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Pepperdine University
Graduate School of Education and Psychology

PREPARATION AND INSTRUCTIONAL COMPETENCY NEEDS OF THE NEW DENTAL
HYGIENE EDUCATOR: A PHENOMENOLOGICAL STUDY

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Educational Leadership, Administration and Policy

by

Kelly Donovan

July, 2017

Linda Purrington, Ed.D. – Dissertation Chairperson

This dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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ABSTRACT

This study focused on the instructional competency needs of new dental hygiene educators. The purpose of this qualitative and phenomenological study was twofold: (a) to explore the lived experiences and perceptions of 14 dental hygiene educators who have transitioned from clinical practice into the California Community College education system to further understand preparation experiences and instructional competence as related to knowledge, dispositions and skills and (b) to explore what recommendations dental hygiene educators might offer to better support new professors in developing instructional competence as related to knowledge, dispositions, and skills.

The researcher collected data by conducting semi-structured interviews. Several key themes emerged in the qualitative data including, a lack of supportive structures for new faculty, a lack of established pedagogical practices, a lack of staff development, the need for a formal orientation and mentorship programs, the need for pedagogical training for faculty, and standardization of best practices.

Findings from this research study supported several conclusions about the instructional competency needs for new dental hygiene educators in California, including: a formal program to support the transition of dental hygiene clinicians to become dental hygiene educators does not exist and has left educators under prepared to make a successful transition; developing instructional competency as a dental hygiene educator requires formal professional development and ongoing support that is currently lacking; new dental hygiene educators need supportive collaboration from fellow colleagues in order to increase consistency, communication, inclusion and calibration; and new dental hygiene educators would benefit from a formal orientation and mentorship program in teaching methodologies.

Study outcomes recommend the following for support for new dental hygiene educators: dental hygiene departments should expand ways to increase communication between adjunct and full-time faculty, technology training for new and existing faculty should be increased; the new dental hygiene educator should have additional education in teaching methodologies; new dental hygiene faculty should experience a formal orientation upon employment, and a formal mentorship programs should be implemented into dental hygiene programs. Broader recommendations include a three-part instructional competency model for new dental hygiene faculty to include a formal orientation prior to employment, teaching methodology training for faculty, and a formal mentorship program.

Chapter 1: Introduction

In the last 25 years, the scientific community as well as the public sector has put emphasis on the importance of oral health. The association between systemic disease and oral health has been studied among the literature (Åberg, Helenius-Hietala, Meurman, & Isoniemi, 2014; Frisbee, Chambers, Frisbee, Goodwill, & Crout, 2010; Wayne, Trajtenberg, & Hyman, 2001). As dental knowledge has increased, there is a heightened awareness between the link between periodontal diseases and systemic conditions. Research has demonstrated that the association between oral inflammation and systemic inflammation may be linked to a multitude of health risks such as cardiovascular disease, diabetes, respiratory disease, and adverse pregnancy outcomes, as well as deleterious effects on multiple organ systems (Gurenlian, 2006; Oluwagbemigun, Dietrich, Pischon, Bergmann, & Boeing, 2015). As the awareness of the interrelationship between oral infection and systemic health has increased, the need for oral healthcare providers, specifically dental hygienists, has also evolved.

The evolution of the dental hygiene profession began in the early 1900s, when dentist Dr. Alfred Civilion Fones recognized the importance of the routine removal of stains and deposits from the teeth. Dr. Fones trained his chairside assistant, Irene Newman, to perform scaling and polishing as preventative procedures. As a result of these preventative procedures, Dr. Fones's patients presented with healthier gum tissue and less dental decay (University of Bridgeport, n.d.). Realizing that the dental auxiliary could play an important role in oral care, Fones coined the term *dental hygienist*, as he felt the term accurately described “one who is versed in the science of health and the prevention of disease” (American Dental Hygienists' Association [ADHA], 2016, p. 1). In a desire to increase oral health awareness with the community, in 1913

Dr. Fones began the first dental hygiene school in the nation, the Fones School of Dental Hygiene (ADHA, 2016).

From the humble beginnings of Dr. Fones's first class of 27 dental hygiene graduates in 1914, dental hygiene programs have expanded to over 300 accredited dental hygiene programs nationwide, with 29 accredited dental hygiene programs located in California. Preparation and admission requirements for entry-level dental hygiene programs generally include a minimum of 40 credit hours in prerequisite college coursework in chemistry, anatomy, physiology, microbiology, English, speech, psychology, and sociology. Upon completion of the program's required prerequisites and acceptance in the dental hygiene program, the program length is a minimum of 2 years full-time. Accredited dental hygiene programs require an average of 2,932 clock hours of curriculum, including 659 clock hours of supervised clinical dental hygiene instruction. Units for degree completion include an average of 84 credit hours for an associate degree, and 118 credit hours for a baccalaureate degree. Baccalaureate and master's level degree programs are also offered for students interested in research, education, public health or administration (ADHA, 2014).

Upon graduation, the dental hygienist is trained to play an integral role in helping individuals achieve and maintain superlative oral health. Dental hygienists provide educational, clinical, and consultative services to individuals and populations of all ages and environments (ADHA, 2014). The professional roles of the dental hygienist include the following: clinical practitioner/periodontal therapist, educator, researcher, administrator/manager, public health advocate, corporate representative, and entrepreneur (Vitaren, Pellikka, Singh, & Widstrom, 2015).

The dental hygiene profession continues to develop, and the need for highly educated dental hygiene professionals has increased. Employment within the dental hygiene profession is projected to grow 19% from 2014 to 2024 (U.S. Bureau of Labor and Statistics, 2015). As displayed and Figures 1 and 2, dental hygiene employment reflects projected growth as well as an increase in enrollment. In the last 25 years, dental hygiene programs have shown a 65% increase in student enrollment (ADHA, 2014). As dental hygiene program enrollment increases, so does the need to recruit qualified dental hygiene educators.

