to incorporate small group discussions in her classroom by using a different approach that eliminated the pre-tests and presented information in a way that allowed students to create their own questions about the material. One lesson in particular was very successful with her 9th grade Biology class:

> I covered taxonomic groups, heredity, interdependence, and continued with plant structures and adaptations. I changed up the presentation of information in the beginning by eliminating the pre-test and replacing it with key concepts and fundamental questions that the students write down and answer independently. This has been more successful in generating discussion and

> helping to ascertain students' knowledge about the subject as well as getting students to do the work. Students who are apathetic and defiant are still not working. However, this method is more successful in generating student work and class discussion about the topic (Journal # 11, Lines 1-7).

Her descriptions of student success and engagement in the classroom did not come without conflict from students. Sarah frequently described how students were intent on derailing her instruction and there seemed no way to deal with the matter. She felt that this particular school was full of students that had no interest in school, and furthermore, no interest in learning science. Sarah became baffled by the sheer magnitidue of misbehavior that occurred at Parsons on a daily basis, even though it was a school designed to modify negative behaviors. In our first interview, Sarah indicated that the enforcement of disciplinary policies by the assistant principal had started to become fairly passive, but she was able to maintain order by consistently reminding students of the behavioral expectations of the school. When a new student was assigned to her classroom, she would take that opportunity to review her classroom procedures and behvioral contract each student had signed at the intake process:

> Every time we get a new student, which is almost every day, I try to maintain structure, go over the rules and expectations of the program, what I expect them to do when they come into class. They really don't have a huge problem with the structure, they really don't have a problem, they are not especially defiant

> students, they are used to the school atmosphere from their regular school, and they didn't really have a problem with that, they just did something stupid like go get high during school or something else that was really non-school related (Interview #2, Lines 271-278).

The main issue that Sarah wrestled with in welcoming new students was their negative attitudes towards school and their negative attitudes towards Parsons in general. Sarah often commented that many new students had an apathy towards school work in general, not just science in particular. New students would often question her motives for attempting to deliver instruction, expressing their opinions of how the DAEP played a role in their lives:

> I think they have apathy, they don't care. They made the statement before, "why do you even care what our grades are? Why do you care if we do it or not?", or, "this isn't a real school, we don't have to do this work" (Interview #1, Lines 190-192).

These statements are also expressed in Sarah's teacher drawings, all of which show students refusing to participate in class. Sarah insisted that not all of the students gave her trouble, and for the most part, classroom disruptions occurred more frequently in her middle school classes. She believed that the spectrum of negative classroom behaviors was a result of three major variables: the nature of the offense a student committed to be placed at Parsons, the lack of positive role models at home, and students having special needs or accommodations that were not being provided.

In her conversations with students, Sarah always tried to avoid asking them why they were sent to Parsons as she did not want to create any prejudices towards her students. Unfortunately, as new more new students arrived the classroom dialogue between students would be directed towards away from school and towards more non-academic topics:

> Each time there is a new student, all the students focus on is what the student did to get placed in the program, where they are from, etc." (Journal #8, Lines 4-5).

In our second interview, Sarah noted that she began to see a shift in offenses as students progressed in grade levels:

> Middleton: Are the bulk of your issues with your middle school students?
>
> Sarah: Yes.
>
> Middleton: Why do you think that is?
>
> Sarah: Honestly I don't know. A wild stab, maybe some type of developmental or home issues, environmental issues at their home school. I am not sure. A lot of them, well we don't ask them what they are there for, but most of them talk about being there for violent reasons.
>
> Middleton: Why are the high school students there?
>
> Sarah: Most of them are there for drugs.
>
> Middleton: But the middle school students are there for?

> Sarah: For fighting, assaulting teachers, bringing weapons to school (Interview #2, Lines 259-268).

Sarah also noticed that the students that were there for drug related offenses were more compliant and more receptive to a school atmosphere, whereas the more violent offenders were more defiant and held more negative views towards school. When I asked her to elaborate on the difference between drug related offenders and violent offenders, Sarah offered this description:

> They [the students with drug related offenses] are really picking up the material really quickly; they will pick up on the conversation and have good discussions. They will actually even do small group work, they will do their assignments, ask for extra work to take home, and as far as the points go, they won't go to the administrator asking about their points. They will go straight to the teacher asking for extra work to get their points because they want to get done and get out. And unless they are on the other end of the spectrum, you know have a violent side or something like that, they aren't really a problem. They will ask you and explain to you when they don't understand the questions, or ask for help. It's not an issue getting them engaged, and getting them to do their work is not very difficult at all. They will engage in normal conversation while doing their work, and they will actually talk to me and ask me how my day was (Interview #2, Lines 290-299).

It was not clear as to why this dichotomy existed, and Sarah was not able to make a generalization for its source. But she did view the drug offenders in a more positive light than the violent offenders, insisting that they were good kids and good students that somewhere along the line got caught doing "something stupid" (Interview #2, Line 277).

Regardless of why students were placed at Parsons, Sarah believed that very few of them had positive role models at home. She was appalled to hear their stories about their parents and living situations. As a mother, she was shocked to hear about how some students were using drugs with their parents:

> I can't imagine doing that with my child, or a child for that matter. And they like being at the school because there is some kind of structure, and it's the most that they have, and I fell like that the strictness they have, because my class is very strict, once they realize I am doing it for their benefit the like it because they like having some kind of structure in their lives (Interview #1, lines 225-228).

Her words indicate that the science classroom and learning environment she created for her students was done so with the needs of the students being the highest priority. She worked to create a safe learning environment for them, just as her high school science teacher had done for her. But as a new science teacher, she was not able to succeed with all of her students, and she felt that her special education students suffered the most from being at Parsons:

> A lot of them are special education and they may not have that ability to read or write. And we don't have anyone to help them with that, we don't have the manpower. The only time someone comes in to help them [the special education students] is when district assessments are given once a six weeks. And that is just because it's required" (Interview #4, Lines 77-81).

Sarah indicated that around 80% of her students had Individual Education Plans (IEPs) which required special services or accommodations. In our first interview, she stated that "there is no way they are getting the attention they need" (Line 179). Later on, she would offer her diagnosis of how this affected student behavior:

> A majority of the students attempt to avoid work because of an inability to do the work. The behavior masks inadequacies or learning disabilities that either have been identified and are not being addressed in this setting or have yet to be identified. Many students, when someone attempts to help them do work, become angry and have behavior issues again, not wanting to be the geeky, nerdy or good student in this environment" (Journal #11, Lines 14-18).

She also indicated that the highly mobile nature of DAEP students created a classroom dynamic that made it extremely difficult to maintain instructional focus:

Students are added to classes daily, which are a constant class disruption and breaks students' attention (Journal #2, Lines 8-9).

> Challenges this week include newly admitted students changing the dynamic of the 8th grade male class. The number of students in that class is around 13 and with the new students they now all choose to not participate instead of doing classwork (Journal #3, Lines 6-10).

With students constantly coming and going, she found it very difficult to make positive connections with them. With only a 30-day window, Sarah worked to make establish positive relationships with her students by providing them structure, something she clearly felt they lacked in their lives outside of school. She insisted that she was not there to be a friend to the students, but to quite possibly be the only positive role model in their lives. She stated that she cared about all of her students, and she cared about their scientific knowledge. She wanted all of her students to learn science, and to understand its concepts. When I asked her how she felt when she was able to make an impact on students lives getting them be getting them enagaged in learning science, she replied, “It validates my career choice”.

The above commentary supports the idea that Sarah’s identity development was shaped through her interactions with students and that she never doubted herself as an effective and caring science teacher. When she was faced with a demanding curriculum that did not fit the needs of the students, she unknowingly created her own science curriculum. Her defiance towards the school’s video policy only goes to show how far she was willing to risk her job to serve her students the best that she could.

She listened to her students and provided them with the classroom structure they needed, not simply the one they wanted.

Nature identity. Only once during the course of this study did Sarah indicate that she was treated differently by students as a female teacher than her male peers:

> The male students try to dominate the classroom, and I found as a female teacher, the majority of our students are minority students and I have found as a female teacher that these students have no respect for females, especially female authority figures. And also it's because maybe I'm a younger female teacher, the majority of the teachers are older. But I have talked to the other teachers and they have similar problems, they try to challenge my authority, they get in my personal space a lot, they talk about inappropriate things a lot to try and push my buttons,(sigh) or to get a pink slip to get out of class or to take over, or to try and disrupt class or whatever (Interview #1, Lines 68-75).

Her nature identity was most affected by those classes which were made up of all male students. In these classes, Sarah found that she was often bullied by male students in order for them to receive leniency on disciplinary consequences when they exhibited negative behaviors, or to get out of participating in school work. Her 8th grade boys class gave her the most problems, and would often "write gang signs on the smart board, roam the room in groups, get in my personal space, corner me and attempt

to bully me" (Journal #3, Lines 6-10). Sarah would not be deterred from her task, however, and she indicated that she was not alone in this experience and the students attempted these tactics with both male and female teachers. She stood her ground and stayed firm, fair and consistent. In short, she did not allow her gender to affect her science teacher identity.

Resolving, reflecting, and forming her science teacher identity

Sarah started looking for work in a different school very early. Eventually, she came to the conclusions that she would have to look outside of her district for employment as a teacher. By March she was tired, frustrated, and desperate; she knew that under no circumstances would she return to Parsons the following year. Along with teaching applications, she began to contemplate other fields and even decided that returning to school was an option. She applied and was accepted to a Doctoral program in Curriculum and Instruction and viewed this as a chance to increase her marketability as a teacher within her district. Unfortunately, she still received no calls for an interview. By April, she had received only one phone call asking her to interview at a small charter school in Houston. She was offered the job on the spot and accepted the position. It was then, and only then, that Sarah was able to reflect on her experiences and express her growth as an educator. Her negative perceptions of her own science teacher identity took a turn towards the positive, and her conversational tone during our interviews transitioned from frustrated to hopeful.

Shortly before Sarah accepted the position in Houston, the head principal retired from Parsons, and I cannot help but find that these two events may have spared

Sarah from joining the ranks of teachers leaving the profession after their first year. Much of our fourth and fifth interviews were focused on Sarah as a teacher, and how her experiences at Parsons helped her grow as an educator. She began to view herself in a positive light, indicating valuable learning experiences in her classroom management:

> I feel like I have definitely grown in my classroom management skills and my interpersonal skills as a teacher in dealing with students that have difficult personal issues that they bring to school with them. Things that I didn't experience during student teaching in a regular school environment. (Interview #4, lines 136-139).

Sarah felt that her experiences gave her the tools to enhance her instructional delivery, organization, and her ability to make positive connections and establish positive relationships with even the most difficult students:

> I feel like it has helped me to know what to look for to help enrich students in other areas. And organizing students to work in groups, even how to be a firm teacher. Some of my toughest students at the beginning have started bringing me flowers after PE class. It's helped me make those connections with those students. I have such a limited amount of time to make those connections, not the whole school year and they are tough students. Yes, I think that it has helped me be a better teacher in a regular classroom. (Interview #4, Lines 174-178).

In her reflections, Sarah felt she had become a more patient person; her interactions with students, fellow teachers, and her principals had caused her great grief. But her patience and resiliency to push forward and never allow herself to be beaten provided her greatest resolve:

> I learned I had to stick to my guns, don't back down on my rules and expectations for them. Even the ones that cussed at me and threw their work at me or ate it, I had to not let that break me down and I had to stay on top of them even when the principal wouldn't back me up. Every day we have work to do, every day I have expectations for the kids to meet and I wasn't going to lower those even though my co-workers said I should just let them pass and make it easy on myself. I mean, I didn't get into teaching to watch movies. I couldn't just give in and let the kids win even though they tried like hell to break me down like they had some of the other teachers. I learned to be patient. I had to put up with a lot of (expletive) not only from the students but also from the administrators, I think had I not been patient I would have just walked out and not come back in October (Interview #5, Lines 35-45).

Sarah's identity as a caring teacher expressed itself even further when I asked her why she did not quit her job:

> Because the kids have had so many people quit on them, it wouldn't be fair (Interview #4, Lines 224-225).

Working with such a wide range of learning abilities taught Sarah to be flexible with her students and with her instruction. Having to fend for herself, she knew that she was possibly the only person who truly cared for her students. She wanted them to feel safe while learning science and she became a firm, but flexible, teacher so that the needs of her students were met:

> When things didn't go the way I planned them, being able to change gears, and present the material from a different angle. I tried to accommodate every kid, which is hard because they are all so far behind. And then when there are multiple classes in the same room, just being able to shift my brain from one subject to the next very quickly. I think it has made me more aware of or recognizing that a student needs help but isn't comfortable asking for it. Really working to create a safe place for them, somewhere they can feel comfortable learning, even if they want to throw stuff at me and cuss at me" (Interview #5, Lines 147-153).

Looking back on her experience as a first year science teacher, Sarah was proud of the job she did at Parsons. She overcame many obstacles, resisted burnout, and maintained professionalism at all times. She believed that she had made a difference in the lives of her students and was successful in teaching them science.

Although she agreed that her first year experiences were not ideal, they made her a better teacher and that she did indeed grow as an educator. Sarah was proud of her efforts and that she was able to establish positive relationships with her students where so many of their teachers had failed in doing so. She explained that Parsons was probably the most difficult environment for a science teacher, and that if she was a DAEP principal she would not hire first year teachers. The culture shock she faced was at Parsons was magnified exponentially in comparison to what had been found in other studies (Wideen, Mayer-Smith, & Moon, 1998). In her own words, she described how she made it through the year:

> I stayed positive, and I never stopped working. I kept planning lessons, I kept using the resources I knew I could use and that would get the kids engaged. Like the short videos from Discovery Education or the BrainPop stuff that they said I shouldn't be using, I kept using them. I guess I was kind of being a little defiant. (Interview #5, Lines 124-127).

In summary, the purpose of this chapter was to analyze visual and written narratives to develop the case of Sarah and demonstrate how her past science experiences, interactions with administrators, relationships with students, relationships with co-workers, and her gender impacted her science teacher identity development. In the next chapter, I compare and contrast Sarah's experiences as a first-year DAEP science teacher with existing literature, discuss the implications of Sarah's narratives,

and present conclusions regarding areas of further research and the DAEP system in Texas.

CHAPTER V

DISCUSSION

This chapter is divided into three sections and includes the following: (a) summary of the study, (b) discussion of the research findings, and (c) implications and future research.

Summary of the Study

This study was initiated to understand the science teacher identity development in a first year teacher in a Texas DAEP. Specifically, this case study was driven by three research questions:

1. How does the literature define science teacher identity in reference to teachers in mainstream public schools?
2. What is the science teacher identity of a first year teacher in a Texas DAEP?
    c) What factors or experiences in a Texas DAEP influence the development of a first-year science teacher's identity?
    d) What factors or experiences are unique to DAEPs?
3. How does a Texas DAEP science teachers' identity development in a DAEP setting compare to that of science teacher identity found in the literature?

