Perceptions of Teachers Regarding Development of Positive Student-Teacher Relationships in Exemplar Schools Using CSTPs

Sneha Sharma
Brandman University, sshar016@gmail.com

Follow this and additional works at: https://digitalcommons.brandman.edu/edd_dissertations

Part of the Curriculum and Instruction Commons, and the Secondary Education Commons

Recommended Citation
https://digitalcommons.brandman.edu/edd_dissertations/227

This Dissertation is brought to you for free and open access by Brandman Digital Repository. It has been accepted for inclusion in Dissertations by an authorized administrator of Brandman Digital Repository. For more information, please contact jlee1@brandman.edu.
Perceptions of Teachers Regarding Development of Positive Student-Teacher Relationships in Exemplar Schools Using CSTPs

A Dissertation by

Sneha Sharma

Brandman University
Irvine, California
School of Education

Submitted in partial fulfillment of the requirements for the degree of

Doctor of Education in Organizational Leadership

December 2018

Committee in charge:

Jonathan Greenberg, Ed.D., Committee Chair
Len Hightower, Ph.D.
Marilyn Saucedo, Ed.D.
BRANDMAN UNIVERSITY

Chapman University System

Doctor of Education in Organizational Leadership

The dissertation of Sneha Sharma is approved.

__________________________  Dissertation Chair
Jonathan Greenberg, Ed.D.

__________________________  Committee Member
Len Hightower, Ph.D.

__________________________  Committee Member
Marilyn Saucedo, Ed.D.

__________________________  Associate Dean
Patricia White, Ed.D.

December 18, 2018
Perceptions of Teachers Regarding Development of Positive Student-Teacher Relationships in Exemplar Schools Using CSTPs

Copyright © 2018
by Sneha Sharma
ACKNOWLEDGEMENTS

Uplift yourself by yourself, do not deprecate yourself.

For you are your own friend, and your own enemy.

Bhagavad Gita 6.5

I am grateful for the support that many people have provided throughout this journey. I would like to thank my chair and cohort mentor, Dr. Jonathan Greenberg. He provided valuable advice and encouragement throughout this process. I would also like to thank my committee members, Dr. Len Hightower and Dr. Marilyn Saucedo, for their guidance as I conducted my research and completed my writing. Additional thanks to Dr. George Giokaris for his help in finding participants for this study and Dr. Kristina Zaragoza for answering my many questions.

To my mom, thank you for consistently helping me understand the importance of education, providing never-ending support, and for always believing in me. Most of all, you taught me that women are capable of greatness, even in a world that does not always appreciate them. You are the strongest woman I know and your resilience is inspiring.

To my dad, thank you for encouraging me to be a teacher and always providing guidance. You always took them time to make sure that I was safe and happy and you always know how to put things into perspective.

I also appreciate my little brother—your determination to achieve your goals is truly inspiring. You are a dependable and trustworthy person and I am proud to be your sister.

I also want to thank Christopher Murkar. You are such a caring, compassionate, and intelligent man.
ABSTRACT

Perceptions of Teachers Regarding Development of Positive Student-Teacher Relationships in Exemplar Schools Using CSTPs

by Sneha Sharma

Purpose: The purpose of this phenomenological, qualitative study was to describe and explore how teachers in Partnership for 21st Century Learning (P21) exemplar schools developed positive student-teacher relationships using the 6 domains of the California Standards of the Teaching Profession (CSTPs).

Methodology: This study included 12 teachers from 2 high schools in California that were recognized as exemplary by P21. Each school principal chose 6 teachers by utilizing a list of specific criteria, based on the CSTPs, that was provided by the researcher. The researcher also conducted interviews of all 12 teachers, completed artifact analysis, and conducted observations of teachers.

Findings: In order to build positive relationships with students, teachers in P21 exemplar schools build a safe classroom environment where students are willing to share their thoughts by engaging in a variety of activities. Teachers also consistently differentiate instruction in order to meet students’ learning needs and assess student learning. Teachers collaborate with each other and seek professional development opportunities.

Conclusions: First, teachers focus on building a positive classroom environment. Also, they are aware of students’ academic abilities and focus on helping students develop transferrable skills. Finally, teachers are consistently seeking out professional development opportunities where they can learn about new ideas as well as share their own knowledge.
**Recommendations:** A research study should be conducted on how P21 schools facilitate professional collaboration on campus. A future study should examine which strategies are most effective when setting classroom norms. A future study should examine the specific strategies that P21 teachers use to formatively assess students and collect data about student performance. A future study should examine and evaluate how teachers changed their instruction as result of their collaboration with peers. Another study should examine to what extent the Capturing Kids’ Hearts program effectively supports the creation of a positive school culture. Another study should evaluate the effective ways in which teachers in P21 schools utilize technology to build positive student-teacher relationships and how this affects student outcomes. A research study should examine how administrators in P21 schools support the development of positive student-teacher relationships.
TABLE OF CONTENTS

CHAPTER I: INTRODUCTION ........................................................................................................1
  Background ..........................................................................................................................3
    Changing 21st-Century Educational Goals .......................................................................3
      Historical goals ............................................................................................................4
      Economic shifts ..........................................................................................................4
      Job market shifts .........................................................................................................5
    Changing Demands for Teachers in the 21st Century .........................................................5
      Cultural demands ........................................................................................................6
      Increased competition .................................................................................................6
      Student engagement .....................................................................................................6
      Instructional shifts ........................................................................................................7
    California Standards for the Teaching Profession (CSTPs) ................................................7
  Theoretical Foundations of Student-Teacher Relationships ...............................................8
    Attachment perspective ..................................................................................................8
    Sociocultural perspective ...............................................................................................8
    Motivation perspective ....................................................................................................8
      Main elements of motivation perspectives ....................................................................8
      Limitations ....................................................................................................................9
      Practical application of motivation perspectives ............................................................9
    Partnership for 21st Century Learning (P21) ...................................................................10
      Process for identifying P21 exemplar schools ..............................................................11
        Exploring student-teacher relationships in P21 exemplar schools .............................11
  Statement of the Problem ................................................................................................11
  Purpose Statement ............................................................................................................13
  Research Questions ........................................................................................................13
  Significance of the Problem .............................................................................................14
  Definitions ........................................................................................................................15
  Organization of the Study ................................................................................................18

CHAPTER II: REVIEW OF THE LITERATURE ........................................................................19
  Changing 21st-Century Educational Goals .......................................................................19
    Historical Goals ............................................................................................................19
      Agrarian Age ..............................................................................................................21
      Industrial Age ............................................................................................................21
      Knowledge Age .........................................................................................................21
    Economic Shifts ............................................................................................................21
    The Impact of Technology on the Job Market .................................................................22
      Necessary skills ..........................................................................................................22
      Technology ..................................................................................................................22
  Changing Demands for Teaching in the 21st Century ..........................................................23
    Cultural Demands ........................................................................................................23
    Increased Competition .................................................................................................24
    Student Engagement .....................................................................................................25
    Instructional Shifts .........................................................................................................26
    Common Core State Standards .......................................................................................27
21st Century Learning and Instruction .................................................................28
California Standards for the Teaching Profession .............................................29
Student-Teacher Relationships ........................................................................31
Theoretical Foundations of Student-Teacher Relationships ............................33
  Attachment Perspective .................................................................................33
  Sociocultural Perspective .............................................................................34
  Motivation Perspective ................................................................................35
Challenges in the 21st Century ........................................................................37
  Curriculum ....................................................................................................38
  Emphasis on Testing .....................................................................................38
Instructional Methods .....................................................................................39
Overview of 21st-Century Intervention Efforts ..................................................40
  EnGauge .......................................................................................................40
  Organization for Economic Cooperation and Development framework ....40
  American Association of College and Universities .....................................40
  Partnership for 21st Century Learning (P21) ...............................................41
Partnership for 21st Century Learning ..............................................................41
  P21 framework ............................................................................................41
  Life and career skills ....................................................................................43
  Learning and innovation skills ....................................................................43
  Information, media, and technology skills ....................................................43
  Key subjects-3Rs and 21st-century themes ....................................................44
  Standards and assessments .........................................................................44
  Curriculum and instruction ........................................................................44
  Professional development ............................................................................45
Process for Identifying P21 Exemplar Schools ..................................................45
Essential Components .....................................................................................46
  Student agency .............................................................................................47
  Research and evidence ................................................................................47
  Engaged community .....................................................................................48
  Climate of achievement ..............................................................................48
  Distributed leadership ................................................................................48
Exploring Student-Teacher Relationships in P21 Schools .................................48
  Emphasizing professional development .......................................................49
  Using technology .........................................................................................50
  Supportive leadership ..................................................................................50
Summary ..........................................................................................................51
Teachers’ Perspectives: Missing in the Literature ...........................................52

CHAPTER III: METHODOLOGY ......................................................................53
Purpose Statement ..........................................................................................53
Research Questions .........................................................................................53
Research Design ..............................................................................................54
Rationale ..........................................................................................................55
Population ........................................................................................................56
Sample ............................................................................................................56
CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Purpose Statement .............................................................................................................74
Research Questions ..........................................................................................................74
Research Methods and Data Collection Procedures .........................................................75
Population ........................................................................................................................76
Sample ..............................................................................................................................76
Presentation and Analysis of the Data ................................................................................77
Research Question 1 ..........................................................................................................79
  Welcoming environment.................................................................................................80
  Prioritizing student safety ............................................................................................80
  Varied instruction ..........................................................................................................80
  Talking to students individually ....................................................................................81
Focus on student learning.................................................................................................82
  Establishing rapport ......................................................................................................82
  Facilitating student-centered activities ........................................................................83
  Making real-life connections .......................................................................................85
  Classroom design ........................................................................................................87
Research Question 2 ..........................................................................................................87
High expectations for students ........................................................................................88
  Focus on student learning ............................................................................................88
  Set routines ..................................................................................................................89
  Shared expectations ......................................................................................................90
Giving constructive feedback to students .......................................................... 91
  Positive rewards ......................................................................................... 91
  Mindful of student needs ............................................................................ 93
Research Question 3 ....................................................................................... 94
  Backwards planning .................................................................................... 95
  Skills based .................................................................................................. 95
  Repeating certain activities .......................................................................... 96
Student-centered activities ............................................................................. 97
  Discussion ..................................................................................................... 97
  Collaboration ................................................................................................ 98
  Prior knowledge ............................................................................................ 99
Research Question 4 ....................................................................................... 100
  Changing instructional plans ....................................................................... 101
  Modifying activities ..................................................................................... 101
  Checking for understanding ........................................................................ 103
Varied instruction .......................................................................................... 104
  Diverse array of activities ........................................................................... 105
  Accommodations .......................................................................................... 106
  Anticipate issues .......................................................................................... 108
Research Question 5 ....................................................................................... 109
  Formative assessment ................................................................................... 110
  Observation .................................................................................................. 110
  Questioning ................................................................................................. 111
  Facilitating student discussion .................................................................... 112
Summative assessment .................................................................................... 114
  Tests and quizzes ........................................................................................ 114
Research Question 6 ....................................................................................... 115
  Collaboration ................................................................................................ 115
    Workshops and conferences ...................................................................... 116
    Interdistrict collaboration ......................................................................... 117
Individual reflection ......................................................................................... 118
  Visiting other classrooms .......................................................................... 119
  Reading ......................................................................................................... 119
Summary .......................................................................................................... 120

CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS .......... 121
Purpose Statement .......................................................................................... 121
Research Questions ....................................................................................... 121
Research Methods and Data Collection Procedures ..................................... 121
Population ....................................................................................................... 122
Sample ............................................................................................................ 122
Major Findings ................................................................................................ 122
  Central Research Question ......................................................................... 123
    Finding ....................................................................................................... 123
Research Question 1 ....................................................................................... 124
  Finding .......................................................................................................... 124
Finding 2 ................................................................. 125
Research Question 2 .................................................. 125
Finding 1 .................................................................. 125
Finding 2 .................................................................. 125
Research Question 3 .................................................. 126
Finding 1 .................................................................. 126
Finding 2 .................................................................. 126
Research Question 4 .................................................. 127
Finding 1 .................................................................. 127
Finding 2 .................................................................. 127
Research Question 5 .................................................. 128
Finding 1 .................................................................. 128
Finding 2 .................................................................. 128
Research Question 6 .................................................. 129
Finding 1 .................................................................. 129
Finding 2 .................................................................. 130
Unexpected Findings ................................................. 130
Conclusions .............................................................. 131
 Conclusion 1: Interest in Creating a Positive Classroom Environment .... 131
 Conclusion 2: Student-Centered Activities That Focused on Skill Development .... 132
 Conclusion 3: Awareness of Students’ Academic Abilities .................................. 132
 Conclusion 4: Focus on Skill Building ................................................................. 132
 Conclusion 5: Innovation Is Key ..................................................................... 133
 Conclusion 6: Teachers Willing to Learn and Share Knowledge ..................... 133
Implications for Action ............................................... 133
 Implication for Action 1 ........................................................................... 134
 Implications for Action 2 ........................................................................ 135
 Implications for Action 3 ........................................................................ 136
Recommendations for Further Research ..................................................... 137
Concluding Remarks and Reflection ......................................................... 138
REFERENCES ............................................................................. 140
APPENDICES ............................................................................ 159
LIST OF TABLES

Table 1. Society’s Educational Goals Throughout the Ages .................................................. 20
Table 2. Frequency of Themes and Sources .............................................................................. 78
Table 3. Frequency of Themes and Scores for Research Question 1 ...................................... 79
Table 4. Welcoming Environment and Making Connections With Students—
Summary of Trends .................................................................................................................. 79
Table 5. Frequency of Themes and Scores for Research Question 2 ..................................... 87
Table 6. Maintaining an Effective Environment for Student Learning—Summary
of Trends .................................................................................................................................... 88
Table 7. Frequency of Themes and Scores for Research Question 3 ..................................... 94
Table 8. Organizing Subject Matter for Student Learning—Summary of Trends ................. 95
Table 9. Frequency of Themes and Scores for Research Question 4 ...................................... 100
Table 10. Organizing Subject Matter for Student Learning—Summary of Trends .............. 101
Table 11. Frequency of Themes and Scores for Research Question 5 ................................... 109
Table 12. Organizing Subject Matter for Student Learning—Summary of Trends .............. 110
Table 13. Frequency of Themes and Scores for Research Question 6 ................................... 115
Table 14. Develop as Professional Educators—Summary of Trends .................................... 115
LIST OF FIGURES

Figure 1. Twenty-first century skills, student outcomes, and support systems ............42
Figure 2. Characteristics of P21 schools .................................................................47
CHAPTER I: INTRODUCTION

Educational goals are rapidly changing in the 21st century (Saavedra & Opfer, 2012; Skoglund & Ness, 2011). Students must leave schools with content knowledge and skills in the areas of creativity, communication, and critical thinking (Kay, 2009; Partnership for 21st Century Learning, 2008a; Wagner, 2008). These transferrable skills are seen as essential to careers in the 21st century (Hilton, 2015). In order to facilitate the 21st-century skill development of students, teachers can implement innovative instructional techniques that enable students to become globally aware and productive citizens (Koenig, 2011).

The role of teachers in the 21st century is rapidly changing (Bellanca & Brandt, 2010; Kaufman, 2013; Walser, 2008). Walser (2008) explained that teachers need to assign work where students can demonstrate skills such as teamwork, collaboration, and self-directed learning. Instead of directing student learning, teachers become facilitators who implement student-centered activities in order to engage in effective instruction (Silva, 2009). Teachers will interact with students differently rather than maintaining the traditional student-teacher relationships where students are passive participants (Trilling & Fadel, 2009).

Student-teacher relationships can be described from the attachment perspective, sociocultural perspective, and motivation perspective (Davis, 2003; Guilloteaux & Dornyei, 2008; Kilian, Fries, Hofer, & Kuhnle, 2010). According to Davis (2003), researchers who employ the motivation perspective seek to understand how student-teacher relationships impact student motivation in the classroom. Research regarding this motivation perspective usually focuses on the complex interactions of individual and
contextual factors (Wentzel & Miele, 2016). Positive student-teacher relationships are critical to student engagement and skill development (Reeve, 2006; Wentzel & Miele, 2016).

The California Standards for the Teaching Profession (CSTPs) provide a set of expectations for how teachers should build positive student-teacher relationships (Commission on Teacher Credentialing, 2009; Stanford Graduate School of Education, 2016). More specifically, the CSTPs focus on how teachers can build positive learning environments that encourage productive relationships between students and teachers (Whittaker, Snyder, & Freeman, 2001). These standards focus on six domains of teaching that define how teachers should interact with students, develop relevant curriculum, and meet the diverse needs of students (Commission on Teacher Credentialing, 2009). They also outline what teachers are supposed to know and do as they work with students in the classroom (Commission on Teacher Credentialing, 2012).

Partnership for 21st Century Learning (P21) schools have created learning environments that help teachers develop positive student-teacher relationships (Hillman, 2012; Johnson, 2009; Wilbert, 2017). P21 has identified specific exemplar schools that enable 21st-century skill development of students and support teachers in the implementation of innovative instructional techniques (Ellis, 2012; Quigley, 2016; Wilbert, 2017). These schools serve as models in terms of how teachers can build positive relationships with students in an environment that focuses on 21st-century instruction rather than more traditional modes of instruction (Wagner, 2008). Research suggests that future studies could explore factors affecting the success of P21 schools (Summers, Childs, & Corney, 2007; Wilbert, 2017). Considering that positive student-
teacher relationships are critical to student achievement and 21st-century skill
development (Wagner, 2008) as well as the lack of research concerning P21 schools
(Wilbert, 2017), it is important to explore how teachers build positive student-teacher
relationships in P21 schools.

**Background**

This chapter provides an overview of literature that is relevant to this study. This
overview is divided into five main sections. First, historical context concerning the
changing role of education and changing 21st-century educational goals is provided.
Second, changing demands for teaching in the 21st century is addressed. Third, the
theme of the 21st-century classroom and related components is presented. Fourth, an
overview of interventions intended to enable 21st-century skill development for students
is presented. Fifth, an overview of the P21 exemplar schools is presented.

**Changing 21st-Century Educational Goals**

The role of education in the United States is changing rapidly in the 21st century.
Instead of focusing on training students to learn skills, educators are expected to cultivate
a culture of learning (Brown, 2012). Wagner (2008) asserted that schools can cultivate
this culture of learning by ensuring that students are able to develop their abilities to
create, imagine, and innovate. As a result of this changing role of education, teachers
have to implement innovative instructional techniques that will allow them to better
enable the 21st-century skill development of students (Danah, Punya, & Petra, 2016;
Kozma, 2003; Lavigne, 2013; Silva, 2009). Unlike the traditional responsibilities of the
teacher that emphasized explaining and answering questions, teachers in the 21st-century
classroom support and facilitate student learning (Lavigne, 2013; Trilling & Fadel, 2009).
Historical goals. Throughout history and into the 21st century, education has focused on four pillars: contribute to work and society, exercise and develop personal talents, fulfill civic responsibilities, and carry traditions and values forward (Trilling & Fadel, 2009). However, the educational goals associated with each pillar have consistently changed. In the Agrarian Age and the Industrial Age, there is a special emphasis on preparing students to pass on knowledge while preserving one’s own cultural identity and values (Trilling & Fadel, 2009). This contrasts with the Knowledge Age where education is intended to prepare students to actively create new services and information while learning from a wide array of cultures and traditions (Trilling & Fadel, 2009).

Another important pattern concerns how civic responsibilities shifted from contributing to local and regional organizations to utilizing technology and knowledge to address global issues. Instead of training students to work in set systems and careers, education in the 21st century must prepare students to exercise their creativity and critical thinking skills (Wagner, 2008).

Economic shifts. In this global economy of the Knowledge Age, more money was spent on information and communication technologies than Industrial Age goods (Trilling & Fadel, 2009). The significant economic shift from Industrial Age production to a knowledge-based age created jobs that demand a higher level of knowledge and skills such as complex communication and expert thinking (Silva, 2009; Trilling & Fadel, 2009). Rapidly evolving technologies are essential to this global economy (Wagner, 2008). Researchers state that educators must be prepared to help students develop the necessary 21st-century skills to succeed in jobs that require these skills (Silva, 2009;
Trilling & Fadel, 2009; Wagner, 2008). Students should develop critical thinking and problem-solving skills so they can independently work to problem solve (Wagner, 2008). They will eventually work in an economy that requires them to be creative and take initiative.

**Job market shifts.** According to Wagner (2008), unlike the Industrial Age economy where students were consistently given specific tasks and orders, 21st-century careers require greater initiative and creativity. For example, the 21st-century global economy includes more corporations that rely on team contributors rather than top-down authority (Trilling & Fadel, 2009; Wagner, 2008). Employers rely on workers to share knowledge and produce information rather than just completing set tasks and following orders. The knowledge economy depends on people knowing, handling, and producing information instead of producing goods (Kozma, 2003).

The changing economy produced a variety of innovative new jobs and career paths (Casserly, 2012). Jobs in the technology sector such as a social media manager or market research data miner did not exist a decade ago but are rapidly growing (Casserly, 2012). Any career path in the 21st century requires students to develop transferrable skills and be able to adapt to changing work environments since they are likely to change jobs (Hilton, 2015). Educational institutions must teach students necessary 21st-century skills in order for them to work successfully in a changing economy (Hilton, 2015; Trilling & Fadel, 2009; Wagner, 2008).

**Changing Demands for Teachers in the 21st Century**

Twenty-first century educators must utilize innovative techniques that differ from more traditional instructional approaches (Hilton, 2015; Silva, 2009). According to
Domenech, Sherman, and Brown (2016), current educational approaches position students as passive learners who must learn a certain amount of information as determined by curriculum and pacing guides. Instead of just teaching core subjects, teachers are instructing students on concepts and skills that can be applied across content areas (Trilling & Fadel, 2009). Successful 21st- century educators emphasize the importance of skill building and authentic instruction in addition to covering material that is part of a curriculum (Preus, 2012; Trilling & Fadel, 2009).

**Cultural demands.** Teachers must understand the diverse needs of their student population. Cultural values that differ in homes and schools may lead to conflict and confusion in classrooms (West, 2007). Trilling and Fadel (2009) explained that teachers must be innovative and creative as they design learning experiences that engage students in thinking of deeper concepts and ideas while creating a positive classroom culture.

**Increased competition.** Educators must help students develop transferrable skills and knowledge that can help them succeed in a rapidly changing economy and workforce (Gasser, 2011; Partnership for 21st Century Learning, 2008a). Gasser (2011) asserted that educators in the United States need to adopt some of the instructional practices of their foreign counterparts in order to prepare students to live and work in the 21st century.

**Student engagement.** Teachers must focus on building student engagement in order to improve student achievement (Lawson & Lawson, 2013; Wagner, 2008). Casey (2012) stated that technology and digital modes of text could increase personalized learning and promote greater student collaboration. According to Wagner (2008),
motivating students is a priority, and innovative modes of instruction that encourage collaboration and creativity are far more effective than traditional modes of instruction.

**Instructional shifts.** Teachers need to ensure that students develop 21st-century skills that will help them collaborate with people from vastly different cultures and geographical areas (Trilling & Fadel, 2009; Wagner, 2008). Researchers believed that teachers need to bring thinking and creativity into the classroom instead of constantly expecting students to memorize facts and information (Hilton, 2015; Trilling & Fadel, 2009; Wagner, 2008). By assigning high-quality, intellectual work, teachers can encourage students to critically think about relevant issues (Preus, 2012). It is imperative that students understand their roles as global citizens.

**California Standards for the Teaching Profession (CSTPs).** The CSTPs are composed of six domains that address various domains of the teaching practice (Commission on Teacher Credentialing, 2009). The current version of the standards was created in 2009 in order to “respond to changes in the context for teaching and learning in California” (Commission on Teacher Credentialing, 2009, p. 3). These standards address specific behaviors and aspects of the teaching practice that accomplished teachers should be able to engage in (Norman, 2010). By outlining these essential elements concerning the teaching profession, the standards provide clear goals in terms of how teachers can best support students by creating positive learning environments that foster positive student-teacher relationships (Lindquist & Glass, 2009).
Theoretical Foundations of Student-Teacher Relationships

The following three theoretical foundations are pertinent to the study of student-teacher relationships: attachment perspectives, motivation perspectives, and sociocultural perspectives (Davis, 2003; Pianta, Hamre, & Allen, 2012).

Attachment perspective. Researchers conceptualize student-teacher relationships as extensions of parent-child relationships (Davis, 2003, Hughes & Cavell, 1999; Libbey, 2009). According to this perspective, the teacher is regarded as an attachment figure who is sensitive to children’s needs (Verschueren & Koomen, 2012). Bergin and Bergin (2009) explained that secure attachment is associated with higher grades and standardized test scores as compared to insecure attachment.

Sociocultural perspective. Researchers who use sociocultural perspective analyze how teachers’ beliefs about children’s interpersonal relationships affect their ability to connect with students and their overall relationships with students (Davis, 2003; John, 2006; Lasky, 2005). Summers et al. (2007) asserted that teachers who had high expectations for success experienced closer relationships with students.

Motivation perspective. Researchers commonly utilize the motivation perspective to explain how student-teacher relationships can increase students’ motivation to learn (Furrer, Skinner, & Pitzer, 2014; Wentzel, 1997; Wentzel & Miele, 2016). Student motivation leads to student engagement, which is critical to enhancing student achievement (Furrer et al., 2014).

Main elements of motivation perspectives. Davis (2003) explained that motivational perspectives are more defined by the educational context of schooling rather than parent-child relationships or relational schemas. Motivational strategies center on
instructional strategies that teachers can apply as well as self-regulating strategies that are used by students (Guilloteaux & Dornyei, 2008; Turner, Christensen, Kacker-Cam, Trucano, & Fulmer, 2014; Murdock & Miller, 2003). Waninge, Dorenyei, and De Bot (2014) noted that students tend to perform better when they are self-motivated but also explained how the teacher can influence students’ levels of motivation by ensuring that all students are engaged. Murdock and Miller (2003) found that students who were the most motivated had above average teacher and parent support.