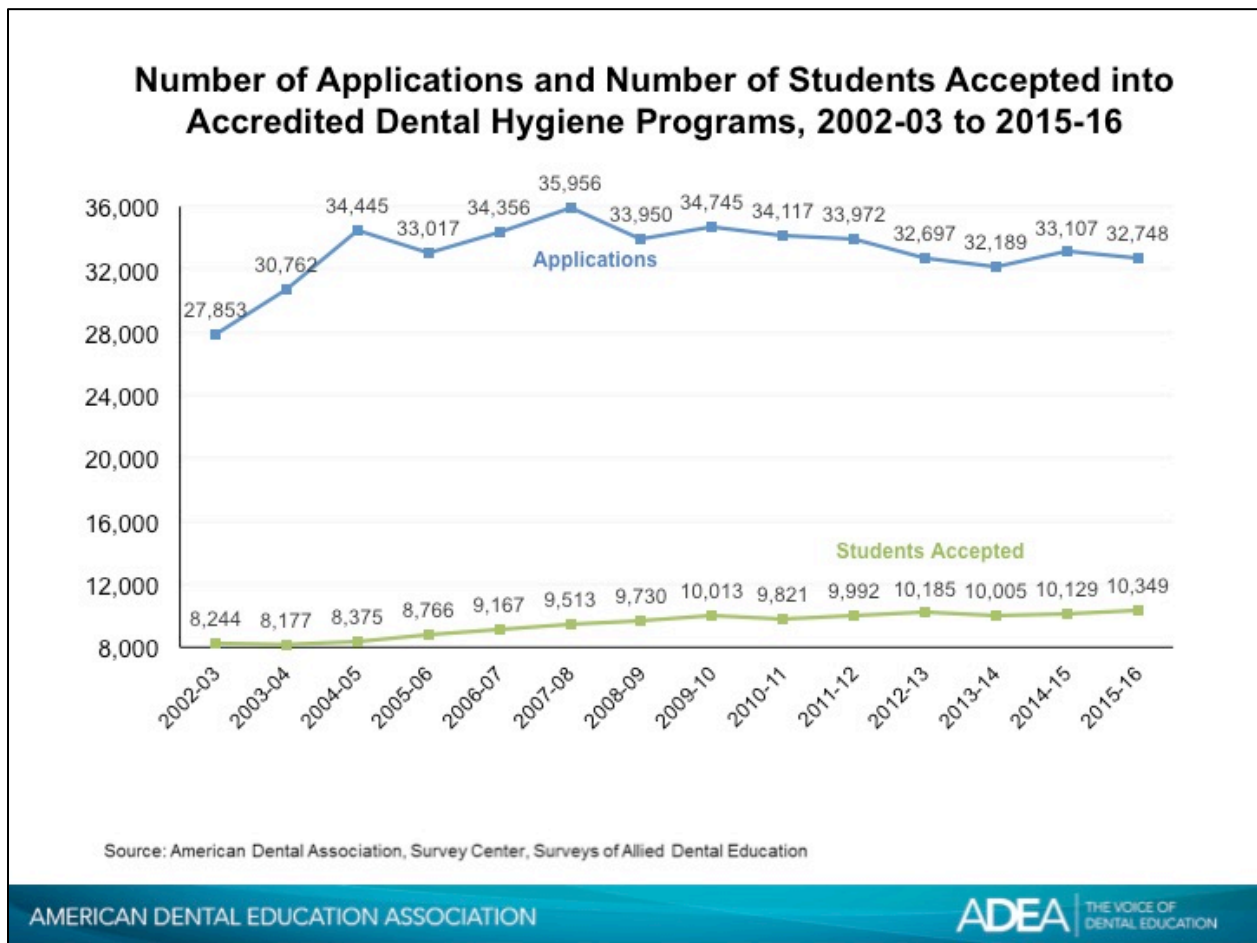


Figure 1. Number of applications and number of students accepted into accredited dental hygiene programs, 2002-3 to 2015-16. Reprinted from “Applicants, Enrollees and Graduates,” by the American Dental Education Association, n.d., retrieved from <http://www.adea.org/publications-and-data/data-analysis-and-research/applicants-enrollees-and-graduates.aspx>. Copyright 2017 by the author. Reprinted with permission.

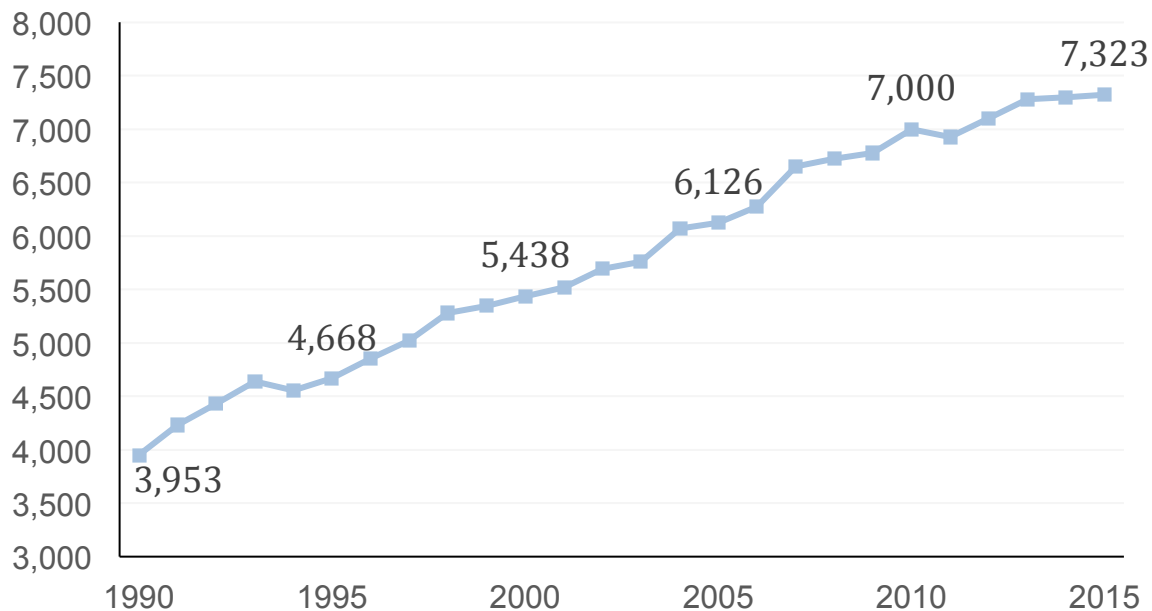


Figure 2. Number of dental hygiene graduates 1990-2014. Reprinted from “Applicants, Enrollees and Graduates,” by the American Dental Education Association, n.d., retrieved from <http://www.adea.org/publications-and-data/data-analysis-and-research/applicants-enrollees-and-graduates.aspx>. Copyright 2017 by the author. Reprinted with permission.

Licensed dental hygiene clinicians who wish to transition to education may do so through several pathways. Dental hygienists who hold an associate degree with 5 years of experience may apply for adjunct clinical faculty positions. Candidates who wish to teach didactic courses must hold a bachelor’s or master’s degree in a related field and are also required to have a minimum of 5 years of clinical experience (ADHA, 2014). Of the dental hygiene clinicians that do transition from clinical practice into education, many do so as a result of their clinical expertise and performance (Battrell et al., 2014). Data reveal that one of the top challenges facing dental hygiene programs in the future is the recruitment of qualified faculty (ADHA, 2014). Dental hygiene clinical instructors may be proficient in the clinical setting but may lack the pedagogical background to develop instructional competencies to support the transition from clinical practice to dental hygiene educator (Frantz & Smith, 2013; Hunt, Curtis, & Sanderson, 2011).

Problem Statement

Many dental hygienists become dental hygiene clinical educators as a result of their clinical expertise and performance (Battrell et al., 2014; Frantz & Smith, 2013; Tax, Doucette, Neish, & Maillet, 2012). New dental hygiene clinical instructors may be proficient in the clinical setting but may lack the pedagogical background to develop instructional competencies to support the transition from clinical practice to dental hygiene educator (Frantz & Smith, 2013).

A problem exists, as there is often no formal training for new dental hygiene faculty transitioning from clinical practice to the classroom. As a result, dental hygiene programs may hire faculty that lack preparation as instructors (Battrell et al., 2014; Carr, Ennis, & Baus, 2010). A lack of preparation may exist, as new dental hygiene faculty often have a minimal overview of adult learning theory and practice methodologies (Frantz & Smith, 2013; Hunt et al., 2011). Additionally, research describes that the transition from clinical practice into education is challenging due to changes in environment, culture, expectations and professional development (Frantz & Smith, 2013).

Existing literature explores the motivating factors of dental hygienists in the career change from clinical practice to education (Gancarz, 2011), as well as professional development for current clinical instructors (Ley, 1982). However, the preparation experiences and instructional competency needs of new dental hygiene professors have not been fully studied. Therefore, further research was indicated to gain understanding of the development of an instructional competency model for new dental hygiene faculty.

The Purpose and Nature of the Study

The purpose of this phenomenological study was to explore the experiences and perceptions of 14-20 California dental hygiene educators who have transitioned from clinical

practice into the community college education system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency.