Gee's (2001) framework for identity development provided the theoretical lens for this study with the primary goal of comparing DAEP science teacher identity development to science teachers in conventional schools. Using qualitative case study methods, I focused on a singular case which allowed thorough description,

documentation, and interpretation of events as they occurred. Analysis of those experiences determined whether they were crucial in Sarah's science teacher identity development (Avraamidou, 2014; Saka et al., 2013).

Key Points from Literature Review

Literature focusing on science teacher identity and identity development revealed that new teachers will generally experience similar first year challenges and follow a basic sequence of identity development. Primarily, the literature review indicated that new science teachers will struggle accommodating various learning styles in their classrooms in addition to properly navigating the curriculum. In Sarah's case, the environment at Parsons would magnify these challenges by presenting her with a constantly changing classroom and an inadequate (or inappropriate) curriculum.

Also applicable to this discussion is Kroger's (2007) elaboration of Erikson's (1968) model of introjection, identification, and identity formation; and Fuller and Brown's (1975) stages of fantasy, survival, mastery, and impact. These models lay the foundation for analyzing Sarah's transition from a student to teacher, and her narratives allow us to visualize her transition from on stage to the next.

Finally, the literature review identified factors that affect the development of a first year science teacher's identity. These included subject affiliation and feelings of isolation, internal struggles, personal feelings, content knowledge, and prior experiences in scientific research or science classes. All of these key points discussed in the literature review manifested themselves in the analysis of Sarah's narratives, and revealed a salient truth about her experiences at Parsons; her experiences were not unique.

Sarah's Identity Development

By Sarah's own account her first year was very difficult and filled with negative experiences. I argue, as Sarah does, that she was able to learn from these experiences and grow as an educator and a person. Sarah openly stated that she was not prepared for the hardships that accompanied working at Parsons, but she attributed much of that to insufficient administrative support. Had she received adequate support from her principals would her experiences have been different? The answer to this question is beyond the scope of this dissertation, but Sarah's story demonstrated an extreme case of a novice teacher being placed in a highly stressful, unsupportive, and restrictive atmosphere while at the same time representing teacher resiliency and perseverance. In this section, I discuss the different elements that impacted Sarah's science teacher identity development, compare her experiences to existing literature, and evaluate if those experiences are unique to Texas DAEPs.

Affinity identity: Prior learning experiences. Within the literature, the prior learning experiences of science teachers were filled with narratives indicating both negative and positive events (Davis et al., 2006; Day, 2012). Sarah's prior learning experiences in science courses did neither influence nor deter her from becoming a science teacher. Although she could only recall a few specific learning experiences from her time as a student, she was able to utilize those memories when constructing her teaching identity. This supports Avraamidou's (2014) idea that a small number of experiences in learning science are critical in the formation of science teacher identity. Sarah did not have a large interest in science as a student, but her experiences with her high school science teacher and her college physics professor had profound impacts on

her identity as a science teacher. Based on the analysis of her narratives, Sarah wanted to be more like her high school science teacher who was caring, compassionate towards students' needs, and fun. She appreciated this quality of a reform-minded teacher who promoted science learning for all students using nontraditional practices. Sarah adopted this affinity identity as her own, supporting Kroger's (2007) assertion that we assume the identities of influential characters in our lives.

Affinity identity: Relationships. Sarah was never able to establish positive working relationships with her fellow teachers. Establishing productive working relationships with co-workers is a pivotal step in helping new science teachers transition into a professional atmosphere (Appleton & Kindt, 2002; Davis et al., 2006; Eick, 2002) and literature concerning new science teachers indicates that many feel isolated from their non-science colleagues (Davis, Petish, & Smithey, 2006; Pegg, Schmoock, & Gummer, 2010; Pirkle, 2011). Science teachers have been reported to feel isolated as a result of pressures to be experts in their field (Pegg et al., 2010), boredom (Roudebush, 2010), and restlesness (Ingersoll, 2007). Sarah's isolation, however, is unique. In the analysis of her narratives, I cannot help but classify her isolation as a defense mechanism consistent with Diehl et al's (2014) psychological study outlining coping mechanisms used by adults. Sarah rationalized her isolation from her co-workers by stating that socialization with fellow teachers added to her work related stress. By utilizing a self-imposed isolation away from her co-workers, she was able to fulfill Fuller and Brown's (1975) stage of *survival*, as she viewed interactions with other teachers as detrimental to her science teacher identity.

Institutional identity. Sarah did not have the support she needed from her mentor teacher. Proper support and encouraging relationships from mentor teachers have been shown to increase new science teacher self-efficacy and positively impact new science teacher identity development (Bradbury, 2010; Pegg et al., 2010). In Sarah's case she was placed with a mentor teacher that was not in her content field, and therefore, was unable to consult her mentor for assistance in science instruction related issues. Placing Sarah with a mentor that was not a science teacher was a significant error in adminsitrative practice by her principal. New science teachers have been shown to have high rates of success when placed with content specific mentor teachers that can guide them through first-year challenges such as classroom management, curricular decisions, and managing stress (Bradbury, 2010; Elliot, Isaacs, & Chugani, 2010; Luft, 2003). It is unclear how Sarah's mentee experience impacted her science teacher identity development because she removed herself from interactions with her mentor teacher prior to our converstations. She did not feel that her mentor was appropriate nor was she qualified to support her efforts in science instruction. Sarah also viewed the principal's choice of mentor teacher as another example of poor leadership decisions and insufficient administrative support.

The circumstance that Sarah wrestled with the lack of administrative support is not a unique experience; there are numerous instances in the literature highlighting poor administrative support of new science teachers (Bobek, 2002; Bradbury, 2010; Davis et al., 2006; Pegg et al., 2010; Pirkle, 2011).Sarah often stated that the hardest part of working at Parsons was dealing with administration and it was apparent early on that she would not return the following year. Her decision to leave Parsons is

consistent with the concept that negative relationships with administrators are a contributing factor to teacher attrition in challenging schools (Houchins, Shippen, & Cattret, 2004; Ingersoll & Smith, 2003). The negative relationships she had with administrators were detrimental to her science teacher identity development, and unfortunately, she was not able to isolate herself from them. Sarah's self-efficacy declined as she became more frustrated with administrative support, or lack thereof.

Sarah's experiences with her mentor teacher and principals are similar to Saka et al's., (2013) case study of Nathan, a novice science teacher in a secondary school. As did Nathan, Sarah allowed her frustrations towards superiors derail her science teacher identity development as she entered a state of professional survival (Saka et al., 2013). Concerns for surviving her first year teaching began to affect her emotionally and physically. Sarah differs most from Nathan in that she never stopped teaching and planning lessons. Whereas, Nathan developed a self-sufficient science teacher identity and refused assistance from collegues, Sarah's self-sufficient identity was developed out of necessity from the lack of assistance. In short, Sarah could not depend on anyone but herself.

When the head principal resigned and a temporary replacement took over, Sarah stated that the new principal left her alone and allowed her to teach her class as she saw fit and did not interfere with her methods. The new principal was supportive of her efforts to treat her classes like interventions and to modify the curriculum to fit the needs of her students. When this occurred, Sarah's identity development resumed and shifted towards the positive. She was able to teach her classes without intrusion and her self-efficacy, as well as her overall identity as a science teacher, improved.

Our interviews seemed less stressful for her and her stories indicating positive interactions with students increased in frequency. Sarah's actions to fully accommodate her classroom and create effective teaching strategies indicate she had progressed to *mastery* stage (Fuller & Brown, 1975).

Discourse identity Sarah's discourse identity was most affected by her student's classroom behaviors and her struggles with classroom management. DAEP students have all been removed from the regular classroom as a result of their behavior, so the classroom dynamics at Parsons were challenging to say the least. Regardless, Sarah shared the common struggle for new teachers to develop adequate classroom management skills (Davis et al., 2006; Zuckerman, 2009). Common with many new teachers, Sarah struggled with classroom management with her unique demographic of students. What puzzled Sarah the most was not the existence of student misbehaviors in what was designed to be a highly disciplined school environment, but the sheer magnitude and intensity of their existence. Sarah's narratives are most similar to studies of teachers working with incarcerated youth in Juvenile Justice Education Programs (JJAEP). Houchins, Shippen and Cattret (2004) reported teacher comments almost identical to Sarah's concerning student behavior. These authors stated that many JJAEP teachers expressed that they were not given adequate support or realistic options when dealing with classroom disruptions which were commonly characterized as sexually inappropriate comments and lack of student engagement. Furthermore, JJAEP teachers also reported, just as Sarah did, that they do not feel safe in their classrooms (Houchins et al., 2004).

Consistent with Zuckerman (2009), Sarah's concerns about classroom management drove her instructional decisions, but did so differently than expected. Zuckerman postulates that new teachers that struggle with classroom management will utilize instructional delivery that is less reform-oriented and more teacher centered . Sarah did the opposite and began using learning stations and activities with multiple tasks to keep students engaged in science learning. Even though the environment at Parsons was very restrictive towards reform-based practices, Sarah assumed the discourse identity of a reform-oriented science teacher when she abandoned traditional practices that she deemed ineffective for DAEP students. She was also able to integrate behavioral interventions into her science instruction, a technique encouraged by JJAEP researchers (Cox, Visker, & Hartman, 2011; Foley & Gao, 2002; Gagnon, Barber, Van Loan, & Leone, 2009; Houchins, et al., 2010). This action indicates Sarah's transtition to Fuller and Brown's (1975) stage of *impact*.

Factors unique to Texas DAEPs

Almost all of the factors that impacted Sarah's science teacher identity development were not unique to Texas DAEPs. Her feelings of isolation, lack of collegial and administrative support, stress and frustration are common in literature investigating first year science teachers. However, her negative experiences were intensely magnified as a result of the overall school culture and context at Parsons. Sarah's struggles with administration and collegial support were consistent with what is revealed in the literature concerning first-year science teachers in mainstream schools, whereas her experiences with students and classroom management are more similar to those reported in JJAEP settings.

JJAEP literature reports the highly mobile nature of student populations present a difficult challenge for teachers in addition to the high percentage of students with special needs (Gagnon, Barber, Van Loan, & Leone, 2009; Leone & Weinberg, 2010). The result is a highly stressful environment for teachers in general, not just new teachers (Houchins et al., 2004; Houchins, et al., 2010). I was unable to determine what the overall percentage of students with special needs was at Parsons, mostly because of its mobile population. Sarah estimations ranged anywhere from 25% to 80% at any given time, unfortunately, state records were not available that were reliable to report here. What I was able to determine was that Parsons was unique in one specific category when compared to JJAEP facilities; length of student placement. the typical length of placement for a JJAEP student in a short term facility is less than 90 days, and 9-10 months for long-term facilities (Houchins, et al., 2010). Parsons, on the other hand, had a typical student placement length of 30 days, a time frame Sarah viewed as almost too short to make any real impact.

Implications and Future Research

The case of Sarah is very unique and it is important to note that her stories are in no way an indictment of the DAEP system in Texas. Rather, the narratives presented are an opportunity for teacher educators and educational leaders to reflect on their own practices of teacher preparation and support. Furthermore, it is a harrowing tale of how unsupported teachers are impacted mentally and physiologically.

The analysis of data from Sarah's narratives strongly suggests that new science teacher identity formation from Gee's (2001) four identity perspectives are essential components in understanding how multiple elements within a DAEP context impact

the development of science teacher identity. Teacher's background experiences, and the communities in which they work, influence their instruction as well as their science teacher identity development (Avraamidou, 2014). This case study of Sarah does not place value on any of her teaching methods she was able to utilize, and no judgment is made here whether they were indeed successful. What is important is that Sarah viewed her teaching practices as successful in a DAEP setting, and that her identity was shaped as a result of this.

The importance of the case study is the case itself (Charmaz, 2008) and the purpose of the research was to investigate a singular case, Sarah, and explore her narratives for information concerning her science teacher identity development in a DAEP. By linking her experiences to each other and existing literature, we are able to see that DAEP science teachers experience the same challenges as their public school counterparts and colleagues in Juvenile Justice Programs; her experiences are common in all arenas of education. In short, first-year science teachers working in Texas DAEPs will experience challenges and hardships that all teachers face, the extent of which is dependent on the presence of available support systems and the ability of the teacher to successfully transition into professional practice.

There are numerous directions for further research into Texas DAEPs. As stated in the literature, not all DAEPs are the same, and many operate successfully under policies and procedures that differ from those at Parsons (Coleman, 2002; Cortez & Cortez, 2009; Toohey et al., 2007). Future research should include a multiple case study evaluating many teachers working under differing DAEP policies and environments such as boot camps versus other models. How new teachers are able to

navigate these different DAEP environments and develop their teacher identity would be interesting to say the least, if not monumental in the Texas DAEP reform movement.

There is no doubt concerning the need for further research in Texas DAEPs in general. A problematic area of Texas public education, few researchers venture in to DAEPs to conduct studies focusing on instructional methods and administrative leadership. Sarah's case presents an example of unsupportive principals in an environment where it would seem logical to conclude that teachers need more support than their public school teacher peers. From an education leadership standpoint, research into a best practices model for DAEP principals would appear to be a necessity in a time when DAEP recidivism is on the rise (Cortez & Cortez, 2009). In addition, professional development must exist to help DAEP teachers cope with the intense challenges they face on a daily basis, especially when working in a DAEP similar to Parsons. Stress management, classroom management, and instructional support for educationally deficient students were all topic that Sarah identified as areas she needed professional development in. Supporting our most vulnerable teachers in those areas may help to stem the high attrition rate amongst teachers of special populations, and provide some aspect of consistency where public education needs it the most.

Instructionally, science teachers in Texas DAEPs are handcuffed with restrictions on labs in fear of misbehavior leading to safety concerns. Glass, metal, chemicals, and sharp objects are strictly prohibited in DAEP science classrooms, thus making inquiry-based instruction and lab exercises impossible to conduct. Because of

these prohibitions, DAEPs with these policies that are not using viable virtual laboratory activities are not adhereing to the Texas Essential Knowledge and Skills (TEKS) standards for science instruction. Each science classroom is recommended to spend as much as 40% of instructional time in laboratory based exercises, yet Parsons made no school-wide effort to follow this mandate. Students attending Parsons (and school with similar policies) are thus being denied their free and appropriate education required by law. As a result, research into the development, implementation, and effectiveness of virtual labs and alternative methods of inquiry-based instruction is a desirable topic in alternative education.