**Limitations.** Limitations pertaining to this motivation perspective relate to how it does not account for certain contextual factors (Reeve, 2006; Urdan & Schoenfelder, 2006). Middleton and Spanias (1999) highlighted how motivation theory still does not account for the role that culture may play in student-teacher relationships and overall motivation. Reeve (2006) argued that the motivation perspective should account for students being more reactive to their classroom environment since their levels of motivation can change depending on the environment they are in. This motivational perspective can have limitations if motivation is considered to be something primarily intrinsic (Reeve, 2006; Urdan & Schoenfelder, 2006).

**Practical application of motivation perspectives.** Some educational organizations and institutions understand the importance of student-teacher relationships regarding student motivation. Advancement Via Individual Determination (AVID) teachers promote nurturing learning environments and positive student-teacher relationships that enhance student achievement (Bernhardt, 2013; Ensor, 2009; Ramos, 2015). AVID focuses on motivating at-risk students through college preparatory classes and necessary
support systems (Ensor, 2009). Ramos (2015) discussed how AVID teachers support student achievement by consciously developing strong relationships with their students.

P21 is another organization that systematically enables educators to create positive learning environments for students and teachers (Quigley, 2016, Trilling & Fadel, 2009; Wilbert, 2017). P21 schools enable positive student-teacher relationships through student-centered instruction that consistently motivates students to stay engaged (Wagner, 2008). P21 schools create 21st-century learning environments where teachers genuinely want to build positive relationships with their students (Hillman, 2012).

**Partnership for 21st Century Learning (P21)**

Project P21 is a national nonprofit organization that aims to help business, government, and education leaders better prepare students for a 21st-century workforce and economy (Partnership for 21st Century Learning [P21], 2016). P21 created a learning framework that outlines necessary student outcomes and support systems (P21, 2008b). It was designed through a collaborative process involving 35 member organizations, participating departments of education, and hundreds of members from professional education and research organizations (Trilling & Fadel, 2009). The P21 learning framework incorporates traditional subjects that students normally learn as well as 21st-century themes that focus on critical thinking, communication, and creativity (Trilling & Fadel, 2009). This framework also highlights the importance of skills relating to life, career, and technology. Support systems within this framework include standards and assessments, curriculum and instruction, professional development, and learning environments.
Process for identifying P21 exemplar schools. P21 exemplar schools are school districts or entities that qualify as leading examples in the field of 21st-century education (P21, 2016). P21 uses a rubric to evaluate each applicant in terms of how advanced and exemplary 21st-century learning practices are embedded in instruction. An evaluation team of two to four members visits selected sites and makes a final recommendation for a P21 exemplary designation (P21, 2016).

Exploring student-teacher relationships in P21 exemplar schools. The success of P21 exemplary teachers and students can be attributed to the P21 framework that provides a strong vision to guide stakeholders (Trilling & Fadel, 2009; Wagner, 2008; Wilbert, 2017). Because of this framework, P21 schools were able to maintain a high level of trust that was essential to skill building (Wilbert, 2017). Quigley (2016) noted how P21 teachers engage their students through innovative instruction that enables 21st-century skill development. Wagner (2008) developed this idea of “a new kind of teacher” who is far more effective in supporting students through 21st-century instruction (p. 72). It is critical to further explore the strategies that P21 exemplar teachers implement in their classrooms.

Statement of the Problem

The changing nature of the economy as well as a shifting job market affects the changing educational goals of 21st-century schools (Hillman, 2012, Silva, 2009). Moving into the global economy, more workers will need to be skilled in the process of creating and sharing information on a global scale rather than simply working in their local communities (Gasser, 2011; Kozma, 2003; Trilling & Fadel, 2009). Current students need to develop the 21st-century skills necessary to succeed in this competitive,
global economy (Hillman, 2012). However, the traditional methods of teaching will not prepare students to work in a rapidly changing economy (Donovan, Green, & Mason, 2014; Wagner, 2008). Many learning environments still prescribe to traditional modes of teaching where students are passive learners, which is detrimental to students since they are unable to develop 21st-century skills (Saavedra & Opfer, 2012).

Instead of focusing on traditional modes of instruction, teachers must utilize innovative strategies in order to enable 21st-century skill development for students (Schleicher, 2015). These strategies are more likely to engage students while helping them learn necessary skills (Ambrose, Sternberg, & Renzulli, 2016; Daniela, 2014; Hilton, 2015). Through their interactions with students in the classroom, teachers can encourage students to take risks and explore new ideas (Wilbert, 2017). This fosters positive student-teacher relationships that are critical to student achievement (Quigley, 2016). Schools that have made 21st-century instruction a norm tend to experience high levels of student achievement and improved classroom culture (Hillman, 2012; Wagner, 2008).

Research has proven the importance of student-teacher relationships to student achievement (Barile et al., 2011; Ramos, 2015; Wilkins, 2014). The most effective teachers build positive relationships with their students in order to support student learning (Satter, 2013; Springborn, 2017). However, many teachers struggle to create positive learning environments that enable effective instruction in the 21st century (Trilling & Fadel, 2009; Wagner, 2008). There is a need to examine 21st-century education from the perspectives of teachers (Schleicher, 2015; Summers et al., 2007; Williams-Hamilton, 2013). Much of the research on 21st-century education concerns the
perspectives of school leaders (Summers et al., 2007). More specifically, there is a need to examine how teachers in 21st-century classrooms build positive student-teacher relationships since these relationships are crucial to student achievement and skill development (Hoy, Bradley, & Horwitz, 2012; Ramos, 2015).

Exploring how teachers build positive student-teacher relationships can improve student achievement and engagement (Hoy et al., 2012). A qualitative study concerning how P21 teachers build positive student-teacher relationships could address the lack of research regarding 21st-century education from the perspective of teachers. Findings from this study could empower other teachers to implement such practices in their own classrooms.

**Purpose Statement**

The purpose of this phenomenological qualitative study was to describe and explore how teachers in P21 exemplar schools developed positive student-teacher relationships using the six domains of the California Standards of the Teaching Profession.

**Research Questions**

How do teachers in P21 exemplar schools develop positive student-teacher relationships according to the six domains of the California Standards of the Teaching Profession?

1. How do teachers in P21 exemplar schools engage and support all students in learning?
2. How do teachers in P21 exemplar schools create and maintain effective environments for student learning?
3. How do teachers in P21 exemplar schools understand and organize subject matter for student learning?

4. How do teachers in P21 exemplar schools plan instruction and design learning experiences for all students?

5. How do teachers in P21 exemplar schools assess students for learning?

6. How do teachers in P21 exemplar schools develop as professional educators?

**Significance of the Problem**

There is a growing body of research concerning 21st-century education. Shifts in education include an emphasis on skills-based instruction where educators are focusing on 21st-century skill development, in addition to teaching content (Koenig, 2011). It is critical that students are active learners who can engage in instructional activities rather than passively processing information during direct instruction (Daniela, 2014; Hilton, 2015; Saavedra & Opfer, 2012). The most effective schools will involve all stakeholders in promoting innovative teaching and learning (Schleicher, 2015). Additionally, the development of positive student-teacher relationships is critical to student achievement, engagement, and skill development (Barile et al., 2011; Ramos, 2015; Wagner, 2008).

Currently, schools are failing to engage students in meaningful instruction because many teachers are not developing 21st-century learning environments where students feel engaged and motivated (Ambrose et al., 2016; Trilling & Fadel, 2009; Wagner, 2008).

As previously mentioned, there is an increasing amount of research concerning 21st-century education. However, more research concerning this topic should be done from the perspectives of teachers (Wilbert, 2017). Current research has shown that student-teacher relationships are especially critical to ensuring 21st-century skill
development for students (Barile et al., 2011; Trilling & Fadel, 2009; Wagner, 2008). There is a need to help teachers better understand how to build positive student-teacher relationships in 21st-century education (Hoy et al., 2012; Ramos, 2015).

This study will contribute to the body of literature concerning 21st-century education in three distinct ways. First, the study will add to the body of knowledge about how teachers are building positive student-teacher relationships in the context of 21st-century teaching practices (Rotherham & Willingham, 2009). Second, the study will explore the implications of the 21st-century education model providing new insights on teacher perspectives and the dynamics of student-teacher interaction (Wilbert, 2017). Third, the study will provide information and key findings that can assist educators in gaining greater effectiveness in their efforts (Springborn, 2017).

The results of this study can provide information about how teachers develop positive student-teacher relationships in 21st-century classrooms. School leaders and administrators can use the findings from this study to strategically support teachers in developing positive relationships with students. Teachers and support staff can utilize the findings from this study to improve their instructional practice. Finally, data from this study will have implications for all stakeholders seeking to ensure 21st-century skill development for students.

**Definitions**

**California Standards for the Teaching Profession (CSTPs).** (CSTPs) are used as the basis for teacher preparation, professional development, and evaluation throughout California (Commission on Teacher Credentialing, 2009).
**Exemplar school.** A school that is identified by P21 as an example of 21st-century learning initiatives that successfully prepare students for college, career, and life. According to P21 (n.d.), exemplar schools are chosen through the use of the exemplar evaluation tool that focuses on the following criteria:

1. Evidence of commitment to college, career, and life readiness.
2. Educational support systems and sustainable design.
3. Engaged learning approaches.
4. Equitable student access to 21st-century learning.
5. Evidence of student acquisition of 21st-century knowledge.
6. Partnerships for sustainable success. (Evaluation Process, para. 4)

**Learning and innovation skills.** P21 defined learning and innovation skills as creativity and innovation, critical thinking and problem solving, communication, and collaboration (Wilbert, 2017).

**Motivation perspective.** The motivation perspective is defined as the belief that student-teacher relationships affects student motivation and attitudes, behavior, and performance in the classroom (Davis, 2003).

**Partnership for 21st Century Learning (P21).** P21 is a national advocacy organization that aims to change K-12 education in America by emphasizing the importance of 21st-century learning skill development (Quigley, 2016).

**Positive student-teacher relationships.** Positive student-teacher relationships occur in classrooms where teachers are able to create a positive learning environment for students (Richards, 2006; Springborn, 2017). Through these relationships, students can
achieve academic success while developing increased feelings of confidence and connectedness to the teacher (Ramos, 2015).

**Twenty-first century skills.** P21 (2016) defined key content knowledge and skills that students need to develop to be successful in the 21st century. According to P21, exemplar schools are chosen through the use of the exemplar evaluation tool that focuses on the following criteria:

1. Evidence of commitment to college, career, and life readiness.
2. Educational support systems and sustainable design.
3. Engaged learning approaches.
4. Equitable student access to 21st-century learning.
5. Evidence of student acquisition of 21st-century knowledge.

**Delimitations**

The study was delimited to two high schools in California that have been identified by P21 as exemplary. Delimitations are boundaries for the study that are decided upon by the researcher (Patton, 2015). The research defined delimitations for this study by considering (a) P21 exemplar schools, (b) geography, and (c) school characteristics. As of 2017, there were 94 exemplars nationwide. The researcher focused on schools in Southern California because of convenience and access to participants. As of 2017, there were four districts and 16 organizations that are defined as P21 exemplars in California. The researchers specifically focused on high schools. Of the schools designated as exemplars in California, two were high schools in Southern California.
Organization of the Study

This document is composed of five chapters. Chapter I includes the problem, significance, and basic background information of the study. It also presents the purpose, significance, and basic background information relating to the focus of the study. Chapter II presents a review of the literature and synthesizes important information concerning 21st-century education. Additionally, this literature review provides details about changing instruction and perspectives regarding student-teacher relationships. Chapter III describes the methodology of the study, which provides a comprehensive review of the research design used in the study. Chapter IV presents data and analysis. Finally, Chapter V summarizes the study, provides recommendation for future research, and concludes the document.
CHAPTER II: REVIEW OF THE LITERATURE

This chapter provides an overview of the relevant literature for this study. It is divided into four main sections. The first section examines changing educational goals throughout the 20th and 21st centuries. The second section addresses how demands are changing for teachers in the 21st century. The third section discusses the various theoretical perspectives relating to student-teacher relationships. The last section explores how Partnership for 21st Century Learning (P21) fosters positive student-teacher relationships.

Changing 21st-Century Educational Goals

The role of education in the United States is rapidly changing in the 21st century. More educators are focused on helping students develop 21st-century skills, in addition to mastering content (Wagner, 2008). The fundamental shift in education relates to historical shifts, economical shifts, and changing instructional demands. These components are outlined in the sections that follow.

Historical Goals

Education has consistently focused on four pillars: contribute to work and society, exercise and develop personal talents, fulfill civic responsibilities, and carry traditions and values forward (Trilling & Fadel, 2009). However, the goals relating to each pillar have changed throughout the Agrarian Age, Industrial Age, and Knowledge Age (Trilling & Fadel, 2009; Wagner, 2008). Table 1 outlines these differences.
Table 1  
*Society’s Educational Goals Throughout the Ages*

<table>
<thead>
<tr>
<th>Goals for education</th>
<th>Agrarian age</th>
<th>Industrial age</th>
<th>Knowledge age</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contribute to work</strong>&lt;br&gt;and society</td>
<td>Grow food for family and others</td>
<td>Serve society through a specialized profession knowledge work</td>
<td>Contribute to information and knowledge work</td>
</tr>
<tr>
<td></td>
<td>Create tools and crafts for basic needs</td>
<td>Apply engineering and science to contribute to industrial progress</td>
<td>Innovate new services to meet needs and solve problems</td>
</tr>
<tr>
<td></td>
<td>Participate in the local cottage economy</td>
<td>Contribute one piece of a long chain of production and distribution</td>
<td>Participates in the global economy</td>
</tr>
<tr>
<td><strong>Exercise and develop personal talents</strong></td>
<td>Learn the basic 3 Rs (reading, ‘riting, and ‘rithmetic), if possible</td>
<td>Achieve basic literacy and numeracy (for as many people as possible)</td>
<td>Enhance personal development with technology-powered knowledge and productivity tools</td>
</tr>
<tr>
<td></td>
<td>Learn farming and craft skills</td>
<td>Learn factory, trade, and industry job skills (for most people)</td>
<td>Take advantage of expanded global opportunities for knowledge work and entrepreneurship as middle class grows</td>
</tr>
<tr>
<td></td>
<td>Use tools to create useful artifacts</td>
<td>Learn managerial and administrative skills, engineering, and science (for a few at the top)</td>
<td>Use knowledge tools and technology to continue learning and developing talents throughout life</td>
</tr>
<tr>
<td><strong>Fulfill civic responsibilities</strong></td>
<td>Help neighbors</td>
<td>Participate in social and civic organizations to benefit the community</td>
<td>Participate in community decision making and political activity online and in person</td>
</tr>
<tr>
<td></td>
<td>Contribute to local village needs</td>
<td>Participate in organized labor and political activities</td>
<td>Engage globally in issues through online communities in social networks</td>
</tr>
<tr>
<td></td>
<td>Support essential local services and community celebrations</td>
<td>Contribute to local and regional civic improvement through volunteering and philanthropy</td>
<td>Use communication and social networking tools to contribute time and resources to both local and global causes</td>
</tr>
</tbody>
</table>

**Agrarian Age.** In the Agrarian Age, children were expected to develop and pass on knowledge about farming as well as community values and traditions. In school, children were expected to learn about three major subjects: reading, writing, and arithmetic (Wagner, 2008). There was an emphasis on passing knowledge to future generations rather than creating or improving upon current knowledge.

**Industrial Age.** Moving into the Industrial Age, education continued to emphasize passing on knowledge to future generations. However, goals also included being able to work with people from other cultures and traditions (Saavedra & Opfer, 2012). Schools in the Industrial Age were similar to factories since students needed to follow instructions, complete repetitive tasks, and follow authority (Horn, 2002; Wagner, 2008). Horn (2002) explained that this system of education was driven by governmental and industrial interests.

**Knowledge Age.** The goals in the Knowledge Age contrast with education goals from previous decades. Rather than focusing on skills that would benefit workers in the Industrial Age, 21st-century educational goals emphasize the importance of communication, collaboration, creativity, and critical thinking (Partnership for 21st Century Learning [P21], 2016). Education reform in the 21st century has also focused on ensuring that students from minorities and low-income communities have the necessary support to ensure their academic success (Chenoweth, 2016; Dolde, 2008).

**Economic Shifts**

The current Knowledge Age economy is dramatically different from the Industrial Age or agricultural economies (Wagner, 2008). This economy is information driven, globally networked, and includes an increasing number of jobs that require higher levels
of knowledge and applied skills (Gasser, 2011; Kozma, 2003; Silva, 2009). Peters, Marginson, and Murphy (2008) elucidated the following as unique characteristics of the global knowledge economy: knowledge as a public good and digitization of knowledge goods. New technologies have also transformed the economy and created new demands (Brown, 2012; Wagner, 2008).

**The Impact of Technology on the Job Market**

According to the Organization for Economic Cooperation and Development (OECD, 2009), technological innovation and globalization are restructuring the U.S. workforce entirely. Employers want to hire workers who can search for and select relevant information, interpret and analyze data, work with distributed teams, and learn new skills as needed (Kozma, 2003). In order to be successful in the 21st century workforce, workers need to develop specific skills (Hilton, 2015; Trilling & Fadel, 2009).

**Necessary skills.** Increasingly, careers in the 21st century require greater levels of collaboration, creativity, and critical thinking (Trilling & Fadel, 2009; Wagner, 2008). Hilton (2015) explained that students must be able to “take what they learned in one situation and apply it to another situation” (p. 64). Rather than working in controlled environments, workers in the 21st century must be able to work independently (Silva, 2009). These workers must be creative individuals who can solve global problems that are interdependent and complex (Henriksen, Mishra, & Fisser, 2016; Hilton, 2015).

**Technology.** Evolving technology is contributing to the development of new careers and job opportunities in the 21st century (Casserly, 2012; Kozma, 2003; Morgan, 2016). For example, jobs such as app developer or market research data miner simply didn’t exist in the past (Casserly, 2012). There are almost 209,000 cybersecurity jobs
that are unfilled according to a 2015 census (Morgan, 2016). According to Brynjolfsson and Saunders (2010), technology is one of the key drivers of productivity and growth for the nation because it is radically transforming the workforce.

**Changing Demands for Teaching in the 21st Century**

Because of the changing demands in the workforce, educational institutions must also change their instructional approaches to prepare students to be productive workers (Trilling & Fadel, 2009; Wagner, 2008; West et al., 2007). Teachers are critical change drivers because they work closely with students and utilize instructional techniques that directly impact student learning (Porter, McMaken, Hwang, & Yang, 2011; Goodyear, 2017). Indeed, these educators are able to provide necessary skills and resources that will be valuable to students in a variety of settings when they enter the workforce (Gasser, 2011).

**Cultural Demands**

According to West et al. (2007), educators must be responsive to the changing needs of an increasingly diverse society. By 2025, at least half of students in public schools will be students of color while more than 40% of schools in America have no teachers of color on staff (West et al., 2007). Additionally, students from high-poverty areas tend to perform worse in school than their wealthier counterparts (Amosa, Ladwig, Griffiths, & Gore, 2007; Dole, 2017; Noguera, 2009). Data show that many students are graduating without meeting college readiness requirements (Dole, 2017; Noguera, 2009). This is especially detrimental because an increasing number of 21st-century job opportunities requires students to have a college degree or higher (Wagner, 2008).
Changes in instruction and student engagement could help address these achievement gaps (Amosa et al., 2007; Dole, 2017; Preus, 2012). Research findings show that schools that consciously implement effective instruction can support students of diverse racial and socioeconomic backgrounds in developing higher order thinking skills (Newmann, Bryl, & Nagoaka, 2001).

**Increased Competition**

It is critical that educational institutions prepare students to be globally competitive workers (Gasser, 2011; Kozma, 2003; Wagner, 2008). American students will be in direct competition with youth from around the world for jobs because more students are learning necessary skills that make them competitive workers in a global economy (Berliner & Glass, 2014; Wagner, 2008).

Employing 21st-century teaching practices is critical to preparing students for global competition since they focus on skill-building and student-centered modes of instruction (Daniela, 2014; Saavedra & Opfer, 2012; Wilbert, 2017). As a result, students in 21st-century classrooms can develop the necessary 21st-century skills of critical thinking, communication, collaboration, and creativity that will enable them to succeed upon entry into the workforce (P21, 2008a).

Twenty-first century skill development is essential to career and college readiness for students (Gasser, 2011). However, students are graduating from high school and college without being adequately prepared for the workforce (Wagner, 2008). This increases pressure on schools to teach in ways that produce the knowledge for workers and innovators to be successful in the 21st century economy (Trilling & Fadel, 2009; Wagner, 2008). Research shows that students graduating from secondary schools,
technical colleges, and universities are lacking some of the following basic skills and a large number of applied skills: oral and written communications, critical thinking and problem solving, professionalism and work ethic, teamwork and collaboration, working in diverse teams, applying technology, and leadership and project management.

In order to enable 21st-century skill development for students, teachers must implement innovative modes of instruction that enable 21st-century skill development (Gasser, 2011; P21, 2008b). By utilizing these skills in the classroom, students can develop as astute thinkers who can problem solve (Hilton, 2015). This preparation in the classroom will allow them to be successful later in life (Hilton, 2015; Saavedra & Opfer, 2012). Instruction in the 21st century can only be effective if teachers are cognizant of the specific skills that students must develop before they graduate (Saavedra & Opfer, 2012).

**Student Engagement**

Student engagement is critical to effective instruction (Domenech et al., 2016; Lawson & Lawson, 2013). Student engagement is essentially the conceptual glue that binds student agency (prior knowledge, experiences, and interests) and ecological influences (peers, family, and community) to the organizational structure and cultures of the school (Kuh, 2009; Lawson & Lawson, 2013). Students who are more engaged with the content they are learning tend to invest more time in school and tend to exhibit strong academic achievement (Casey, 2012). Instruction that encourages collaboration and creativity contributes to far greater student engagement and is far more effective than traditional modes of instruction that position students as passive learners (Wagner, 2008). Based on a study of 11,000 individuals, age 11 to 31, common attitudes, behaviors, and
expectations were found, and they are clearly different from the following attitudes, behaviors, and expectations of those from previous generations:

- Freedom to choose what’s right for themselves and to express their personal views and individual identity.
- Customization and personalization—the ability to change things to better suit their own needs.
- Scrutiny—detailed, behind-the-scenes analysis so they can find out what the real story is.
- Integrity and openness in their interactions with others and from organizations such as businesses, government, and educational institutions.
- Entertainment and play to be integrated into their work, learning, and social life.
- Collaboration and relationships to be a vital part of all they do.

However, many students remain disengaged from school, and ineffective instruction can be an important factor for this change (King, 2012). Trilling and Fadel (2009) stated that instruction that “engages students in their learning, goes beyond memorization” (p. 141), which results in large gains for students from diverse backgrounds with a wide range of learning styles.

**Instructional Shifts**

In order to prepare students for the global economy, teachers must incorporate instructional strategies that support students in their 21st-century skill development (Domenech et al., 2016; Egan, Judson, & Dunton, 2014; Gasser, 2011). According to P21 (2008a), students must develop skills in the areas of collaboration, creativity, and critical thinking. Instruction must require students to practice these skills in the
classroom rather than emphasizing memorization of content (Preus, 2012). Current grade-level standards have been revised and updated to reflect these instructional shifts (Porter et al., 2011).

**Common Core State Standards.** These standards were established to provide a clear set of expectations for students across the country (Lang, 2014; Porter et al., 2011). According to Phillips and Wong (2010), Common Core State Standards will lay the groundwork for teachers to develop appropriate instructional tools and assessments. Additionally, these standards will enable increased college readiness of students (Illingworth, 2016; Phillips & Wong, 2010). According to March and Peters (2015), Common Core State Standards integrate multiple skills that require analytic and critical thinking, require students to cite evidence to support opinions, and enable students to discover meaning and construct relationships for themselves. This represents a significant shift from previous standards that stressed the importance of understanding information as directed by the teacher (Bambrick-Santoyo, 2013; March & Peters, 2015).

According to Hilton (2015), the Common Core State Standards provide a strong incentive for educational institutions to emphasis 21st-century competencies in disciplinary instruction.

The standards do not prescribe specific curriculum and do not determine the textbooks or lessons that teachers need to use (Leifer & Udall, 2014; U.S. Department of Education, 2017a). As a result, teachers have more freedom in terms of choosing and implementing strategies (Leifer & Udall, 2014). Teachers will have to make decisions about which texts will engage their population of students, the specific strategies that will enable student success, and the texts that students will access (Grindon, 2014).
following Common Core State Standards, teachers can better support students in developing necessary 21st-century skills (Trilling & Fadel, 2009; U.S. Department of Education, 2017a).

21st Century Learning and Instruction

In order for students to learn 21st-century skills relating to the areas of collaboration, communication, critical thinking, and creativity, teachers must implement innovative modes of instruction (Trilling & Fadel, 2009; Wagner, 2008). Teacher-directed instruction cannot be the primary method of instruction, since students are not as engaged (Daniela, 2014; Saavedra & Opfer, 2012). In order to facilitate 21st-century learning, teachers can prompt students to think more deeply about subjects, engage learning in challenging tasks, and connect content to students’ personal lives and interests (Hilton, 2015).