Importance of the Study

Current literature primarily addresses the concern of dental hygienists' motivating factors for career change into education as well as professional development for current clinical instructors; however, there is a gap in the literature surrounding the perceptions of the needs of the new dental hygiene educator in preparation experiences and instructional competence. This study is particularly compelling at this time due to the increase in dental hygiene enrollment and need for qualified faculty applying for vacancies (ADHA, 2014). This study may be of importance to existing and future dental hygiene students, dental hygiene educators, and the dental hygiene profession. The impact of this study may inform California dental hygiene educators and the perceptions of other allied-health educators statewide, in addition to providing a more comprehensive understanding of the needs of new dental hygiene and allied-health faculty transitioning from clinical practice to education. A better understanding of new dental hygiene and allied-health faculty needs might result in better preparation of dental hygiene faculty and student instruction, and ultimately lead to improved patient care.

Definition of Terms

Registered dental hygienist (RDH): Licensed preventive oral health professionals. Dental hygienists must graduate from an accredited dental hygiene program with a certificate, associate, or baccalaureate degree, and pass the written National Board Examination and the clinical state board licensure examination (California Dental Hygiene Educators Association [CDHA], 1995).

Dental hygiene instructor: An adjunct, or full-time clinical instructor who is involved in teaching dental hygiene students in a clinical and/or classroom setting. The individual instructs

students on instrumentation techniques, assessment of patients, implementation of dental hygiene services, and evaluation of dental hygiene services (Paulis, 2011).

Methods of dental hygiene clinical instruction: The assistance, facilitation, and assessment of student learning undertaken by clinical instructors in teaching dental hygiene students (Paulis, 2011).

Instructional competence: The educator's possession of required skill, knowledge, qualifications, or capacity to deliver information to the student, including the following: knowledge, skills, and dispositions (Cummins & Asempapa, 2013; Veal & Allan, 2014).

Legitimate peripheral participation (LLP): How individuals who are new in a field become experts within that field through the apprenticeship model (Lave & Wenger, 1991).

Significant statement: An expression used by the researcher to keynote important themes.

Theoretical Framework

Lave and Wenger's situated learning theory describes how individuals acquire professional skills, extending research on apprenticeship into how peripheral participation leads to membership in a community of practice (Wenger, 1998). The dental hygienist transitions from clinical practice into a community of higher education. As the new instructor develops skills in instructional practices, he/she becomes a member of a new community of practice (dental hygiene instructors). The framework for this study supports the existing research that describes the need for new clinical instructors transitioning from clinicians to academics to undergo socialization into the academic role (Frantz & Smith, 2013).

Research Questions

The following two research questions guided this study:

1. What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions and skills?
2. What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions, and skills?

Delimitations

The delimitations utilized by the researcher in this study were determined by a desire to better gain an understanding of the needs and perspectives of dental hygiene educators in order to further understand how dental hygiene programs within the California Community College system might better support new professors in developing instructional competency. In order to gain these perspectives, the researcher sought participants who were faculty hired within the community college system. The use of community college faculty as participants did not allow the researcher to gain the views of faculty hired in private institutions or 4-year universities.

Limitations

The study had the following limitations. Data were gathered from dental hygiene educators in California and may not be representative of all dental hygiene educators in the nation or even statewide. Many variables outside the researcher's control had the potential to impact the study, such as the participants' complete participation. This qualitative study relied on participants' recollection of events, and did not examine the transition as it was occurring; as a result, participants may have encountered difficulties in reflecting back on their needs as new dental hygiene educators.

Assumptions

This study included the following assumptions. The selected participants will understand the interview questions and will not be restricted by a language barrier. The selected participants will give complete responses to the interview questions. The data collected will accurately provide significant statements, themes, and rich and thick descriptions of the participants' experiences.

Organization of Study

This research study is presented in five chapters. Chapter 1 includes the background of the study, statement of the problem, purpose and nature of the study, importance of the study, research questions, theoretical framework, conceptual models and variables, delimitations, limitations, and assumptions of the study. Chapter 2 presents a review of the literature, which includes adult learning theory, situated learning theory, and empirical literature relating to allied health and dental hygiene programs specifically surrounding the following instructional competency needs: knowledge, dispositions, and skills. Chapter 3 describes the methodology used for this research study, including selection of participants, instrumentation, data collection, and data analysis procedures. Chapter 4 presents the study's findings, including demographic information, and results of the data analysis for significant statements, meaning units, textual and structural description, and the description of essence (Creswell, 2013). Chapter 5 provides a summary of the entire study, discussion of the findings, implications of the findings for theory and practice, recommendations for further research, and conclusions.

Chapter 2: Review of Literature

This chapter presents the rationale for conducting research to explore the perceptions and experiences of California dental hygiene educators who have transitioned from clinical practice into education in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. A problem exists, as there is often no formal training for new dental hygiene faculty transitioning from clinical practice to the classroom. As a result, dental hygiene programs may hire faculty that lack preparation as instructors (Battrell et al., 2014; Carr et al., 2010). A lack of preparation may exist as new dental hygiene faculty often have a minimal overview of adult learning theory and practice methodologies (CODA Dental Hygiene Standards, 2013).

Existing literature explores dental hygienists' motivating factors in the career change from clinical practice to education, as well as professional development for current clinical instructors. However, the preparation experiences and instructional competency needs of new dental hygiene professors have not been studied fully. Therefore, further research is indicated to gain understanding in the development of an instructional competency model for new dental hygiene faculty. The following review of the literature represents the literature pertinent to this research study, and is categorized into five sections: (a) development of dental hygiene education; (b) situated learning theory and the community of practice; (c) instructional competency needs of the new dental hygiene educator concerning knowledge, dispositions and skills; (d) pedagogy within dental hygiene instruction; and (e) existing instructional competency models.

Development of Dental Hygiene Education

As was first introduced in Chapter 1, as the dental hygiene profession continues to develop, the need for highly educated dental hygiene professionals has increased. Employment within the dental hygiene profession is projected to grow 19% from 2014 to 2024 (U.S. Bureau of Labor and Statistics, 2015). As dental hygiene employment reflects projected growth, dental hygiene programs also reflect an increase in enrollment. In the last 25 years, dental hygiene programs have shown a 65% increase in enrollment (ADHA, 2014). As dental hygiene program enrollment increases, so does the need to recruit qualified dental hygiene educators.

Licensed dental hygiene clinicians who wish to transition to education may do so through several pathways. Dental hygienists who hold an associate degree with 5 years of experience may apply for adjunct clinical faculty positions. Candidates who wish to teach didactic courses must hold a bachelor's or master's degree in a related field and are also required to have a minimum of 2 years of clinical experience (DHCC, 2016). Of the dental hygiene clinicians that do transition from clinical practice into education, many do so as a result of their clinical expertise and performance (Battrell et al., 2014). Data reveal that one of the top challenges facing dental hygiene programs in the future is the recruitment of qualified faculty (ADHA, 2014). Dental hygiene clinical instructors may be proficient in the clinical setting but may lack the pedagogical background to develop instructional competencies to support the transition from clinical practice to dental hygiene educator (Frantz & Smith, 2013; Hunt et al., 2011). To support the need for further investigation in the instructional competency for the new dental hygiene educator, key learning theories will be reviewed.