Lastly, the narratives reported bring to light that the policies governing Texas DAEPs and how students are placed in them are in need of review. In the State of Texas, students can be placed in DAEPs for offenses ranging from dress code violation to assaulting a teacher, but the majority of placements are classfied as violations of the student code of conduct (Cortez & Cortez, 2009). School administrators should be required to be more specific for reasons of DAEP placements, and it is the opinion of this researcher that placing all ranges of offenders in the same facility is detrimental to their rehabilition. According to Sarah, drug offenders and violent offenders made up the majority of students at Parsons and Texas Public Education policy should provide drug rehabilitation rather than behavioral rehabilitation for these vulnerable adolescents.

A typical 30-day placement for students in DAEPs may seem like a harsh punishment, but when taken into consideration that the purpose of the DAEP is to rehabilitate behavior, sustain, supplement or enhance their current academic program,

and return students to home campuses, it seems that 30 days may not be adequate. I am in no way advocating that DAEP placements should be longer, rather, I encourage school districts to pursue programs in which these tasks can be accomplished at the students home campus. DAEPs should be reserved for the most difficult of students, not simply those who are defiant. Students with drug problems should not be placed with violent offenders, and rather should be offered drug rehabilitation programs at their home campuses.

The DAEP system in Texas is flawed with very few articles indicating successful programs (Metze, 2012). But I do not call for its eradication, rather I argue that DAEPs are a necessary evil for maintaining order and discipline in our public schools. DAEPs are in need of reform, however, and an exhaustive review and overhaul of Chapter 37 of the Texas Education Code is warranted. Students guilty of dress code violations should not be placed in the same facility as a student who assaults a teacher. Some authors argue that a DAEP placement is the last step before entering the School-to-Prison pipeline (Fowler, 2010; Fowler, 2011), I argue that it is the first step in entering it.

Conclusion

The case study reported herein identifies elements of the DAEP science teaching experience that impacted the teacher identity development of a first-year science teacher. Identity development was analyzed through the narratives of Sarah, as seen through her eyes. The study revealed that although Sarah experienced the same challenges as science teachers in all areas of public education, some of those

experiences were magnified due to the context of a DAEP setting. The real benefit of the study lies in the case itself. Sarah was able to reflect and form her identity as a caring, resilient, patient, and reform-oriented science teacher because of her willingness to participate in the study. By telling her story, she was able to paint a picture of what she wanted in a principal, in a school, and what kind of teacher she wanted to be for her students. This mode of reflection walks the boundaries of poetic self-intervention. When Sarah spoke, I listened. When she would diverge from topics and spin off on tangents filled with complaints regarding how much she hated her job, I provided her a podium to voice her frustrations. It was often difficult for me to resist providing her with some type of mentoring advice to deal with her issues at work. Oftentimes she would ask me for help, unfortunately, I could offer her none. I was often torn between being a researcher and being a teacher and mentor. I could not interfere with her identity development and because I did not do so, her narratives are true and uncontaminated. As we progressed in our conversations, one truth emerged that has only been voiced in literature on special education teachers in juvenile detention centers; the DAEP environment (specifically at Parsons) is just as stressful and detrimental to the personal growth of the teachers as it is to the students. I conclude with the words of Sarah, a more descriptive and holistic reflection of her experience than I could possibly offer, “It’s been a rough year, it’s been one hell of a first teaching job” (Interview #4, Line 128-129).

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APPENDIX A

IRB APPROVAL LETTER

TEXAS TECH UNIVERSITY
Vice President for Research

February 8, 2014

Patricia Patrick
Curriculum & Instruction
Mail Stop: 1071

Regarding: 504360 New Science Teacher Identity Development in a Texas Disciplinary Alternative Education Program

Dr. Patricia Patrick:

The Texas Tech University Protection of Human Subjects Committee has approved your proposal referenced above. The approval is effective from February 8, 2014 to January 31, 2015. This expiration date must appear on all of your consent documents.

We will remind you of the pending expiration approximately eight weeks before January 31, 2015 and to update information about the project. If you request an extension, the proposal on file and the information you provide will be routed for continuing review.

Sincerely,

Rosemary Cogan

Rosemary Cogan, Ph.D., ABPP
Protection of Human Subjects Committee

Box 41075 | Lubbock, Texas 79409-1075 | T 806.742.3905 | F 806.742.3947 | www.vpr.ttu.edu
An EEO/Affirmative Action Institution

APPENDIX B

FIGURES

Figure 1. Teacher Drawing 1

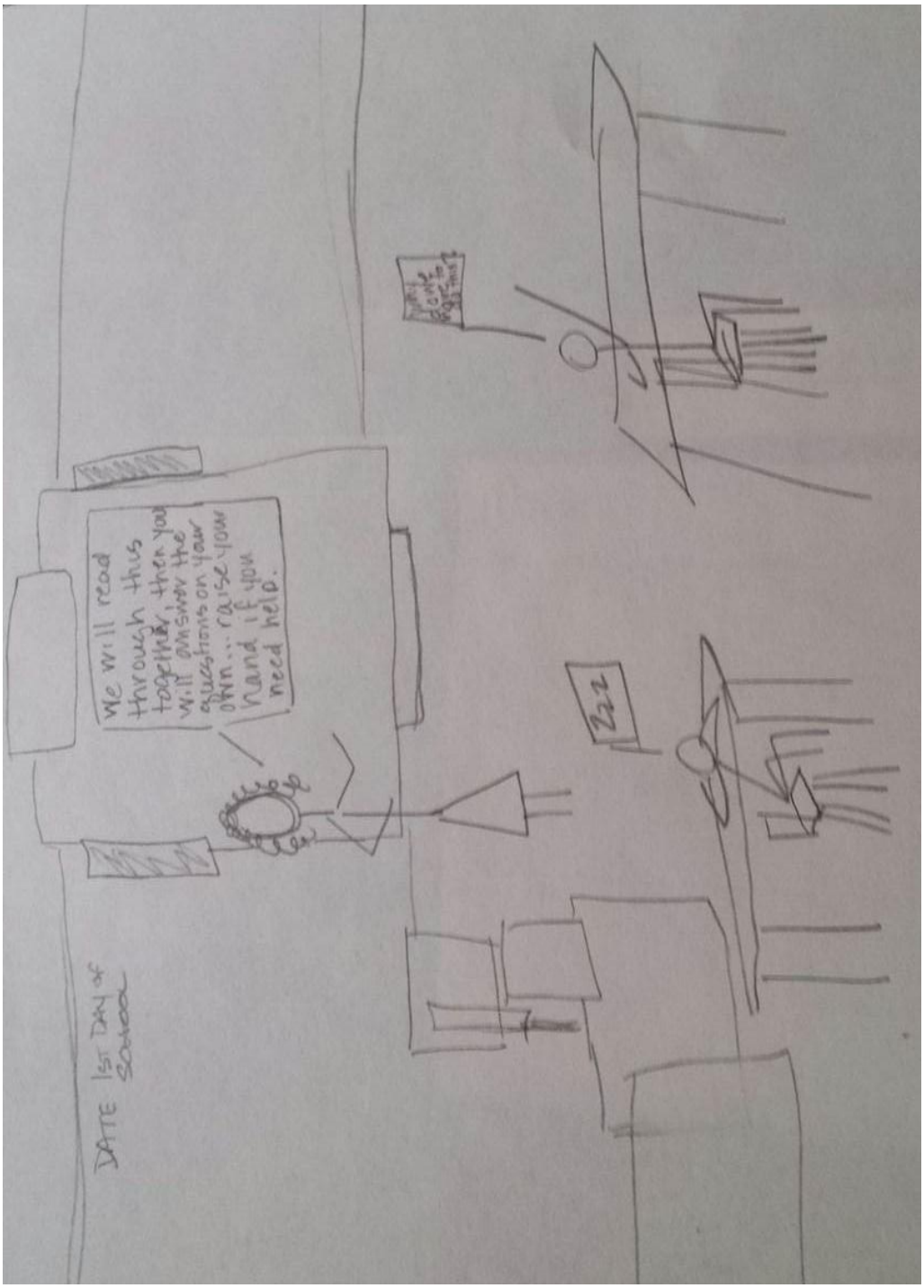


Figure 2. Teacher Drawing 2

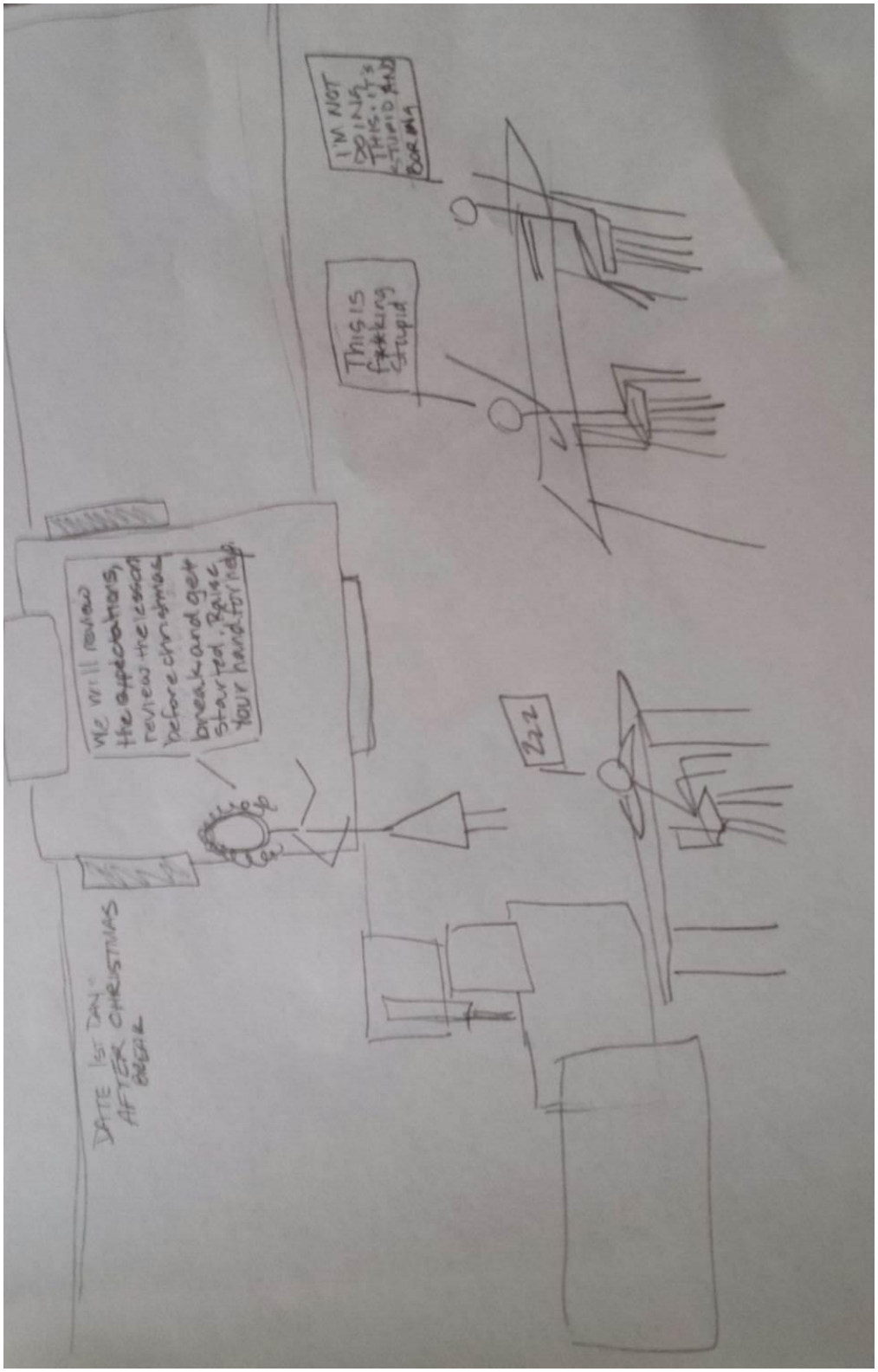
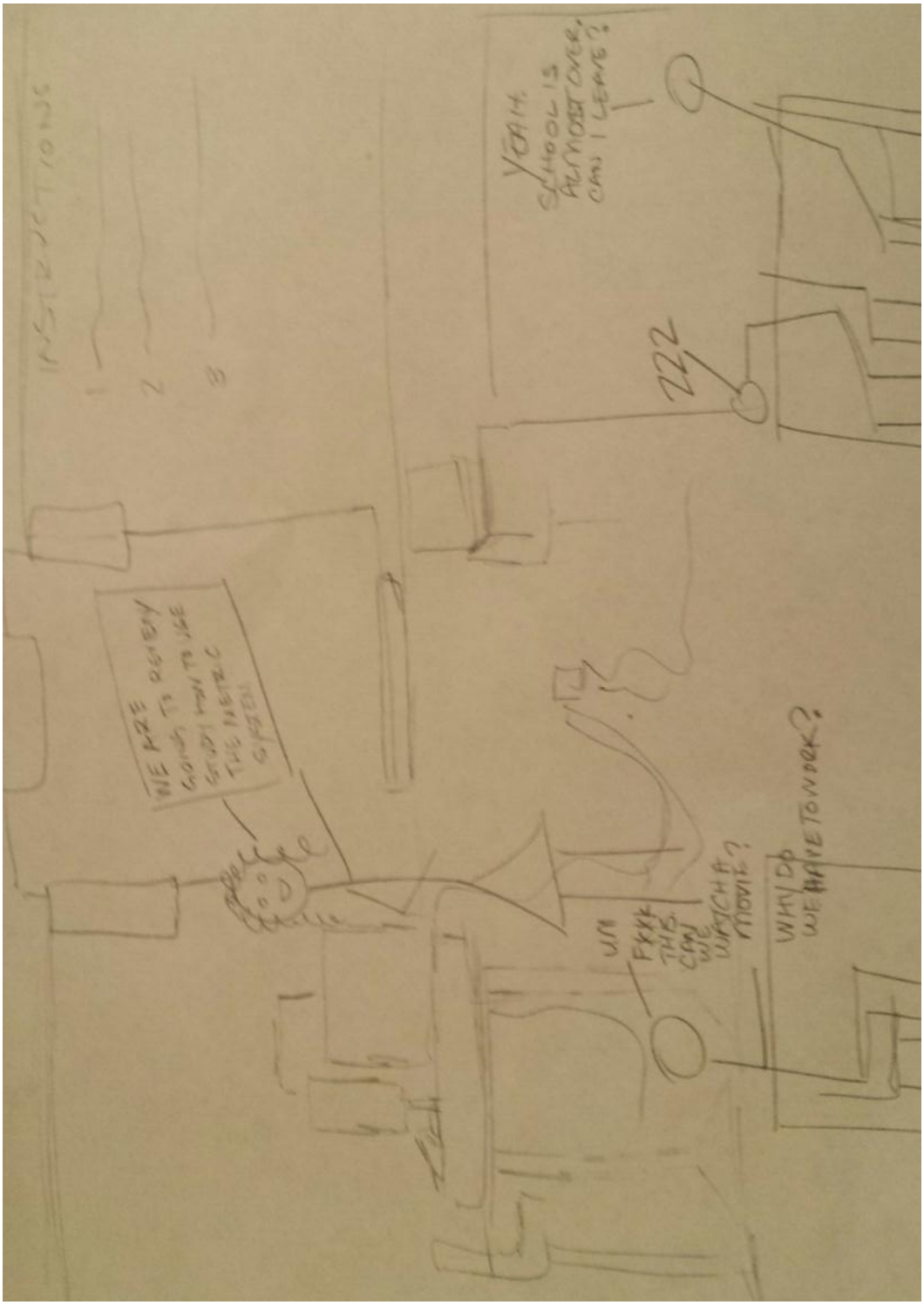