Learning scientists have identified the following specific methods to enable 21st-century skill development (Saavedra & Opfer, 2012):

1. Make it relevant.
2. Teach through the discipline.
3. Develop thinking skills.
4. Encourage learning transfer.
5. Teach students how to learn.
6. Address misunderstandings directly.
7. Treat teamwork like an outcome.
8. Explicit technology to support learning.
These methods support students in becoming active learners who have more agency in the classroom and differ from teacher-directed modes of instruction from the past (Saavedra & Opfer, 2012; Trilling & Fadel, 2009). More specifically, inquiry and design-learning methods, combined with traditional ways of acquiring knowledge, are the key components of 21st-century learning (Trilling & Fadel, 2009). Inquiry-based learning is another effective form of instruction that occurs when educators are facilitators of learning who can promote a culture of investigation and active learning (National Research Council, 2010). Design-learning methods include project-based learning where students respond to real-world questions or challenges through an inquiry process (Lattimer & Riordan, 2011). Twenty-first century instructional practices are student centered since they allow students to collaborate, work on authentic problems, and engage with the community (Rotherham & Willingham, 2009).

**California Standards for the Teaching Profession**

In order to guide 21st-century instruction, the California Standards for the Teaching Profession (CSTPs) were created in 1999 and revised in 2009 (Commission on Teacher Credentialing, 2009). The standards are intended to “prompt reflection, formulate professional goals, guide, monitor, and assess the progress of a teacher’s practice” in order to promote teacher development and student achievement (Commission on Teacher Credentialing, 2009, p. 4). Various research shows that a student’s teacher is one of the most important factors in supporting a student’s academic success (Hoy et al., 2012; Ramos, 2015; Richards, 2006). According to Wechsler and Shields (2008), policy makers acknowledged this fact and created the standards in order to raise the quality of
the teacher workforce to ensure that every student could have an effective teacher. The following are the six domains of the CSTPs:

1. Engaging and supporting all students in learning.
2. Creating and maintaining effective environments for student learning.
3. Understanding and organizing subject matter for student learning.
4. Planning instruction and designing learning experiences for all students.
5. Assessing students for learning.
6. Developing as a professional educator. (Commission on Teacher Credentialing, 2009, p. 3)

While the original standards were created in 1990, the updated version of these standards in 2009 were meant to address the changes occurring in 21st-century classrooms in teaching and learning (Norman, 2010). The U.S. Department of Education (2017b) described how these teaching standards addressed the diversity of students and teachers in California schools as well as how they reflect the various facets of effective instruction. These six standards emphasize the importance of effective instruction, learning environments, and assessment (Commission on Teacher Credentialing, 2009). The revision of the CSTPs indicate the need for teachers to continue implementing innovative instructional strategies that will better support 21st-century learners (Commission on Teacher Credentialing, 2009).

These standards are especially critical in terms of supporting teachers in building positive relationships with their students (Stanford Graduate School of Education, 2016; U.S. Department of Education, 2017a). According to Lindquist and Glass (2009), the CSTPs articulate specific behaviors and expectations for effective educators.
Student-Teacher Relationships

Student-teacher relationships are changing in the 21st century because of a shift from teacher-directed instruction to student-centered instruction (Rotherham & Willingham, 2009; Trilling & Fadel, 2009; Wagner, 2008). Traditionally, teachers directed student learning while students were passive participants (Silva, 2009). However, teachers’ roles have shifted so they are facilitating student learning rather than controlling it (Bellanca & Brandt, 2010; Kaufman, 2013). Wagner (2008) asserted that 21st-century classrooms need “a new kind of teacher” who is able to facilitate activities that engage their students in activities that help them develop necessary skills. This changing dynamic presents new challenges to teachers who must be able to expertly manage classroom behavior and collaboration among students (Rotherham & Willingham, 2009). Understanding the changing dynamics of student-teacher relationships is critical to supporting student success (Hoy et al, 2012; Ramos, 2015).

The nature of teacher-student relationships has changed throughout the decades. In the 1930s, communities positioned the teacher as someone who upheld communal values and was responsible for nurturing the next generation (Pajak, 2012). This teacher would likely be unmarried and without a family. Within these teacher-student relationships, there was a “repetitive pattern of questions asked and answers given” (Pajak, 2012, p. 1192). This mode of teaching, which positioned students as more passive learners, allowed for greater emotional distance between the teacher and student. Teachers’ individual personalities were seen as irrelevant to their careers and the concept of the teacher-student relationship was relatively unimportant.
Until the late 20th century, teachers were perceived as unimportant to student achievement and did not make a major impact on the quality of education that a student received (Lavigne, 2013). After the 20th century, communities became bigger and more metropolitan and allowed teachers greater independence (Pajak, 2012). Teachers could express more of their own ideas and personalities in the workplace. By the beginning of the 21st century, research started proving that teachers did affect student learning by employing certain techniques and exhibiting positive behaviors (Lavigne, 2013).

Because of this emerging research, there was a greater collective understanding that teachers impacted students in fundamental ways and were critical stakeholders in a child’s education.

Teacher-student relationships are critical to the development of students’ socioemotional learning as well as their overall academic success (Ramos, 2015). Ramos (2015) stated that positive teacher-student relationships depends on “teachers’ ability to care, understand, and exercise patience, in addition to being honest, encouraging, trustworthy, and motivating” (p. 134). In fact, Aultman, Williams-Johnson, and Schutz (2009) stated that “teachers who value having positive relationships with students tend to be more effective” (p. 637). At-risk students especially benefit from strong relationships with their teachers because they are less likely to drop out of school when they feel supported and cared for (Barile et al., 2011). Even in more affluent schools, students tend to experience less stress and have improved academic performance when they feel positive about their relationships with their teachers (Conner, Miles, & Pope, 2014).

Conner et al. (2014) wrote that caring teachers enable student success especially when they are facing mental health issues including anxiety. Multiple sources of
scholarly research indicate that teacher-student relationships are critical to student success because they help students persevere in the classroom. Eversgerd (2014) asserted that “teachers who displayed unhelpful behaviors more frequently had twice the number of failing students as teachers who displayed helpful behaviors more frequently” (p. 117). This is a critical finding because failing students are less likely to want to persevere in school. High school students also believe that relationships with their teachers are the most important facet of education in influencing learning (Richards, 2006). Teachers who nurture positive relationships with their students actually help their students build academic and social skills (Cheser, 2015). Overall, “Teacher-student relationships can become more central to the policy debates about education,” which will definitely improve student outcomes (Gehlbach, Brinkworth, & Harris, 2012, p. 701).

Theoretical Foundations of Student-Teacher Relationships

Student-teacher relationships have been studied from the following perspectives: attachment perspectives, motivation perspectives, and sociocultural perspectives (Davis, 2003; Pianta et al., 2012). According to Pianta et al. (2012), properly “understanding the nature and quality of relationship interactions between teachers and students is fundamental to understanding student engagement” (p. 365). These perspectives conceptualize students’ relationships with teachers, which helps one to better understand the impact of student-teacher relationships on students’ skill development (Davis, 2003; Robertson, 2017).

Attachment Perspective

According to the attachment perspective, positive student-teacher relationships can be viewed as extensions of the parent-child relationship because they emphasize high
levels of closeness and support (Davis, 2003). In this context, attachment can be defined as the degree to which students respect teachers and the extent to which students care what teachers think (Libbey, 2009). Greater student attachment to teachers is associated with greater social competence and higher academic achievement (Bergin & Bergin, 2009; Verschueren & Koomen, 2012). Riley (2008) stated that teachers also feel a level of attachment to their students because they are somewhat dependent on their students’ mental representations and interactions with them. This dynamic revealed that teachers may be required to introduce and scaffold relationships, but students must also participate (Robertson, 2017). Based on the attachment perspective, good student-teacher relationships occur when teachers focus on trust and collaboration (Robertson, 2017). In 21st-century learning environments, strong student-teacher relationships can occur only if teachers are partners and facilitators in learning rather than simply directing student learning (Riley, 2008; Robertson, 2017). Additionally, authentic learning tasks also strengthened relationships between students and teachers because students could express themselves in the classroom and be active and honest contributors (Rector-Aranda & Raider-Roth, 2015; Robertson, 2017).

**Sociocultural Perspective**

This perspective recognizes that “students and teachers have important roles in the development of positive student-teacher relationships” (Davis, 2003, p. 217). For example, a sociocultural study could focus on how adults’ perceptions of children’s social needs impact student-teacher relationships (Davis, 2003). Teachers’ identity, agency, and context can affect how they instruct students, create trustworthy learning environments, and build relationships with students (Davis, 2003; Lasky, 2005).
Teachers who reported a higher sense of personal efficacy had students who reported decreases in teacher dependency across the academic year (Summers et al, 2007). Research from the sociocultural perspective also acknowledges the important role of students in the development of positive student-teacher relationships in the 21st-century classroom (Davis, 2003; Mehra, 2002; Summers et al., 2007). Students can exhibit certain behaviors that will enable them to develop more positive relationships with their teachers (Wilkins, 2014). This perspective also addresses contextual factors relating to political and social contexts that may influence how student-teacher relationships develop (Davis, 2003). The sociocultural perspective examines the construction of student-teacher relationships in terms of how students and teachers can influence each other (Davis, 2003; Robertson, 2017). According to Robertson (2017), it is important to “restructure teacher and student roles with the aim of strengthening engagement” (p. 41).

The evolution of 21st-century learning requires that students have more agency in the classroom, participate authentically and honestly in the classroom environment, and develop increased autonomy (Roberston, 2017; Taber, 2015). Not only can teachers facilitate student learning, but they can also enable students to lead learning in the classroom at different times (Mehra, 2002; Robertson, 2017). This can increase student achievement and help teachers form positive relationships with students (Mehra, 2002).

**Motivation Perspective**

According to the motivation perspective, students appreciate the structure and support that teacher relationships can provide and also value the ability of teachers to help them feel successful in school (Davis, 2003). For example, studies that incorporated this perspective suggest that students tend to experience increased motivation and
achievement when they genuinely like their teachers (Montalvo, Mansfield, & Miller, 2007; Reeve, 2006). This shows how teachers have an especially important role in ensuring that students are motivated to learn (Davis, 2003, Urdan & Schoenfelder, 2006). Furthermore, teachers can implement effective instructional strategies that improve student performance and student motivation (Turner et al., 2014). Clearly, student motivation is linked to quality of instruction because teachers can create a positive classroom environment where students want to do their work rather than feeling discouraged (Kilian et al., 2010; Reeve, 2006). Furrer et al. (2014) believed that students need structured interactions and support from teachers in order to be autonomous learners who feel motivated in the classroom. When teachers utilize effective instructional strategies, students are more likely to be engaged, understand content material, and develop positive student-teacher relationships (Guilloteaux & Dornyei, 2008; Murdock & Miller, 2003; Robertson, 2017). For example, Capturing Kids’ Hearts is a program that focuses on providing teachers with socioemotional learning techniques and classroom facilitation tools that can increase student engagement, on-task behavior, and overall student performance (Flippen Group, 2010). According to Yeager (2006), this program enables teachers to better motivate students by educating teachers about different methods of building trust and rapport with students.

Teachers can increase student motivation by encouraging student autonomy, creativity, and collaboration (Robertson, 2017; Turner and Christensen et al., 2014). Twenty-first century instructional techniques increase student motivation because they require students to be active learners (Ambrose et al., 2016; Hilton, 2015; Saavedra & Opfer, 2012). By diverging from traditional instructional methods, teachers can promote
student agency in the classroom and create 21st-century learning environments (King, 2012). These learning environments promote increased student motivation because students are actively making meaning thinking on their own rather than being told what to think (Daniela, 2014). Reeve (2006) contended that “teachers need to provide adequate support for students as they develop necessary skills and knowledge” (p. 20).

Many experts believe classrooms must change in order to promote more positive student-teacher relationships (Trilling & Fadel, 2009; Wagner, 2008). According to Furrer et al. (2014), “Teachers have to meet increased demands while having fewer resources such as larger classroom sizes, loss of prep time, and diminishing compensation” (p. 104). Because of these contextual factors, it becomes even more imperative that teachers have the necessary skills to improve relationships, engagement, and motivation in classrooms (Daniela, 2014; Furrer et al., 2014). Ambrose et al. (2016) stated that student engagement naturally correlates to student motivation so teachers must engage students to effectively motivate them. Motivated students develop more positive relationships with their teachers and perform better in their classes (Hilton, 2015, King 2012). Successful 21st-century learning environments can also encourage greater student motivation and success (Robertson, 2017; Wentzel & Miele, 2016).

**Challenges in the 21st Century**

Although 21st-century instruction is critical to student success, many schools are not encouraging innovative teaching (Ambrose et al., 2016; Daniela, 2014; Saavedra & Opfer, 2012). This is a critical issue because students are graduating high school without having necessary skills to succeed in higher education and the workforce (Trilling &
Fadel, 2009; Wagner, 2008). Various external factors are contributing to stakeholders resisting the shift toward 21st-century instruction.

**Curriculum**

Outdated curriculum can affect the slower implementation of 21st-century instruction (Daniela, 2014; Rotherham & Willingham, 2009; Silva, 2009). According to Silva (2009), curriculum has become narrower because of an increase in testing that confines students’ thinking and does not help them develop the necessary critical-thinking skills of the 21st-century. Parents may also believe in curriculum that mirrors what they learned in school rather than sending their children to schools where different instructional approaches are used (Wagner, 2008). In order to address this issue, Hilton (2015) suggested that increased research and development must be done to ensure that grade-level curriculum is focused on skill development.

**Emphasis on Testing**

Standardized testing is not conducive in terms of measuring and supporting deeper learning (Ambrose et al., 2016; Hilton, 2015; Rotherham & Willingham, 2009). Despite this proof that traditional assessments are not as effective, Hilton (2015) suggested that policy makers may want to minimize assessment costs by maintaining lower-cost, traditional test formats rather than performance and curriculum-based assessments. The three most common teaching practices in school were filling out worksheets, having students individually working at the same pace and sequence on the same tasks, and answering tests (Trilling & Fadel, 2009). These assessment formats focus on students’ knowledge of information based on grade-level standards rather than assessing 21st-century skill development (Wagner, 2008). However, the quality of
assessments is improving as schools focus on what students should be able to do with their content knowledge rather than the subject matter they should know (Hilton, 2015; Trilling & Fadel, 2009).

### Instructional Methods

Research shows that many teachers tend to not use student-centered methods even if they believe that these methods are more effective than traditional teacher-directed instruction (Rotherham & Willingham, 2009; Silva, 2008; Walser, 2008). However, Rotherham and Willingham (2009) stated that it can be challenging for teachers to manage classrooms with increased student activity because it can devolve into chaos if teachers are not properly trained. Therefore, teachers must engage in professional development in order to improve instructional effectiveness (King, 2012; Rotherham & Willingham, 2009). Through effective professional development, teachers learn about innovative modes of instruction and helpful teaching strategies (Johnson, 2009).

However, schools must invest in teachers by creating a strong environment where teachers consistently have opportunities to hone their craft (Knight, 2007; Shidler & Fedor, 2010). This can prevent higher rates of attrition and improve isolating and dysfunctional schools where teachers find it difficult to improve their instruction and better engage students (Simos, 2013; Stegall & Linton, 2012).

Traditional professional development initiatives do not improve instructional effectiveness because teachers are passively listening to information rather than engaging in personal reflection and collaboration with peers (Kedzior & Fifield, 2004; Knight, 2007). Innovative and high-quality professional development includes mentoring,
coaching, instructional rounds, and other similar practices (Johnson, 2009; van Nieuwerburgh, 2012).

**Overview of 21st-Century Intervention Efforts**

To respond to the need for 21st-century instruction in schools, various organizations have created frameworks that outline processes and skills for teachers and students (Dede, 2009). The section that follows outlines four frameworks: EnGauge, Organization for Economic Cooperation and Development, American Association of College and Universities, and Partnership for 21st Century Learning.

**EnGauge.** This is a web-based framework that focuses on a set of 21st-century skills that will be increasingly important for students to develop before they enter the workforce (Lemke, 2002). This framework focuses on the following areas: digital-age literacy, inventive thinking, effective communication, and high productivity (OECD, 2009). It was created because of challenges that students, citizens, and workers face in the digital age (Lemke, 2002; OECD, 2009).

**Organization for Economic Cooperation and Development framework.** In 2005, this organization provided a set of 21st-century skills that included the following areas: using tools interactively, interacting in heterogenous groups, and acting autonomously (OECD, 2009). This framework addresses the issue of students being unprepared for the workplace because they are not developing 21st-century skills that can help them succeed in an increasingly globalized market (Martin, Buelow, & Hoffman, 2015).

**American Association of College and Universities.** This organization detailed the following essential learning outcomes for K-12 students: knowledge of human
cultures and the physical and natural world, intellectual and practical skills, personal and social responsibility, and integrative learning (Dede, 2009). Basic skills and 21st-century technological skills are essential to this framework (Texley, 2017).

**Partnership for 21st Century Learning (P21).** This framework addresses the following areas: core subjects, 21st-century content, learning and thinking skills, technology and life skills, and 21st-century assessments (Dede, 2009). P21 is the leading advocacy organization in the United States, and the framework is widely used because it infuses 21st-century skills into education (Johnson, 2009). This framework also represents the goals of the partnership in supporting students in the development of content knowledge and skills (Bellanca & Brandt, 2010; Johnson, 2009; Wagner, 2008).

**Partnership for 21st Century Learning**

P21 is a national nonprofit organization with a mission to serve as a catalyst for 21st-century learning by building collaborative partnerships among education, business, community, and government leaders (P21, 2008a; Wagner, 2008). Various 21st-century frameworks exist, but P21 offers the most comprehensive framework that addresses core aspects of 21st-century learning and instruction (Quigley, 2016; Wilbert, 2017). According to Trilling and Fadel (2009), P21 is an outgrowth of successful efforts by the United States to bring technology to American classrooms. Since its inception, P21 has become a successful organization in the field of 21st-century education (Wagner, 2008).

**P21 framework.** The framework was developed after consultations with teachers, education experts, and business leaders. It defines the skills that students need in work, life, and citizenship as well as the support systems that would enable 21st-century skill development (P21, 2016). Dede (2009) asserted that the P21 skills framework is more
widely adopted than any other 21st-century skills framework and is the most detailed framework.

According to Trilling and Fadel (2009), this framework illustrates desired student outcomes that include “learning through traditional school subjects and contemporary content themes combined with 21st-century skills” (p. 83). It illustrates how the development of life and career skills, learning and innovation skills, and technology skills are supported through systems such as standards, curriculum, professional development, and learning environments (P21, 2016). Figure 1 outlines these necessary skills and support systems.

This framework delineates the core aspects of 21st-century learning by encompassing the skills that students need to develop as well as the support systems that enable 21st-century skill development (Dede, 2009).

**Life and career skills.** Today’s graduates must navigate complex work and life environments (P21, 2016). In addition to understanding core content and developing necessary thinking skills, students must develop skills that help them function in a variety of work and life settings (Hilton, 2015; P21, 2016). Hilton (2015) opined that more support must be provided to teachers in order to help them support students’ 21st-century skill development and mastery of academic content. Current approaches to instruction need to change in order to emphasize essential life and career skills that can help students be successful in a variety of environments upon graduation (Saavedra & Opfer, 2012; Silva, 2009).

**Learning and innovation skills.** Critical thinking, communication, collaboration, and creativity are essential 21st-century skills that students should develop throughout their education (Daniela, 2014; Johnson, 2009; Summers et al., 2007). Traditional approaches to instruction are teacher directed and position students as passive learners (Wagner, 2008). Student-centered teaching is a necessity in terms of enabling 21st-century skill development because students have the freedom to think critically, communicate, and collaborate with one another to exercise their creativity (Ellis, 2012; Quigley, 2016).

**Information, media, and technology skills.** Technology is an essential part of 21st-century education because students must develop the necessary skills to productively use technology throughout their lives (King, 2012; Wilbert, 2017). In this digital age,
students need to learn how to use technology productively in work and school environments (Trilling & Fadel, 2009; Wagner, 2008).

**Key subjects-3Rs and 21st-century themes.** Core subjects such as math or English are just as important as 21st-century interdisciplinary themes (Daniela, 2014; Saavedra & Opfer, 2012). P21 (2016) details how educational institutions can promote a higher level of student cognition by integrating 21st-century themes into instructional practices. For example, students can use 21st-century skills to better understand global issues while collaborating with individuals from diverse backgrounds (P21, 2016; Wagner, 2008). Additionally, students must know about local and global implications of civic decisions while participating in civic life (P21, 2016; Silva, 2009). Individuals should also understand information concerning health and wellness (P21, 2016). Finally, students in the 21st century need to learn about environmental issues as well as their own abilities to individually and collectively address these issues (P21, 2016; Trilling & Fadel, 2009; Wagner, 2008).

**Standards and assessments.** Rather than assessing students’ knowledge of information that is specific to grade levels, standards and assessments must emphasize acquisition of 21st-century skills (Hilton, 2015; Wagner, 2008). P21 (2008a) defined successful standards as those that emphasize deeper understanding rather than shallow knowledge. Assessments in P21 schools allow students to demonstrate and master specific skills rather than assessing how much information a student can retain.

**Curriculum and instruction.** Twenty-first century curriculum and instruction includes content that is relevant to students’ lives and provides opportunities for students to apply 21st-century skills (Donovan et al., 2014; King, 2012; P21, 2016). Innovative
instruction positions students as active learners while teachers are facilitators of student learning (Ambrose et al., 2016; Bellanca & Brandt, 2010).

**Professional development.** In order to better support student success, teachers need to engage in consistent professional development opportunities that are not simply workshops and conferences where students are passive participants (Russell, 2015; Shidler & Fedor, 2010). Instead, more effective professional development opportunities include peer-to-peer coaching or collaboration days where teachers can learn from each other (Kedzior & Fifield, 2004; Knight, 2007). P21 (2008a) defined how professional development initiatives can highlight innovative instructional techniques through professional learning communities and knowledge sharing. This description from P21 emphasized how teachers should learn about helpful strategies that can replace ineffective instructional methods. According to Trilling and Fadel (2009), effective professional development initiatives in P21 schools tend to be experiential, grounded in the teacher’s own questions and issues, collaborative, and connected to the teacher’s own work with students and curriculum.

**Process for Identifying P21 Exemplar Schools**

Based on specific criteria, P21 has designated various elementary and high schools throughout the nation as exemplar schools through its P21 (2016) exemplar evaluation process. First, schools must apply online in order to be considered. P21 evaluates each application based on the following criteria:

1. Evidence of commitment to college, career, and life readiness.
2. Educational support systems and sustainable design.
3. Engaged learning approaches.
4. Equitable student access to 21st-century learning.

5. Evidence of student acquisition of 21st-century knowledge and skills.


Following the application evaluation, two to four evaluation team members will visit selected schools. They will meet with stakeholders and partners such as the principal, community members, teachers, and students. The evaluation team will use another rubric to evaluate the school after the site visit. This rubric includes the following criteria:

1. Evidence of commitment to college, career, and life readiness.

2. Education support systems and intentional design.

3. Engaging learning approaches.

4. Equitable student access to 21st-century learning.

5. Evidence of student acquisition of 21st-century knowledge.


**Essential Components**

According to P21 (2016), there are “common features—the patterns of innovation that emerge across exemplar schools” that are at the core of successful 21st-century instruction. The five major components are distributed leadership, student agency, research and evidence, engaged community, and a climate of achievement (see Figure 2). According to Hillman (2012), P21 schools tend to have a clearly articulated vision—fidelity of vision with school practice and community support, capacity to develop curriculum, and a school culture that is centered on student and adult learning.
Student agency. Agency can be defined as the capacity and propensity to take purposeful initiative (Ferguson, 2015; P21, 2016). Students who have agency in the classroom are more likely to be engaged and successful (Hillman, 2012). Teachers have the ability to encourage student agency by providing student-centered instruction and building positive relationships with students (P21, 2016). Classroom environments in P21 schools empower students and allow them to take ownership of their learning (Bellanca & Brandt, 2010; Trilling & Fadel, 2009).

Research and evidence. Exemplar schools tend to focus on research-based approaches and theory to instruct students (P21, 2016; Wagner, 2008). The P21 framework that outlines skills and relevant support systems is based on this research (Dede, 2009). Schools use diverse approaches, but project-based learning seems to be a highly effective tool in most exemplar schools (P21, 2016). Project-based learning is a
highly effective form of 21st-century instruction because students can collaboratively utilize real-life approaches to solving issues that relate to the community and the world (Lattimer & Riordan, 2011).

**Engaged community.** Exemplar schools engage their communities of teachers, students, families, and organizations (P21, 2016). According to Summers et al. (2007), superintendents of exemplar 21st-century school districts will utilize strategies that focus on community engagement to support a broader vision of supporting students.

**Climate of achievement.** According to the National School Climate Council (2007), school climate reflects the “norms, goals, values, interpersonal relationships, teaching, learning, and leadership practices, and organizational structures” of a school (p. 3). P21 exemplar schools tend to focus on building a positive school climate by involving stakeholders such as teachers, administrators, students, parents, and community members.

**Distributed leadership.** Distributed leadership is a framework for understanding leadership that focuses on interactions between school leaders, teachers, and students (P21, 2016). Rather than focusing on the individual leader, distributed leadership focuses on responsibilities that are distributed among a team of individuals (Bill & Melinda Gates Foundation, 2015).