Theoretical Framework

A review of the literature suggests traditional models of learning by evaluation have been challenged with models of situated learning in communities of practice within healthcare education (Abma, 2007). Traditional models of learning suggest a cognitive process in which the student is evaluated through abstract findings and conclusions that are conveyed by the evaluator. Conventional learning models are based on the idea that children can be taught abstract concepts in order for knowledge to be applied to many different situations, and see learning and doing as separate acts (Hendricks, 2001). The memorization of vocabulary terms, for example, would encourage learning through abstraction. The learner may associate the terms only to the context in which they were originally presented, and may not associate the term to real-world problems and situations (Brown, Collins, & Duguid, 1989). Situated theorists would argue that learning and doing are not separate acts, but instead are situated and embedded in sustained participation. From childhood to adulthood, beliefs and behaviors are implemented from the social groups from which they interact (Caldwell, 2011; Hendricks, 2001). This study employs the theoretical framework of situated learning theory within the construct of the community of practice (Lave & Wenger 1991).

Situated learning theory. Situated cognition is founded on the work of Vygotsky (1978), and is also connected to the work of Brown et al. (1989); Lave, (1993, 1998); and Lave and Wegner (1991); Leont'ev (1981); and Renolds, Sinatra, and Jetton (1996). Situated cognition espouses the idea that learning and doing are inextricable and are a process of enculturation (Brown et al., 1989). Situated learning theories reject the traditional models of evaluation, citing that learning should not isolate or distance the learner from the active learning process (Abma, 2007). Situated cognition stresses that from childhood to adulthood, beliefs and behaviors are

implemented within social groups (Hendricks, 2001). Evaluation within the situated learning model accentuates learning as contextually and relationally bound (Abma, 2007). Vygotsky (1978) described the relationship between knowledge and cognition as a result of socio-historical experience (Hendricks, 2001). Moreover, Lave and Wenger (1991) termed this situated learning process legitimate peripheral participation (LPP), and claimed that the collective processes of knowing and learning are embedded in social context reflective of an intimate connection between knowledge and action. Knowledge and the action of learning are collective processes embedded in social context where personal interaction takes place. Therefore, a process that is situated within a social context is known as a community of practice (Abma, 2007).

Community of practice. Wenger (1998) argued that learning involves the relationship of four distinct interconnected parts: meaning (learning as experience), practice (learning as doing), community (learning as belonging), and identity (learning as becoming; Williams, Ritter, & Bullock, 2012). Therefore, knowledge and actions are formed through communities of practice that support a shared learning process (Lave & Wenger, 1991). *Shared* refers to commonalities such as culture, aspirations, or objectives among professionals, and therefore is recognized as a practice (Hendricks, 2001). Personal relationships are established among the community members, which in turn nurture respect among the group members. Collective experiences, stories, and mutual collaboration create opportunities for other members to join the community, which subsequently creates a living community system. Such living communities offer the learner the freedom to acquire knowledge in his/her field that may not be found in the formal structure of his/her organizational system (Abma, 2007; Tax et al., 2012). Studies have been conducted exploring community of practice models in pharmacy education and post-graduate

medical education that involve apprentice learning, which may enhance intra-faculty member collaboration (Austin & Duncan-Hewitt, 2005).

Apprenticeship model. The situated learning model coincides with the apprenticeship-learning model, an early model dating back to Greek and Roman times that describes the master/apprentice relationship (Caldwell, 2011). The expert teaches a craft to the apprentice through means of modeling, coaching, articulation, reflection, exploration, and explanation of problem solving through experience in order to solve real-world problems (Brown et al., 1989; Collins et al., 1989). Apprenticeship learning supports cognitive thinking, as well as the apprentice's experiences moving through the transition process from novice to expert. As the novice is unprepared for individual work, this relationship allows the novice to improve and grow as a learner until he/she may complete tasks alone. As the novice becomes more skilled and acquires competence in the subject matter, the learner then moves from apprentice to expert (Lave & Wenger, 1991; Vygotsky, 1978). As the apprentice moves from novice to master, the individual is admitted to the community of practice fully embedded within its established behaviors and culture (Caldwell, 2011).

The literature suggests that the apprenticeship-learning model within the healthcare teaching system has not been utilized effectively primarily due to the idea that healthcare instruction can be "standardized, reproducible and measurable" (Caldwell, 2011 p. 6). Simulations and standardized clinical examinations imply that there is one way for a healthcare provider to respond to a given situation, suggesting that the healthcare environment is reproducible and measurable and that standardized exams are a valid indicator of clinical expertise. Situated theorists reason that the clinician needs to be trained to act spontaneously in a variety of situations that cannot possibly be standardized. Such theorists are concerned with the

revitalization of the apprenticeship model within the constructs of the clinician-educator transition in order to restore and foster the relationship among clinicians, educators, and apprentices (Caldwell, 2011). Through the apprenticeship model, novice clinical educators are able to see how experts resolve problems through guided experience (Hendricks, 2001). The novice clinical educator is given small tasks with responsibility, and then moves into more difficult tasks with added responsibility and experience (Caldwell, 2011). Situated theorists deem apprenticeship and mentorship necessary within the clinical setting in order to draw clinicians and educators together to renew the relationship between apprentice and master and restore the “assessment of expertise” (Caldwell, 2011, p. 3).

Situated learning theory and the apprenticeship model are highly applicable to the dental hygienist transitioning from clinical practice into a community of higher education. As the dental hygienist transitions from clinical practice to education, he/she develops a new identity as a dental hygiene instructor. As the new instructor develops skills in instructional practices, he/she becomes a member of a new community of practice of dental hygiene educators. As experiences are shared among the community, it fosters a culture of support among its members. With mentorship, time, and experience, the novice educator transitions to master. The master educator continues to foster new hygienists transitioning from clinical practice to education via apprenticeship learning, and thus contributes to the next generation of a community of practice of dental hygiene educators.

Instructional Competence

As mentioned previously, expert clinicians who transition from clinical careers to academia often discover they are unprepared to undertake their new role as educators (Poindexter, 2013). A review of the literature suggests that limited tools exist for the evaluation

of clinical instructors that include a focus on clinical teaching behaviors (Beliveau et al., 2015; Young et al., 2014). Therefore, this section of the literature review will address the instructional competency needs of the new dental hygiene educator, as well as how the new educator might be supported in adopting new competency skills. The literature indicates that the key competencies of knowledge, skills, and dispositions are critical tools for the new healthcare educator (Cummins & Asempapa, 2013; Veal & Allan, 2014).

Knowledge. Review of the literature suggests that novice educators receive little or no training in instructional efficacy, but are expected to assume entry-level teaching positions with specific levels of established proficiency in competencies of knowledge (Fiedler, 2015; Poindexter, 2013; Srinivasan et al., 2011). Studies have determined that the novice healthcare educator may be responsible for an extensive range of clinical practice competencies across the curriculum. Due to the complexity surrounding knowledge competencies, the clinical professional transitioning into the role of novice educator may not be adequately prepared to support the expectation of established proficiency. Furthermore, according to the literature, the type of academic institution and position type may determine the required qualifications and competencies to be assigned to a teaching position. For example, data show that research-based institutions may emphasize competencies of knowledge that supports a scholarly role, whereas community colleges may reflect a focus on clinical competence at a generalist level. Additionally, similar skills with varied performance levels are expected for tenured and non-tenured faculty (Poindexter, 2013). As competencies incorporating knowledge are varied and defined ambiguously, determining the definition and understanding of the competencies may provide clarity and support for the new healthcare educator.