Figure 3. Teacher Drawing 3



APPENDIX C

VISUAL NARRATIVE SCORING RUBRIC

Table 2

Drawings of Science Teaching and Learning Scoring Rubric

Score	Description
Theme 1: Experience excitement, interest and motivation to learn about phenomena in the natural and physical world.	
4	Smiling figures and specific indicators such as the use of descriptive words ‘‘fun’’ or other exclamations of excitement, interest or motivation
3	Smiling figures or comments that indicate excitement, interest or motivation
2	Figures with facial expressions but ambiguous in regards to excitement, motivation, or interest
1	Negative facial expressions or comments suggesting lack of interest or motivation
0	No evidence (facial expression or comments) of excitement, interest, or motivation in the drawing
Theme 2: Come to generate, understand, remember and use concepts, explanations, arguments, models and facts related to science.	
4	Evidence in thought bubbles, comments, or models of concepts, explanations, arguments, models, or facts (4 or more present)
3	Evidence in thought bubbles, comments, or models of concepts, explanations, arguments, models, or facts (3 present)
2	Evidence in thought bubbles, comments, or models of concepts, explanations, arguments, models, or facts (2 present)
1	Evidence in thought bubbles, comments, or models of concepts, explanations, arguments, models, or facts (1 present)
0	No evidence of concepts, explanations, arguments, models, or facts present
Theme 3: Manipulate, test, explore, predict, question, observe and make sense of the natural and physical world.	
4	Evidence in thought bubbles, comments, or activities of manipulating, testing, exploring, predicting, questioning, observing, or sense-making (4 or more present)
3	Evidence in thought bubbles, comments, or activities of manipulating, testing, exploring, predicting, questioning, observing, or sense-making (3 present)
2	Evidence in thought bubbles, comments, or activities of manipulating, testing, exploring, predicting, questioning, observing, or sense-making (2 present)
1	Evidence in thought bubbles, comments, or activities of manipulating, testing, exploring, predicting, questioning, observing, or sense-making (1 present)
0	No evidence of manipulating, testing, exploring, predicting, questioning, observing, or sense-making
Theme 5: Participate in scientific activities and learning practices with others, using scientific language and tools.	
4	Evidence of learning with others, using scientific language and using scientific tools. (3 or more Present)
3	Evidence of learning with others, using scientific language and using scientific tools. (2 present)
2	Evidence of learning with others, using scientific language and using scientific tools. (1 present)
1	Students not participating in a science activity or practice
0	No evidence of learning with others, using scientific language, or using scientific tools

From Katz et al., (2013)

APPENDIX D

KEY POINT CODING CHART

1. Classroom Dynamics in a DAEP Population			
a. Structured classroom procedures			
Key Point 1a-J1-1	Open Codes: Common classroom procedures between teachers	Identity View (Gee, 2000) Affinity	"Every day, the students follow the same procedures for entering the classroom and getting started. After they are lined up quietly at my door, they enter the room, place their point folders on the shelf next to the door, take a framing the lesson paper, a pencil, and sit down. After being seated, they are to write their name, the date, and the objective on the paper while I take attendance and pass out the activity for the day or get the activity started" (Journal #1, Lines 10-14).
Key Point 1a-J1-2	Open Codes: Procedures reduce conflict between students	Identity View (Gee, 2000) Affinity	"This has reduced the amount of friction from students, however, there are still those who want to argue and ask the pointless questions" (Journal #1, Lines 19-20).
b. Constant reminders of behavioral expectations and consequences.			
Key Point 1b-J6-1	Open Codes: Integrating behavioral interventions in Instruction (IBII). Maintain behavioral expectations	Identity View (Gee, 2000) Affinity Discourse	"This week I noticed that I am ahead of the other schools in the curriculum so I took the opportunity to go over some lessons that students were not understanding in a simplified way, explain the program behavior expectations, review the behavior contract" (Journal #6, Lines 1-3). "Sleeping during class is not allowed per the program expectations as well. However, I "be trippin" when I tell them not to sleep and assign the behavior points in their folders accordingly. I also am apparently "trippin" when I assign the appropriate points for talking and disrupting class, although I inform them before class the consequences of such behavior"

			(Journal 6, Lines 13-16).
Key Point 1b-J7-2	Open Codes: IBII Maintain behavioral expectations	Identity View (Gee, 2000) Affinity Discourse	"This week I focused on brain pop videos for the student expectations and because we had more than several new students in each class, I also focused on lessons based on behavior interventions as well as reinforcing the expectations of the program" (Journal #7, Lines 1-3) "So when students do the work, they get the appropriate grade and points. When they sit and do nothing, they get the appropriate points and grade" (Journal #7, Lines 13-15)
Key Point 1b-I2-3	Open Codes: Maintain structure, Remind new students of the rules	Identity View (Gee, 2000) Affinity Discourse	Every time we get a new student, which is almost every day, I try to maintain structure, go over the rules and expectations of the program, what I expect them to do when they come into class. They really don't have a huge problem with the structure, they really don't have a problem, they are not especially defiant students, they are used to the school atmosphere from their regular school, and they didn't really have a problem with that, they just did something stupid like go get high during school or something else that was really non-school related (Interview #2, Lines 271-278).
c. Effects of entering and exiting students on classroom behaviors			
Key Point 1c-J1-1	Open Codes: 8th grade boys more difficult, Changing classroom dynamics	Identity View (Gee, 2000) Affinity Discourse	"The dynamic of my 8th grade boys class is different as there have been a handful of new students added and several of them simply do not care to do school work or follow instructions" (Journal #1 , Lines 35-37).
Key Point 1c-J2-2	Open Codes: Changing classroom dynamics	Identity View (Gee, 2000) Affinity, Discourse	"Students are added to classes daily, which are a constant class disruption and breaks students' attention" (Journal #2, Lines 8-9).
Key Point 1c-J3-3	Open Codes: 8th grade boys	Identity View (Gee, 2000) Affinity,	"Challenges this week include newly admitted students changing the dynamic of the 8th grade male class.

	more difficult, Changing classroom dynamics	Discourse	The number of students in that class is around 13 and with the new students they now all choose to not participate and instead of doing classwork, will write gang signs on the smart board, roam the room in groups, get in my personal space, corner me and attempt to bully me“ (Journal #3, Lines 6-10).
Key Point 1c-J8-4	Open Codes: Changing classroom dynamics	Identity View (Gee, 2000) Affinity, Discourse	“Each time there is a new student, all the students focus on is what the student did to get placed in the program, where they are from, etc.” (Journal #8, Lines 4-5). “When students are ready to exit, they are exceedingly apathetic or suddenly ready to work thinking that one or two grades will miraculously boost them from failing to passing after six weeks of no grades or zeroes” (Journal #8, Lines 5-7).
	d. Safety in the classroom		
Key Point 1d-J3-1	Open Codes: Safety	Identity View (Gee, 2000) Affinity, Discourse	“I do not feel safe in the class room and have requested an additional person in the room or to have the students’ schedules changed to have fewer students in the class” (Journal #3, Lines 10-12).
Key Point 1d-I3-2	Open Codes: 8th grade boys Safety	Identity View (Gee, 2000) Affinity,	“In my 7th and 8th grade class, or classes that are all boys, I feel like I have to either be at my desk or at my door. I don’t feel like I can move around the room” (Interview #1, Lines 84-86).
Key Point 1d-I2-3	Open Codes: Middle school students vs. high school students. Drug offender behaviors vs. violent offenders.	Identity View (Gee, 2000) Discourse	Middleton: Are the bulk of your issues with your middle school students? Sarah: Yes, Middleton: Why do you think that is? Sarah: Honestly I don’t know. A wild stab…maybe some type of developmental or home issues, environmental issues at their home school. I am not sure. A lot of them, well we don’t ask them what they are there for, but most of them talk about

			being there for violent reasons. Middleton: Why are the high school students there? Sarah: Most of them are there for drugs. Middleton: But the middle school students are there… Sarah: For fighting, assaulting teachers, bringing weapons to school" (Interview #2, Lines 259-268).
2. Frustration With Administrators			
a. Lack of support			
Key Point 2a-J1-1	Open Codes: Lack of support	Identity View (Gee, 2000) Institutional	"I cannot be expected to teach when I have no support or get reprimanded for being a teacher and attempting to manage my classroom" (Journal #1, Lines 49-50).
Key Point 2a-J2-2	Open Codes: Being viewed poorly by administrators. Being the blame	Identity View (Gee, 2000) Institutional, Discourse	"I think that administrators (principals and higher up) view my efforts as minimal and poorly because they are always in their offices, avoiding dealing with the students that we see all day every day, but they have no problem telling us that we are doing things wrong" (Journal #2, Lines 21-24).
Key Point 2a-J2-3	Open Codes: Lack of support	Identity View (Gee, 2000) Institutional	"I know for a fact that they do not support the teachers at all" (Journal #2, Lines 25-26).
Key Point 2a-I1-4	Open Codes: Viewing administrators poorly	Identity View (Gee, 2000) Institutional, Discourse	Middleton: how would your admin describe you? Sarah: I have no idea because they never come in my room long enough to see me teach (Interview #1, Lines 285-286).
Key Point 2a-J4-5	Open Codes: Viewing administrators poorly	Identity View (Gee, 2000) Institutional	"I would say the biggest challenge, side from dealing with the students, is attempting to deal with the administration" (Journal #4, Lines 22-23).
Key Point 2a-I2-6	Open Codes:	Identity View (Gee, 2000)	"Because there is no way I can take care of what I need to in the classroom

	Viewing administrators poorly	Institutional	when they aren't taking care of business in the front office" (Interview 32, Lines 146-147).
Key Point 2a-I3-7	Open Codes: Viewing administrators poorly Losing authority in the classroom.	Identity View (Gee, 2000) Institutional, Discourse	Sarah: They said he retired but he is not supposed to be on the campus at all now. Middleton: When did this happen? Sarah: Around the end of March. Middleton: How have the rules been since then? Better or worse? Sarah: It's been a little bit better, but not much. The assistant principal that is supposed to enforce the discipline and pink slips still doesn't do anything. Middleton: How does that affect how you feel regarding your authority in the classroom? Sarah: Well, if I had the support from the administration I feel like it would be fine, But Sergeant V., who is supposed to help with disciplining the kids if there is a problem in the classroom doesn't do anything. He'll come in the classroom and yell at them or something, but he is all talk he doesn't do anything. And they kids know the assistant principal isn't going to do anything so I have no authority in my classroom. They know nothing is going to happen to them. (Interview #3, Lines 149-160).
Key Point 2a-I3-8	Open Codes: Lack of administrative support Losing authority in the classroom.	Identity View (Gee, 2000) Institutional, Discourse	Middleton: You have expressed in your journals that you experience a high level of frustration, Sarah: Yes Middleton: What are you most frustrated with as far as the environment? Sarah: the lack of support from the administration. (Interview #3, Lines 2-208). "They expect me to get them engaged and follow and provide them with this curriculum, but when I ask them for help when someone is not compliant

			they don't help. It's a disciplinary school but there is no discipline. I have 20 girls in one class and they are saying inappropriate things to me and when I ask for assistance I don't get any. I've called for help before and no one came. I get no support. They give them this contract, they tell them this is what you have to do, they have to dress a certain way and walk a certain way in the halls and it is not enforced. It's supposed to be a disciplinary school." (Interview 3, Lines 209-215).
Key Point 2a-I5-9	Open Codes: Resolution of Dilemma Resiliency in being defiant. Isolation	Identity View (Gee, 2000) Affinity, Discourse	I know I talk about that a lot, but it happened a lot. And I wasn't really able to get away from that until the principal left or was fired or whatever. Middleton: So how did you overcome that problem? Sarah: I just did my job, even though the assistant principal would still occasionally come in and bother me and talk down to me in front of my students, I just kept at it. I knew what I was doing was right even if he wasn't smart enough to realize that after being in my room for a whole 15 seconds. I stayed positive, and I never stopped working. I kept planning lessons, I kept using the resources I knew I could use and that would get the kids engaged. Like the short videos from Discovery Education or the BrainPop stuff that they said I shouldn't be using, I kept using them. I guess I was kind of being a little defiant, but when I am the only teacher actually teaching, and I told them that, they could just, you know. Then the new principal came in, and he pretty much left me alone to teach my class. Middleton: Where you able to resolve the dilemma of being undermined by the administrators in front of your students?