**Exploring Student-Teacher Relationships in P21 Schools**

P21 schools are able to maintain a high level of trust between stakeholders and create learning environments that benefit both teachers and students (Hillman, 2012; Trilling & Fadel, 2009; Wilbert, 2017). There is an emphasis on maintaining positive learning environments where students are engaged in student-centered activities.
In P21 schools, teachers tend to work with smaller groups of students and develop relationships with students that span several years (Wagner, 2008). According to P21 (2016), teachers created an optimistic education culture where students are learning to connect with others in collaborative and supportive environments. These positive learning environments contribute to positive student-teacher relationships that are present in P21 schools (Quigley, 2016). P21 schools implement the following specific actions to ensure that schools are supporting their students and teachers:

- Provide adequate funding and time for educators to participate in professional learning opportunities.
- Focus on high-quality, sustainable professional learning opportunities for all educators.
- Ensure that new teachers have participated in digital learning opportunities and that they have the pedagogy needed to integrate technology tools and resources.
- Communicate to all stakeholders the critical need for ongoing sustainable professional learning.
- Dedicate administrative and instructional staff to provide coaching and mentoring for educators. (P21, 2016)

**Emphasizing professional development.** P21 schools focus on the importance of consistent professional development for teachers (Bellanca & Brandt, 2010; Quigley, 2016; Summers et al., 2007). Teachers are learning about innovative strategies through professional learning communities and teacher collaboration (Wagner, 2008).
Essentially, professional learning communities are places where teachers can talk about what good teaching is and how they can improve their own teaching methods (Trilling & Fadel, 2009; Wagner, 2008). Teague and Anfara (2012) asserted that professional learning communities possess three core attributes: (a) supportive working conditions, (b) shared values and goals, and (c) collaboration among teachers and administrators. Teachers who successfully engage in professional learning communities systematically inquire into present practices, consult outside expertise, reflect on what they had learned from experience, and engage in searching conversations with one another (Wood, 2007). In order to assist teachers in their professional development, professional learning communities are essential because they provide consistent support and empower teachers to improve their instructional practices (Lumpe, 2007; Thessin & Starr, 2011).

**Using technology.** Twenty-first century technology is critical to creating positive learning environments (Wilbert, 2017; Quigley, 2016). Twenty-first century teaching must integrate technology because it is a useful tool to enable students’ skill development (Guo & Woulfin, 2016; Saavedra & Opfer, 2012).

**Supportive leadership.** P21 schools tend to have transformational leaders who actively support teachers (Summers et al., 2007; Titone, 2017). According to Titone (2017), administrators in P21 schools tend to engage in consistent professional development, evaluate innovation in classrooms, and maintain networking and partnerships with outside organizations such as local/regional agencies and businesses. Summers et al. (2007) also specified strategies that P21 superintendents use:

- Engaging the community.
- Hiring for fit.
• Allocating resources to initiatives.
• Building capacity through collaborative professional development.
• Listening purposefully.
• Recognizing and celebrating successes.
• Building a culture of risk taking and trust.
• Maintaining a loose-tight relationship with site principals.
• Fostering organizational persistence and resilience. (pp. 169-170)

Summary

Current research explores the benefits of 21st-century education in preparing students to be successful in the future (Absolum, Gray, & Mutchmor, 2010; Daniela, 2014; Saavedra & Opfer, 2012). This is especially true in P21 exemplar schools because they have created effective learning environments that enable students’ 21st-century skill development (Hillman, 2012; Johnson, 2009; Wilbert, 2017). Various factors contribute to the success of P21 exemplar schools. Positive district leadership is essential in these schools as evidenced by the effective strategies that superintendents of exemplary P21 school districts used to implement change processes in their districts (Summers et al., 2007). Also, administrators and support staff are actively involved in the process of integrating 21st-century skills (Wilbert, 2017). Teachers are important stakeholders as well because they mentor students, employ engaging instructional techniques, and enable student autonomy in class (Trilling & Fadel, 2009; Wagner, 2008). Quigley (2016) examined how teachers’ perceptions and attitudes about 21st-century learning positively affected their instructional practices. Research on P21 schools addresses how strong
leadership, beneficial student-teacher relationships, and progressive instruction affect the
development of positive learning environments in P21 exemplar schools.

**Teachers’ Perspectives: Missing in the Literature**

Research on P21 schools does not provide as much insight into the specific
strategies that teachers use to develop positive student-teacher relationships. Since
positive student-teacher relationships are essential to student motivation, socioemotional
well-being, and overall academic success (Davis, 2003; Mehra, 2002; Robertson, 2017),
it is important that research further addresses how teachers in P21 schools can build these
positive relationships with students.
CHAPTER III: METHODOLOGY

This chapter reviews the methodology of the study. The research purpose statement and questions are presented at the beginning of this section. In order to address the research questions, a qualitative phenomenological approach was used. The purpose of the study focused on describing and exploring how teachers in Partnership for 21st Century Learning (P21) exemplar schools developed positive student-teacher relationships. Data were collected through interviews, observations, and artifact analysis.

Purpose Statement

The purpose of this phenomenological qualitative study was to describe and explore how teachers in P21 exemplar schools developed positive student-teacher relationships using the six domains of the California Standards of the Teaching Profession.

Research Questions

How do teachers in P21 exemplar schools develop positive student-teacher relationships according to the six domains of the California Standards of the Teaching Profession?

1. How do teachers in P21 exemplar schools engage and support all students in learning?
2. How do teachers in P21 exemplar schools create and maintain effective environments for student learning?
3. How do teachers in P21 exemplar schools understand and organize subject matter for student learning?
4. How do teachers in P21 exemplar schools plan instruction and design learning experiences for all students?
5. How do teachers in P21 exemplar schools assess students for learning?

6. How do teachers in P21 exemplar schools develop as professional educators?

**Research Design**

This study utilized a qualitative phenomenological research design to describe and explore the shared lived experiences of teachers and how they developed positive student-teacher relationships in 21st-century classrooms. Data were collected through interviews, observations, and artifact analysis. The phenomenological approach was chosen because the study sought to understand the meaning and essence of the lived experiences to teachers in P21 exemplar schools (Patton, 2015).

According to Patton (2015), qualitative research is based on four types of data: in-depth, open-ended interviews, direct observations, and written communications. Unlike qualitative research, quantitative research collects objective data that are gathered and analyzed numerically (Patten, 2014; Patton, 2015). Qualitative data primarily consist of narrative data that describe subjects’ experiences while quantitative data are primarily numerical and do not have as much rich detail relating to subjects’ experiences (Patton, 2015). Researchers who utilize the qualitative method typically engage in fieldwork where they make observations of activities and interactions (McMillan & Schumacher, 2010; Patton, 2015). Resulting data are in narrative form and communicate information about the participants’ stories, perceptions, and experiences (Patton, 2015). Qualitative data are analyzed and organized according to various major and minor themes relating to the lived experiences of teachers (Patten, 2014).
Rationale

Qualitative methodology was selected for this study because of the nature of the purpose statement and research questions. This type of methodology generates data that describe the lived experiences of teachers rather than producing numeric data relating to this topic (Patton, 2015). The qualitative methodology of the study provided richer details that described how teachers in 21st-century learning environments were able to build positive relationships with their students. Only interviews and observations can thoroughly document teachers’ lived experiences in terms of how they build these student-teacher relationships (Patton, 2015). Certainly, quantitative studies could produce data about teachers’ experiences, but these data would not include the important details that interviews and document analysis can reveal (Patten, 2014; Patton, 2015). Combining interviews and observations is a particularly strong qualitative inquiry that generates credible and useful data concerning teachers’ experiences in the classroom (Patton, 2015).

Phenomenology was the specific qualitative approach used in this study. Phenomenological research describes the meaning or essence of a lived experience (McMillan & Schumacher, 2010). Patton (2015) explained that phenomenological research focuses on the descriptions of what people experience and how they experience it. The phenomenon under study was the experiences of teachers building positive student-teacher relationships in 21st-century classrooms. These teachers’ experiences form the essence of what positive student-teacher relationships are and how teachers build these positive student-teacher relationships in P21 classrooms.
Population

A population can be defined as a group of individuals or events to which results can be generalized (McMillan & Schumacher, 2010; Patton, 2015). The general population of this study was high school teachers teaching in schools that are chosen as exemplars by P21. As of 2017, there were 94 exemplars nationwide. Per the 2016-2017 school year, there were 72,187 high school teachers in California (U.S. Department of Education, 2017a). This population of teachers was more experienced with at least 5 to 8 years of experience in the classroom (Berliner & Glass, 2014).

The target population from which the sample was generated for this study included all P21 high schools in California. As of 2017, there were three P21 exemplar public high schools in California. For the past 5 years, P21 has used the exemplar evaluation tool to identify, document, and recognize examples of successful 21st-century learning institutions from which educators, policy makers, and communities can draw inspiration (P21, 2016). There are more than 40 exemplar schools and districts across the nation, and each institution serves as an example of how 21st-century learning environments are increasing student engagement and achievement (P21, 2016).

Sample

A sample is a smaller group that is part of a larger population (Patten, 2014). The smaller sample enabled the researcher to select specific participants so that the study could yield data that relate to the purpose statement and research questions (McMillan & Schumacher, 2010; Patton, 2015). Patton (2015) explained that this allows the researcher to learn about issues that are of central importance to the purpose of the inquiry. Teachers in P21 exemplar schools were selected via purposive sampling because the
study focused on describing and exploring the various strategies that these teachers used to develop positive student-teacher relationships. Patton (2015) explained that purposive sampling is chosen for a study because participants are ‘information rich’ and will offer useful information concerning the “phenomenon of interest” (p. 40). The results of this sampling method were generalizable to the larger group of teachers in P21 exemplary high schools. The research from this study provided insight into strategies that P21 exemplary high school teachers use to build positive student-teacher relationships.

The researcher reviewed the P21 exemplar list to determine which exemplar public high schools were located in California. As of 2018, there were three exemplar public high schools in California. Two school sites chose to participate in the study. The researcher selected teachers from schools that met the following criteria: They (a) were located in California, (b) were P21 exemplar public high schools, and (c) had teachers with a minimum of 5 years of teaching experience. The sample included 12 teachers from each of the following schools: Valencia High School and Savanna High School. These schools were selected by the researcher because they yielded diverse data. The schools are located in different areas of California, have diverse student populations, and are identified as exemplar schools according to P21.

Qualitative research focuses on relatively small samples that are selected for a specific purpose (Patton, 2015). McMillan and Schumacher (2010) described how the researcher develops a profile of the attributes that participants should possess. Before deciding on participants in the study, the researcher specified certain criteria for participants by reviewing the purpose statement and research questions. Participants in
this study were teachers in P21 exemplar schools who were able to develop positive student-teacher relationships.

In order to continue the process of identifying participants, purposive sampling was used in this study. Purposive sampling occurs when participants are strategically selected to be part of the study based on information relating to the phenomena (Patton, 2015). In this study, teachers in P21 exemplar schools were selected based on specific criteria that the researcher and chair agreed upon. Principals at different P21 school sites were given a form that specified the following criteria: (a) 5 years of teaching experience, (b) 2 years of teaching experience in a P21 school, and (c) experience working with a diverse student population. This form included criteria based on the CSTPs and helped principals choose their teacher participants. Based on the recommendations from the principal, the participants in the study were interviewed and observed.

**Instrumentation**

In qualitative research, the researcher is the main instrument of inquiry (Creswell, 2013; Patton, 2015). Pezalla, Pettigrew, and Miller-Day (2012) explained that the unique personality, characteristics, and interview techniques of the researcher could impact how data are collected. Therefore, the study may contain certain biases based on how the researcher was influenced during the qualitative interviews and observations. It is important to mention that the researcher is a public high school teacher in California and volunteers for many initiatives that promote 21st-century instruction and learning in the classroom. As a result, the study may include some bias because the researcher may have influenced the interviews during the qualitative interview sessions. The researcher maintained emphatic neutrality in order to collect and analyze data. Emphatic neutrality
involves the respectful and sensitive stance of the researcher while maintaining neutrality in any observations or judgements (Patton, 2015). In order to develop emphatic neutrality, the researcher acquainted herself with the target population, understood their unique characteristics, and refrained from rendering any judgements. The researcher also maintained neutrality during the study by employing specific data collection protocols, engaging in training before conducting interviews and observations, utilizing triangulation methods, and facilitating external reviews of the semi-structured interview questions, observation logs, and logs used to collect information concerning artifact analysis.

The researcher conducted observations of classes, interviews with teachers, and document analysis of related artifacts. The researcher developed the interview questions after reviewing related literature concerning the CSTPs, student-teacher relationships, and P21 strategies. She also sent the interview questions to her committee to gain feedback about the questions and make revisions as necessary. After principals suggested specific teachers, the researcher asked six interview questions of each of the teachers. The researcher asked follow-up questions in order to clarify important concepts or ask for additional information. Interview questions were based on the six CSTPs (see Appendix A). All interviews were face to face and recorded via a handheld device and e-mailed to the transcriptionist to ensure that all responses were accurately recorded.

Observations are another form of naturalistic inquiry where the researcher engages in participant observation in order to generate narrative descriptions relating to the phenomenon being studied (Patton, 2015). For the purposes of this study, observations were conducted in teachers’ classrooms. A total of six classrooms were
observed for a minimum of 50 minutes each. Utilizing an observation log, the researcher recorded information about when a teacher employed a strategy or action that correlated with a specific CSTP domain (see Appendix B). The researcher also used a subjectivity journal to take notes during observations. This subjectivity journal requires factual information to be written in one column while personal observations and judgements are included in a separate column (Mehra, 2002).

Finally, artifact analysis was conducted. Patton (2015) explained that this method utilizes documents, reports, or related materials as sources of evaluation data. Teachers would identify the artifacts that enabled them to build relationships with students in the classroom. These items included class syllabi, classroom procedures, and other materials that were suggested by the teacher. Other materials could also include communication letters to parents, pictures of the classroom environment, classroom instructional materials, and presentations. A collection log was used to extract relevant data.

Validity

According to McMillan and Schumacher (2010), validity “refers to the degree of congruence between the explanation of the phenomena and the realities of this world” (p. 354). Validity also addresses whether or not researchers actually observed what they intended to observe (McMillan & Schumacher, 2010; Patton, 2015).

In order to enhance design validity, specific strategies were used during data collection. The researcher obtained literal statements of participants and quotations from documents by transcribing interviews and utilizing a collection log for document analysis (McMillan & Schumacher, 2010). Also, the researcher asked participants to review the data to check for accuracy (McMillan & Schumacher, 2010). The researcher facilitated
this process by providing the interview transcripts to teachers in order to verify that all language was correctly recorded. Audio recording was used to record participants’ responses. Their responses were later transcribed. Validity of classroom observations was established by utilizing techniques that limited researcher bias. The researcher used a subjectivity journal that limits bias by requiring the researcher to include notes and descriptions in a column that was separate from personal opinions or reflection (Mehra, 2002). The researcher included low-inference descriptors in all observation notes by using concrete, precise descriptions that are understood by participants (Patton, 2015).

Specific characteristics of the researcher must also be considered when establishing the validity of this study. The researcher is a female public school teacher who is actively involved with projects at her school that are focused on 21st-century instruction. The researcher’s background in education builds interpersonal validity, which is defined as “the extent to which an evaluator is able to relate meaningfully and effectively to individuals in the evaluation setting” (Patton, 2015, p. 691). The researcher was able to maintain interpersonal validity during interviews and observations with teachers because she was able to draw upon her own teaching experience.

Before beginning the data collection process, the researcher worked with an expert panel to assess the validity of the interview questions. The expert panel was composed of educators, administrators, and program instructors who were familiar with the purpose of the study. To review the questions efficiently, the researcher communicated with experts via e-mail. Each expert independently reviewed the research instruments and provided feedback.
Finally, a pilot test was conducted with two teachers at the researcher’s current school site to assess the clarity and specificity of the interview questions. The teacher who was selected for the field test was chosen by the researcher in order to ensure that the field-test participant met the criteria of 5 years of teaching experience and involvement with 21st-century skills initiatives on campus. The particular teacher who was selected for the pilot interview had been teaching for 5 years, was involved with the instructional leadership team on campus, and engaged in professional development training regarding the implementation of 21st-century teaching strategies.

The pilot test consisted of a “mock” interview where the researcher used interview protocol that was used in the actual study. Unlike the process used during the study, respondents have the opportunity to provide feedback about the questions regarding the clarity of the questions or provide suggestions for improvement (McMillan & Schumacher, 2010). Participants answered interview feedback reflection questions to describe their thoughts about the interview as well as specify any suggestions for improvement (see Appendix C). During the pilot test, the researcher observed participants’ behaviors and general reactions as they answered questions in order to make necessary adjustments to the interview script if the interview seemed too short, too long, or if they had questions that were unclear (McMillan & Schumacher, 2010; Patton, 2015). An observer provided feedback about how the questions yielded data that were relevant to the purpose of the study.

Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results (Patton, 2015). Establishing reliability allows the researcher to produce
clear results and enables the researcher to describe the phenomenon experienced by teachers in 21st-century classrooms in relation to how they develop positive student-teacher relationships.

**Internal reliability.** Internal reliability was established by triangulating data that were obtained through different inquiry methods (Patton, 2015). For this study, the researcher triangulated data collected from interviews, observations, and artifact analysis. All interviews were first transcribed and then coded to determine existing themes or patterns. The researcher established internal reliability by conducting face-to-face interviews with all participants as well as using the same six questions for all interviews (Patton, 2015). Questions were provided to participants before any interviews were conducted to ensure clear communication and responses from participants. The researcher also observed classes and analyzed artifacts to record all observations in a written format that included factual details.

**External reliability.** External reliability relates to whether or not outside researchers would be able to replicate the study and produce the same results (Thyer, 2001). This study is not meant to be replicated. Rather, the results were intended to convey critical details regarding how teachers build positive student-teacher relationships in 21st-century environments.

**Intercoder reliability.** To establish quality control for this study as well as evaluate the researcher’s perspective, intercoder reliability was completed. Intercoder reliability is a measure where independent judges make the same coding decisions by evaluating data relating to various parts of the study (Lombard, Snyder-Duch, & Bracken, 2006). By establishing intercoder reliability, the researcher was able to verify
conclusions and ensure that the conclusions were consistent with the data. The intercoders determined intercoder reliability by asking questions such as “Are areas of uncertainty identified?” and “Are the findings internally coherent and concepts systematically related?” (Miles & Huberman, 1994, p. 278). To establish the validity of the study, intercoder reliability must be completed (Lombard et al., 2006).

Various processes were completed to ensure intercoder reliability. The external intercoder for this study included a university faculty member with a doctorate in the area of social science research. This individual was also familiar with the purpose of the study and the correlating research questions. The necessary tools and materials were provided to the individual. Minimum levels of reliability were set at .80 and would be acceptable in the study (Lombard et al., 2006). Reliability was assessed through the pilot test, and the results were evaluated to guarantee that the results were clear and correct.

Two themes were selected for the reliability test. NVivo data and themes were provided to the external intercoder. The intercoder reviewed the themes and data to verify that the themes were valid. After this step, the intercoder used the NVivo software to code the data that related to the two themes. The results of the coding process of the researcher and intercoder were compared and a minimum of 80% agreement was established. The results were reported and used to inform future researchers. The primary researcher and independent intercoder also discussed possible discrepancies between their findings.

**Data Collection**

The researcher used a phenomenological lens to gather data about the lived experiences of teachers in 21st-century classrooms to determine how they build positive
student-teacher relationships. Patton (2015) stated that a phenomenological study focuses on the essence of lived experiences for a specific group of individuals. In relation to this specific study, the researcher studied the lived experiences of teachers in P21 exemplar schools as they built positive relationships with students. In accordance with this type of study, the researcher tried to understand participants’ viewpoints by gathering detailed information through interviews, observations, and artifact analysis (McMillan & Schumacher, 2010; Patton, 2015).

**Preparation for data collection.** To begin the data collection process, the researcher had to gain the consent of the district superintendent, administrators, and teachers. The following are the preliminary steps in the data collection process:

1. The district superintendent and two site principals were contacted via e-mail and telephone. They were provided an overview of the study as well as the purpose statement and research questions. Follow-up e-mails and telephone calls were made. When the superintendent and principal gave their consent, a follow-up e-mail was sent to the school leaders who reviewed the purpose of the study, which thanked them for their participation. Electronic copies of all forms were sent to the principals. Principals were also provided with a list outlining the following criteria for participating teachers: (a) 5 years of teaching experience, (b) at least 2 years teaching in a P21 exemplary high school, and (c) experience building positive student-teacher relationships with a diverse group of students.

2. The researcher e-mailed the administrator at each school to schedule a time for the researcher to conduct observations and interviews at the site. In the e-mail,
researcher also requested the names of the three teachers who the principal recommended as participants in the study.

3. Once the principals communicated which teachers could participate in the study, the researcher contacted the teachers and set up a time to informally meet them prior to conducting the interviews. During the informal meeting, participants were provided additional forms to complete. The researcher conducted interviews first to gain information that could inform observations. At the end of the interviews, the researcher asked participants to suggest artifacts that could be collected for analysis. At that time, the researcher scheduled dates and times for observations and interviews. The researchers also asked the participants to identify possible artifacts that related to the study. Participants were able to provide related artifacts at the time of the interviews.

**Human Subjects Consideration**

Brandman University’s Institutional Review Board (BUIRB) approved the research design before the researcher began data collection. BUIRB approved the data-gathering instruments for interviews, observations, and artifact analysis. After approval, an e-mail was sent to school administrators of P21 schools that were involved with the study. This e-mail contained an overview of the study, and follow-up telephone calls were conducted in order to provide clarification as needed. Following this step, the researcher scheduled site visits in collaboration with administrators. Administrators checked school calendars and schedules to determine appropriate times for the school visits. They also suggested specific classrooms and teachers that the researcher should visit during the data collection process. Administrators received approval from teachers
before scheduling days and times for the researcher to visit the school site. After the visits were scheduled, the researcher sent an e-mail to administrators and teachers to thank them for their participation. Each e-mail also contained the date and time for the anticipated site visit.

**Interview Procedures**

Interviews were conducted with teachers at P21 schools, and the same format was used to facilitate all interviews. First, a confirmation e-mail was sent to each teacher at least 3 days before the scheduled date and time for the interview. The following attachments were included with the e-mail: (a) Brandman University’s Participant’s Bill of Rights, (b) the informed consent form, and (c) listed interview questions (see Appendix D). All six teachers consented to face-to-face interviews that were recorded and conducted at their respective schools.

First, the interviewer introduced herself and reviewed the necessary consent forms and required paperwork. The interviewer also asked for permission to record the interviews, and all teachers consented to this. The researcher then asked six questions that pertained to each of the CSTPs. Each interview lasted no more than an hour. The interviewer recorded all statements on an audio recording device. Each interview was transcribed and sent to the interviewees. To collect additional data that could not be recorded, the researcher brought a notebook to each interview where she recorded information about facial expressions, body language, tone, and other details.

**Observations**

The researcher gathered data by observing teachers’ classes at two P21 exemplar schools. The researcher provided school administrators with a list of criteria for teacher
participants to ensure that the identified teachers were able to build positive student-teacher relationships. Using the administrator’s recommendations, the researcher met the teachers and requested their participation in the study. The researcher then sent a follow-up e-mail to confirm their participation. The researchers then visited the different classrooms to observe participants’ classes. The researcher used a journal to record notes about specific strategies, behaviors, and interactions with students that demonstrated evidence of how the teacher was addressing domains from the CSTPs. Additionally, the researcher took notes about the setting and general resources available in the classroom. The researcher also used a subjectivity journal to note factual observations as well as personal opinions and reactions (Mehra, 2002).

**Artifact Analysis**

The researcher also collected artifacts that related to how teachers built positive student-teacher relationships in their classrooms. Examples of artifacts include posters, class syllabi, classroom procedures, and photographs of the classrooms. The researcher utilized these artifacts with the teacher’s consent. According to Patton (2015), document analysis provided stimulus for other paths of inquiry such as interviews or observations. By using document analysis in conjunction with other methods, the researcher was able to gather more detailed information that provided insight into how teachers in P21 schools developed positive student-teacher relationships. In this study, document analysis revealed information about different classroom environments.

**Data Analysis and Coding**

This study utilized a phenomenological lens to analyze the lived experiences of teachers in P21 exemplar schools as they built positive student-teacher relationships
Homogenous sampling occurs when the researcher selects cases that are similar in order to study the characteristics that they have in common (McMillan & Schumacher, 2010; Patten, 2014). This study utilized purposeful sampling because the researcher identified participants who were teachers in P21 exemplar schools in California. This purposeful sampling strategy enabled the researchers to gain a better understanding of strategies that this specific population of teachers used to build strong student-teacher relationships.

**Collecting and Documenting the Data**

Data from interviews and observations were collected prior to completing data analysis. Fieldwork is essential to data collection because the researcher gains a more thorough understanding of the participants and the situations (McMillan & Schumacher, 2010; Patten, 2014).

During the interviews, all verbal comments were recorded and later transcribed. The transcribed interviews were provided to the participants in order to ensure that the responses were recorded accurately. In addition to using a recording device during the interviews, the researcher took notes on nonverbal communication such as facial expressions or body language (McMillan & Schumacher, 2010; Patten, 2014). Additionally, the researcher asked follow-up questions to clarify various points or to invite the interviewee to share additional information about a specific topic. After transcribing the interview responses, specific patterns in the responses were identified.

To complete the observations, researchers visited the teachers’ classrooms and observed their lessons. Using a journal, the researcher took notes about dialogue,
classroom environment, teacher behavior, student behavior, and interpersonal interactions. All handwritten observations were typed later.

The researcher also collected data through artifact analysis and asked participants to provide materials that helped them build positive student-teacher relationships. Artifacts were either photocopied, photographed, or digitally scanned. The researcher used a collection log to note descriptions and factual details concerning the artifact.