Billett (2015) defined *knowledge* in clinical education to encompass everything an individual might know (conceptual), do (procedural), and value (dispositional). These forms of knowledge are interrelated, and together define an individual's *readiness* to engage with and learn from his/her experiences. Conceptual knowledge can be seen in a hierarchical order, with factual knowledge at the lowest level describing basic knowledge skills and understanding, and conceptual knowledge at the highest level, including deep knowledge, encompassing critical thinking and reasoning skills. Procedural knowledge may be defined as how the learner achieves goals through thinking and acting. Procedural knowledge is also hierarchical in order, and describes lower-order functions for enacting single tasks to higher-order functions that include monitoring and evaluating student outcomes. Dispositional knowledge comprises the social, occupational specific, and personal attitudes, values, and interests that guide an individual's thinking, acting, and learning. Additionally, Billet maintains that without the appropriate readiness, the novice healthcare educator may conceptually understand facts but may of not had the repertoires and experiences to determine knowledge competency. To further understand the competency needs of the new healthcare educator surrounding conceptual and procedural knowledge, specific competencies must be determined.

McDonald (2010), Mlyniec, (2012), Poindexter (2013), and Srinivasan et al. (2011) proposed that novice healthcare instructors need to learn a variety of instructional competencies, including:

1. Knowledge in teaching methods, curriculum, and evaluation
2. Knowledge of pedagogical methods, including the interrelation of feedback, assessment, grading in clinical courses

3. Clinical expertise, as well as knowledge of how to teach and evaluate students in a didactic and clinical setting
4. Knowledge of educational theories, evidence-based teaching practices, and the ability to teach diverse learners.
5. Knowledge of values and ethics relating to didactic and clinical instruction
6. Application of established and evolving knowledge to facilitate, recognize, and prioritize critical care issues to ensure effective care of patients

Established knowledge-based competencies may be used as a framework for the new healthcare educator in order to provide guidance for development of career paths. The novice healthcare educator should be provided the opportunity to develop the knowledge competencies appropriate to his/her particular institution in order to make an informed and intentional transition process into the educator role. Furthermore, the literature suggests that learning institutions should establish continuous quality improvement efforts to properly prepare candidates with the knowledge necessary to address emerging educator role requirements within academia. Educational development programs including formal graduate programs and comprehensive orientation programs may help the novice educator achieve the knowledge necessary to successfully transition from clinical practice to education (Poindexter, 2013).

Dispositional knowledge. In addition to the demands and responsibilities of new teacher candidates in competencies of conceptual and procedural knowledge, the new health educator must also learn to become proficient in intellectual, moral, and cultural dispositions (Carroll, 2012). A disposition can be described as “a tendency, propensity, or inclination to behave or act in certain ways under certain circumstances” (Siegel, 1999, p. 208). Dispositions are essential characteristics for the new educator as they influence the behavior and personal growth toward

students, colleagues, and communities that affect student development. Increasingly diverse student populations demand the new health educator understand the linguistic, cultural, physical and socioeconomic differences of today’s student population.

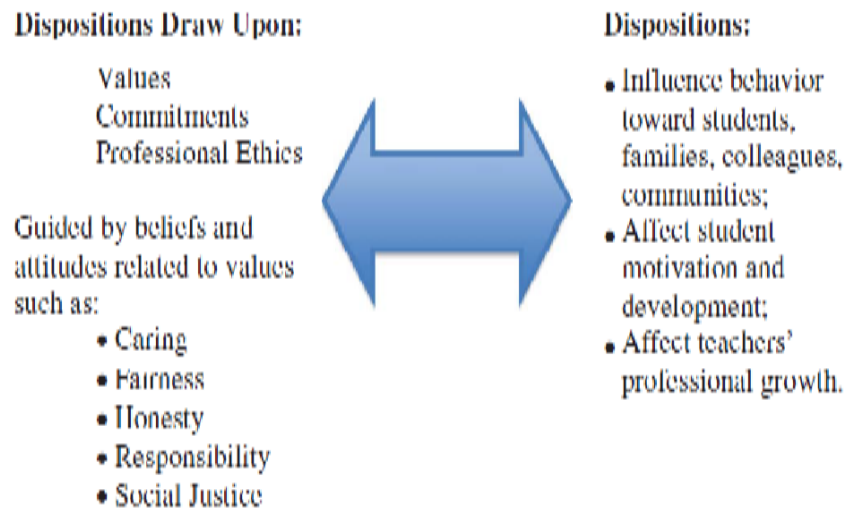


Figure 3. NCATE’S definition of dispositions. Reprinted from “Examining the Development of Dispositions for Ambitious Teaching,” by D. Carroll, 2012, *New Educator*, 8(1), p. 41. Copyright 2012 by the author. Reprinted with permission.

Increased awareness surrounding teaching and dispositions were emphasized in the 1990s with the efforts of the Interstate New Teacher Assessment (INTASC) and the National Council for the Accreditation of Teacher Education (NCATE; Carroll, 2012). Each of these entities stressed that teaching was more than *knowing* about the subject matter, and included the integration of knowledge coupled with values, commitments, and professional ethics. The NCATE (2002) defined dispositions as values, commitments and professional ethics guided by beliefs and attitudes related to caring, fairness, honesty, responsibility, and social justice. This process indicates that dispositions connect beliefs and values with action and determines optimal teacher performance requires both knowledge and strategic dispositions. Carroll (2012) described the five developing dispositions of the new educator:

1. *Values* that emerge out of their family life, culture, and previous experience, such as having a strong work ethic or valuing teamwork or community.
2. *Beliefs* that guide them in considering what is true or right (emanating from either their religious background or elsewhere) about such things as human nature and appropriate family roles and expectations.
3. *Ideals* about what the world ought to be like, or about what they hope to make happen as teachers.
4. *Ideas*, concepts, and understandings about human learning, pedagogy, curriculum, and classrooms based upon their prior and ongoing experience as students.
5. *Personal experiences* and aspects of cultural, gender, race, ethnicity, and social class background that affect perceptions, provide examples, and situate other aspects of their inner qualities in visions of how to act and what or what not to strive for.

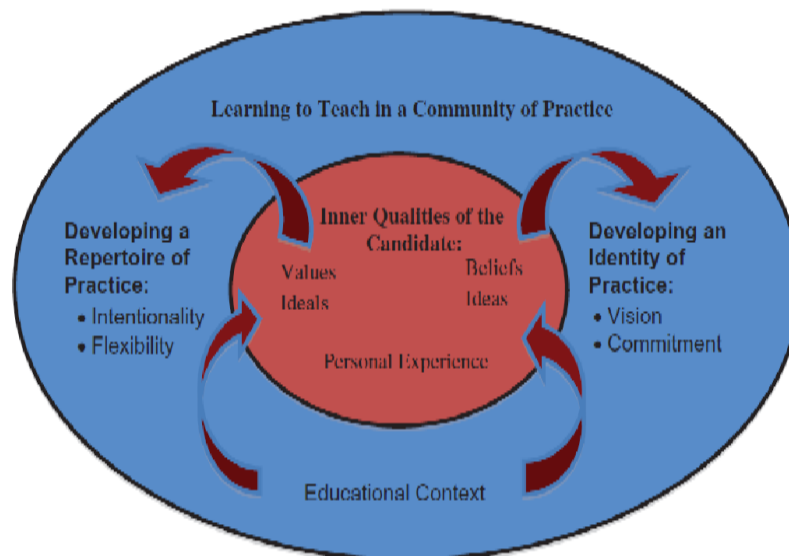


Figure 4. Developing dispositions for ambitious teaching. Reprinted from “Examining the Development of Dispositions for Ambitious Teaching,” by D. Carroll, 2012, *New Educator*, 8(1), p. 44. Copyright 2012 by the author. Reprinted with permission.