			Sarah: I was. I just maintained my composure, stayed firm with my kids, and made sure that they knew that my rules and expectations were not going to change. (Interview #5, Lines 118-133).
	b. Lack of focus		
Key Point 2b-I1-1	Open Codes: Too many things to focus on. Losing focus	Identity View (Gee, 2000) Institutional	"They gave us some other book that we are supposed to be reading, but every day, every time we have a meeting its something different we are supposed to be focusing on" (Interview #1, Lines 97-98).
Key Point 2b-I2-1	Open Codes: Frustration,	Identity View (Gee, 2000) Affinity, Institutional, Discourse	"I was told not to do that, not to use what the district gave me, and that I needed to design my own curriculum. What's the point of designing a curriculum when they aren't even going to halfway do any of the work?" (Interview #2, Lines 103-105). "I still have some students that are able to do some of the more advanced work, and with the number of students we have now, there is no way I can do one on one instruction. I would constantly be told one day to do it this way, and the next day that I'm doing it wrong. I wouldn't be able to raise the rigor when I am constantly being told to do two different things. So, I don't know, it would be really difficult." (Lines 135-139)
	c. Constantly being the blame		
Key Point 2c-I1-1	Open Codes: Frustration Viewing administrators poorly Aggressive behavior from administrators towards teachers.	Identity View (Gee, 2000) Institutional, Discourse	"The principals like to blame it on the teachers when we don't know what causes these things" (Interview #1, Lines 130-131). "I am down to the bare bones of my classroom because they are always stealing my stuff; I've had a smart board pen stolen when I had a substitute and the response from the principal was "what was the substitute

			doing?" A: I wasn't there how am I supposed to know? B: why was there no one there monitoring the substitute? Why am I getting questioned when I wasn't even there acting like it's my fault it got stolen? I don't know. It's frustrating" (Interview #1, Lines 274-278). "All the accountability is placed on the teacher" (Interview #1, Line 282).
Key Point 2c-J4-2	Open Codes: Viewing administrators poorly	Identity View (Gee, 2000) Institutional, Discourse	"The principal stated that the teaching staff is confrontational and took no responsibility for any of the situations that were discussed (Journal #4, Lines 20-21).
Key Point 2c-I2-3	Open Codes: Isolation Aggression by administrators	Identity View (Gee, 2000) Institutional, Discourse	"I also left my kids with a sub and as a reward for finishing their work for the sub I allowed them to watch a movie, "war of the worlds", and I got chastised for that even though every other teacher shows movies all day long every day. I got in trouble for showing a movie as a reward. Anyway." (Interview #2, Lines 34-37).
	d. What kind of principal is needed		
Key Point 2d-I2-1	Open Codes: Viewing administrators poorly Frustration with policies	Identity View (Gee, 2000) Institutional	Middleton: In an ideal world, describe the type of principal that you need as a first year science teacher in a DAEP. Sarah: I need one that is going to be highly visible, one that is going to enforce the contract that the students and parents have to sign during the intake process; they need to read over it, it needs to be enforced. That way when the teachers try to enforce the rules and expectations, the students know that they just can't run to the principal and say "I don't want to do this, and blah blah blah", the principal should be saying "well the teacher is enforcing this rule and you have to follow it." That way, when they come into the classroom, the students know that they can't just come into the

			classroom and run their mouths, and not do their work. That way, if I wanted to bring in some kind of small lab activity, and I am not talking about with scalpels or anything, but even maybe with vinegar. I can't do any type of activity because they are tearing up their papers and breaking their pencils. I just can't do that, I mean there is no way I can do any type of activity when they are stabbing each other with pencils. There is no way I am going to be able to do anything fun. Middleton: So you need your principal to be highly visible, follow the contract and enforce the rules. What else do you need? Sarah: Firm fair and consistent with both the students and the teachers. I am not talking about ripping in the board, but you know, strict. Understanding that when the teacher says "something is happening in the classroom, I need you to back me up", they will back me up. When I send a student out of my classroom, do not send him back to me ten seconds later because that is disrupting my classroom. That's showing all the other students that they can get away with what they want. Support the teachers, support and enforce the rules and expectations. Take the problem kid out of the classroom when I need it. I think one of the things we really need along with a new AP (assistant principal) is to add an ISS (In school suspension). If they are not going to send them home, have somewhere that the problem students know they are going to have to go instead of home if they act up. One of the problems we have is that we have students that want to follow the rules, but they are being dragged down by the kids they aren't removing from the

			classroom. They force us to just keep them in the classroom, and they disrupt and disrupt and disrupt, and the other kids are sitting there saying "well they are sending them home, they are giving them their points and their grades anyway, so I can do whatever I want, it's not going to affect me anyway." (Interview #2, Lines 148-178).
e. Lack of consequences for student behavior			
Key Point 2e-J1-1	Open Codes: No consequences reinforcing negative behaviors.	Identity View (Gee, 2000) Affinity	"I will not write pink slips for the simple fact that there are no consequences for the students and that reinforces the bad behavior for the students" (Journal #1, Lines 37-39).
Key Point 2e-J1-2	Open Codes: No consequences reinforcing negative behaviors.	Identity View (Gee, 2000) Affinity, Institutional, Discourse	"The students know that nothing will be done when they misbehave, and that reinforces the misbehavior" (Journal #1, Lines 48-49).
Key Point 2e-I1-3	Open Codes: No consequences reinforcing negative behaviors. Losing authority in the classroom	Identity View (Gee, 2000) Affinity, Institutional, Discourse	"the kids know that they can get a pink slip and leave class and not have to do the work and get sent right back to the next class with no consequence, and they lose all respect for the teacher because they know nothing is going to happen to them" (Interview #1, Lines 135-137)
Key Point 2e-J6-4	Open Codes: Frustration Losing hope	Identity View (Gee, 2000) Affinity, Institutional,	"Nothing is done to students when they are written up and no teaching is going on (Journal #6, Line 28).
Key Point 2e-J7-5	Open Codes: Frustration with policies Declining student participation	Identity View (Gee, 2000) Discourse	"There is less and less participation and increasing apathy in the student population because they know that the 3 exit "requirements" do not have to be met in order to exit the program" (Journal #7, Lines 3-5). "The students who want to meet the 30

	No consequences reinforcing negative behaviors.		days early will whine to an administrator when they get a 1 or 2 from a teacher and they will be given the points anyway, regardless of their behavior, some even getting extra points for no reason" (Journal 7, Lines 9-11). "Students are still not being disciplined for write ups and even being sent back to class" (Journal 7, Lines 15-16).
Key Point 2e-I3-6	Open Codes: Lack of support Feeling useless	Identity View (Gee, 2000) Affinity, Institutional,	Sarah: I attempt to discipline, but I am not supported. When I attempt to give discipline I am asked why I am doing that. Middleton: Even though it's a DAEP? Sarah: Right Middleton: how does that make you feel about your position as a science teacher in a DAEP? Sarah: useless. (Interview #3, Lines 256-261).
f. Relationship with new principal			
Key Point 2f-I4-1	Open Codes: Change of administrators, more support.	Identity View (Gee, 2000) Institutional, Discourse	"He made an offhand joke about not having an engaging curriculum. But it comes down to the group of challenging kids that we have, He made the joke that it all starts in the classroom. Sometimes they are just not going to work. I have kids that have been here for the fourth time this year. He understands that it is a difficult task for us as teachers to get a handle on the kids, especially the ones that are repeat offenders. I don't think that he is trying to breathe down our necks so much. I have 22 girls in one class and 16 in another and a lot of them have been there a few times. I think that he appreciates the level of classroom management and the amount of planning it takes to keep those groups intact." (Interview #4, Lines 115-122).
3. Frustration with Environment			

a. The point system			
Key Point 3a-I1-1	Open Codes: Improper use of the point system	Identity View (Gee, 2000) Institutional	"I think the point system is stupid"…"The point system is supposed to be based on the behavior in the classroom, but there is no consistency between teachers. Their grades and their behavior is supposed to be separate, some teachers will combine them on the points. I think it's stupid, there is no consistency. They (the principals) threaten the students with removing points but there is no follow through" (Interview #1, Lines 239-245).
Key Point 3a-I2-2	Open Codes: Lack of support Giving up Losing authority in the classroom	Identity View (Gee, 2000) Affinity, Discourse, Institutional	"When the teachers see that they are not being supported by the administrators, they just give up. And another big problem is pink slips and those stupid folders, because they bring them in and tell them they have to have these three things; attendance, points, and your grades to get out. And about two weeks into it the students see that's not true so they start not working. They stop behaving because the can go cry to Mr. (Principals name) and get their points. I've given a student a one before, she didn't like, she walked out of the room without permission, went to Mr. (Principal), cried about it and he overrode it, gave her a three and some bonus points, all because she didn't like the fact that the teacher gave her a one" (Interview #2, Lines 181-189).
Key Point 3a-I2-3	Open Codes: Bad environment for 1st year teacher Need security Need assistance	Identity View (Gee, 2000) Affinity, Institutional,	Middleton: Let's say that you are a principal and that this is your DAEP. You're the one that is going to design how the classrooms run, you are the one who is going to have say so in what kind of curriculum is used, how many teachers you are going to have, etc… How would you change the school you are at to make it run the way you feel it needs to be run?

	Being bullied by students and administrators		Sarah: No first-year teachers. I would have more security personnel in the hallways so when the teachers call for help they actually get assistance. Whatever the curriculum is that the district has in place, that's what I would use. If the teachers are supposed to make it their own then make it their own. There needs to be no confusion, the teachers and the principals need to be on the same page from the start. Middleton: What would you do away with that is currently in place? Sarah: The folders, the point system, Middleton: You don't feel that the point system is effective at all? Sarah: No, because it's not consistent, it's not being used the way that it was originally intended; students know how to manipulate it to get what they want. Middleton: What if that wasn't the case, could it be effective? Sarah: It could, but get rid of the folders, the students are carrying them around and they see their points after every class. If they are going to do a point system it needs to be done online, and anonymously, so the teachers can give out the point and so the students can't react negatively to them. The folders are ridiculous, they know immediately when they get a one and then stomp out of the room and whine to an administrator asking why they got a one. Well your behavior right now is probably why you got a one in class! They should not be able to see their points during the day, maybe their total at the end of each day or at the beginning of the day when they get to school. Middleton: you think that's the only way it could work? Sarah: yes, because I have had a student who got a one try and bully me

			into giving them a three even though they did nothing but cuss in my class the whole 45 minutes and then come up and try to bully me into giving them a three when the bell rings. (Interview #2, Lines 431-457).
Key Point 3a-I5-4	Open Codes: Viewing administrators poorly Inappropriate use of point system DAEP not operating the way it was designed Low academic success.	Identity View (Gee, 2000) Institutional,	Middleton: At the DAEP, do you feel like the system and the policies they had there are flawed? Sarah: Yes. Totally flawed. I think the way they approached the whole mechanism was wrong. The way the treated the teachers, they point system, the drill instructors, the lax discipline from the principals, everything. They wondered why so many kids were there multiple times; I think that it starts there. It is supposed to be a school for behavior modification. Highly controlled, highly disciplined, highly structured, and it was the exact opposite. I think some of the kids came out of that place more screwed up than when they got there. Middleton: Do you think it was possible for any student to succeed academically in that environment? Sarah: Not at that school. Not with the way things were. (Interview #5, Lines 265-273).
	b. Unpredictability leading to stress		
Key Point 3b-I1-1	Open Codes: Stress	Identity View (Gee, 2000) Affinity	"You never know what's going to happen, There is so much stress in this environment" (Interview #1, Lines 123-124).
Key Point 3b-J6-2	Open Codes: Too many students	Identity View (Gee, 2000) Affinity, Institutional,	"Friday, there were administrators from central office in the building holding meetings with teachers to discuss the incidents and our views on the current situation. All in all, it was a pretty stressful and less than productive week. We have 176 students and are still accepting more" (Journal #6, Lines 25-27).
Key Point	Open Codes:	Identity View	"They told us to totally disassociate

3b-I6-3	Bad advice from administrators Stress related to post- teacher assault by student	(Gee, 2000) Affinity, Discourse	ourselves from our jobs when we leave, to not take it home with us. Anything we could do to relieve the stress. They told us that if we need to drink, then drink. If we need to work out then work out. Find something to do to take our mind off of this place when we leave" (Interview #2, Lines 46-49).
Key Point 3b-J9-4	Open Codes: Stress	Identity View (Gee, 2000) Institutional	"The principal is gone and we have a temporary replacement until the end of the year just in time for STAAR testing, as if this place wasn't stressful enough" (Journal #9, Lines 16-18).
Key Point 3b-I3-5	Open Codes: Hopelessness DAEP not operating the way it was designed	Identity View (Gee, 2000) Affinity, Institutional, Discourse	Middleton: have you lost faith in this environment? Sarah: As it is now, yes. Middleton: when you first came to this job, what was your faith in this environment? What were the main characteristics that led you to believe that you could be successful in this environment? Sarah: that it was controlled, I just thought it was going to be more of a disciplinary environment, not kids roaming around the halls like a regular school. They go to class when they want to. They are told that they cannot enter a room without a teacher there, but if the kids get to a room and there isn't a teacher there and the room is locked, someone with a key comes by and unlocks it. There is a reason it is locked. There are Lines on the floor where they are supposed to walk but no one makes them do it. I had expectations for my environment as a teacher that were not met. Middleton: Have your expectations as a teacher for your students been completely derailed as a result of the lack of discipline? Sarah: yes (Interview #3, Lines 241-254).

	c. Physical effects		
Key Point 3c-I3-1	Open Codes: Unhappy going to work Migraines	Identity View (Gee, 2000) Nature, Affinity	Sarah: I don't really sleep much, I to take migraine medication and that was increased in September by 25%. Middleton: You were taking migraine medication before then? Sarah: yes Middleton: have you had an increase in the frequency of migraines? Sarah: yes, Middleton: You said you don't sleep a lot, has that worsened since you started working here? Sarah: Yes. Middleton: Is that a result of you staying up dreading what is going to happen the next day? Sarah: I don't know that I consciously think that, but the best part of my day is when I leave work and I am unhappy when I go to work. I try not to think about work when I am not there (Interview 3, Lines 172-182).
	d. Resolving the frustration dilemma		
Key Point 3d-I4-1	Open Codes: Resiliency	Identity View (Gee, 2000) Affinity, Institutional,	Middleton: one of the dilemmas you've face this year is this constant feeling of frustration. Sarah: Uh huh Middleton: Have you been able to resolve that at all? Or are you constantly frustrated with your job? Sarah: It's just one of those feeling that you have to suck it up and move on because nothing is going to happen. (Interview #4, Lines 151-155).
4. Classroom Instruction			
	a. Lack of Resources Provided by the District		
Key Point 4a-J1-1	Open Codes: Finding what works	Identity View (Gee, 2000) Discourse	"I have found that BrainPop is a much more useful resource with the students in this program, however, even though it is aimed at students of a younger age group" (Journal #1, Lines 24-25).
Key Point 4a-I1-2	Open Codes: Need for specialized	Identity View (Gee, 2000)	"The stuff they want us to use like in a regular classroom doesn't really work in our environment" (Interview #1,

	instruction	Institutional, Discourse	Lines 47-48)
Key Point 4a-J14-3	Open Codes: Finding what works	Identity View (Gee, 2000) Affinity Discourse	"I wish that at the beginning of the school year I had been told that I don't need to adhere to the same schedule as the rest of the district. If I could just treat all of the classes as an intervention class, it would have been much more beneficial for the students and me" (Journal 14, Lines 15-18).
Key Point 4a-I4-4	Open Codes: Finding what works Meeting the needs of the students Interventions	Identity View (Gee, 2000) Institutional Discourse	Middleton: Has your attitude towards working at the DAEP improved any in the last month? Sarah: I think that if it was more structured and more support it would be better. I have had a little bit more support in the last month so I guess it has gotten a little bit better. If I initially had been told to treat it as an intervention than to treat it as a strict curriculum I think that it would have gone much smoother. Because right now, I am able to revisit certain things and focus on concepts that the students need help with instead of sticking to a strict calendar. (Interview #4, Lines 36-41).
Key Point 4a-I4-5	Open Codes: Interventions Mainstream curriculum is detrimental Students are not on level	Identity View (Gee, 2000) Institutional Discourse	Middleton: Was being handcuffed with the district curriculum a dilemma that you had to overcome and was it even worthwhile using that in DAEP? Sarah: I'm not sure. Middleton: In other words, was staying on-line with the district curriculum beneficial or detrimental to you as a science teacher in the DAEP Sarah: It was detrimental. Because the kids were not ready. I am expected to administer the 6weeks test, but the scores don't affect the students when they are there. I feel like I should be treating this school like a large intervention. The large majority of the students are not on level in reading, math, science, and all the core subject

			areas. If I could just have focused on something and stuck with it in all my classes I wouldn't have had all these migraines, I wouldn't have been as frustrated. (Interview #4, Lines 159-169).
Key Point 4a-I2-6	Open Codes: Ineffectiveness of PBLs.	Identity View (Gee, 2000) Institutional, Discourse	Middleton: What kind of instructional model are you using? Sarah: They do a lot of worksheets; we do a lot of interactive quizzes. I don't lecture a lot because it's supposed to be problem based learning but the students don't want to do that. The district wants us to use problem based learning. Middleton: What do you mean by problem based learning? Sarah: They want us to pose a question and have the students work through the process themselves. But, like I said, the students get it and they think it's too hard and they shut down and don't want to do anything. Even when it's based on a reading assignment, if I sit there and explain to them the words they don't understand and if there are questions attached to it they think it's a test and shut down. So I am not really sure how to work around that. Like anything that has questions they think is a test. They don't want to do any thinking. Middleton: Is that common in all your classes? Sarah: Yes, that is all of them. (Interview #2, Lines 371-381).
Key Point 4a-I2-7	Open Codes: Common practices are ineffective Perfect world vs. real world	Identity View (Gee, 2000) Institutional, Discourse	Middleton: Is the problem based learning initiative effective? Sarah: I don't like it; I don't think it works in this environment. Middleton: On a scale from one to ten, how would you rate it? Sarah: I would give it a one or two. Middleton: What would be the most successful instructional method that