**Coding the Data**

After the data were collected, they were then coded and categorized. The researcher followed specific steps to code and categorize the data (McMillan & Schumacher, 2010). First, the researcher reviewed all data to identify data segments that were comprised of a few lines of text. Based on these segments, specific codes were identified and correlated with different segments. These codes were then listed to check for duplicated codes or to recode certain segments. These codes and concepts formed the basis for descriptions and meanings that related to the phenomenon of student-teacher relationships in P21 classrooms (McMillan & Schumacher, 2010). As more data were analyzed, this coding system became more precise. NVivo qualitative software was used to maximize efficiency when coding and categorizing the data. This software program enables the researcher to easily analyze codes and categorize data segments. The researcher reviewed the codes on NVivo to verify that they effectively identified important patterns in the data. The researcher also checked for any segments of data that were not assigned a code.
Identifying Themes

When all data segments were coded, these codes were combined to form themes (Creswell, 2013; McMillan & Schumacher, 2010). Each code was based on multiple sources of data. According to Patton (2015), “Coding qualitative data produced a framework for organizing and describing what has been collected during fieldwork” (p. 554). In this study, codes related to best practices that teachers used to build strong relationships with students. The researcher engaged in the recursive process of coding by repeatedly evaluating how each code encompassed different data segments (McMillan & Schumacher, 2010). All data gathered from interviews, observations, and document analysis were reviewed several times to check for any inaccuracies, which ensured the validity of the study. Throughout the process of coding data, the researcher gathered data as necessary. This nonlinear approach to collecting and analyzing data was necessary because the study was phenomenological in nature (Patten, 2014).

Triangulation, a process where a variety of data sources are used, was also necessary to this study (Patten, 2014). By triangulating collected data, the researcher was able to identify any inconsistencies in her findings relating to different types of data (Patton, 2015).

Limitations

A limitation is defined as a possible weakness of the study (Creswell, 2013). While various strategies have been applied in order to strengthen the validity of this study, there are certain limitations that must be acknowledged.
**Researcher Bias**

Qualitative inquiry positions the human being as an instrument of data collection, so there is the potential for bias (Patton, 2015). The researcher formed the questions and took notes during interviews, observations, and document analysis. Data were also analyzed by the researcher. Although the researcher utilized certain strategies to limit bias, it could still be present in the study.

**Participant Bias**

In this study, all participants were teachers in 21st-century learning environments. Their responses may be influenced by personal bias. Teachers may have been distracted by professional obligations or simply did not want to have a detailed conversation with the interviewer who was a stranger. Additionally, principals recommended the teachers as participants for the study. Teachers may have felt obliged to participate because of their school leaders’ request.

**Location**

Location may have been a limitation of the study because each exemplary school serves a unique population and demographic. This study included two high schools in California. It would not be feasible to compare these schools to all exemplar schools in the United States.

**Time Frame**

The time frame of this study was restricted to September and October of 2018. Since data collection was restricted to these months, other participants could not be included in the study. Because of this limitation, the findings of the study do not reflect more teachers’ experiences or their experiences at different times in the school year.
Reducing Limitations

The researcher employed various strategies to reduce the limitations of this study. In order to limit personal bias, the researcher remained neutral and did not seek to “prove a particular perspective or manipulate the data to arrive at predisposed propositions” (Patten, 2014, p. 306). To address prospective participant bias, the researcher created questions that were clear and specific so that interviewees understood the questions and could give honest answers. The researcher also facilitated an informal meeting with participants before conducting formal interviews and observations. This allowed participants to ask questions about the study as well as get acquainted with the researcher. In order to mitigate bias due to the location of the study, the researcher chose schools located in different areas with diverse stakeholders.

Summary

This chapter provided a summary of the methodology used in this study. At the beginning of this chapter, the purpose statement and research questions were listed. These sections provided readers with basic information about the focus of the study. Information about the research design, population, and instrumentation was included. Finally, this chapter reviewed data collection and data analysis procedures before addressing the limitations of the study.
CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

This study addressed the gap in Partnership for 21st Century Learning (P21) literature concerning how teachers in P21 exemplar schools developed positive student-teacher relationships. Chapter I provided the background for the study, which included the purpose statement, research questions, and the significance of the problem. It also defined important terms and concluded with the organization of the study. Chapter II included a review of the literature concerning 21st-century instruction, the role of P21 and the importance of student-teacher relationships. Chapter III provided the purpose, research questions, and methodology of this phenomenological study. Chapter IV reviews the purpose statement, research questions, and methodology of this qualitative study. Chapter IV also covers the data collection process as well as the population and sample. It ends with a presentation of the qualitative data that were collected.

Purpose Statement

The purpose of this phenomenological qualitative study was to describe and explore how teachers in P21 exemplar schools developed positive student-teacher relationships using the six domains of the California Standards of the Teaching Profession.

Research Questions

How do teachers in P21 exemplar schools develop positive student-teacher relationships according to the six domains of the California Standards of the Teaching Profession?

1. How do teachers in P21 exemplar schools engage and support all students in learning?
2. How do teachers in P21 exemplar schools create and maintain effective environments for student learning?

3. How do teachers in P21 exemplar schools understand and organize subject matter for student learning?

4. How do teachers in P21 exemplar schools plan instruction and design learning experiences for all students?

5. How do teachers in P21 exemplar schools assess students for learning?

6. How do teachers in P21 exemplar schools develop as professional educators?

**Research Methods and Data Collection Procedures**

This qualitative study utilized a phenomenological approach to describe and explore how teachers in P21 exemplar schools were able to develop positive student-teacher relationships according to the six domains of the California Standards for the Teacher Profession (CTSPs). Data were collected via semi-structured interviews, classroom observations, and artifact analysis. An interview script was used to maintain a consistent structure with all participants in the study. The semi-structured interviews were based on six probing questions that were used in order to obtain descriptive data. The interview script was based on the CSTPs that were outlined in the literature review.

The interview script, research questions, and research design were approved by the Brandman University Institutional Review Board (BIURB) on July 10, 2018 (see Appendix D). Consent forms described the methods that researchers used to protect the identity of participants. Each participant was given an identifying number that was only known to the researcher. Any name or personal identifier was removed from the transcript as well as from the observation forms. Participants also signed an audio
consent form so all interviews could be digitally recorded. Interviews were sent to an online transcription service. The researcher reviewed the recordings and transcripts in order to verify the accuracy of the transcripts. The researcher also asked teacher participants to recommend any artifacts that helped them in forming positive student-teacher relationships.

Research about P21 schools does not provide as much insight into the specific strategies that teachers use to develop positive student-teacher relationships. Since positive student-teacher relationships are essential to student motivation, socioemotional well-being, and overall academic success (Davis, 2003; Mehra, 2009; Robertson, 2017), it is important that research further addresses how teachers in P21 schools build these positive relationships with students.

**Population**

Patton (2015) defined a population as a group of individuals or events to which results can be generalized. The population of this study included high school teachers teaching in schools that were chosen as exemplars by P21. McMillan and Schumacher (2010) defined a target population as “a group of elements or cases, whether individuals, objects, or events that conform to specific criteria to which we intend to generalize the results of the research” (p. 129). The target population for this study included all P21 high schools in California.

**Sample**

A sample is a smaller group that is part of a larger population (Patten, 2014). High school teachers in P21 exemplar schools were selected via purposive sampling. P21 is the leading advocacy organization in the United States and created a 21st-century skills
framework, which incorporates 21st-century skills into education (Johnson, 2009). Patton (2015) explained that purposive sampling is chosen for a study because participations can offer rich and detailed information regarding the “phenomenon of interest” (p. 40).

The sample population totaled 12 high school teachers in P21 exemplar schools. All 12 participants agreed to sign the informed consent form. Data were collected through interviews, observations, and artifact analysis. First, all 12 participants volunteered to participate in face-to-face interviews in their classrooms. At the culmination of each interview, the teacher participant offered artifacts that supported the development of positive student-teacher relationships in the classroom. The researcher also observed each teacher for one class period.

**Presentation and Analysis of the Data**

The findings presented in this chapter are from the aggregate data gathered in semi-structured individual interviews, class observations, and review of artifacts. A phenomenological approach was used to study the data. Creswell (2013) suggested that the researcher cluster important phrases and organize these phrases into broader themes. By triangulating interview data with observations and review of artifacts, the validity of thematic statements could be established and descriptions of each theme could be more detailed. After data and key phrases were collected and analyzed, 12 main themes emerged and are listed in Table 2.
Table 2

Frequency of Themes and Sources

<table>
<thead>
<tr>
<th>Theme</th>
<th>Total frequency</th>
<th>Interview</th>
<th>Observations</th>
<th>Artifacts</th>
<th>Total sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ensuring that the classroom environment is safe and welcoming</td>
<td>53</td>
<td>30</td>
<td>21</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>2. Allowing opportunities for students to share their thoughts</td>
<td>46</td>
<td>27</td>
<td>23</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>3. Maintaining high expectations</td>
<td>49</td>
<td>34</td>
<td>12</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>4. Consistent feedback provided to students</td>
<td>90</td>
<td>45</td>
<td>45</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>5. Lesson planning with the intention of helping students meet specific learning goals</td>
<td>17</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>6. Activities that require students to actively participate</td>
<td>102</td>
<td>31</td>
<td>63</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>7. Differentiating material based on skill levels of students</td>
<td>55</td>
<td>25</td>
<td>30</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>8. Being cognizant of students’ learning needs</td>
<td>54</td>
<td>31</td>
<td>17</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>9. Using a variety of methods to assess student learning</td>
<td>64</td>
<td>40</td>
<td>17</td>
<td>7</td>
<td>31</td>
</tr>
<tr>
<td>10. Assigning tests, quizzes, and essays to determine student understanding after material is taught</td>
<td>36</td>
<td>35</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>11. Collaborating with other educators to assess material that is being taught</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>12. Learning from other educators about innovative instructional strategies</td>
<td>31</td>
<td>31</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>
Research Question 1

*How do teachers in P21 exemplar schools engage and support all students in learning?*

Table 3 displays the two themes from the data along with their frequencies and sources. Both themes were mentioned by all 12 participants.

Table 3

*Frequency of Themes and Scores for Research Question 1*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring that the classroom environment is safe and welcoming</td>
<td>53</td>
</tr>
<tr>
<td>Allowing opportunities for students to share their thoughts</td>
<td>46</td>
</tr>
</tbody>
</table>

Upon analysis of data collected for Research Question 1, the following themes were identified: (a) ensuring that the classroom environment is safe and welcoming and (b) allowing opportunities for students to share thoughts. Table 4 provides the specific trends associated with each theme.

Table 4

*Welcoming Environment and Making Connections With Students—Summary of Trends*

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcoming environment</td>
<td>• Prioritizing student safety</td>
</tr>
<tr>
<td></td>
<td>• Varied instruction</td>
</tr>
<tr>
<td></td>
<td>• Talking to students individually</td>
</tr>
<tr>
<td></td>
<td>• Classroom design</td>
</tr>
<tr>
<td></td>
<td>• Establishing rapport</td>
</tr>
<tr>
<td>Making connections with students</td>
<td>• Facilitating student-centered activities</td>
</tr>
<tr>
<td></td>
<td>• Making real-life connections</td>
</tr>
</tbody>
</table>
Welcoming environment. All 12 participants mentioned that a welcoming environment was essential to building positive relationships with students. “Welcoming environments” were situations and settings where students felt comfortable and willing to participate by sharing their ideas and engaging in activities that may involve their peers. All 12 participants stressed the importance of carefully building classroom environments where students felt encouraged to ask questions, feel safe, and make a genuine effort.

Prioritizing student safety. All participants mentioned that students should feel safe in their classrooms. Participant 3 described a safe environment as a place where “students know that they can trust not just the teacher, but they can trust also their classmates.” Many teachers described how students were better able to share their thoughts and ideas when they were in a safe environment. Participant 12 said that students should “feel safe enough to express a bad idea” and emphasized how important it is to develop “a culture and set of attitudes” that encourage students to feel safe. Many teachers explained that a positive classroom culture was crucial to student learning. For example, Participant 1 mentioned how she strives to create a “classroom culture of celebrating each other’s lives” by providing opportunities for students to “share something good that happened to them.” Safety was a priority for all interview participants since they believed that students needed to feel safe before they could thoroughly learn academic content in their classes. According to the interview responses, participants also emphasized the idea that students and teachers need to build trust with each other by accepting each other’s ideas and getting to know one another.

Varied instruction. All teachers mentioned how they kept students engaged in productive activities throughout the class period. Participant 4 described how important
it was to “vary instruction, whether that be sometimes direct instruction, sometimes reading, sometimes student driven, oftentimes trying to get the students to speak and be engaged more.” All 12 participants reinforced this idea that teachers needed to vary instruction in order to ensure that students consistently did their best in class. According to participant responses, each type of instruction was necessary to enable student learning. Participant 1 mentioned how students tend to be more engaged when “everything is, it’s very varied, so they’re not stuck in one thing for too long” and that instruction tends to “vary between table talk activity, independent work, teacher instructed work.” Participant 11 mentioned how varied instruction keeps “students engaged and they are constantly working.” All participants mentioned how effective instruction engaged students by incorporating a range of activities that required students to follow directions, work independently, and collaborate with their peers.

**Talking to students individually.** All participants emphasized the importance of interacting with students individually. Nine of the 12 participants mentioned that they tried to talk to students on an individual basis as much as possible. Participant 8 said that “personal check-ins regularly both, academically and just kind of in general, ‘How’s it going?’ That always helps to put them in the mind frame that they want to be here.” This notion of checking in with students was important to other participants as well. Participant 5 explained that it is important to “engage [students] because they’re not just some random student in the classroom.” Participant 10 said that giving students the opportunity “to share who they are makes them feel comfortable.” According to these participants, talking to students individually was essential to teachers understanding how to support students in their learning. The participants described how they ensured that
students felt supported and capable of learning after interacting with the teacher on an individual basis. These responses indicated a pattern where teachers are consistently trying to understand the unique characteristics of their students.

**Focus on student learning.** All 12 participants mentioned the importance of focusing students on genuinely understanding the subject matter and developing necessary skills. Nine of these teachers explained that teachers got to know students by simply taking the time to talk to them and interact with them on a more individual basis in order to better understand the needs of each student. All participants explained the importance of valuing students’ thoughts, opinions, and ideas.

**Establishing rapport.** Establishing rapport with students was an important priority for all participants. More specifically, good rapport with students was defined as a positive relationship where the teacher was accepting and encouraging while the student was comfortable and willing to listen to his or her ideas. Rather than just understanding students’ academic abilities, participants ought to understand their students in a more personal sense. They felt it was their responsibility to help students feel confident enough to share their ideas, opinions, and information about themselves.

- Participant 2 stated, “I don’t want to assume anything at the very beginning. I allow them to let me know.”
- Participant 10 mentioned, “I salvage a pretty good rapport with the students as part of that, and valued their opinions, and allowed them to have a voice also.”
- Participant 7 mentioned, “We’ll do a lot more personal things, like personal reflections, personal narratives” in order to get an “understanding of where [students] are coming from.”
• Participant 12 had the following to say about building rapport with students:

I try to let them know every day, “I’m trying to really make sure that you’re not just a number who walks in and out, but I recognize you, I see you. How are you doing?” And so that’s been our motto this year, personally, but also with my students. And I ask them to do the same with each other, with your teachers.

These responses indicate that participants tried to build rapport with students by consistently giving students various opportunities to share their ideas and thoughts in a comfortable environment. Each participant prioritized personal connections by integrating specific learning tasks where students would share information about themselves. They would also take the time to greet students at the door and ask about their well-being.

Artifact analysis included encouraging posters, student goals, and motivational quotes that were posted in various classrooms. These materials supported student learning because of the positive messages written on them. Most of these messages included phrases such as “In a world where you can be anything, be kind” (Participant 9).

**Facilitating student-centered activities.** All 12 participants mentioned the importance of incorporating student-centered activities in order to ensure that students were really engaging with the content and felt confident in their knowledge. Participants described these activities as opportunities where students are creating knowledge and actively engaging in learning tasks that allow them to think critically about a range of subjects. They emphasized that teachers played a limited role in order to encourage student ownership and autonomy. Participant 4 provides the following example:
If you were here later in the year, you’d see the evolution of what their first conversation looks like, towards the end of the year, when they’re much more comfortable with the process. Those are absolutely done by the students, I just facilitate, I’m not a participator in it, so I don’t bring in, “Well, no, this is what paragraph four means,” but that’s for them to discuss.

Student learning was linked to student participation. Participant 4 indicated that he aimed to be a facilitator and wanted students to assume leadership roles during the course of the activity. In fact, the participant positions himself as more of an observer while students are expected to conduct the discussion.

There are other examples of how student-centered activities required students to practice skills they were learning. Participant 9 described student-centered learning as students “applying knowledge as they go along. Introducing something that they don’t know, trying to figure it out and they get really frustrated” and “using different activities and labs, just using that as actually a learning tool for understanding basically our subject.” These activities required students to be active learners rather than allowing them to passively listen to information being presented. Participant 6 described how students learning a new language engaged in student-centered learning when she asked students “to modify the dialogue, make it into their own and they produce it. I want them to revise it so that, you know, the language becomes their own, you know, learning, knowledge.” Student ownership was critical to student-centered activities since students had to understand the information they learned rather than memorizing it.

Although the participants in this study taught different subjects, they described student-centered activities where students were engaging with the material. Teachers
mentioned the following examples: discussing text material, annotating the text, making meaning, and modifying dialogue. Participants indicated that student-centered activities allowed teachers to better engage and support all students.

Observations of teachers also yielded examples of how teachers engaged students in student-centered activities.

- Participant 2 had students participate in a collaborative activity to share current events relating to the topic of mental and physical health.
- Participant 3 facilitated a discussion where students discussed their educational experiences outside of America.
- Participant 4 implement an activity where students brainstormed open and closed-ended questions about various European countries.
- Participant 10 organized an activity where students utilized a website to practice identifying tropic levels of different animals.

Making real-life connections. Seven participants noted that they consistently sought to make connections between academic concepts and examples that would be more concrete and relevant to students. Participants explained how they used these real-life connections to make content more relevant and understandable to students while still covering necessary subject matter.

Participants provided a variety of examples to illustrate how they connected content to their students’ lives.

- Participant 4 provided the following example:

  In history, obviously, there are a lot of concepts that we may cover that students are unfamiliar with, so I’ll always try to say, “This would be like this.” As an
example, let’s say the Declaration of Independence, the Declaration of Independence as a break up letter.

The participant elaborated upon this example by explaining, “There’s 27 reasons why the colonies are breaking up with the British, and so that’s a specific example of something that’s relevant.”

- Participant 8 used the following example to explain geometry terms: “There’s real life examples, but they have to be brought up and pointed out to the students. So many times, I’ll just grab a piece of paper or, ‘This is a plane and a pencil.’” Participant 2 explained that students “finished an independent living project. That’s really obviously life, expectations.”

- Participant 7 provided the following explanation: “I always try to get them also, to make those connections themselves too. So have you ever experienced a time when something like this happened to you?”

- While explaining the importance of real-life examples during instruction, Participant 5 mentioned how “there are little things I want them to remember and so I will relate it somehow to whatever is currently popular to try to help them remember.”

- Participant 12 intentionally gathered information that real-life examples could be based on by taking “notes of what [students] are talking about, personal connections they make and then I’ll bring that back as a way of helping them remember some of the things we’re learning.”

Based on these participant responses, real-life examples are critical to student learning because students are better able to scaffold instruction by incorporating
examples that students can easily make connections to. These connections also made the content more interesting and less confusing for students.

*Classroom design.* Based on observations and collected artifacts, 11 of 12 classrooms were designed specifically to facilitate student collaboration. These classrooms had student desks that were clustered in pods rather than being in traditional rows. As a result, students were able to talk to each other more easily since they were sitting directly across from their group members. Teacher 6’s room had 12 couches rather than traditional desks and chairs. Teacher 6 mentioned that this classroom setup helped students feel more comfortable.

**Research Question 2**

*How do teachers in P21 exemplar schools create and maintain effective environments for student learning?*

Table 5 displays the five themes from the data along with their frequencies and sources. All five themes were mentioned by all 12 participants.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining high expectations</td>
<td>49</td>
</tr>
<tr>
<td>Consistent feedback</td>
<td>90</td>
</tr>
</tbody>
</table>

Upon analysis of data collected for Research Question 2, the following themes were identified: (a) focusing on student learning and (b) providing consequences as needed. The following section provides further detail about each theme. Table 6 specifies the important trends relating to each theme.
Table 6

*Maintaining an Effective Environment for Student Learning—Summary of Trends*

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>High expectations for students</td>
<td>• Focus on student learning</td>
</tr>
<tr>
<td></td>
<td>• Set routines</td>
</tr>
<tr>
<td></td>
<td>• Shared expectations</td>
</tr>
<tr>
<td>Giving constructive feedback</td>
<td>• Positive rewards</td>
</tr>
<tr>
<td></td>
<td>• Mindful of student needs</td>
</tr>
</tbody>
</table>

**High expectations for students.** All 12 participants explained that they had high expectations for their students. “High expectations” was described as the belief that students were capable learners who could successfully develop the necessary skills and knowledge to be successful in the class. Additionally, all teachers mentioned that they wanted to create a classroom environment where all students had the opportunity to receive support.

**Focus on student learning.** Eight of the 12 teachers stated that the purpose of class norms and expectations was to help students focus on what they needed to learn without getting distracted. For example, Participant 10 stated, “I’m not very strict, but I’m trying to become more strict so that it’s more conducive to learning.” Participant 6 provided the following explanation: “You know, it’s not fair for the kids who really want to learn. So, my way of doing, or creating an efficient learning environment is that when I see inappropriate behavior, I stop it and always give explanation to the whole class.” Overall, participant responses indicated that negative student behaviors needed to be addressed quickly and efficiently in order to create a more effective classroom environment.
**Set routines.** All 12 teachers mentioned that they had certain routines that students followed on a daily basis. Six of the 12 participants explained that these routines allowed students to do their best in the environment because they knew the expectations and understood what was expected of them. “Routines” were described as specific daily actions that students knew they had to complete during the class period. One teacher explained that these routines were especially helpful with support classes. Participant 7 stated,

Routines especially in my lower level classes, I live by them. We’re very structured in terms of every day, trying to get the expectation out of, you know what you need to take out. Every Monday, we do grade checks with them. They know Monday’s coming in, they’re doing a grade check. They need to have it signed by Wednesday. So Wednesday when they come in, they take that out. We start with a vocabulary warm-up, so that they are in the habit of doing that. They reference the board to know that they have to take out.

This participant also indicated that support classes and students with more learning disabilities especially needed to follow routines. Rather than waiting for the teacher to direct them, students knew exactly what to do when they arrived to class. This contributed to student autonomy because students knew how to be successful in the class without any prompting from the teacher. Ultimately, routines also enabled teachers to create an environment that better facilitated student learning. Other participants described specific routines they completed in class in order to facilitate student learning.
• Participant 6 stated,

And then they will say, “hello teacher,” and they all sit down. And then we all bow at each other, as you can see. It’s very Asian but I think, you know, it should be respect. No matter which culture. You know, respect is very important so, at this point, the kids already accept that routine.

• Participant 10 described,

So, I was saying something like, “Thank you for raising your hand.” So, then, they’re like, “Oh, okay, she’s going to call me if I raise my hand.” That helps us stay on topic. That helps us stay focused so we can keep moving and learning.

Observations also yielded data that revealed how participants set specific routines in their classes. During all 12 classroom observations, students knew exactly what to do as they came into class. Participant 1 had a timer and a warm-up activity posted so students could start on their work right away. Teacher 3 also had an activity so they could begin their work right away. She used this time to check each student’s homework and to talk to the student about any homework corrections. Students in Participant 10’s class immediately knew how to log in to their Chromebooks and navigate to a specific website because the teacher taught them exactly how to use this technology efficiently.

**Shared expectations.** Nine of 12 teachers stated that teachers needed to spend a large portion of time reviewing expectations relating to behavior, student work, and peer-to-peer interaction. In order to communicate these expectations, Participant 1 had students participate in the creation of a social contract. She described the process:

We have done this social contract and there’s some specific . . . and the students put it together, there’s four questions on the contract. One of them is, “How do
you want to be treated by your classmates? How do you want to be treated by the teacher? How do you think the teacher wants to be treated by the students? And how do we solve conflicts when they arise?” They have the contract done and it’s out there, and they sign it.

This teacher utilized a specific tool to ensure that students understood expectations concerning how the teacher should treat the student, how students should treat the teacher, and how students should interact with one another. Participant 7 utilized the school mascot to share expectations: “For example, we go by tiger’s roar. Tigers are responsible. They take ownership of their actions.” This example also reveals how the participant used school spirit to establish behavioral norms in her classroom. Participant 8 felt that it was important for students to internalize the shared expectations in the classroom. The participant stated, “I’m a little old school, but getting told enough times and I will hear them start to self-monitor. It’s kind of interesting.” Participants implemented different methods in order to communicate expectations, but their expectations centered on creating a classroom environment where the students and teacher respected each other.

**Giving constructive feedback to students.** All 12 teachers elaborated on the importance of providing feedback to students about their work and overall participation in the class. “Constructive feedback” would involve teachers helping students understand their own strengths and areas of growth.

**Positive rewards.** Many participants mentioned the rewards they gave to students for their quality of work and participation in class. Rather than focusing on student misbehavior, the participants felt that it was crucial to highlight the positive actions of
their students. The following examples illustrate how positive rewards can promote an effective classroom environment.

- Participant 4 stated,

  What that evolution of that was, was that each month I would take three students from each class who best exemplified one of those, or multiple of those, student learning capacities, and then I’d recognized them each month, and so I’d print out a student of the month certificate.

  This example illustrates how the participant recognizes different students for demonstrating a particular skill in the classroom. This visual reward would be posted for the other students.

- Participant 5 stated,

  Those kids earn tickets and then once a week do we do a little raffle. They’ll get mechanical pencils, they could get whatever they want. It’s like little bags of chips, or whatever. And that kind of helps our environment ‘cause kids will want a ticket so they’re like, “No wait, Miss, I was doing my work too!”

Participant 1 mentioned a similar point: “We do a student of the week every week, we have a student raffle every week.” By handing out prizes, participants were able to motivate students to stay on task.