Additionally, Poindexter (2012) described the essential dispositional components of the healthcare educator as the ability to communicate within multidisciplinary healthcare agencies,

the demonstration of positive and collaborative working relationships, and the establishment of effective communication skills with colleagues and patients.

Due to the complexity of the essential dispositional components for the new educator as well as the vast difference in individual social skills, educators' personal understanding of dispositional competencies may differ. Carroll (2012) and Giovacco-Johnson (2005) discussed several dispositional obstacles facing the new educator, including: adjusting to academia; acceptance of constructive criticism; distinguishing the boundary between teacher and friend; difficulties forming effective professional relationships and collegial interactions due to cultural, experimental, and philosophical differences; and complications relating to responsibility and authority. Moreover, the literature suggests that many professionals in education believe that new educator candidates come *endowed* with the dispositions necessary in order to become effective educators, and this endowment is the reason the candidates have chosen to enter the teaching profession (Cummins & Asempapa, 2013). Carroll (2005) disputed this idea, instead emphasizing that dispositions are not developed naturally and dispositions are acquired and developed through a "community effort" (p.60). In order to attain dispositional competency, new healthcare educators need the assistance of more experienced colleagues in order to model dispositions in professional contexts, support collaborative inquiry, and facilitate the interpretation of past experiences (Carroll, 2012; Cummins & Asempapa, 2013; Diaz, 2007).

The new educator's dispositions are developed through daily experiences, observations of experienced faculty and colleagues, as well as the process of identity development. The concept the development of identity through observation of others directly relates to Wenger's (1998) concept of communities of practice. Wegner described the repertoire of communities of practice and identity of practice as inseparably linked. A person's virtues are the result of intentional and

strategic actions “leading to the development of a repertoire of practice” (Carroll, 2012, p. 43). Dispositions in teaching operate as a process and connect belief and value with action that is strategic, purposeful, and intentional. Actions equate to accomplishment, and therefore result in desired outcomes. As the new educator’s dispositions are shaped through a repertoire of practice, it is essential for the new dental hygiene educator to assess his/her dispositional competency upon hiring. Existing behavioral assessment models may help the new dental hygiene healthcare educator develop dispositional competency (Paulis, 2011).

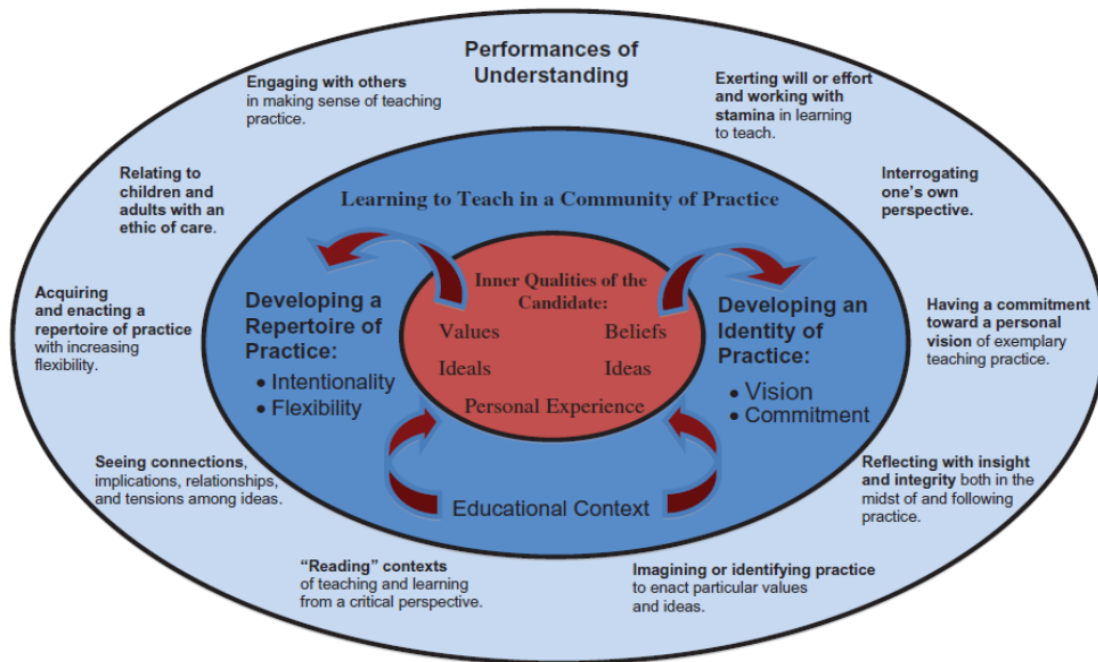


Figure 5. Performances of understanding. Reprinted from “Examining the Development of Dispositions for Ambitious Teaching,” by D. Carroll, 2012, *New Educator*, 8(1), p. 47. Copyright 2012 by the author. Reprinted with permission.

Existing models may serve to assist the new health educator with language acquisition, collaboration, differentiated instruction, and creating inclusive learning communities (Carroll, 2012). The literature describes teacher education programs that customize their courses and experiences to develop dispositional competency and provide assessments to reflect

understanding. Behavioral assessment instruments are used in national colleges and universities to identify intrinsic motivation as well as other relevant dispositions such as reflection, collaboration, and communication (Cummins & Asempapa, 2013). Designing assignments as performances of understanding may assist the new healthcare educator in developing a repertoire as an identity of practice. Such assessments can be used as a tool for assessing and developing critical dispositions. Performances of understanding may be used to describe degrees of performance and to track candidates' performance over time, and provide new dimensions in the trajectory of teaching (Carroll, 2012).

Skills. A review of the literature suggests that healthcare and dental hygiene education have experienced a shortage of educators due to increases in faculty reaching retirement age. Dental hygiene directors have reported that faculty vacancies have continued to occur, as few applicants applied for positions and candidates lacked required qualifications (Coplan, Klasmer, & Taichman, 2011). Dental hygiene programs have implemented several methods to alleviate the loss of full-time faculty as a result of retirement, such as increasing the number of adjunct faculty, increasing the workload current faculty, and hiring faculty with less than desired credentials. Prior to 2016, the minimum requirement for a dental hygiene faculty member was an active, current dental or dental hygiene license and 5 years of clinical experience. The faculty member did not have to possess a bachelor's degree to teach. To address this concern, in January 1, 2016 the Dental Hygiene Committee of California (DHCC) made the following change to the regulations of California dental hygiene educational programs, mandating the following:

California Code of Regulations Title 16, Professional and Vocational Regulations
Division 11 Dental Hygiene Committee of California, Section 1105:1 states the
following:

(a) “Program Director” or “Interim Program Director” means a registered dental hygienist or dentist who has the authority and responsibility to administer the educational program in accordance with approved accreditation standards referenced in subsection. The program director shall meet the following minimum qualifications:

- (1) Possess an active, current dental or dental hygiene license issued by the Committee or the Dental Board of California (DBC), with no disciplinary actions;
- (2) Possess a master’s or higher degree from a college or university accredited by an agency recognized by the U.S. Department of Education or Council for Higher Education Accreditation;
- (3) Documentation of two (2) years’ experience teaching in pre- or post-licensure registered dental hygiene or dental programs. This requirement may be waived for an Interim Program Director; and
- (4) Documentation of a minimum of 2,000 hours in direct patient care as a registered dental hygienist, or working with a registered dental hygienist.

(b) “Program faculty” means an individual having a full-time or part-time agreement with the institution to instruct one or more of the courses in the educational program’s curriculum. The individual shall hold a baccalaureate degree or higher from a college or university accredited by an agency recognized by the U.S. Department of Education or Council for Higher Education Accreditation, and possess the following:

- (1) An active California dental or dental hygiene license or special permit with no disciplinary actions;
- (2) A postsecondary credential generally recognized in the field of instruction; or
- (3) A degree in the subject being taught or evaluated
- (4) All program faculty shall have documented background in educational methodology every two years, consistent with teaching assignments.