	Theory vs practice		you could use in this environment? Sarah: In a perfect world? Middleton: Well we will use two scenarios, first in a perfect world? Sarah: I think a combination of lecture so you can get the information out there, group work, and a little bit of problem based learning for the higher level kids, more of an integrated model Middleton: So now how about in the real world. What would be the best thing to use? Sarah: Book work and lecture. Because they need to be monitored. (Interview #2, Lines 396-407).
Key Point 4a-J11-8	Open Codes: Finding what works	Identity View (Gee, 2000) Institutional, Affinity,	"I do not feel as though I have any questions at this time unless it would be how to develop a better instructional model for students and teachers in this type of school setting" (Journal 11, Lines 18-20).
Key Point 4a-I5-9	Open Codes: Resolving the dilemma Lack of labs/resources Finding what works Fun instructional activities Resiliency in defiance	Identity View (Gee, 2000) Institutional, Affinity, Discourse	"Not having labs was the biggest part or really being able to anything like a lab. I tried to find things that were fun and interactive. Things we could do as a group on the smart board, which was harder with the middle school kids because they would try to tear things up. But with the high school kids we could actually do some fun things like Jeopardy, or science bingo, or some kind of trivia game. I think I talked about using some videos that would show the lab experiments that we could have been doing, but I was told by the principals no movies. I showed them anyway because they aren't movies. Maybe they would have realized that if they actually were paying attention like the kids were" (Interview #5, Lines 136-142).
	b. Multiple Tasks within the classroom		
Key Point 4b-J2-1	Open Codes: Finding what	Identity View (Gee, 2000)	"The most successful aspect has been to incorporate multiple activities to keep students busy, if not interested"

	works	Discourse	(Journal #2, Lines 9-10). “I have a variety of tasks for the students so that even the most energetic students seem eventually to become engaged” (Journal #2, Lines 11-12)
Key Point 4b-J3-2	Open Codes: Finding what works Lack of student participation.	Identity View (Gee, 2000) Discourse	“I changed the manner in which I administered vocabulary quizzes. Instead of matching words to definitions using a word bank, they will utilize the interactive review game together as a group to decide the definitions to the vocabulary. Students are having more success with this method, although those that are intent on disengaging from school are still refusing to participate” (Journal #3, Lines 2-6).
c. Patience With/Waiting for Students to Show interest in Learning			
Key Point 4c-J1-1	Open Codes: Students showing interest in science	Identity View (Gee, 2000) Affinity, Discourse	“Most of the students were not paying attention and then asked me what it was about after 15 minutes because it started to look interesting to them. Most students took between 2-7 minutes to complete the assessment” (Journal #1, Lines 31-33).

Key Point 4c-I2-2	Open Codes: Drug offenders behavior vs. violent offenders. Having "good" students Making positive connections with students.	Identity View (Gee, 2000) Discourse	Middleton: How are the students, which are there for drugs, comprehension level as far as understanding the material? Sarah: They are really, picking up the material really quickly, they will pick up on the conversation and have good discussions. They will actually even do small group work, they will do their assignments, ask for extra work to take home, and as far as the points go, they won't go to the administrator asking about their points. They will go straight to the teacher asking for extra work to get their points because they want to get done and get out. And unless they are on the other end of the spectrum, you know have a violent side or something like that, they aren't really a problem. They will ask you and explain to you when they don't understand the questions, or ask for help. It's not an issue getting them engaged, and getting them to do their work is not very difficult at all. They will engage in normal conversation while doing their work, and they will actually talk to me and ask me how my day was (Interview #2, Lines 288-299).
	d. Signs of Success		
Key Point 4d-J9-1	Open Codes: Finding what works	Identity View (Gee, 2000) Affinity Discourse	"Upon completion of the pretest, reading, and progress monitoring tests, students graded their own papers with a map color. If they disagree with the correct answer, they can justify their answer with research for extra points before the end of class. This is successful with students who are intrinsically motivated. It can be successful with students who are motivated to bring up their grade or who are having difficulty understanding the content due the teacher reading everything out loud (Journal #9, Lines 9-14).

Key Point 4d-J11-2	Open Codes: Finding what works	Identity View (Gee, 2000) Discourse	"This week I covered taxonomic groups, heredity, interdependence, and continued with plant structures and adaptations. I changed up the presentation of information in the beginning by eliminating the pre-test and replacing it with key concepts and fundamental questions that the students write down and answer independently. This has been more successful in generating discussion and helping to ascertain students' knowledge about the subject as well as getting students to do the work. Students who are apathetic and defiant are still not working. However, this method is more successful in generating student work and class discussion about the topic (Journal # 11, Lines 1-7).
e. Pride/Happiness With Students Academic Engagement			
Key Point 4e-J1-1	Open Codes: Student progress and success	Identity View (Gee, 2000) Affinity	"I was more pleased with the results of this assessment, as this time there was a noticeable improvement in grades and student comprehension of the content "(Journal #1, Lines 33-35).
Key Point 4e-J5-2	Open Codes: Student progress and success	Identity View (Gee, 2000) Affinity, Discourse	'The activity was more successful than I anticipated however because they began to ask me questions about what they were reading and asking more insightful questions beyond what was included in the text" (Journal #5, Lines 6-8).
Key Point 4e-J8-3	Open Codes: Students showing interest in science Creating safe learning environments Using what works	Identity View (Gee, 2000) Affinity, Discourse	"When watching some of the discovery education, brain pop videos, engaging in discussions, and watching movies with the students, these are the times when the students are the most engaged and ask questions about science. They frequently ask questions about life and relationships. When they are watching videos or taking the interactive quizzes, they feel more comfortable interacting with an authority figure and asking sensitive questions than they do when they are

			reading or engaged in an activity of a strictly academic nature. While I am not a fan of showing videos or movies in the classroom, in this context and for this population, it is a tool that is working well to aid with comprehension and engagement." (Journal # 8, Lines 11-18).
Key Point 4e-I2-4	Open Codes: Using what works Generating classroom discussion Fun instructional activities	Identity View (Gee, 2000) Discourse	Middleton: Have you had any "Ah hah!" moments with those students? Sarah: When we were talking about viruses. Half of the kids are biology, and the other half are health and nutrition kids, and we were doing human growth and health, and cell repair and things like that. We were watching a clip on discovery education about viruses and disease and they would keep asking me, "is that really true?", and "does that really happen?" So we had a discussion about the topic and that was really fun, when they actually paid attention and were interested in the topic. (Interview #2, Lines 213-219).
5. How I Feel as a Teacher			
a. Lack of Preparation from Teacher Education Courses			
Key Point 5a-I1-1	Open Codes: Common practices are ineffective Theory vs. practice Entering field unprepared	Identity View (Gee, 2000) Affinity	Middleton: Did your teacher education courses prepare you at all for this experience? Sarah: No. Middleton: Have you been able to use anything that your prep courses taught you to use? Any resources that your teacher education courses gave you, have you been able to use any of those? Sarah: Uhm, just how to find stuff for preparing lessons. Really none of the classroom management stuff, I haven't been able to utilize here. They tell you, "use your signals" and "do this"…If I try to use a signal I usually get the middle finger…give me a break. (Interview #1, Lines 30-37).

Key Point 5a-I4-2	Open Codes: Common practices ineffective. . Theory vs. practice	Identity View (Gee, 2000) Affinity	Middleton: Lets concentrate on your more successful classes, do you use any specific instructional methods that have been shown to you or do you just kind of wing it? Sarah: As far as instructional methods, the only ones I know are from my education classes, none of them really work. I mostly just wing it. (Interview #2, Lines 269-271)
Key Point 5a-I4-3	Open Codes: Need for DAEP field experience in student teaching Entering field unprepared.	Identity View (Gee, 2000) Nature, Affinity	Middleton: do you think it would have been beneficial for you, in your educator certification program student teaching to have field experience in the DAEP. Sarah: Absolutely Middleton: do you think that it would have scared you away from teaching here? Sarah: I think that it would have helped me make an informed decision before I accepted the position. Middleton: so you wouldn't have accepted the position? Sarah: I'm not saying that. I did work at MHMR for three years before going into education field. I think It would have helped me make a more informed decision because I didn't know much about the environment, but it would've helped me be more or better prepared with the environment of the DAEP. Because I wasn't familiarly with the kinds of students that would be there or the duration and it was kind of like a crash course during orientation. (Interview #4, Lines 140-150).
	b. Not Feeling like a science teacher		
Key Point 5b-J2-1	Open Codes: Students have been given up on Frustration	Identity View (Gee, 2000) Institutional	"I do not feel like I am a science teacher as much as a substitute teacher in a science class with a group of students that have misbehaved one too many times and with who no one wants to deal" (Journal #2, Lines 18-20).

Key Point 5b-J2-2	Open Codes: Being told to pass students	Identity View (Gee, 2000) Institutional	"One sentence to describe me as a teacher right now would be: I am a full time middle school monitor of behavior who doles out meaningless assignments and I am told in a not-so-subtle way to socially pass students to help them exit our facility" (Journal #2, Lines 30-33).
Key Point 5b-I2-3	Open Codes: Not growing as a teacher Becoming a worse teachers	Identity View (Gee, 2000) Institutional	Middleton: How would you describe your present state of mind as far as being a first-year science teacher in a DAEP? How do you feel about yourself? Sarah: I don't know if I feel anything. I don't feel like I am creative, I feel like if I went to another school I would be awful. I feel like I am becoming more and more stupid every day. Middleton: Do you think that if you were to go to a "regular school" that this experience would have prepared you to deal with negative behaviors more efficiently? Sarah: Not necessarily. Middleton: What about your instruction? Do you feel like you are being challenged as a teacher to be creative in your instruction and that it is getting better? Sarah: No. I am not doing any instruction at all. That's how I feel. I feel like I am just being put in a room so they can say that they have a teacher and that is all. (Interview #2, Lines 420-430).
Key point 5b-J10-4	Open Codes: Hopelessness Common practices ineffective	Identity View (Gee, 2000) Institutional	"I am curious as to what, if any, instructional models have been successful in this environment, because nothing seems to work with these students" (Journal #10, Lines 17-19).
Key point 5b-I3-5	Open Codes: Frustration	Identity View (Gee, 2000) Institutional,	Middleton: Can you describe yourself as a science teacher. Sarah: Well, see I don't feel like I am teaching anything because they won't

	Providing opportunities for students	Affinity	do anything. Middleton: Well let's start there. Are you in your mind making an honest effort to teach? Sarah: I give them work, I plan lessons, and I provide them opportunities to learn. One of the girls took the lesson and put it in her mouth and ate it. What am I supposed to do with that? (Interview #3, Lines 185-189).
	c. Feeling like a babysitter		
Key Point 5c-I1-1	Open Codes: Frustration	Identity View (Gee, 2000) Institutional	"I feel like I am just more of a baby sitter" (Interview #1, Line 7).
Key Point 5c-J7-2	Open Codes: Shame	Identity View (Gee, 2000) Institutional	"This program is a large day care for delinquent students" (Journal #7, Line 16). "This program is a joke and I am embarrassed to be associated with it" (Journal #7, Lines 18-19).
Key Point 5c-J9-3	Open Codes: Viewing administrators poorly	Identity View (Gee, 2000) Institutional	"I still feel like a glorified babysitter and what frustrates me the most is the clear lack of support from administration and the shifting of or clear blaming of teachers by administration" (Journal #9, Lines 14-16).
	d. Thoughts on accepting this position		
Key Point 5d-I2-1	Open Codes: Regret	Identity View (Gee, 2000) Institutional	Middleton: Are you coming back next year? Sarah: No, no way. Middleton: do you feel like coming to work at this school in the first place was a mistake? Sarah: Yes, period. (Interview #2, Lines 458-461).
Key Point 5d-J12-2	Open Codes: Regret	Identity View (Gee, 2000) Institutional, Discourse	"I feel like I hate teaching science and no one feels as though I am a competent instructor and I think that I should have never accepted this position" (Journal #12, Lines 21-22).
Key Point	Open Codes:	Identity View	"This is by far the worst setting for an