- Participant 2 stated, “I’ll take them outside and just be like, ‘I really appreciate you being a role model and being on task.’ That way every time they see me going outside it’s not something negative.” In this example, Participant 2 demonstrates how she individually recognizes students for their exemplary behavior.
During the observations of Participants 1 and 5, the teachers handed out raffle tickets to students who demonstrated positive behaviors such as being on task or respectfully listening to others.

During observations, seven of the 12 participants gave positive feedback to students such as “good job” or “well done.”

**Mindful of student needs.** Many participants explained that teachers needed to pay attention to student needs in terms of their socioemotional well-being and understand the challenges that they face outside of the classroom. Participant 2 stated, “I think we have to be mindful of that sometimes too. I think sometimes teachers are not mindful of what externally those on outside of this and they are just like this is the due date, what do you mean?” This quote illustrates how teachers can be flexible with certain students if they are aware of challenges that students are facing. Participant 12 prioritizes student needs and described this by saying, “First and foremost, it’s about them as a person, not as a student. And then let’s work on the student part.” Based on these responses, students’ learning needs are also influenced by the challenges they face outside of the classroom and teachers need to be aware of this. Participants were aware that students had external stressors outside of the classroom environment.

Participants described a variety of methods they implemented in order to be more supportive of students. Individually talking to students or being flexible with lessons and activities were recurring elements in participant responses. Participant 11 simply stated, “Give them time. Talk to them. Making those connections and helping them feel comfortable in my class.” Participant 6 said, “Students are already tired so I want them
to get up and move around, if they want to have a little chat it’s okay as long as they’re still on task, mainly.”

Overall, these examples reveal how teachers consistently view their students as human beings who may have outside stressors that influence their behavior and academic performance. Participants tried to understand and encourage students by paying attention to their physical and emotional needs. All participants wanted to be aware of students’ needs in addition to focusing on student learning.

**Research Question 3**

*How do teachers in P21 exemplar understand and organize subject matter for student learning?*

Table 7 displays the two themes from the data along with their frequencies. Both themes were mentioned by all 12 participants.

Table 7

*Frequency of Themes and Scores for Research Question 3*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson planning with the intention of helping students meet specific learning goals</td>
<td>17</td>
</tr>
<tr>
<td>Activities that require students to actively participate</td>
<td>31</td>
</tr>
</tbody>
</table>

Upon analysis of data collected for Research Question 3, the following themes were identified: (a) backwards planning and (b) student-centered activities. The following section provides further detail about each theme. Table 8 specifies the important trends relating to each theme.
<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backwards planning</td>
<td>• Skills-based</td>
</tr>
<tr>
<td></td>
<td>• Repeating certain activities</td>
</tr>
<tr>
<td>Student-centered activities</td>
<td>• Discussion</td>
</tr>
<tr>
<td></td>
<td>• Collaboration</td>
</tr>
<tr>
<td></td>
<td>• Prior knowledge</td>
</tr>
</tbody>
</table>

**Backwards planning.** All 12 participants explained that backwards planning was essential to designing engaging and effective lessons. “Backwards planning” occurs when teachers create lessons based on specific objectives and skills that students need to master.

**Skills based.** All 12 participants mentioned that they designed lessons based on specific skills that students needed to develop. Participant 1 explained, “We organize one skill that they’re going to need for that and we practice, and we practice, and we practice and then we build the next skill and then we loop it back around to the first skill.” Since lessons are skills based, there are many opportunities during the lesson or unit where students can practice a skill repeatedly in order to successfully develop it. Participant 4 described how subject matter focused on specific skills such as being a “critical thinker and inquirer, academically/personally accountable, communicator and collaborator” by engaging in various activities and learning tasks.

All 12 teachers indicated that backwards planning was usually based on a future assessment or objective, but they emphasized that students needed to develop specific skills in addition to meeting objectives. Participant 12 stated the following: “We’re going to end with this in about three weeks with another diagnostic essay, it’ll be on bias, but
we’re starting with this movie to just get them to be lost in this world and looking at different ways of having a bias.” In this case, the teacher acknowledged the importance of preparing students for the eventual essay assessment by helping them develop the skill of recognizing bias. In order to support the importance of skills-based instruction, Participant 10 made the following point: “You can Google all of this. But what you need to know how to do is be organized, talk, communicate, present, public speak, and find, communicate, write it down.”

Rather than simply focusing on the academic content that students needed to know for any exam or activity, participants emphasized skill building in all their lessons. Participants realized that students needed to build transferrable skills that would allow them to succeed after graduating from high school.

**Repeating certain activities.** Eight of the 12 participants emphasized the importance of repeating activities to emphasize certain skills or subject matter. Repeating specific activities helped teachers ensure that students understood certain subject matter. Participant 6 stated, “If after they writing a sentence and I still don’t think they get it, now, just like do that for the next day, for the next day, for the next day until they get it.” This response indicated a larger pattern of thinking where participants believe that students need to practice certain activities multiple times before they can develop necessary skills. This pattern of thinking is again revealed when Participant 7 explained, “Instead of just, ‘Here’s this worksheet and we’re going to test on it in a week.’ We try to take at least five or 10 minutes every single day to do something meaningful with it.” Students need to repeatedly practice specific activities while preparing for an assessment. Discussions would also be repeated throughout the year so
students could refine their listening and speaking skills. Participant 4 provided the example of Socratic Seminars: “If you were here later in the year, you’d see the evolution of what their first conversation looks like, towards the end of the year, when they’re much more comfortable with the process.” By completing a specific activity multiple times throughout the year, students could gradually develop their reading, writing, speaking, and listening skills.

**Student-centered activities.** All 12 participants indicated that student-centered activities were essential to organizing subject matter for student learning. Based on participant responses “student-centered activities” were activities where students actively participated in learning about content. Student-centered activities required students to be active learners rather than passive learners.

**Discussion.** All participants emphasized discussion as an effective way of helping students understand concepts. Participants explained that students needed to discuss ideas with each other in order to truly deepen their understanding of them. Pair-share was an especially popular strategy for participants because this helped students exchange ideas with one partner before presenting to the class. By engaging in pair-share, students were also able to clarify their understanding of subject matter that they were struggling to learn. Based on participant responses, whole class discussions were also effective because students could discuss material they previously learned about with the class. Examples of this include,

- Participant 7 stated,

  A lot of think, pair, share, as basic of a strategy as that is, I find myself doing that pretty much daily. Because I’ll ask them to, “Okay, take a minute. Think about
this and then turn to your partner and talk about it. Write your answer down and then come as a class.” What I have found is that students that struggle with participation, it’s just really effective because they gain confidence based on their conversation with their partner. They’ve written it down.

- Participant 5 said, “I also like to, because we have the tables where four kids sit at a table, I like to use the Think, Pair, Share. Like, ‘Hey kids, talk about it at your tables for a minute, and then I’ll call out and you can share what your table said.’”
- Participant 3 said, “Our conversation yesterday was based on their findings of each country, on Tuesday they shared the article, and then they brought in.”
- Participant 4 mentioned the following: “So the following day, students would read and annotate that piece of historical fiction, and the following day, we’d have a Socratic seminar or class discussion on that piece of historical fiction, alongside of the German unification.”

**Collaboration.** Ten of 12 participants explained the value of students’ collaboration in terms of ensuring that students understood necessary concepts and developed relevant skills. Participant 11 distinguished between group work and collaboration:

‘Cause it’s not just like I used to think that collaboration was, “Okay, get together with your partner and go over the homework answers.” But that’s not collaborating, they’re just telling each other what they got for the homework. And like the jigsaw, for example, every student is held accountable for something and that portion, it’s necessary to complete something at the end.
This explanation highlights how students must be held accountable in any collaborative activity. Collaboration can only occur when each student in the group is contributing something. Participant 3 shared another version of implementing a collaborative jigsaw: “They research their article, they read it, they annotate it, they write a synthesis on it, and then they come to class, I put them in groups of four, they cannot be of the same country. Then they share out their findings.” Participant 9 shared that “assigning group roles” could also enable student collaboration as long as the teacher carefully decided on role responsibilities.

**Prior knowledge.** Eight of the 12 participants spoke about the importance of connecting subject matter to students’ prior knowledge. Participants described how they connected unfamiliar material or concepts to material that students already knew about. Many times, these connections were tied to academic knowledge that students learned about in previous classes. Participants also shared how they connected abstract academic concepts to simple examples that were interesting to students. The following statements are examples of this:

- Honestly, the process is almost identical to what they do in grade school. It’s just kicked up a notch in difficulty because they’ve got more terms, they’ve got variables and exponents that they have to learn how to deal with. But that tends to be super helpful, when teaching that kind of, a lesson, if there’s something I can tie it to prior knowledge. (Participant 8)

- The prior knowledge for 1.2 is really important for me regardless of the class level. If it’s an IB class or honors class to a college prep class, giving them something that they can connect to allows them to access and reference some
of the bigger concepts that I bring up in class, especially for theory of knowledge. (Participant 12)

- Then we can refer back to the heart rate activity as to what did you learn, have you been applying it when you are exercising, and you are out and about. (Participant 2)

- So when I first started introducing Mandarin Chinese to the students, I tried to relate with their own languages. It might be English, it might be Spanish, it may be Vietnamese, or some Korean so I try to find if there’s any commonality in it. Maybe it’s culturally, maybe it’s just linguistic. (Participant 6)

Participant responses reveal how students are able to comprehend subject matter when they find connections to their prior knowledge. Either teachers can link current subject matter to previous content that was taught or they can connect content to real-life examples.

**Research Question 4**

*How do teachers in P21 exemplar schools plan instruction and design learning experiences for all students?*

Table 9 displays the two themes from the data along with their frequencies. Both themes were mentioned by all 12 participants.

Table 9

*Frequency of Themes and Scores for Research Question 4*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiating material based on skill levels of students</td>
<td>55</td>
</tr>
<tr>
<td>Being cognizant of students’ learning needs</td>
<td>54</td>
</tr>
</tbody>
</table>
Upon analysis of data collected for Research Question 4, the following themes were identified: (a) differentiating material based on skills levels and (b) being cognizant of students’ learning needs. The following section provides further detail about each theme. Table 10 specifies the important trends relating to each theme.

Table 10

Organizing Subject Matter for Student Learning—Summary of Trends

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing instructional plans</td>
<td>• Modifying activities</td>
</tr>
<tr>
<td></td>
<td>• Checking for Understanding</td>
</tr>
<tr>
<td>Varied instruction</td>
<td>• Diverse array of activities</td>
</tr>
<tr>
<td></td>
<td>• Accommodations</td>
</tr>
<tr>
<td></td>
<td>• Anticipate issues</td>
</tr>
</tbody>
</table>

**Changing instructional plans.** All 12 participants mentioned that they altered lesson plans based on students’ academic abilities, level of understanding, and quality of participation.

**Modifying activities.** Nine of the 12 participants described how they modified activities depending on individual student needs or the needs of the class as a whole. Modifying lessons includes changing certain assignment due dates so students have more time to work, revising instructional plans, and providing more support to struggling students. Communication between teachers and students was key in terms of modifying assignments. Participant 2 said,

At the end of the period there was about seven or eight minutes, and I said, “Look. Instead of getting out your vision boards, and physically showing me, how many people are less than halfway done? Show of hands. How many people
are halfway to maybe three quarters done, and how many of you are three quarters, or they are almost fully done? Show of hands.”

In this example, the participant modified the activity due date based on student feedback. Students had to communicate with teachers in order to ask for modifications and the teacher had to provide opportunities where the students could approach the teacher. Participant 10 mentioned, “Yeah. Okay, a lot of those, I feel like they need extra time on tests or homework, which I’m very open to. But they need to talk to me.” Since these participants already created a safe classroom environment, teachers already knew that students would feel comfortable with approaching them about assignments.

Participants also indicated that they closely observed students in order to determine if assignments needed to be modified. Participant 2 explained, “I have to sometimes break it down so that they really understand, especially from seeing it on the test, where it’s like, I tangibly have that they are not getting it.” Participant 6 said, “I will reteach. I don’t mind. I’m okay to take a task like a day, two days, three days later. That’s fine. But, I’m more, I think I put more focus on students learning result, like their ability.” Participants were more concerned with student learning than pacing and wanted to ensure that students were capable of doing specific activities before moving to different content. In order to ensure that all students were able to participate in activities, the participants would alter activities so all students could participate. Participant 4 modified a specific activity and describe the process here:

One of the things that I did a couple of years ago is I had an EL class and in that EL class, when we would do our Socratic seminars, I would allow my English language learners to speak in their native language.
These responses indicate that participants wanted to modify activities in order to address learning needs and help students be successful in the class.

**Checking for understanding.** Seven of the 12 participants explained how they checked for understanding throughout the lesson in order to make necessary adjustments while teaching. Teachers performed various activities when checking for understanding: grading assessments, observing students, listening to student discussion, and asking individual students about content. Participant 1 provided an example of how to use writing samples as a method of checking for understanding. By looking at a student’s writing, the participant was able to determine specific areas where students needed additional support.

I have data that say, okay, in this piece of writing we say this, I’ve anecdotal data about when they read, and sort of all of it informs the conversation that we have so that way I can say, “Hey we read for 10 minutes, two days a week and I see you staring out the window and you wrote about how you’ve never really had success with this here and you know, your writing suggests that you maybe need some support with language so, what do you think you need?”

Participants made sure to provide opportunities for student discussion in order to assess student understanding. These opportunities required students to talk to their peers or to the teacher. Whether the participant made sure to ask students a question or simply asked them to share an idea, responses indicate that it is essential to facilitate student participation when checking for understanding.
Participant 5 provided this example: “I give them time to look at one example and how to do it, and then when we come up all together I’m at the board and I just say, ‘Okay, what did you guys think?’ And then they just share out.”

Participant 8 said, “I could figure those things out, but not everybody is that way and especially, not my English learners. So I really have to make sure I know who those kids are and talk through the vocabulary with them or maybe give visuals.”

Participant 3 described how students’ questions can be opportunities to check for understanding:

As an example, on a video, I could watch for five minutes or ten minutes or fifteen minutes and I could say, “Pause. What five questions do you have about the video now?” And then, I’m checking for understanding from that video.

Participant 7 explained,

I used to teach our ELD classes as well and what I see is that students like to hide. They don’t want the attention. So if they can sit there and be quiet, they’ll do that. I try to, every single day provide many opportunities for discussion and kind of force the students to take part in the discussion. ‘

Observing students during class was also important in terms of supporting students who may not verbalize their questions.

Participant 9 said, “It’s all about really reading their faces, and always asking for questions, and always having something, I guess, in your back pocket, always having a plan B is super important.”

Varied instruction. Nine of the 12 participants described how they utilized a variety of instructional methods and activities in order to better support student success.
Diverse array of activities. Some teachers mentioned how they would incorporate specific activities based on what students were interested in or what their strengths were. Additionally, teachers would incorporate moments of peer-to-peer interactions so students could be exposed to same information and concepts through a different method. Finally, teachers would incorporate a variety of activities so students had the opportunity to excel in different ways. Nine of the 12 participants understood that some students may excel in verbal communication while others were better writers or readers. Keeping this in mind, participants embedded activities that required a variety of skillsets. By using this approach, participants made sure that all students would find some success in the classroom and could be motivated to learn the content in different ways.

- Participant 4 said,
  
  Oh my goodness, I can’t believe the depth of thought that’s going into what she says and if I had only lectured every day, or if I had only done book work every day, I never would have had the opportunity to see that and learn that in her.

- Participant 1 mentioned, “We give them verbal assessments like, really we’re as flexible and adaptive as we can for the student to prove that they can meet the standard.”

- Participant 2 explained, “They might hear it in different way because the student next explains it probably differently than I’m gonna explain it or their partner explained it. They are again hearing it for a third time, those kinds of things.”

- Participant 6 provided an example of how students learned Chinese efficiently:
  
  So, this group, even last year, they love singing, like small kinds, like, they love singing and dancing, rap, you know. So I found a lot of Chinese songs that is
like, with good rhythm. Like, not sad songs. Like, happy songs, you know, have
good, fast rhythm and I just show it. They learn, like, songs really quick.

- Participant 1 said, “A lot of kids will do things where they’re creating videos, or
they’re creating podcasts, or they’re creating things like that so that, that way if
they’re not successful in a traditional writing model we give them another way.”

**Accommodations.** All 12 participants described various methods that they
accommodated students with learning disabilities or students who had specific learning
needs. Since all participants were general education teachers, they had to include specific
lesson plan accommodations in order to best support students. Participant 12 gave the
following example:

And for those students who are really scared of presenting, I’ll only have half the
class present, or I’ll even do, “Pick three of your closest friends to show up at
lunch and do your 10-minute presentation.” Because if that student is that scared
... I don’t want them penalized for the assessment, because they should have
every fair and safe opportunity. So I try to provide accommodations to fit where
they’re at.

Other participants made observations of students and adjusted their actions
slightly in order to accommodate students. Participant 9 discussed how to make an
accommodation simply based on observations about that students’ habits: “I have
assigned rules. I have this one girl in my third period who, she’s very hyperactive.
Anytime I need stuff from another class, she’s the one that gets to go.” Participant 6
provided another example of accommodating a specific student in the class: “He doesn’t
feel comfortable talking so I have to constantly, like, hey, let’s talk. Don’t worry about
it. You know, I have to encourage him. That’s something that I, yeah, so I have to modify, have to adjust, yeah.”

Other accommodations can be based on specific learning needs for students who are classified as English learners or special education students. Participant 1 explained, And we always kind of give them the opportunity to express their voice first. We use a lot of sentence frames, so we have like these, and that these will be out on the table today actually when we start working with these but they teach them, give them a little bit of the tools. We have a lot of the EL kids and with special ed kids, anything that we can give them for this, so kind of give them the language, because some kids have never sort of had to advocate for themselves before and they just feel like you know the teacher judges me for what I can do or what I can’t do and that’s the end of the day. So this kind of gives them a little more if a voice and also an awareness that they are in control of their education.

This idea of allowing students to be in control of their education was a common pattern of thinking among participants. They wanted to help students think independently. In this case, sentence frames became a scaffold for language development and hopefully would increase student autonomy. Rather than depending on the teacher for help, students could use the sentence frames tool to communicate their ideas clearly.

Even the accommodations that participants provided were designed to promote autonomous thinking so students were not as dependent on the teacher for help and felt more confident in themselves. Participant 10 said, “So, sentence frames, and I think sitting next to someone that they feel comfortable with to talk to, and also maybe in the similar language if there is a language barrier.” Participant 2 highlighted the importance
of paying attention to students’ learning plans if they are part of special education by saying, “Because I have obviously SDC kids and EL kids, and the RSP kids, and my life management class as well. I have to be mindful of their IEPs, and how I can modify, especially long-term activities so they don’t feel uncomfortable.”

In summary, participants described accommodations as providing more time, following learning plans for special education, providing scaffolds such as sentence frames, and providing more individualized help. Participants also viewed these accommodations as opportunities to help students take more ownership of their learning.

**Anticipate issues.** Eight of 12 participants said that they would create lesson plans and incorporate activities based on the specific areas that students struggled with. Participant 7 explained how she used sentence frames with many assignments “because it really is modeling the academic language for them and it’s pushing them to write more than three words in response to something.” Participant 9 stressed the usefulness of creating online resources for students because students could follow along at their own pace rather than relying on the teacher or feeling like they needed to keep up with their peers. She said,

I’m going too slow for these kids, and then too fast for these. And so, having that video at home of the content, helps like you can pause it, you can rewind it. You can watch it as many times as you want. You can put me on like one-and-a-half times, so I go fast. It’s up to them, and I got a lot of feedback that they really like the videos, because they can go at their own pace.

It is also important to design a lesson plan based on the specific skills and knowledge that students still need to develop in the course. Participants would take the
time to reflect on the objective of the lesson before planning specific activities. Their lesson planning methods were intentional and highly focused on the specific learning needs of their students. Participant 12 said, “So I’d start planning and start to think, ‘What do my students in general need? What are the key skills they need to get there? What does IB require of them from this assessment?’” This participant clearly took the time to figure out the skills that students still needed to develop and worked backwards from this point.

**Research Question 5**

*How do teachers in P21 exemplar schools assess students for learning?*

Table 11 displays the two themes from the data along with their frequencies. Both themes were mentioned by all 12 participants.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a variety of methods to assess student learning during instruction</td>
<td>64</td>
</tr>
<tr>
<td>Assigning tests, quizzes, and essays to determine student understand after material is taught</td>
<td>36</td>
</tr>
</tbody>
</table>

Upon analysis of data collected for Research Question 5, the following themes were identified: (a) using a variety of methods to assess student learning during instruction; and (b) assigning tests, quizzes, and essays to determine student understanding after material is taught. The following section provides further detail about each theme. Table 12 specific the important trends relating to each theme.
Table 12

*Organizing Subject Matter for Student Learning—Summary of Trends*

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of trends</th>
</tr>
</thead>
</table>
| Formative assessment | Observation  
                          | Questioning                          |
| Summative assessment | Facilitating student discussions  
                          | Tests and quizzes                     |

**Formative assessment.** All 12 participants described how they formatively assessed students during their lessons. “Formative assessment” occurs when teachers assess student understanding during a lesson. Based on the data they collect, teachers will adjust their lessons accordingly.

**Observation.** Eight of the 12 participants mentioned that they observe students in order to formatively assess them. Simply walking around could be an example of formative assessment. Participants explained that they would walk around to look at student actions, listen to student discussion, and check student work.

Participants primarily made observations by looking at what students were accomplishing in class. Participant 9 said, “As I go around . . . I definitely walk around, ask questions, see if they’re on, not necessarily on task, but if they’re on track for what they’re doing. I can just assess by that.” Participant 10 made a similar point: “I could really see if kids know what they’re talking about, just from if they can present, or if they’re reading off the poster that their group made.” Participant observations helped them gain a strong understanding of areas in which students were strong as well as areas in which they could improve.
Participant 7 also discussed the importance of checking student work. Participant 7 stated, “For example, the vocab warmup that you saw, tomorrow when I’m checking their homework, there’s another warmup that they’ll be discussing and I’ll be walking around checking.” Rather than waiting until students had to take a test or quiz, participants would look at classwork and homework to determine student readiness and mastery.

**Questioning.** Seven of 12 participants described how asking students questions could help with assessing student learning. The following examples describe this process:

- As I go around . . . I definitely walk around, ask questions, see if they’re on, not necessarily on task, but if they’re on track for what they’re doing. (Participant 9)
- “Can you please tell me what you learned from this reading?” And they are able to articulate in three, five sentences, and I can actually understand their message. (Participant 3)
- That happens a lot. A lot of times I’ll ask the student if they’re not getting it, like “Hey are you having a rough time with this?” And they’ll be, “Yeah, I really didn’t get this part.” And then I try to connect to the kid, so sometimes I know they’re on the football team, or I know that they really like Taylor Swift, so I’ll try to relate it to content that they like, that’s interesting to them so that it makes sense. And a lot of times it does. (Participant 5)
- Throughout the class, maybe asking them questions. Their warmups are really good ways of assessing. And I think when I asked questions on the fly, getting
that kind of response all at once is where I would want it to be more, whereas like if there’s like set up questions on the board, like, “Talk to your partner. Now, I’m going to call on people, or raise your hand,” but when I ask a question, I can like hear a unanimous feedback, I’m like, “Okay, they get it.” Or there’s crickets, and so maybe I need to repeat the question, or that’s a good way for me to see like, “Okay, majority of people, are they getting it? Are they not? What’s going on?” (Participant 7)

Some participants actually asked students to list their own questions about the material. This questioning strategy requires students to create questions about complex material.

- I’ll have them generate questions about the picture and then they kind of throw them at each other, everybody picks one and does micro-research and we kind of evaluate it that way. (Participant 1)

- What, questions do you have about this map? During our Socratic seminars, we’re looking at a piece of art related to Alsace, what questions do you have about this map and oftentimes when we’re doing those things, we’re doing them in that we’re just listening to the question. We’re not actually answering them. (Participant 4)

**Facilitating student discussion.** In order to conduct formative assessment, nine of 12 teachers facilitated student discussions. According to participants, these discussions help teachers assess students’ knowledge as well as their language skills. Participant 4 mentioned how students can demonstrate their collaboration and critical thinking skills: “So we had a Socratic seminar on Syria and then I was reading their Capstone reflections,
and two kids per class said, “I was a communicator and collaborator during our Socratic seminar.”

Rather than waiting to collect assignments from students, teachers were able to instantly formatively assess students based on their contributions to the discussion. By sharing their thoughts, students were also able to help each other. Participant 5 described how student discussion is a useful tool when students are struggling to understand certain information. The participant stated, “A lot of times the kids will share strategies. The kids who get it will share strategies and the other kids will be like, “Oh that makes sense.” So I like to bring the class together and say, “Hey some of us are struggling with this. If you got this, how did you get it? What did you do?”

Participants described how they facilitated productive student discussion. They emphasized the importance of actively listening to what students were saying in order to ensure that they were understanding the content. Participant 1 provided the following example:

Some of them are just having a discussion like I will have the tables talk about something and I’ll walk around to every table and listen to their discussion and say okay are they getting it or are they not getting it?

Sometimes students were hesitant to talk to their peers and needed some encouragement. By facilitating student discussions, participants explained that students gradually became more comfortable and could participate with less hesitation. This example from Participant 6 relates to this point: “We’ll do jig sawing activities, a lot of Spencer Kagan cooperative learning strategies, where they’re moving around. I’ll just try different things to really get them out of their shell.”
Summative assessment. All 12 participants stated that they needed to give students traditional assessments such as tests, quizzes, and essays in order to measure student progress. “Summative assessments” are done after students have finished learning the material.