(c) Clinical teaching faculty shall have direct patient care experience within the previous (5) years in the dental hygiene area to which he or she is assigned, which can be met by either:

- (1) Two (2) years experience providing direct patient care as a registered dental hygienist or dentist; or
- (2) One (1) academic year of dental or dental hygienist level clinical teaching experience.

(d) Didactic teaching faculty shall possess the following minimum qualifications: Current knowledge of the specific subjects taught, which can be met by either:

- (1) Having completed twelve (12) hours of continuing education in the designated subject area; or (2) Two (2) semester units of three (3) quarter units of dental hygiene education related to the designated dental hygiene area; or have national certification in the designated dental hygiene area.

(e) Faculty Responsibilities.

(1) Each faculty member shall assume responsibility and accountability for instruction, evaluation of students, planning and implementing curriculum content as required by the educational program.

(2) Each faculty member shall participate in an orientation prior to teaching, including but not limited to, the educational program’s curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation.

(3) Each faculty member shall be competent in the area in which he or she teaches.

Note: Authority cited: Section 1905, Business and Professions Code.

Reference: Sections 1905 and 1941, Business and Professions Code.

Of particular importance to this study is the following: (e) Faculty Responsibilities (2)
Each faculty member shall participate in an orientation prior to teaching, including but not limited to, the educational program's curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation. (Dental Hygiene Committee of California, May, 2015). A review of the literature suggested that few health educators have formal skill preparation to be new educators, and faculty orientation programs may vary widely among learning intuitions (Schoening, 2009). As a result, dental hygiene programs may have not defined and implemented a formal orientation protocol, and may need assistance in preparing formal orientation programs and defining desirable qualification skills for the new dental hygiene educator.

The definition of desirable skills for the dental hygiene educator was also discussed in literature. A study conducted in 2011 revealed that over 90% of dental hygiene faculty believe that the following qualifications are necessary for clinical faculty: clinical skills, educational skills, and technological skills. Only one half of the dental hygienists surveyed indicated that research skills were an important factor. Faculty who taught didactic courses placed a greater importance on educational skill than clinical faculty; however, both didactic and clinical faculty members placed an equal amount of importance on clinical competence. As the character and reputation of dental hygiene programs depend on the academic qualifications of their faculty members, recruitment and retention of faculty with the incorporation of formal educational as well as technological skills will be needed (Coplen, Klausner, & Taichman, 2011; Frantz & Smith, 2013).

Technology. The integration of new technology and adoption of 21st century learning may also be a challenge for new health educators (Evans & Forbes, 2012). Allied health educators who did not grow up in the computer age or have limited knowledge of technology may experience stress when attempting to master new technological advances. The expectation of implementing new technologies into the curriculum may increase anxiety for the new health educator or possibly hasten the departure of qualified faculty (Axley, 2008). Moreover, healthcare educators who have received their professional training within a different generational era may not be familiar with the learning styles of the 21st century student. Additionally, the allied health student of today is very diverse in comparison to the learner of prior generations. According to Oblinger and Oblinger (2005), generational groups may be described in the following categories: Matures (1900-1945), Baby Boomers (1946-1964), Generation X (1965-1982), and the Net Generation/Millennials (1982-1991). The current allied health student is categorized as a Net Generation learner and is characterized by the following: immediate connectivity and responses driven by the internet and mobile technology; social investment in personal relationships, *learning by doing* through discovery and inductive reasoning, interest in social and political occurrences, and fascination with new technological advances. Net Generation students are “digital natives” and incorporate technology as part of their daily lives (Evans & Forbes, 2012, p. 2). To engage the Net Generation student, learning must be technologically appealing, interactive, and community oriented. Due to the learning styles of the 21st century student, technological requirements, and the expansion of online courses and degree programs, healthcare educators in all capacities—including dental hygiene—must be prepared to enhance, support, and gain competency in the use of technological recourses throughout the curricula.

A review of the literature suggests that technological literacy is an essential skill for dental hygiene faculty (Coplen et al., 2011; Stegeman & Zydney, 2010). Due to the rapidly changing healthcare environment, coupled with a decrease in qualified faculty due to the advanced degree requirements for California dental hygiene educators, more dental hygiene courses may be taught online. Distance education may be replacing traditional methods of instruction, as well as advanced and terminal degree completion programs. In 2007, data suggested that 41 dental hygiene programs nationwide utilized distance education (Coplen et al., 2011). In 2016, data indicated that 46 dental hygiene programs nationwide offered online bachelor's degree completion programs, with 16 dental hygiene programs nationwide offering hybrid master's degree programs (ADHA, 2016). The expansion of distance education in dental hygiene education, combined with the inclusion of critical thinking models of instruction, warrant pedagogical strategies that incorporate technology into the dental hygiene curriculum (Stegeman & Zydney, 2010).

Currently, technology is being incorporated in the didactic and clinical environment through various methods. Didactically, dental hygiene instruction has gradually transitioned from lectures and extremely competitive individualized instruction to collaborative instructional models. Educators are utilizing technology tools such as smart phone applications to enhance student communication, as well as introducing more technologically advanced media presentations. Clinically, the latest technologies and diagnostic tools have been incorporated into the dental hygiene clinical curriculum via instructional webinars, digital radiography, and patient assessment software. Student assessments, as well as board examinations for dental hygiene licensure, are now taken in electronic format. Additionally, future trends in nursing education indicate that the use of sophisticated simulation-based technologies will be used to create

scenarios applicable to patient care. The simulation-based technologies will allow nursing students to respond and provide appropriate treatment to a fictional patient that provides real-life responses (Vandijck & Hellings, 2014). Simulation-based technology is also slowly being integrated into dental hygiene curriculum as well, with the use of simulated mouth models being used to assist students in medical emergency preparation, as well as the identification and recording of dental restorations (Bilich, Jackson, Bray & Willson, 2015; Lemaster, Flores, & Blacketer, 2016). As the use of technology in healthcare is compulsory, dental hygiene educators must become proficient in the implementation of technology within the curriculum. Successful models such as technology fellowship programs in nursing education may serve as a model to support technological competency for the dental hygiene educator.

Nursing programs have incorporated structured technology fellowship programs into the curriculum that are designed to help faculty develop technological competencies. The programs are designed to enhance web-based learning and are incorporated with the goal of increasing technological competence, skill, and experience for nurse educators. The mentor-based fellowship programs offer nurse educators a series of online courses in web-based teaching and learning strategies, including web-based teaching, designing web pages for online courses, and providing collegial support for the Net Generation educator. The programs also identify existing courses that might benefit from integration of electronic technologies and employ technologically advanced staff to help colleagues with implementation. Such programs reflect the need for continued support in the advancement of teaching strategies that employ critical and independent thinking, and enhance efficiency of learning methods for the millennial student (Stegeman & Zydney, 2010).