5d-J13-3	Frustration	(Gee, 2000) Institutional, Affinity	educator and no reformation is being accomplished here for the students" (Journal 13, Lines 9-10).
Key Point 5d-I4-4	Open Codes: Frustration Not growing as an educator	Identity View (Gee, 2000) Institutional, Affinity	Middleton: In one of your journals that this is by far the worst setting for an educator. Do you still feel that way? Sarah: Yes, I don't feel like I am using anything creative, I don't feel that I am growing as an educator, I don't feel that I am getting any kind of, that I don't have anything to offer. It's hard to feel positive, when you have to be on your guard all the time because the strategies that you have is trying to get them to stay in their seat instead of gauging where they are at and what their levels are. Because we have a lot of IEP's and Special ed students, and you are trying to figure out how to deal with their disabilities along with whatever their misbehaviors are. It's hard to do any teaching that way. (Interview #4, Lines 56-64).
Key Point 5d-I4-5	Open Codes: Positive results	Identity View (Gee, 2000) Institutional	"I would be lying if I said I wasn't looking forward to school being over. But, I do have my classes that have a regular school kind of feel, that I can actually have a regular discussion with. It makes me feel, it validates my career choice, they are engaged, they can do the work and they do it. I don't think I feel burned out; it's just been a rough year. It's been a hell of a first teaching job." (Interview #4, Lines 125-129).
e. Viewed in a positive way by fellow teachers			
Key Point 5e-J2-1	Open Codes: Viewed positively by peers	Identity View (Gee, 2000) Affinity Discourse	"I think that my fellow teachers view my efforts as well prepared and knowledgeable in my field" (Journal #2, Lines 20-21).
Key Point 5e-I1-2	Open Codes: Viewed	Identity View (Gee, 2000)	Middleton: how would your co-workers describe you? Sarah: organized

	positively by peers	Affinity Discourse	Middleton: how about your students? Sarah: mean. (Interview #1, Lines 287-290).
6. Challenges in working with DAEP Students			
a. Students not on level			
Key Point 6a-I1-1	Open Codes: Student not on level Impossible task	Identity View (Gee, 2000) Institutional, Affinity Discourse	"We are playing catch up all the time; the kids are clearly not on level with reading, math, or anything. They are so far behind, there is no way we can catch them up" (Interview #1, Lines 116-118).
Key Point 6a-I1-2	Open Codes: Educational deficiencies.	Identity View (Gee, 2000) Institutional, Affinity	"When we have our lesson frame statements for science, they don't understand all of the words so I have to explain the frame statement to them for them to understand so they can identify the goals before the activity" (Interview #1, Lines 157-159). "Comprehension, attention span, overall across the board educational deficiencies. They are really only on task for a few minutes and then they want to be done" (Interview #1, Lines 164-165)
Key Point 6a-J4-3	Open Codes: Lacking literacy skills	Identity View (Gee, 2000) Institutional, Affinity	"Even after class discussion, group or partner work, and brain pop videos, the students are having difficulty answering the questions, understanding the concepts and relaying the information in a written cohesive format" (Journal #4, Lines 4-6).
Key Point 6a-J5-4	Open Codes: Students not on level	Identity View (Gee, 2000) Institutional, Affinity	"The facts the students wrote down revealed what I suspected about their knowledge of the subject matter: that the students are not on level in the content area" (Journal #5, Lines 8-10).
Key Point 6a-I2-5	Open Codes: District curriculum needs to be modified to fit the needs of the students	Identity View (Gee, 2000) Institutional, Affinity Discourse	"Well with this group of kids, what the district currently wants me to use is aiming way too high. They can't understand the vocabulary, and the concepts are way too high brow for them. It needs to be brought down and start off with more basic concepts, more things they can relate to."

			(Interview #2, Lines 122-125).
Key Point 6a-J14-6	Open Codes: Using intervention strategies for review and instruction	Identity View (Gee, 2000) Discourse, Affinity	"This week I decided to teach a review of mathematics skills which are utilized in science. I tried to review the metric system, measurements, formulas for work, acceleration, volume, density, etc. The students responded with typical "this isn't math class, this is science!" and "why do we have to do math in science class?" When the fraction of students who decided to participate began to do the work, it was obvious that the majority of even the high school students was below grade level in their math skills and had difficulty completing the calculations. The middle school students had difficulty with both the calculations and the abstract concepts associated with the mathematic formulas. The high school students admitted that they had missed a lot of instructional time and did not seem to care much about it or care to remedy the problem. The middle school students stated that they simply did not understand, may have missed some school, but blamed the teacher at their home school for not teaching them the material, taking no responsibility for not attempting to learn it." (Journal 14, Lines 1-11).
	b. Student's Negative attitudes towards school		
Key Point 6b-J2-1	Open Codes: Students determined to derail instructions	Identity View (Gee, 2000) Discourse, Affinity	"Unfortunately, those that are determined to disengage from school choose to be disrespectful, unengaged, or hostile and aggressive no matter what the task" (Journal #2, Lines 12-14).
Key Point 6b-I2-2	Open Codes: Students don't respect DAEP	Identity View (Gee, 2000) Discourse, Affinity	"I think they have apathy, they don't care. They made the statement before, "why do you even care what our grades are? Why do you care if we do it or not?", or, "this isn't a real school, we don't have to do this work"

			(Interview #1, Lines 190-192).
Key Point 6b-J4-3	Open Codes: Lack of literacy skills	Identity View (Gee, 2000) Discourse, Affinity	"The students are just as resistant, if not more so, to writing full responses as they are to reading questions and seeking the correct response in a multiple choice" (Journal #4, Lines 2-4).
Key Point 6b-J6-4	Open Codes: Students don't respect DAEP, teachers	Identity View (Gee, 2000) Discourse, Affinity	"I was surprised that the students, who complain about having to do school work in a place that "is not a real school" still complained about having to do even simple review lessons and worksheets over concepts that have already been covered. When I ask if anyone has any questions or if everyone understands, the standard response is back talk or silence. When I pass out the worksheet, the response is that I am not teaching and that I didn't give them instructions or explain, which is what I just completed doing while they were either talking or not paying attention" (Journal #6, Lines 5-11).
Key Point 6b-J11-5	Open Codes: Student determined to derail instruction	Identity View (Gee, 2000) Affinity	"These students have no use for science or education in general and will ask questions to attempt to steer the class off topic and run out class time or talk about things that are inappropriate for school" (Journal #11, Lines 9-11).
Key point 6b-J12-6	Open Codes: Students determined to derail instruction Students don't respect DAEP	Identity View (Gee, 2000) Discourse, Affinity	"Students are more apathetic and defiant than in previous classes. In other classes, teachers are watching movies every day and not adhering to any type of curriculum so the students feel as though they are entitled to a "fun Friday" or movie day in every class, every day. When they don't get to watch a movie, they become hostile and belligerent, refusing to work and extremely disrespectful, stating that they don't learn anything in here anyway and this isn't a real school" (Journal #12, Lines 2-6).

Key Point 6b-I4-7	Open Codes: Lack of literacy skills	Identity View (Gee, 2000) Discourse,	Middleton: how did the state testing go? Sarah: The high school groups went better. The groups that I had, it was about half and half being interested in the testing. The writing portion; a lot of them were like, "I don't want to do the writing, I will just do the fill in the blank or multiple choice parts". But the middle school kids were just awful. Just like usual, they didn't take it seriously, some of them, when I looked at the groups I had, I told the admins that I was going to have problems with them and I did have problems. I had a couple of girls that just wanted to fight, I don't know if they just were trying to get out of testing or if they had problems at home that just escalated at school or what. But it was bad. (Interview #4, Lines 27-35).
c. Large SPED presence			
Key Point 6c-I1-1	Open Codes: No support for SPED students	Identity View (Gee, 2000) Discourse Affinity	Middleton: how many of your students are special education? Sarah: about 80% and I have someone come in to work with my students once a week so there is no way they are getting the attention they need (Interview #1, Lines 177-179).
Key Point 6c-I2-2	Open Codes: No support for SPED students	Identity View (Gee, 2000) Institutional, Affinity Discourse	"I mean a lot of them are special education and they may not have that ability to read or write. And we don't have anyone to help them with that, we don't have the manpower. The only time someone comes in to help them (the special ed kids) is when district assessments are given once a six weeks. And that is just because it's required" (interview #4, Lines 77-81).
Key Point 6c-J11-3	Open Codes: Why students misbehave	Identity View (Gee, 2000) Discourse,	"A majority of the students attempt to avoid work because of an inability to do the work. The behavior masks inadequacies or learning disabilities that either have been identified and are

			not being addressed in this setting or have yet to be identified. Many students, when someone attempts to help them do work, become angry and have behavior issues again, not wanting to be the geeky, nerdy or good student in this environment" (Journal 11, Lines 14-18).
d. Students lack positive role models			
Key Point 6d-I1-1	Open Codes: Challenging family situations	Identity View (Gee, 2000) Discourse,	"It seems like a lot of them have a lack of role models, or anyone that is teaching them how to be a responsible person and make good decisions" (Interview #1, Lines 218-220). "They talk about how their parents do drugs with them. I just can't imagine that. In their word, everyone does drugs, it's a strange situation" (Interview #1, Lines 222-223).
e. Multiple Grade Levels in a Single Classroom			
Key Point 6e-I2-1	Open Codes: Home campuses not sending work Focus instruction on students taking district assessments	Identity View (Gee, 2000) Affinity	"They are just all over the place, I try to avoid preparation in that class, I don't even know where most of them are or how I am supposed to approach teaching in that class when the home campuses don't send me work" (Interview #2, Lines 230-232). "I really, what I try to do, and I try to make it as interesting as possible, but I focus my teaching on the students that are going to have a district assessment. Then I will throw in some extra health and nutrition, and then for the kids that have maybe not one of the elective classes, but maybe one of the career technology education classes like environmental sciences or something like that, I'll see if I have books for that and I will give them a reading assignment and tell them if they have any questions come ask me just so they won't fall further behind than is necessary. Because there really aren't any lessons, their teachers don't send lesson plans and there isn't anything on

			the district website that I can access as far as lesson plans for year at a glance stuff. So I try to focus most of my attention on the kids that have district assessments and stuff. I try to teach them the best I can, if they don't want to pay attention then that's on them, but I try to make the fun stuff that we do in class more towards nutrition and stuff like that. And I do what I can for additional classes" (Lines 241-252).
f. When the End of School Draws Near			
Key Point 6f-J13-1	Open Codes: Students determined to derail instruction	Identity View (Gee, 2000) Discourse	"The end of the school year being so close is having a detrimental effect on the teaching and learning environment in the classroom. The students refuse to do the work even when the rigor or grade level difficulty is below the skill level at which they should be currently working. When they choose to turn in work at all, it is completed in a fraction of the time it should have taken and the answers are incorrect. They are still working under the impression that turning in work, even if it is wrong, should earn them a passing grade, regardless of their behavior in the school or classroom setting. The students are increasingly disrespectful and face no consequences for their actions" (Journal #13, Lines 2-9).
Key Point 6f-J15-2	Open Codes: Students determined to derail instruction	Identity View (Gee, 2000) Discourse	The students are more disruptive and difficult to manage and less interested in doing any sort of work as the school year winds down, if they bother to come to school at all (Journal #15, Lines 18-22).
7. Isolation			
a. Feeling like being the only teacher that is teaching			
Key Point 7a-I1-1	Open Codes: Isolation Determination Resiliency	Identity View (Gee, 2000) Affinity	Sarah: because A: because I would like to try and teach them something, B: the one time I showed them a video from discovery learning someone jumped down my throat. It wasn't even a movie. C: I didn't become a teacher to

			show movies, I came here to teach. Middleton: do you think they are harder on you because you're a first year teacher? Sarah: probably, I mean the reading teacher next door shows movies every day…the reading teacher shows movies, I can hear them every day through the wall and no one says anything to her. (Interview #1, Lines 198-203).
Key Point 7a-J12-2	Open Codes: Intentionally isolating herself	Identity View (Gee, 2000) Affinity, Discourse	"I feel as though I am the only teacher who is trying to follow the rules and it is impossible to do when it is clear that it is not being done anywhere else in the building. I have started keeping the door to my classroom locked from the outside so that wandering students cannot enter and it has helped tremendously. I think the only thing that is going to help me get through the end of the school year is the fact that I have started on an antidepressant which has helped to improve my mood slightly. It has also helped to reduce my stress level because I am not constantly worrying or upset about things I cannot change at my job. Socializing at work with my co-workers is a source of stress as well which I have tried to reduce because I don't like to hear them complain about each other or work. The result is that I mostly keep to myself. Instead of offering insight into how to better work with the students, they just complain, which adds to my stress and frustration" (Journal #12, Lines 11-21).
Key Point 7a-I3-3	Open Codes: Isolation Breakdown of school policies by administrators	Identity View (Gee, 2000) Affinity, Institutional	Middleton: Where does the breakdown start? Sarah: It starts in the administration but the teachers aren't doing it either. I think that I am one of the only one that is doing it. (Interview #3, Lines 216-218).

Key Point 7a-I4-4	Open Codes: Staying firm with students Resiliency “I’m here to teach”	Identity View (Gee, 2000) Affinity	Middleton: With it getting near the end of the school year are you staying consistent or are you letting up a little? Sarah: I’m staying consistent, that’s another thing. The kids ask me why we aren’t watching a movie, it’s the end of the year, but we still have things to do work. We still have to do school work until the last day. The time to goof off will be summer time. It doesn’t really bother them and they don’t like me but that’s fine. Middleton: Does it bother you that they don’t like you? Sarah: Not at all. Middleton: what about your co-workers? Are the letting up? Sarah: I know the teacher next door to me watches movies every day. One of the teachers in the other hall, he was hired this year, he has shown movies since the beginning of the year. I have to watch his class occasionally when there isn’t a sub and I check where he is supposed to be on the year-at –a-glance document and the kids have no idea what they are supposed to be learning about. They have been talking about restaurants, or his personal life, or random stuff that has nothing to do with the curriculum. They don’t do work, they don’t do assignments, its nothing all the time. They don’t like me because I make them do work. I didn’t become a teacher so we could watch movies. I want them to learn. (Interview #4, Lines 86-102).
Key Point 7a-I5-5	Open Codes: Staying firm	Identity View (Gee, 2000) Affinity, Institutional	“Being firm, fair and consistent. I know I say that a lot, but that was supposed to be our motto at this school and it seemed like at times I was the only one doing it. You come into my room a certain way, you act a certain way, and I don’t care what the other teachers are doing because this is my

			classroom and no we aren't going to watch movies every day" (Interview #5, Lines 52-55).
Key Point 7a-I5-6	Open Codes: Being an oucast	Identity View (Gee, 2000) Affinity, Institutional	"I basically was alone during planning times. I felt like I was the only person trying to teach in the whole school. I stopped eating lunch with the other teachers; I stopped leaving my room because I felt like an outcast. How is it that there were all these teachers in this school that were not teaching yet, I was the only one being criticized? Did the principals only come into my room? I mean I could hear the movies in the classroom next to me through the walls when I was trying to teach and no one said anything to that teacher" (Interview #5, Lines 239-244).
Key Point 7a-I2-7	Open Codes: No support in planning	Identity View (Gee, 2000) Affinity, Institutional	"I don't have anyone to collaborate with; the more experienced science teacher there is coming to me and asking me what I am doing for Biology. And she is supposed to have taught Biology before. I don't have anyone to plan with, so I am kind of sink or swim out there by myself" (Interview #2, Lines 368-370).
Key Point 7a-I4-8	Open Codes: Stay firm	Identity View (Gee, 2000) Discourse	Middleton: How do you feel about the other teachers you work with? Sarah: I don't know, I feel like, there are a couple that I work with that really want the children to like them on a friendship kind of level I can see why they would want that. But these kids are not going to be our friends; I think they try to win them over so they will do the work for them. But we are not there to be their friend; we are there to help them succeed. I've had more than a little bit of success being consistent and enforcing the rules and doing it the same way every day, over and over again. One particular teacher that is trying to be likable, the kids know they can push her buttons, and they do it.