Tests and quizzes. All participants mentioned that they gave quizzes and tests. However, participants differed in how they structured tests and collected data about student performance. Participant 5 said, “So they get a grade per standard. I think it helps them organize their own learning and see, “Oh I was good at this one. But I wasn’t so good at that.” This participant explained how students can actually self-assess using a traditional test. Other participants emphasized that tests and quizzes were only administered after students had an appropriate amount of time to learn the material. Participant 8 stated, “We will do one chapter test at the end, but we do lots and lots of preparation for that test.”

Ultimately, summative assessments helped to inform instruction and were given after teachers had adequately prepared students. Both formative and summative assessment provided information that helped participants adjust lessons and pacing accordingly. Participant 2 explained that summative assessment could enable teachers to better support students: “I have to sometimes break it down so that they really understand, especially from seeing it on the test, where it’s like, I tangibly have that they are not getting it.” Participant 6 said,

I just maybe give them, like, a project that lasts for a week or maybe some writing practices, some vocab quiz, and then by the end of the week I’ll give them a chapter test. Yeah, so it really depends on how well they learn.
**Research Question 6**

*How do teachers in P21 exemplar schools develop as professional educators?*

Table 13 displays the two themes from the data along with their frequencies.

Both themes were mentioned by all 12 participants.

Table 13

*Frequency of Themes and Scores for Research Question 6*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborating with other educators in order to discuss instructional strategies</td>
<td>25</td>
</tr>
<tr>
<td>Learning from other educators about innovative instructional strategies</td>
<td>31</td>
</tr>
</tbody>
</table>

Upon analysis of data collected for Research Question 6, the following themes were identified: (a) collaborating with other teachers in order to learn new ideas, and (b) observing other teachers’ instruction. The following section provides further detail about each theme. Table 14 specific the important trends relating to each theme.

Table 14

*Develop as Professional Educators—Summary of Trends*

<table>
<thead>
<tr>
<th>Category</th>
<th>Summary of trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>• Workshops and conferences</td>
</tr>
<tr>
<td></td>
<td>• Interdistrict collaboration</td>
</tr>
<tr>
<td>Individual reflection</td>
<td>• Visiting other classrooms</td>
</tr>
<tr>
<td></td>
<td>• Reading</td>
</tr>
</tbody>
</table>

**Collaboration.** All 12 participants stated that collaboration was an important method of professional development. “Collaboration” is defined as teachers working
together to create lesson plans, reflect on instructional practices, and discuss innovative strategies.

**Workshops and conferences.** Nine of 12 participants cited workshops and conferences as useful methods of professional development. All of them found it necessary to update their teaching methods because their student population was changing. In order to meet their students’ changing needs, teachers had to expose themselves to new ideas and consistently engage in professional development that normally consisted of workshops and conferences that were facilitated by other educators.

Participant 4 explained,

> For me, as an educator, I found maybe the most value in looking at what other educators are currently doing as opposed to potentially somebody who hasn’t been in the classroom very much, or for a long time, just because, this is my 17th year like I said, the students that we have today are different from the students that we had ten years ago.

Other participants made similar points about how workshops and conferences helped them learn about new ideas. All participants seemed eager to learn from others.

Participant 6 said,

> And it’s where teachers come and they share for an hour what’s working in their classes. And it’s strategies, so I pay for that and I’m going to that. And it’s because I want to keep changing my lessons not teach the same thing every year.

Participant 10 made a similar point: “So, we have meetings on Mondays, and then in those meetings people share out, and it’s like, “Oh, that’s a good idea.” So, you’re hearing from other people in all areas, from around the school subject areas.
Many participants expressed a desire to update their instructional practice rather than adhering to what they previously learned in their credential programs or when they started teaching. They also enjoyed trying new things and experimenting with different strategies. This desire to implement innovative practice fueled their decision to participate in professional development initiatives. Participant 12 said,

I’m trying to find things that work today, not worked for me and my credentialing program in 99, because kids have changed and I can’t believe I’m even saying this to you, but I’m starting to feel like I need to be up to date. I need to update my own operating system to make sure that I’m connecting with all my students.

Participant 11 said,

‘Cause I will be bored. And if I get bored, I mean, I am pretty sure the students will get bored. So, you have to change. There’s so many things that if I were to say, oh, no. I’m gonna teach the same thing I’ve been teaching or the same way I’ve been teaching since I started here, then I would close myself to other things that . . . like better strategies.

**Interdistrict collaboration.** Nine of 12 participants believed that collaborating with their colleagues at work furthered their professional development.

- Participant 2 said,

  I also will collaborate with my junior high colleague and a couple other colleagues in the district, and I think that keeps me engaged and not just with my students but I can see what other ways I can be inspired by my colleagues.

- Other participants indicated that their colleagues consistently motivated them to refine their craft. Participant 4 said, “Brian and I were both part of the civic learning
initiative, which institutionalized civic learning at Savannah, and when I became
department chair, Brian challenged me to make our department be known for its
teaching.”

• Participant 3 mentioned,
  I also will collaborate with my junior high colleague and a couple other
colleagues in the district, and I think that keeps me engaged and not just with my
students but I can see what other ways I can be inspired by my colleagues.

• Participant 7 said,
  So it’s something as simple as another teacher saying, “Hey, I found this great
strategy. Let me show you about it.” I’ve gained some awesome things from
those professional developments. But the collaboration time, honestly, is just . . .
I can’t explain how valuable it is.

• Participant 8 said, “So it’s good to just get different ideas. I mean, there’s sometimes I
walk away from a department meeting and think, ‘Huh, that never crossed my mind to
try it that way. I think I’ll try it that way.’”

• Participant 1 also stated,
  So, you really have to sort of self-advocate for your own things and do as much
reading as possible, and I think sometimes we think we teach in isolation and so
connecting with as many people, whether it’s at your site or outside of your site.

**Individual reflection.** While participants emphasized the importance of
collaboration as professional development, they also described how individual reflection
was essential. Based on participant responses, observing other teachers and reading
inspired motivated teachers to reflect on their own practice.
**Visiting other classrooms.** Eleven of 12 participants mentioned the importance of observing other teachers in order to further professional development. Participant 5 said, 

So a lot of it allows you to reflect on your own learning and what you do and you see what somebody else is doing. It’s just reflective. I think it’s really helpful that nobody is saying, “Hey you need to do this more. Hey you need to better in this. Or hey your kids need to be writing more.”

More specifically, observing other teachers allowed participants to learn about new ideas as well as how they can implement these ideas. Participant 7 said, “I’ve always just gained so much from veteran teachers that have been teaching that same class. Just an exposure to different learning techniques and things like that.” Participant 4 made a similar point: “We also do a lot of learning walks on campus to where you’re going into other people’s classrooms and seeing the strategies that they’re utilizing.”

**Reading.** Seven of the 12 participants mentioned reading as a useful tool to enable professional development since it allowed teachers to address challenges they faced by helping them learn about new ideas. Reading was important to all participants because it encouraged personal reflection and provided useful information about practical instructional practices. Participant 12 said,

If you go to the conference room and everyone’s complaining, because we’re so frustrated, but instead of doing that, I really try to find ways to, if I can’t change it, let me figure out ways to adapt to. And so I try to do that by reading a lot.

Participants also found that reading helped them learn about students’ needs. Participant 1 said, “I do a lot of professional reading, Edutopia, I’m looking for things like that to support socio-emotional needs.” Participant 3 made a similar point, “I read a
lot on different things to help guide me to understand this generation ‘cause it’s a challenge.”

**Summary**

Chapter IV reviewed the study’s purpose, research questions, and methodology. It also described the data collection process, population, and sample. After providing an overview of the study, this chapter described data analysis procedures. Presentation and analysis of findings were based on the following sources: a total of 12 participants, 12 individual interviews, 12 classroom observations, and 15 artifacts.

This study focused on describing and exploring how teachers, in two P21 exemplar schools in California, developed positive student-teacher relationships. Twelve themes emerged as critical ways that teachers in these exemplar schools were able to build positive relationships with their students. Using the data from the findings, the next chapter provides findings, conclusions, and recommendations.
CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Purpose Statement

The purpose of this phenomenological qualitative study was to describe and explore how teachers in P21 exemplar schools developed positive student-teacher relationships using the six domains of the California Standards of the Teaching Profession.

Research Questions

How do teachers in P21 exemplar schools develop positive student-teacher relationships according to the six domains of the California Standards of the Teaching Profession?

1. How do teachers in P21 exemplar schools engage and support all students in learning?

2. How do teachers in P21 exemplar schools create and maintain effective environments for student learning?

3. How do teachers in P21 exemplar schools understand and organize subject matter for student learning?

4. How do teachers in P21 exemplar schools plan instruction and design learning experiences for all students?

5. How do teachers in P21 exemplar schools assess students for learning?

6. How do teachers in P21 exemplar schools develop as professional educators?

Research Methods and Data Collection Procedures

This qualitative, phenomenological study was designed to describe and explore how teachers in P21 exemplar schools were able to develop positive student-teacher relationships as defined by the California Standards of the Teaching Profession (CSTPs).
The two high schools were chosen because they were designated as exemplar schools by P21. The principal at each school site recommended teachers who were able to develop positive relationships with their students. Data were collected through interviews, observations, and review of artifacts. By collecting data from multiple sources, the researcher was able to gain a deeper understanding of how teachers were able to build positive relationships with their students.

**Population**

The target population included all three P21 exemplar high schools in California. P21 has specific criteria, a rubric, and implements an applications and visitations process in order to designate certain schools as exemplars.

**Sample**

In order to collect data for this phenomenological study, two high school sites were selected based on purposeful sampling. Criteria for selecting these sites included that the school had an exemplar school identification by P21, it was a high school, and it was located in California. Two of the sites that met these criteria agreed to be part of this study and were the sample for the study.

**Major Findings**

The purpose of this research study was to describe and explore how teachers in P21 exemplar high schools were able to develop positive student-teacher relationships. This phenomenological study included interviews, observations, and review of artifacts in order to better understand the experiences of teachers. All data collection was completed at two high school sites in California.
A total of 12 teachers participated in semi-structured interviews and observations. They also recommended artifacts. Semi-structured interviews were conducted on an individual basis and lasted about 45 to 60 minutes. All questions aligned to the CSTPs. Participants were interviewed during their preparation period and participated in a classroom observation for a 1-hour period. Through this process, the researcher collected qualitative data from a total of 12 participants, 12 classroom observations, and 12 artifacts.

The data collected from these two high school sites provided information about how teachers in 21st-century learning environments effectively build relationships with their students. It presented certain themes and conclusions that could support teachers in building positive relationships with their students in 21st-century learning environments. Building on these themes and conclusions, the next section describes major findings. This chapter ends with conclusions and recommended action steps.

**Central Research Question**

*How do teachers in P21 exemplar school develop positive student-teacher relationships according to the six domains of the California Standards for Teaching Profession?*

**Finding.** Student-centered activities are critical to the development of positive student-teacher relationships. After data were collected from interviews, observations, and artifact analysis, student-centered instruction was the most referenced. Participants consistently mentioned that student-centered activities allowed students to express themselves in the classroom and take ownership of their learning. This finding builds upon previous research that proves how student-centered activities require students to
develop necessary skills and knowledge (Daniela, 2014; Saavedra & Opfer, 2012). Participants described how student-centered activities motivated students by holding them accountable for their own learning. Additionally, students were able to share about their own lives and ideas whether this was through projects, class discussions, or collaborative activities. All participants described specific actions they completed simply to build positive relationships with students. Students would only be willing to share their ideas and be active learners in classrooms where they trusted the teacher and their classmates. Participants were cognizant of this and consistently completed actions simply to build stronger bonds with their students. This connects to how student-teacher relationships can be the prime motivator for students since teachers can encourage students to continue doing their best (Davis, 2003).

**Research Question 1**

*How do teachers in P21 exemplar schools engage and support all students in learning?*

**Finding 1.** Teachers in P21 exemplar schools emphasized how students needed to feel safe before they could learn content. More specifically, students needed to feel that their ideas were valued and that they would not be regarded as inferior if their answers were not correct. Participants mentioned that the teacher helped students feel safe by managing student behavior, setting behavioral norms, and being a role model for students. This finding correlates to research concerning how student-teacher relationships are built (Farr, 2010; Richards, 2006). By emphasizing certain norms, such as respect and acceptance, teachers created an environment where students felt comfortable and ready to learn.
**Finding 2.** Students should have the opportunity to share their thoughts. Students were more likely to learn if they were actively sharing their ideas in class. This is part of student-centered instruction where students are controlling more of their learning and become less dependent on the teacher (Trilling & Fadel, 2009). Especially in the 21st-century classroom, it is critical that teachers allow students to speak up so they develop their critical thinking, collaboration, and communication skills (Daniela, 2014; Hilton, 2015). Teachers could facilitate opportunities for students to share their thoughts by integrating activities that required students to actively participate rather than passively listening to each other (Saavedra & Opfer, 2012).

**Research Question 2**

*How do teachers in P21 exemplar schools create and maintain effective environments for student learning?*

**Finding 1.** Teachers consistently need to keep high expectations for students when instructing students. Preus (2012) described this “authentic instruction” as emphasizing “higher order thinking, deep knowledge, substantive conversation, and value beyond school” (p. 5). Participants consistently emphasized the importance of students being able to learn and they created routines and expectations that fostered student learning. Rather than allowing students to have a passive role in their learning, teachers held students accountable by designing learning tasks where students needed to learn the material and communicate their learning. Teachers expected students to take ownership of their learning and created opportunities for students to do so.

**Finding 2.** Teachers gave consistent feedback to students. Participants valued individualized feedback the most because it was more personalized. Domenech et al.
(2016) emphasized this need to personalize education in order to more effectively facilitate student learning. Participant responses emphasized more individualized feedback because each student had different strengths and weaknesses. Rather than focusing on areas where students were lacking, participants focused on building students’ strengths by offering positive remarks when work was done correctly and constantly encouraging students to do their best.

Research Question 3

*How do teachers in P21 exemplar schools understand organize subject matter for student learning?*

**Finding 1.** Teachers engaged in backwards planning that focused on skills that students needed to develop by the end of a lesson or unit. Participant responses emphasized the importance of skill building because students would be able to use these skills in the future. While students needed to learn specific subject matter, participants did not solely focus on this while designing lessons. They would specifically incorporate activities that helped students build skills relating to the four Cs: creativity, critical thinking, communication, and collaboration (P21, 2016). This is an example of how instructional practices must depart from traditional modes of instruction in order to support students in 21st-century skill development (Kaufman, 2013; Quigley, 2016).

**Finding 2.** Student-centered instruction is crucial. Student learning can only occur when teachers focus on students’ understanding content rather than being able to regurgitate what they learned (Wagner, 2008). Participants indicated that any type of instruction, whether it was teacher directed or not, needed to be done with the intent of helping students understand the subject matter. Participant responses especially
emphasized how they provided opportunities for discussion and collaboration. When organizing lesson plans, teachers specifically integrated moments where students could interact with each other to better understand the content. Many participants saw this as an opportunity for struggling students to use their peers as a resource. This was another way to hold students responsible for their own learning. Building on prior knowledge was also important to participants. They wanted to connect content matter to material that students already knew about in order to more effectively facilitate student learning. Lessons were designed to spark these connections to prior knowledge by including real-life examples that were tangible and easy to understand.

**Research Question 4**

*How do teachers in P21 exemplar schools plan instruction and design learning experiences for all students?*

**Finding 1.** It is important to differentiate material based on the skill levels of students. Based on observations and interview responses, participants did this by modifying activities whenever necessary and constantly checking for understanding. Many participants indicated that they were flexible with assignment due dates and formats as long as students communicated with them. They also indicated that students’ lives outside of the classroom could impact a lot of their work in class and they differentiated them based on this information as well. Research from Lawson and Lawson (2013) supported this point and explained that students who live in high-poverty neighborhoods or isolated areas need even more effective instruction. However, participants acknowledged that it was unrealistic to differentiate for each student in the class since class sizes could be quite large. Therefore, many of them described how they
tried to find certain needs that were common in each class and modified activities based on this pattern. Whenever it was necessary, participants explained that more individualized instruction and communication could take place.

**Finding 2.** Being cognizant of students’ learning needs was critical to effective supporting student learning. When planning instruction and designing learning experiences, participants described their strong focus on students’ learning needs. Many participants taught classes that included students with disabilities and special education students. Also, participants considered students who tended to misbehave as students with a different set of learning needs. By keeping their student population in mind, participants felt that they were more effective teachers and developed more positive relationships with students because these students were staying engaged in class. This finding supports the idea that 21st-century learning environments meet the diverse needs of students (King, 2012).

**Research Question 5**

*How do teachers in P21 schools assess students for learning?*

**Finding 1.** Formative assessment is necessary for effective instruction. All participants indicated that they used formative assessment to check student progress and understanding. This supports research concerning how formative assessment allows educators to adjust instruction and check for understanding (AustinHurd, 2016). Participants indicated that formative assessment could be completed by observing students as they worked in class or by asking questions. Formative assessment normally involved students talking or completing an activity. Either way, teachers could ascertain whether students were comprehending the subject or needed more support. Other
examples of formative assessment included Socratic seminars and pair-share. As per participant responses, formative assessments were especially helpful because they could be done mid lesson and did not necessarily have to be planned ahead of time. Participants indicated that they would pause instruction to conduct formative assessment if they felt that students were confused and unable to learn something.

**Finding 2.** Summative assessments are normally given to test student mastery, but data from summative assessments can help teachers understand how to support struggling students who did not do well on that particular assessment. This supports research that shows that data from summative assessments can be used in a formative way (Hoover & Abrams, 2013). Participants indicated that traditional tests and quizzes gave valuable insight into areas where students needed more support. These summative assessments would help participants understand whether to reteach something or change the pacing of a lesson or unit.

**Research Question 6**

*How do researchers in P21 exemplar schools develop as professional educators?*

**Finding 1.** Collaboration is essential. All participants believed that collaboration was essential to their professional development. By collaborating with their colleagues, participants were able to exchange ideas and learn about new ideas. Many of them referenced workshops and district initiatives as opportunities for collaboration. This finding builds on research that shows how collaboration can be valuable when teachers value each other’s expertise and hold each other accountable (Gilyard-Shyne, 2014). All participants viewed their colleagues favorably and believed that they had much to learn by interacting with these teachers.
Participants also collaborated with their students by allowing them voice their opinions and ideas in the classroom. For example, many participants worked with students to create social contracts that outlined specific classroom norms. Rather than delineating classroom rules for students, participants facilitated lessons where students participated in thoughtful discussions about behavioral norms that were necessary in positive classroom environments. This finding illustrates how more collaborative modes of teaching can better support students in the development of 21st-century skills such as collaboration and critical thinking (Saavedra, 2012).

**Finding 2.** Participants also valued individual reflection such as time they spent reading or reflecting on observations of other teachers. All participants highlighted the importance of taking time outside of the classroom to individually reflect on instructional practices. Reading was a key habit that all participants mentioned in response to this question. All of them seemed to have a keen desire to continue learning new ideas and improving their craft.

**Unexpected Findings**

Literature supports the idea that positive-student teacher relationships are crucial to students’ academic success, but it did not reveal how relationship building programs could help teachers build relationships with students in 21st-century learning environments (Davis, 2010; Hoy et al., 2012; Springborn, 2017). Multiple participants in one school site mentioned how a program named Capturing Kids’ Hearts helped them develop positive relationships with students. Almost every participant at one school site mentioned how Capturing Kids’ Hearts positively impacted his or her instruction. Teachers were all trained in Capturing Kids’ Hearts, a program that focuses on improving
the five indicators of school performance: fewer discipline referrals, improved
attendance, higher student achievement, lower dropout rates, and higher teacher
satisfaction (Flippen Group, 2010). At this site, almost all participants mentioned the
positive changes they had seen on campus because of the program and all participants
implemented program processes in their classrooms. There are a few reasons why
Capturing Kids’ Hearts might be such a positive catalyst at this school: (a) all staff
members were trained to use it and believe in its vision, (b) the principal encouraged
teachers to follow it, (c) teachers noticed positive changes in their classrooms as a result
of implementing it.

Conclusions

Several conclusions were drawn from the data concerning how teachers in P21
schools developed positive student-teacher relationships. By interviewing and observing
teachers in P21 schools as well as gathering artifacts, conclusions were formed in relation
to important findings and literature concerning student-teacher relationships in the 21st
century.

Conclusion 1: Interest in Creating a Positive Classroom Environment

Before delving into content and academic learning, these teachers seek to build a
classroom culture where students feel valued and respected. They believe that learning
cannot occur if students are scared or feel distrustful of those around them. For this
reason, safety is a priority. Teachers focus on providing support and encouragement to
students in order to create a classroom environment that is conducive to learning. Conner
et al. (2014) explained how positive student-teacher relationships occur when students
feel respected, valued, and supported by the teacher.
Conclusion 2: Student-Centered Activities That Focused on Skill Development

Teachers intentionally included various activities that allowed students more control of their own learning while decreasing their dependence on the teacher. During these activities, students would work with their peers by engaging in discussions or collaborative tasks. These activities allow for moments where students are able to voice their ideas rather than adopting a more passive role where they are simply listening to the teacher. These student-centered activities allow students to develop transferrable skills such as critical thinking, collaboration, and communication (Daniela, 2014; Silva, 2009).

Conclusion 3: Awareness of Students’ Academic Abilities

Findings from this study show that teachers are aware of students’ abilities because they check for understanding, assess students, and review data collected from assessments. By completing these steps, teachers can design more effective lesson plans that help students develop their academic abilities. This is especially helpful for struggling students who may need extra support. After determining areas in which students are struggling, teachers can pursue different options such as reteaching or working with students on an individualized basis. This conclusion is supported by data and literature (Absolum et al., 2010).

Conclusion 4: Focus on Skill Building

Different instructional strategies and learning tasks require students to develop a diverse skill set that will be useful even as students transition into the 21st-century workforce upon graduation. Wagner (2008) also highlighted how educators can help students effectively participate in the 21st-century global economy. Teachers need to continue supporting students in the development of 21st-century skills by integrating
innovative and engaging activities and learning tasks. P21 defined learning and innovation skills as creativity and innovation, critical thinking and problem solving, communication, and collaboration (Wilbert, 2017).

**Conclusion 5: Innovation Is Key**

More traditional modes are teacher-directed while 21st-century modes of instruction are more varied and require teachers to be facilitators of learning (Trilling & Fadel, 2008). Teachers in P21 schools understand this dynamic and are willing to adapt their teaching methods to better support current students. They consistently reflected on how they can best support students and change aspects of their instruction that are not enhancing student learning.

**Conclusion 6: Teachers Willing to Learn and Share Knowledge**

Effective teaching is done in collaboration with others. Collaboration is most effective when teachers are sharing information and constantly learning how to improve their instruction (Gilyard-Shyne, 2014). Teachers in P21 schools found their colleagues to be the most valuable resource at the school and learned how to refine their craft through professional collaboration. Teachers also led trainings in order to share their ideas and provide support for other teachers.

**Implications for Action**

The implications for action are based on the previous findings and conclusions. The implications for action are suggestions to school districts, higher education institutions, and policy makers to ensure that teachers have the support they need to create effective learning environments for students. These implications for actions also
relate to teachers in terms of how they can continue building positive student-teacher relationships in 21st-century learning environments.

**Implication for Action 1**

Data gathered during the course of this study suggest that there should be a governing set of behavioral norms that the school consistently communicates to students and teachers. The following actions are recommended in order to consistently build positive classroom environments.

- The school site leadership team must develop a set of skills and processes that prepare all teachers to effectively develop positive classroom environments and all staff can be trained in these skills and processes.
- Classroom teachers need to develop a set of classroom norms that are agreed upon by the students and teachers.
- The school site leadership team needs to allow opportunities for teachers to share practices they use in their classroom to build positive classroom environments.
- The school site leadership team needs to consistently communicate to students what schoolwide expectations are through posters, assemblies, and positive rewards such as prizes for respectful behavior.
- The school site leadership team needs to designate certain staff as mentors/advisers for different groups of students to ensure that each student has a trusted adult he or she can turn to.
- Teachers should be trained on assessment techniques that they could implement in the classroom in order to better monitor student learning.
Implications for Action 2

There need to be different methods to help teachers be aware of students’ needs especially if students have learning disabilities. The following actions are recommended in order to ensure that teachers are aware of their students’ learning needs and how best to support these students.

• Teachers in the special education department need to work collaboratively with general education teachers in order to help students who have learning disabilities. Schools can develop certain processes and structures that can help structure this interdepartmental collaboration (Stegall & Linton, 2012). Teachers can share ideas and collaboratively create resources that would support student learning.

• Teachers must use utilize various technological resources that help them formatively assess students by providing immediate feedback about students’ answers and responses. School districts need to provide trainings about these different resources. Data from formative assessments will help teachers understand areas where students may need more support.

• Teachers should distribute a survey that students can fill out about challenges they face outside of school as well as areas they can they struggle in both academically and personally.

Implications for Action 3

Even experienced teachers need to continue refining their teaching methods in order to effectively support students. The following actions are recommended in order to create a school culture where teachers are willing to be innovative.
• Each teaching department must complete best practices where teachers share effective instructional practices that they are implementing. As a follow-up to this best practices presentation, teachers need to share their experiences by implementing a strategy they learned about. The idea is that teachers will reflect on what went wrong and what can be improved in terms of implementing that strategy.

• The entire school staff must choose different professional development strands so that all staff members are working collaboratively in smaller strands. These strands can focus on different areas such as writing or reading. These strands must be led by other teachers who help their colleagues learn about 21st-century instructional strategies that can increase student engagement and learning. Staff members need to meet weekly to engage with their professional development strands.

• Administrators and teachers must work together to recognize teachers who are trying innovative strategies. This can be in the form of verbal recognition at a staff meeting or weekly bulletins that inform staff about the different instructional practices that teachers are trying to implement.