			They goof off, and they don't work, and they know it gets to her so they keep doing it. It really upsets her so they do it every day, all the time. (Interview #4, Lines 77-85).
8. Making Connections with Students			
a. Students sharing personal situations			
Key Point 8a-I1-1	Open Codes: Positive connections with the female students.	Identity View (Gee, 2000) Discourse, Nature	"A lot of the girls talk to me about what's going on in their lives. Sometimes they have trouble relating to each other on a personal level. They will open up to me sometimes about things that they do, and I will ask them why they made those decisions, or I will ask them how their weekend was, and the ones that actually open up to me will tell me things and I will ask them why they did it and they say, "I don't know, I just did it." (Interview #1 #, Lines 214-218).
Key Point 8a-I4-2	Open Codes: Positive connections with Special needs students. Safe learning environments	Identity View (Gee, 2000) Discourse	"We do have some special needs kids that I had made connections with that I wasn't even aware I had made a connection with. They just let me know. I think it's because I do the same thing every day, during my off period they will come ask me for work, they will tell me they feel comfortable in my classroom. They feel like they can work with me, they can ask me questions. They feel like they can work with me on their level" (Interview #4, Lines 180-184).
Key Point 8a-I5-3	Open Codes: Positive connection with female students	Identity View (Gee, 2000) Discourse	Middleton: Well, what were some bright points throughout the year? Sarah: I had a female student who had been there three times this year. She had probably spent 75% of the school year in the DAEP. When we would send her to the home campus, they would just send her right back. And she was a handful, she was there for fighting, she would get into fights, she would cuss at me, throw things at me, you know? Then one day I just asked

			her why she does these things. Why does she feel the need to act this way when she knows that it's only going to lead to jail or something worse? Of course she just cussed at me some more and stormed out of my classroom. But she really changed right after that. I think just me asking her that kind of woke her up, and then she started asking me for help with her work. I thought it was a joke at first, or that she was going to hit me, but she really asked me for help and I helped her. And she started doing her work in my class; that made me feel good. And, it was nice when I would leave for a day or two for some kind of training, or I was out sick, and I would get back and the kids would ask me if I was ok, or tell me that they missed me. Mind you it was the same kids that gave me hell every day and were my most difficult kids that were asking me that, but regardless it was kind of nice. (Interview #5, Lines 156-170).
b. What is preventing making connections with students			
Key Point 8b-I3-1	Open Codes: Classroom management Frustration	Identity View (Gee, 2000) Discourse, Institutional	Middleton: what is it about you that is keeping you from forming positive relationships with students? Sarah: I mean a lot of it right now is because a lot of my students are in the facility for a second or third time, and they want to nit-pick at me so they don't have to do their work. A lot of what I have to do is classroom management, they want to fight all the time, there isn't much teaching going on. And we are doing state testing, so in the morning I am having small groups to do testing with, and in the afternoon I have to do a lot of classroom management because they don't want to do anything. They don't want to do any classwork; they won't even watch a movie. They don't even

			want to do word searches. It's kind of a bad mix because I get frustrated with the students because I can't even ask them to sit down and be still before they are jumping up and mouthing off at me. And it's the first time I have had them for the day after my testing group has left the classroom. Middleton: What about the environment is keeping you from forming positive relationships with the students? Sarah: Well they walk around and they have been there before I don't know how many times besides this year that they have been there. And they don't want to be there anymore but they also don't want to be at their home campuses. And the way that they are grouped; they have all these middle school girls in a pack together, which I don't know a better way to describe it. But they want to beat the crap out of each other or they want to talk about things that are inappropriate and all I can do is try to manage the group, and the boys are about the same. The only group that is somewhat manageable is the high school students. And I don't know what is going on with the other teachers, but kids are walking up and down the hall, I lock my door so they don't come in my room, but when I have my door locked they are beating on my door to try and get in. I don't understand how these kids are able to roam the halls in an environment that is supposed to be extremely controlled. It's a source of distraction (Interview #3, Lines 108-131).
Key Point 8b-I3-2	Open Codes: No teacher authority	Identity View (Gee, 2000) Discourse	Middleton: What is it about the policies in place and the administration that is making it difficult to form a positive relationship with the students? Sarah: Well we have a principal, the

			one we have now is just temporary until the end of the year. But our assistant principal that is supposed to be handling the discipline and those matters. He could take care of the discipline issues but when someone is sent out of the room he just sends them right back or doesn't do anything and waits to send them to the next class period. So now the students think they can get away with anything they want, so we as teachers feel like we don't have any kind of support or authority and the students feel like they run the facility. They won't do what they are told, and they don't care about the points or pink slips. They don't care. There is also a lot of uncertainty on what policies are supposed to be followed because we are in a state of transition. It's just chaos. (Interview 3, Lines 135-145).
9. Professional and Personal Growth from this Experience			
a. Growth as a teacher and a person			
Key Point 9a-I4-1	Open Codes: Classroom management Limited student teaching experiences	Identity View (Gee, 2000) Affinity	Middleton: do you think this first year has made you a better teacher? Sarah: I don't know about better, but probably more prepared for discipline issues. It definitely prepared me for rough and difficult students. Middleton: do you think you can teach anywhere after this school Sarah: I don't know about anywhere, but definitely a lot of places. Middleton: Do you think that you are better prepared to take on classroom management issues? Sarah: yes, I feel like I have definitely grown in my classroom management skills and my interpersonal skills as a teacher in dealing with students that have difficult personal issues that they bring to school with them. Things that I didn't experience during student teaching in a regular school

			environment. (Interview #4, Lines 130-139).
Key Point 9a-I4-2	Open Codes: Making connections with students Growing as a teacher Staying firm	Identity View (Gee, 2000) Affinity	Middleton: Do you have a positive outlook for your next teaching assignment? Sarah: I feel like it has helped me to know what to look for to help enrich students in other areas. And organizing students to work in groups, even how to be a firm teacher. Some of my toughest students at the beginning have started bringing me flowers after PE class. It's helped me make those connections with those students. I have such a limited amount of time to make those connections, not the whole school year and they are tough students. Yes, I think that it has helped me be a better teacher in a regular classroom. (Interview #4, Lines 172-178).
Key Point 9a-I4-3	Open Codes: Growing as a person Growing as a teacher	Identity View (Gee, 2000) Affinity	Sarah: I feel like I have grown in having patience, I feel like at the beginning of the year I thought I had patience but now I have more. Like when we were working on the math skills activity I don't think at the beginning of the year I would have let them yell at me like they did. But once they got it out of their system they were fine, and then I explained to them why we were doing x-y-z. I definitely have a more patient attitude. Middleton: How does that make you feel about the next group of kids you work with? Sarah: I feel like it will be a breeze. (Interview #4, Lines 190-196).
Key Point 9a-I5-4	Open Codes: Staying firm Resiliency Maintain	Identity View (Gee, 2000) Affinity, Discourse	"Make sure the students know every day what is going on. I feel like I had to be firm with them more than I initially thought I would have. I learned I had to stick to my guns, don't back down on my rules and expectations for them. Even the ones

	expectations		that cussed at me and threw their work at me or ate it, I had to not let that break me down and I had to stay on top of them even when the principal wouldn't back me up. Every day we have work to do, every day I have expectations for the kids to meet and I wasn't going to lower those even though my co-workers said I should just let them pass and make it easy on myself. I mean, I didn't get into teaching to watch movies. I couldn't just give in and let the kids win even though they tried like hell to break me down like they had some of the other teachers. I learned to be patient. I had to put up with a lot of bullshit not only from the students but also from the administrators, I think had I not been patient I would have just walked out and not came back in October (Interview #5, Lines 35-45).
Key Point 9a-I5-5	Open Codes: Growing as a teacher Growing as a person Consistency Being Fair	Identity View (Gee, 2000) Affinity	"I would have to say that I am more patient, I am more willing to help my students, I am more sympathetic to what these kids have gone through that landed them here. I mean it's probably not their fault, somewhere down the line they had someone in their lives that screwed them up and that's why they are here. And I felt sorry for them, but at the same time I wanted them to be something better. And all the times I felt like quitting and walking out, I knew that that wouldn't be fair to them. I was probably the only source of consistency they had ever had. I think that getting knocked down every day at work and then getting up every morning made me a stronger person. I feel like there is nothing I can't handle now, I mean these kids are the most difficult kids to deal with, and I did it every day and I didn't quit. I feel like my next career will be a breeze

			compared to this." (Interview #5, Lines 62-71)
Key Point 9a-I5-6	Open Codes: Growing as a teacher Growing as a person Caring for all students Creating safe classrooms	Identity View (Gee, 2000) Affinity, Discourse	"I think mostly being flexible. When things didn't go the way I planned them, being able to change gears, and present the material from a different angle. I tried to accommodate every kid, which is hard because they are all so far behind. And then when there are multiple classes in the same room, just being able to shift my brain from one subject to the next very quickly. I think it has made me more aware of or recognizing that a student needs help but isn't comfortable asking for it. Really working to create a safe place for them, somewhere they can feel comfortable learning, even if they want to throw stuff at me and cuss at me" (Interview #5, Lines 147-153).
	b. Positive outlooks for the future		
Key Point 9b-I5-1	Open Codes: Positive outlooks for the future	Identity View (Gee, 2000) Affinity	Middleton: What about now? Now that the school year is over, you are looking forward to a new principal, new school, and different kids. Now how do you feel? Sarah: I feel like I will actually have a classroom of kids that want to learn. I feel like I will be able to actually plan and collaborate with other teacher when we do lesson planning. I feel like I will have a supportive principal that will back me up when I need them to and will not talk down to me or criticize me in front of my students. And I feel like I can handle anything that may potentially happen in my new classroom. It'll be easy I think. Middleton: First day of school last year in August, if were to have walked in, what would I have seen? Sarah: Well, no students for one. But I prepared everyday like I would have students. I would have my objectives on the board, I would have work set

			out ready for a student to come in. Middleton: What about this coming August at your new school, if I walk in what would I see? Sarah: I think you will see a lot of smiling faces, mine for one. I think you will see a lot of young students engaged in learning science. I think you will see these students appreciate the world around them and enjoy learning about it. I will ask a question and all their hands will go up, or at least some of their hands. Unlike when I would ask a question at the DAEP I would hear either cussing or crickets. (Interview #5, Lines 249-264).
10. Statements of Teacher Identity			
a. How I feel as a teacher at this moment			
Key Point 10a-I4-1	Open Codes: Reasons for becoming a teacher	Identity View (Gee, 2000) Discourse	One student in particular had been in the program twice, and her second time around I think she realized that I was there because I wanted her to learn something. I wanted her to do something positive for her life. I wasn't there just to yell and scream at her, I wanted her to learn science, to improve her reading and improve her behavior because it was bad for her. I mean we have to act a certain way to get along with each other in life, when we get older we have to get along with each other. I want to make a difference with these kids Middleton: Do you feel like you have made a difference? Sarah: with some of them I have (Interview #4, Lines 202-210).
Key Point 10a-I4-2	Open Codes: Making a difference Being fair with the students	Identity View (Gee, 2000) Discourse	Sarah: I think when school started I thought I was fighting a losing battle, I thought if I could just keep going, you know the salmon that swims upstream? If they keep going they will eventually get there. Sometimes it's maddening, but you may not catch them all, but the ones you do make a difference for it

	Not quitting on the students		makes it worth it. Middleton: When you reflect on the job you've done this year, are you pleased with the job you have done? Sarah: Yeah, I feel like down the road I may run into one of them and they would tell me that at the time they hated me but I made a difference for them. That it was worth it. Middleton: did you ever feel like quitting? Sarah: oh yeah, there were a lot of times. Middleton: why didn't you? Sarah: Because the kids have had so many people quit on them, it wouldn't be fair. (Interview #4, Lines 214-225).
Key Point 10a-I5-3	Open Codes: Taking student failure personally Feeling sympathy for students' educational deficiencies.	Identity View (Gee, 2000) Discourse	Middleton: What about their science knowledge in particular. How did you feel when one of your students was not able to grasp the science concepts? Sarah: I took it personally, and I would try my best to help them. I felt sorry for them that some of them were in high school and didn't have the ability to understand the most basic of science concepts. Like I had a few kids that didn't know that we are mammals! And I don't know where that came from. But a lot of them just didn't have that cognitive ability to comprehend something like the carbon cycle, or cellular reproduction. Once they got into their heads that it was difficult, they would just shut down. And I would try to motivate them and show them that it wasn't that hard, they just needed to think. But some of them couldn't think, I mean literally, they were not able to think. If something required just a little bit of thinking they couldn't do it. I don't understand how they made it to high school! And it's not their fault, their teachers have just

			been passing them along and now they are 17 years old, in a DAEP and they don't know that all living things are made up of cells. (Interview #5, Lines 184-196).
Key Point 10a-I5-4	Open Codes: Teacher identity statement at beginning of study. Science for all Frustrated Hopelessness	Identity View (Gee, 2000) Discourse	Sarah: I wanted all of my students to learn science, and grasp the concepts that their previous teachers had failed to teach them. I knew I couldn't reach them all but I was going to give it my best shot. Middleton: Ok, but you were still frustrated? Sarah: Oh yes, very. Middleton: And that's not only to your students but also to your administrators? Sarah: Mostly yes, I would say it was about 60% frustration towards administrators, 40% towards the kids. Middleton: Were you hopeful at all that things would change? Sarah: No. I was hopeless (Interview #5, Lines 218-226).
11. Being a female teacher in a DAEP			
Key Point 1a-I1-1	Open Codes: Minority students do not respect females.	Identity View (Gee, 2000) Nature	The male students try to dominate the classroom, and I found as a female teacher, the majority of our students are minority students and I have found as a female teacher that these students have no respect for females, especially female authority figures. And also it's because maybe I'm a younger female teacher, the majority of the teachers are older. But I have talked to the other teachers and they have similar problems, they try to challenge my authority, they get in my personal space a lot, they talk about inappropriate things a lot to try and push my buttons,(sigh) or to get a pink slip to get out of class or to take over, or to try and disrupt class or whatever. (Interview #1, Lines 68-75)