Implications for Action 3

Schools must consistently provide time for collaboration (Jewett & McPhee, 2012). The following actions are recommended in order to ensure that authentic collaboration occurs.

• Schools must institute instructional rounds or learning walks in order to allow teachers the opportunity to observe each other’s classrooms as well as reflect on the instructional practices that they saw.
• Schools need to create virtual calendars where teachers can post dates and times that they would like to be observed by their colleagues. Teachers could view these calendars and observe their colleagues at a time that is convenient for them.

• A time should be provided immediately after a workshop or conference for teachers to lesson plan. This would allow teachers to implement some of the tools that they are learning about. They would also get to lesson plan with their peers.

**Recommendations for Further Research**

Based on the findings and limitation of this study, the following section contains recommendations for future research:

• A research study should be conducted on how P21 schools facilitate professional collaboration on campus.

• A future study should examine which strategies are most effective when setting classroom norms.

• A future study should examine the specific strategies that P21 teachers use to formatively assess students and collect data about student performance.

• A future study should examine and evaluate how teachers changed their instruction as result of their collaboration with peers.

• Another study should examine to what extent the Capturing Kids’ Hearts program effectively supports the creation of a positive school culture.

• Another study should evaluate the effective ways in which teachers in P21 schools utilize technology to build positive student-teacher relationships and how this affects student outcomes.
A research study should examine how administrators in P21 schools support the development of positive student-teacher relationships

Concluding Remarks and Reflection

I began this research with a passionate interest in how teachers could facilitate students through the development of positive relationships with students. As I read more literature about the topic, I came across literature concerning 21st-century skills. I began realizing just how pivotal positive student-teacher relationships were to 21st-century learning. While literature has consistently proved the importance of positive student-teacher relationships, these relationships are even more important in the 21st-century classroom. This is primarily because students must be comfortable when collaborating with their peers or explaining their ideas to the teacher. No longer was it acceptable for students to assume a passive role in the classroom.

I decided to focus on P21 exemplar schools because these schools were known for creating 21st-century learning environments as based on the widely respected 21st-century skills framework that was developed by P21. I had the opportunity to meet with several teachers during my qualitative research. All of the teachers had one trait in common: the desire to get to know their students. In a personal sense, these teachers genuinely wanted to know about their students’ interests and intentionally created lessons that would spark students’ interest. On an academic level, these teachers wanted to know if there were specific concepts or content that students struggled to understand or if they needed certain accommodations.

Student-teacher relationships are critical to the success of students in 21st-century learning environments. I am committed to my continued research relating to this topic.
Through my work as teacher and as a result of my conversations with the participants in this study, I have learned about various ways to better support students.
REFERENCES


Hoy, L. K., Bradley, J., & Horwitz, J. (2012). Does your school have a Doug Franklin? Teachers can be the most important resource in the building. *Journal of Staff Development, 33(1)*, 50-52.


https://doi.org/10.1177/0031721714547857


https://doi.org/10.1080/13504620500169841


<table>
<thead>
<tr>
<th>STANDARD ONE:</th>
<th>STANDARD TWO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGAGING AND SUPPORTING ALL STUDENTS IN LEARNING</td>
<td>CREATING AND MAINTAINING EFFECTIVE ENVIRONMENTS FOR STUDENT LEARNING</td>
</tr>
<tr>
<td>1.1 Using knowledge of students to engage them in learning</td>
<td>2.1 Promoting social development and responsibility within a caring community where each student is treated fairly and respectfully</td>
</tr>
<tr>
<td>1.2 Connecting learning to students’ prior knowledge, backgrounds, life experiences, and interests</td>
<td>2.2 Creating physical or virtual learning environments that promote student learning, reflect diversity, and encourage constructive and productive interactions among students</td>
</tr>
<tr>
<td>1.3 Connecting subject matter to meaningful, real-life contexts</td>
<td>2.3 Establishing and maintaining learning environments that are physically, intellectually, and emotionally safe</td>
</tr>
<tr>
<td>1.4 Using a variety of instructional strategies, resources, and technologies to meet students’ diverse learning needs</td>
<td>2.4 Creating a rigorous learning environment with high expectations and appropriate support for all students</td>
</tr>
<tr>
<td>1.5 Promoting critical thinking through inquiry, problem solving, and reflection</td>
<td>2.5 Developing, communicating, and maintaining high standards for individual and group behavior</td>
</tr>
<tr>
<td>1.6 Monitoring student learning and adjusting instruction while teaching</td>
<td>2.6 Employing classroom routines, procedures, norms, and supports for positive behavior to ensure a climate in which all students can learn</td>
</tr>
<tr>
<td></td>
<td>2.7 Using instructional time to optimize learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANDARD THREE:</th>
<th>STANDARD FOUR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDERSTANDING AND ORGANIZING SUBJECT MATTER FOR STUDENT LEARNING</td>
<td>PLANNING INSTRUCTION AND DESIGNING LEARNING EXPERIENCES FOR ALL STUDENTS</td>
</tr>
<tr>
<td>3.1 Demonstrating knowledge of subject matter, academic content standards, and curriculum frameworks</td>
<td>4.1 Using knowledge of students’ academic readiness, language proficiency, cultural background, and individual development to plan instruction</td>
</tr>
<tr>
<td>3.2 Applying knowledge of student development and proficiencies to ensure student understanding of subject matter</td>
<td>4.2 Establishing and articulating goals for student learning</td>
</tr>
<tr>
<td>3.3 Organizing curriculum to facilitate student understanding of the subject matter</td>
<td>4.3 Developing and sequencing long-term and short-term instructional plans to support student learning</td>
</tr>
<tr>
<td>3.4 Utilizing instructional strategies that are appropriate to the subject matter</td>
<td>4.4 Planning instruction that incorporates appropriate strategies to meet the learning needs of all students</td>
</tr>
<tr>
<td>3.5 Using and adapting resources, technologies, and standards-aligned instructional materials, including adopted materials, to make subject matter accessible to all students</td>
<td>4.5 Adapting instructional plans and curricular materials to meet the assessed learning needs of all students</td>
</tr>
<tr>
<td>3.6 Addressing the needs of English learners and students with special needs to provide equitable access to the content</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANDARD FIVE:</th>
<th>STANDARD SIX:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSESSING STUDENTS FOR LEARNING</td>
<td>DEVELOPING AS A PROFESSIONAL EDUCATOR</td>
</tr>
<tr>
<td>5.1 Applying knowledge of the purposes, characteristics, and uses of different types of assessments</td>
<td>6.1 Reflecting on teaching practice in support of student learning</td>
</tr>
<tr>
<td>5.2 Collecting and analyzing assessment data from a variety of sources to inform instruction</td>
<td>6.2 Establishing professional goals and engaging in continuous and purposeful professional growth and development</td>
</tr>
<tr>
<td>5.3 Reviewing data, both individually and with colleagues, to monitor student learning</td>
<td>6.3 Collaborating with colleagues and the broader professional community to support teacher and student learning</td>
</tr>
<tr>
<td>5.4 Using assessment data to establish learning goals and to plan, differentiate, and modify instruction</td>
<td>6.4 Working with families to support student learning</td>
</tr>
<tr>
<td>5.5 Involving all students in self-assessment, goal setting, and monitoring progress</td>
<td>6.5 Engaging local communities in support of the instructional program</td>
</tr>
<tr>
<td>5.6 Using available technologies to assist in assessment, analysis, and communication of student learning</td>
<td>6.6 Managing professional responsibilities to maintain motivation and commitment to all students</td>
</tr>
<tr>
<td>5.7 Using assessment information to share timely and comprehensible feedback with students and their families</td>
<td>6.7 Demonstrating professional responsibility, integrity, and ethical conduct</td>
</tr>
</tbody>
</table>

Numbers are provided for ease of reference. They do not imply priority or ordering of the standards.
APPENDIX B

Observation Log

Date: Time: Class:

California Standard(s) for the Teaching Profession Being Addressed

- Engaging and supporting all students in learning
- Creating and maintaining effective environments for student learning
- Understanding and organizing subject matter for student learning
- Planning instruction and learning experiences for all students
- Assessing students for learning
- Development as a professional educator

<table>
<thead>
<tr>
<th>Factual observations</th>
<th>Personal observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

Interview Feedback Reflection Questions

Conducting interviews is a learned skill set/experience. Gaining valuable insight about your interview skills and affect with the interview will support your data gathering when interviewing the actual participants. As the researcher, you should reflect on the questions below after completing the interview. You should also discuss the following reflection questions with your observer after completing the interview field test. The questions are written from your prospective as the interviewer. However, you can verbalize your thoughts with the observer and he/she can add valuable insight from his/her observation.

1. How long did the interview take? _____ Did the time seem to be appropriate?

2. How did you feel during the interview? Comfortable? Nervous?

3. Going into it, did you feel prepared to conduct the interview? Is there something you could have done to be better prepared?

4. What parts of the interview went the most smoothly and why do you think that was the case?

5. What parts of the interview seemed to struggle and why do you think that was the case?

6. If you were to change any part of the interview, what would that part be and how would you change it?

7. What suggestions do you have for improving the overall process?
APPENDIX D

Research Participant’s Bill of Rights, Informed Consent, and Interview Protocol

BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD

Research Participant’s Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.

2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.

3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.

4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.

5. To be told what other choices he/she has and how they may be better or worse than being in the study.

6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.

7. To be told what sort of medical treatment is available if any complications arise.

8. To refuse to participate at all before or after the study is started without any adverse effects.

9. To receive a copy of the signed and dated consent form.

10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the Brandman University Institutional Review Board, which is concerned with the protection of volunteers in research projects. The Brandman University Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA, 92618.

163
Informed Consent

CONSENT TO PARTICIPATE IN RESEARCH

BRANDMAN UNIVERSITY
16355 LAGUNA CANYON ROAD
IRVINE, CA  92618

Research Topic: Effective strategies used by teachers in P21 exemplar schools to build positive relationships with students.

Researcher: Sneha Sharma, Doctoral Candidate

Purpose of Study: The purpose of this qualitative study is to identify and describe the various strategies that teachers in exemplar schools use to build positive relationships with students. These exemplar schools are identified by the Partnership for 21st Century Learning.

Procedures: By participating in this study, I agree to participate in a one-on-one recorded interview. The interview will be done in person; however, arrangements can be made, if necessary, to conduct the interview via Adobe Connect if participant is unable to meet in person. The interview will take approximately 45-60 minutes from start to finish, and I have been advised that I have the right to not answer a question, if I do not feel comfortable. After the interview, the researcher may ask me for any artifacts that support the development of positive student-teacher relationships in my classroom. I may also be asked to allow the researcher to come into my classroom and observe me as I teach.

I understand that:

1. There are minimal risks associated with participating in this study. I understand that the researcher will be safeguarding my confidentiality and anonymity by using a pseudonym and avoid using any identifying information, such as school district or school.

2. The potential benefit to me participating in this study is that I can add my expertise in the form of strategies to build positive relationships with students to other educators.

3. The findings at the end of the study will be made available to me.

4. My participation in this study is voluntary.

5. I will not be compensated for my participation in this study.

6. I can remove myself from the study at any time for any reason.
7. Any questions I have regarding this study can be directed to the researcher, Sneha Sharma, via e-mail at ssharma1@mail.brandman.edu or by phone at (949) 413-7687.

I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, at 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641. I acknowledge that I have received a copy of this form and the Research Participant’s Bill of Rights. I have read the above and understand it and hereby consent to the procedure(s) set forth.

____________________________________________ _____________________
Signature of Participant                        Date

____________________________________________ _____________________
Signature of Researcher                        Date
Interview Protocol Script

Oral Interview Script, Brandman University Doctoral Dissertation

Researcher: Sneha Sharma
Participant #:_____________ Date:______

Introduction

Hello, my name is Sneha Sharma and I am a doctoral student at Brandman University. Thank you for meeting with me today. Your time is valuable and I appreciate your participation.

The purpose of this qualitative study is to identify and describe the various strategies that teachers in exemplar schools use to build positive relationships with students. These exemplar schools are identified by the Partnership for 21st Century Learning.

Interviews with teachers will be used to gather information about strategies that teachers utilize in order to build positive student-teacher relationships in their classrooms. Data from these interviews will also provide insight into how teachers engage students while implementing innovative 21st-century instructional techniques. Five other teachers will be interviewed and all responses will be transcribed later.

I would like to remind you that this interview will be recorded so I can make sure to transcribe your answers correctly. This transcription will be sent to you so you can review it for accuracy. Please remember that your name will be anonymous. Additionally, all names will be removed from the transcript as well.

I will be reading from my interview template to conduct this interview. This will be done to ensure that all interviews will be conducted using the same protocol. Feel free to ask clarifying questions at any time during this process.
Informed Consent (required for Dissertation Research)

I would like to remind you that any information that is obtained in connection to this study will remain confidential. All of the data will be reported without reference to any individual(s) or any institution(s). After I record and transcribe the data, I will send it to you via electronic mail so that you can check to make sure that I have accurately captured your thoughts and ideas. Did you receive the Informed Consent and Brandman Bill of Rights I sent you via e-mail? Do you have any questions or need clarification about either document?

We have scheduled an hour for the interview. At any point during the interview you may ask that I skip a particular question or stop the interview altogether. For ease of our discussion and accuracy I will record our conversation as indicated in the Informed Consent. Do you have any questions before we begin? Let’s get started.
1. These are the six California Standards for the Teaching Profession from the California Commission on Teacher Credentialing. Each standard is listed on your card.

<table>
<thead>
<tr>
<th>STANDARD ONE: ENGGENG ENGAGING AND SUPPORTING ALL STUDENTS IN LEARNING</th>
<th>STANDARD TWO: CREATING AND MAINTAINING EFFECTIVE ENVIRONMENTS FOR STUDENT LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Using knowledge of students to engage them in learning</td>
<td>2.1 Promoting social development and responsibility within a caring community where each student is treated fairly and respectfully</td>
</tr>
<tr>
<td>1.2 Connecting learning to students’ prior knowledge, backgrounds, life experiences, and interests</td>
<td>2.2 Creating physical or virtual learning environments that promote student learning, reflect diversity, and encourage constructive and productive interactions among students</td>
</tr>
<tr>
<td>1.3 Connecting subject matter to meaningful, real-life contexts</td>
<td>2.3 Establishing and maintaining learning environments that are physically, intellectually, and emotionally safe</td>
</tr>
<tr>
<td>1.4 Using a variety of instructional strategies, resources, and technologies to meet students’ diverse learning needs</td>
<td>2.4 Creating a rigorous learning environment with high expectations and appropriate support for all students</td>
</tr>
<tr>
<td>1.5 Promoting critical thinking through inquiry, problem solving, and reflection</td>
<td>2.5 Developing, communicating, and maintaining high standards for individual and group behavior</td>
</tr>
<tr>
<td>1.6 Monitoring student learning and adjusting instruction while teaching</td>
<td>2.6 Employing classroom routines, procedures, norms, and supports for positive behavior to ensure a climate in which all students can learn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANDARD THREE: UNDERSTANDING AND ORGANIZING SUBJECT MATTER FOR STUDENT LEARNING</th>
<th>STANDARD FOUR: PLANNING INSTRUCTION AND DESIGNING LEARNING EXPERIENCES FOR ALL STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Demonstrating knowledge of subject matter, academic content standards, and curriculum frameworks</td>
<td>4.1 Using knowledge of students’ academic readiness, language proficiency, cultural background, and individual development to plan instruction</td>
</tr>
<tr>
<td>3.2 Applying knowledge of student development and proficiencies to ensure student understanding of subject matter</td>
<td>4.2 Establishing and articulating goals for student learning</td>
</tr>
<tr>
<td>3.3 Organizing curriculum to facilitate student understanding of the subject matter</td>
<td>4.3 Developing and sequencing long-term and short-term instructional plans to support student learning</td>
</tr>
<tr>
<td>3.4 Utilizing instructional strategies that are appropriate to the subject matter</td>
<td>4.4 Planning instruction that incorporates appropriate strategies to meet the learning needs of all students</td>
</tr>
<tr>
<td>3.5 Using and adapting resources, technologies, and standards-aligned instructional materials, including adopted materials, to make subject matter accessible to all students</td>
<td>4.5 Adapting instructional plans and curricular materials to meet the assessed learning needs of all students</td>
</tr>
<tr>
<td>3.6 Addressing the needs of English learners and students with special needs to provide equitable access to the content</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANDARD FIVE: ASSESSING STUDENTS FOR LEARNING</th>
<th>STANDARD SIX: DEVELOPING AS A PROFESSIONAL EDUCATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Applying knowledge of the purposes, characteristics, and uses of different types of assessments</td>
<td>6.1 Reflecting on teaching practice in support of student learning</td>
</tr>
<tr>
<td>5.2 Collecting and analyzing assessment data from a variety of sources to inform instruction</td>
<td>6.2 Establishing professional goals and engaging in continuous and purposeful professional growth and development</td>
</tr>
<tr>
<td>5.3 Reviewing data, both individually and with colleagues, to monitor student learning</td>
<td>6.3 Collaborating with colleagues and the broader professional community to support teacher and student learning</td>
</tr>
<tr>
<td>5.4 Using assessment data to establish learning goals and to plan, differentiate, and modify instruction</td>
<td>6.4 Working with families to support student learning</td>
</tr>
<tr>
<td>5.5 Involving all students in self-assessment, goal setting, and monitoring progress</td>
<td>6.5 Engaging local communities in support of the instructional program</td>
</tr>
<tr>
<td>5.6 Using available technologies to assist in assessment, analysis, and communication of student learning</td>
<td>6.6 Managing professional responsibilities to maintain motivation and commitment to all students</td>
</tr>
<tr>
<td>5.7 Using assessment information to share timely and comprehensible feedback with students and their families</td>
<td>6.7 Demonstrating professional responsibility, integrity, and ethical conduct</td>
</tr>
</tbody>
</table>

*Numbers are provided for ease of reference. They do not imply priority or ordering of the standards.*
2. The first standard on the card is Engaging and Supporting all Students in Learning (points to card). Based on your ability to successfully develop positive student-teacher relationships in your classroom, it is clear that you are able to engage and support students in learning. Are there specific things that you remember having done to engage and support students in learning within your classroom?
   • Are there some strategies that worked better than others?
   • Why were these strategies successful?
   • Were there any unintended outcomes to the strategies that you utilized?

3. The second standard on the card is Creating and Maintaining Effective Environments for Student Learning. This involves creating a classroom environment that is conducive to learning. Are there specific things you have done in order to create and maintain an effective environment for student learning?
   • Are there some strategies that worked better than others?
   • Why were these strategies successful?
   • Were there any unintended outcomes to the strategies that you utilized?

4. The third standard on the card is Understanding and Organizing Subject Matter for Student Learning. This addresses how teachers successfully use instructional strategies that support student learning. Can you describe a lesson where you were able to organize subject matter for student learning?
   • What instructional strategies did you utilize in the lesson in order to support student learning?
   • Why were these strategies successful?
   • Were there any unintended outcomes to the strategies that you utilized?

5. The fourth standard on the card is Planning Instruction and Designing Learning Experiences for all Students. This standard pertains to how teachers can meet the specific learning needs of their students. Are there specific things you do in order to meet the unique learning needs of your students?
   • How do you adapt instructional plans in order to meet the learning needs of students?
   • What are some curricular materials that help you meet the learning needs of all students?
   • Why were they successful?
   • Were there any unintended outcomes to the strategies that you utilized?

6. The fifth standard on the card is Assessing Students for Learning. Are there specific things you do in order to assess students for learning?
   • Are there some forms of assessment that worked better than others?
   • Why were these types of assessment successful?
   • Were there any unintended outcomes to the assessments that were implemented?

7. The sixth standard on the card is Developing as a Professional Educator. What activities do you engage in as you develop as a professional educator?
- Are there some strategies that worked better than others?
- Why were these strategies successful?
- Were there any unintended outcomes to the strategies that you utilized?

Thank you very much for taking the time to be interviewed. If you like, the results of my research can be sent to you upon completion of the study.

**GENERIC PROBES THAT CAN BE USED TO REQUEST MORE INFORMATION AND ASK THE INTERVIEW TO EXPAND UPON VARIOUS POINTS**

1. Could you elaborate on . . .
2. Do you have more to add?
3. Could you provide more details about . . .?
4. What did you mean by . . .?
5. Could you explain . . .
6. Can you give me an example of . . .
APPENDIX E

Confirmation Letter to Participants

Dear Qualitative Study Participant,

Thank you for agreeing to participate in my qualitative research study. Upon recommendation from your principal, you were selected as a teacher who is capable of building strong relationships with your students. Your role within the study is critical in helping all teachers in the 21st century learn specific strategies that enable the development of positive student-teacher relationships.

As a participant in this study, you agree to the following:

1. Participate in a one-on-one interview with me, as the researcher. The interview should last 45-60 minutes, and we will meet at a time and place that is convenient for you. Please be advised that the interview will be digitally recorded and transcribed by a transcription service. I will safeguard your confidentiality and anonymity by using a pseudonym and avoid using any identifying information, such as school district or school. You may decline to answer any questions that you do not feel comfortable answering.

2. You may be asked, as one of the teachers that participate in this research study, if I, the researcher, can observe you teaching one of your classes. This observation will provide me with an opportunity to gain a better sense of your ability to build positive teacher-student relationships. These observations will also be voluntary. I will document my observations in a written format, excluding names of all participants.

3. You may be asked, as one of the participants in this study, to share any artifacts that help you develop positive student-teacher relationships. These artifacts will help me
better understand how you build positive relationships with students in your classes.

This is voluntary. All my artifact analysis will be completed in a written format, excluding all names of participants.

If you have any questions about this study or would like any additional information about the study, please feel free to contact me at (949) 413-7687 or via e-mail at ssharma1@mail.brandman.edu.

Thank you for your participation in this research study.

Sneha Sharma, Doctoral Candidate
APPENDIX F

Audio Release Form

RESEARCH TITLE: Perceptions of Teachers Regarding Development of Positive Student-Teacher Relationships in P21 Schools Using California Standards for the Teaching Profession

BRANDMAN UNIVERSITY
16355 LAGUNA CANYON ROAD
IRVINE, CA  92618

RESPONSIBLE INVESTIGATOR: Sneha Sharma, M.Ed.

I authorize Sneha Sharma, M.Ed., Brandman University Doctoral Candidate, to record my voice. I give Brandman University and all persons or entities associate with this study permission or authority to use this recording for activities associated with this research study.

I understand that the recording will be used for transcription purposes and the identified-redacted information obtained during the interview may be published in a journal or presented at meetings and/or presentations. I will be consulted about the use of audio recordings for any purposes other than those listed above. Additionally, I waive any rights and royalties or other compensation arising from or related to the use of information obtained from the recordings.

By signing this form, I acknowledge that I have completely read and fully understand the above release and agree to the outlined terms. I hereby release any and all claims against any person or organization utilizing this material.

Signature of Participant: __________________________  Date: __________

Signature of Principal Investigator: ____________________  Date: __________
Interview Feedback Reflection Questions

Conducting interviews is a learned skill set/experience. Gaining valuable insight about your interview skills and affect with the interview will support your data gathering when interviewing the actual participants. As the researcher, you should reflect on the questions below after completing the interview. You should also discuss the following reflection questions with your observer after completing the interview field test. The questions are written from your prospective as the interviewer. However, you can verbalize your thoughts with the observer and he/she can add valuable insight from his/her observation.

1. How long did the interview take? _____ Did the time seem to be appropriate?

2. How did you feel during the interview? Comfortable? Nervous?

3. Going into it, did you feel prepared to conduct the interview? Is there something you could have done to be better prepared?

4. What parts of the interview went the most smoothly and why do you think that was the case?

5. What parts of the interview seemed to struggle and why do you think that was the case?

6. If you were to change any part of the interview, what would that part be and how would you change it?

7. What suggestions do you have for improving the overall process?
APPENDIX H

Field-Test Participant Feedback Questions

While conducting the interview you should take notes of their clarification request or comments about not being clear about the question. After you complete the interview ask your field test interviewee the following clarifying questions. Try not to make it another interview: just have a friendly conversation. Either script or record their feedback so you can compare with the other two members of your team to develop your feedback report on how to improve the interview questions.

Before the brief post interview discussion, give the interviewee a copy of the interview protocol. If their answers imply that some kind of improvement is necessary, follow up for specificity.

1. How did you feel about the interview? Do you think you had ample opportunities to describe what you do as a leader when working with your team or staff?

2. Did you feel the amount of time for the interview was ok?

3. Were the questions clear or were there places where you were uncertain what was being asked? If the interview indicates some uncertainty, be sure to find out where in the interview it occurred.

4. Can you recall any words or terms being asked about during the interview that were confusing?

5. And finally, did I appear comfortable during the interview . . . (I’m pretty new at this)?

Remember, the key is to use common, conversational language and very user-friendly approach. Put that EI to work.

NOTE: Red font is for your eyes and support info only.
APPENDIX I

Artifact Analysis

Date: Time: Title:

California Standard(s) for the Teaching Profession Being Addressed
   Engaging and supporting all students in learning
   Creating and maintaining effective environments for student learning
   Understanding and organizing subject matter for student learning
   Planning instruction and designing learning experiences for all students
   Assessing students for learning
   Development as a professional educator

Type of artifact
   Newsletter
   Communication with parents
   Bulletin boards/ class material
   Syllabus
   Class assignment

<table>
<thead>
<tr>
<th>Factual observations</th>
<th>Personal observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Institutional Review Board Approvals

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Sneha Sharma successfully completed the NIH Web-based training course "Protecting Human Research Participants."

Date of Completion: 05/16/2017

Certification Number: 2328988

National Institutes of Health Office of Extramural Research