Pedagogy in Clinical Instruction

This section of the literature review focuses on the benefits of peer-focused collaborative pedagogy in allied health education. As mentioned earlier, academic leaders do not require healthcare instructors to undergo formal or informal instruction on teaching methodologies before transitioning into education. Clinicians are seen to be capable, skilled, and proficient practitioners of their craft, and thus are deemed suitable for instruction. Experienced healthcare instructors may understand specialized pedagogical principles within their area of expertise in behavior, methodology, and clinical skill, but fail to understand the foundational constructs of the “teaching and learning process-the ‘why’ of pedagogical behaviors” (McLeod, Steinert, Meagher, & McLeod, 2003 p. 638). New instructors may feel more comfortable using *common sense* than pedagogy, and separate themselves from teaching and learning to teach (Field, 2012). Lougran (2006) described this phenomenon in the following terms:

In the same way as the novice teacher needs to be sensitive to releasing control in order to manage the complexity of teaching, so too teacher educators need to depart from their well-marked path and approach the edge of chaos to re-embrace the creativity, experimentation and risk-taking that so shapes a developing understanding of pedagogy. (p. 35)

The literature suggests the reason for this gap in known practices and pedagogy exists as academic research emphasizes behaviors and deemphasizes pedagogical methodologies (McLeod et al. 2003). As a result of the lack of pedagogical instruction, the new educator is focused on the immediate need within the institution. Several years may pass before the new educator gains a profound understanding of pedagogical practices (Field, 2012). Furthermore, new instructors transitioning from clinical practice to education may struggle with multiple and conflicting professional identities, and begin to emulate their own personal pedagogies (Williams et al., 2012).

Review of the literature revealed that healthcare practitioners move into the new role of educators with strong professional identities and ideologies (Boyd & Harris, 2010; Boyd & Lawley, 2009; Williams et al., 2012). Newcomers to a community of practice must negotiate between existing beliefs and practices, as well as the practices of the new community they have joined (Williams et al., 2012). Boyd and Lawley (2009) described the challenges of new nurse practitioners transitioning from clinical practitioner to higher education as perplexing and complicated due to their own ideology of what educators should be. As existing ideologies remain, the nurse educator may struggle to fit in with the unfamiliar culture and social norms of academia (McDonald, 2010).

The new educator may struggle with feelings of inadequacy in teaching content, strategies, language, curriculum and clinical procedures, as well as a lack of autonomy and credibility within professional relationships (Field, 2012; McDonald, 2010; Williams et al., 2012). Murray and Male (2005) suggested that new teacher educators experience a feeling of disempowerment due to concerns of adequacy and knowledge base, and proposed that a 2-3-year span is necessary for the educator to create a new professional identity. Moreover, Wenger (1998) discussed the negotiations of the novice educator in holding on to his/her original identity and letting that identity go for fear of losing the individuality of his/her previous profession (Field, 2012). Wegner described the need for institutions as communities of practice to value the participants' past experiences and share expectations of social norms with new members in order to cultivate feelings of belonging and reduce anxiety that may come with the transition (McDonald, 2010; Wenger, 1998).

As the literature suggests, there is a need for a paradigm shift concerning pedagogy and the new educator within higher education and healthcare instruction (Field, 2012; McLeod et al.,

2003; Parkison & Bartek, 2010). A need also exists for pedagogical approaches that extend beyond transitional methods, including immersion-based experiences that are rich with peer collaboration and reflection. Within healthcare instruction, a focused analysis of curriculum, adult learning, and variations in learning and assessment are required to ensure the use of effective pedagogical practices (Parkison & Bartek, 2010). McLeod et al. (2003) outlined such reflective and collaborative pedagogical basic principles that enrich the experience of the new healthcare educator:

1. *How adults learn*: motivation for learning; transfer of learning; self-regulation of learning; adult learning theory; case-based learning; self-directed, teacher- directed instruction, and idiosyncratic problem solving.
2. *Helping adults learn*: pedagogical implications of learner differences; knowledge, skills and attitudes; coaching; peer and near peer tutoring; role modeling; supervision of learners, lesson structure and planning; relevance for learning; learning environment; communication skills and concepts, and problem solving for learning.
3. *Curriculum management* to include structure, goals and objectives; understanding of andragogy and adult learning principles to include motivation or learning; transfer of learning; adult learning theory, cased-based learning; self directed, teacher-directed instruction, and idiosyncratic problem solving.
4. *Assessment*: summative versus formative assessment; key concepts for assessment; criterion versus norm-referenced assessment; unintended consequences of assessment; reasons for assessing learners; assessment to drive learning, and performance-based assessment. (p. 641)

Additionally, in 2006, a conceptual teaching competency model was inducted to define critical skills for medical educators. The Teaching as a Competency framework was derived from data collected from 16 medical and non-medical educators from U.S. and Canada. The purpose of the study was to provide a common conceptual framework of the skills necessary to be an effective medical educator, and to provide clarity surrounding medical educator training. The data revealed that six core competencies were necessary for the new medical educator: medical knowledge, learner-centeredness, interpersonal and communication skills, professionalism and role modeling, practiced based reflection, and systems-based practice. The study concluded that clear definition of teaching competencies, mentorship, and teaching may provide medical institutions tools to recruit, reward, and retain faculty, as well as hold institutions responsible for the quality of their teaching. Additionally, the framework may serve to improve the quality of training for new medical educators (Srinivasan et al., 2011).

A review of the literature suggests that understanding of content-specific pedagogy is developed partly by emulating the actions of more experienced teacher-educators through the theoretical constructs of situated learning theory (Field, 2012; Lave & Wenger, 2009; McLeod et al., 2003; Paulis, 2011). Situated cognition—coupled with the important basic pedagogic concepts of knowledge, skills, dispositions, and lifelong learning—are essential key components that support the clinical healthcare professional transitioning into higher education.

Instructional Competency Models

Existing models of mentorship and apprenticeship may assist dental hygiene programs understand the needs of the new healthcare educator. A popular strategy for easing the demands of the new educator is the use of formal induction programs, which are typically based on adult learning theory and focused on active, collaborative, and use-based approaches to learning

(Knowles, Holton, & Swanson, 1998). Over 25 states nationwide utilize formal induction programs to foster teacher induction training. Formal induction programs provide mentorship, support, and guidance, and serve as a sounding board for the career transition into education. Individualized assistance is provided by university personnel, curriculum specialists, or experienced faculty. Mentors may aid novice instructors with the implementation of new instructional practices or curriculum (McCaughtry, Cothran, Kulinna, Martin, & Faust, 2005). Induction models suggest the expansion of the orientation of new faculty over a probationary period (Frantz & Smith, 2013).

Successful mentoring programs depend on the mentor's effectiveness. Successful mentors possess rich knowledge in pedagogy, curriculum, and content, as well as effective communication and personal motivation. The literature suggests that new faculty who had mentors stayed in the teaching field longer and experienced fewer difficulties in the transition than those who did not (McCaughtry et al., 2005; Smith & Ingersoll, 2004). Additionally, the literature also suggests that if the positive effects of a mentorship program are seen in new faculty, then mentorship may also be an effective practice with more experienced faculty who need guidance or are in need of positive reinforcement (McCaughtry et al. 2005). Current models of induction programs have been utilized in physical education, music teacher preparation, medical education, and dental hygiene faculty development. All programs stemmed from concerns regarding high faculty turnover and the lack of knowledge about curriculum management (Conkling, 2007; McCaughtry et al., 2005; Srinivasan et al., 2011; Tax et al., 2012).

The physical education induction program project began by recruiting a volunteer group of 15 experienced faculty members. The protégés' induction training was a 1-year commitment and was conducted in a workshop format. For 2 months, the mentor trainees attended workshops

on professional development, cultural proficiency, curriculum management, videotaped lesson exchanges, and virtual correspondence. At the conclusion of the training, each mentor was paired with a protégé based on commonalities such as similar subject areas, school demographics, and individual personality types. Each mentor-protégé pair was introduced personally and then was able to communicate via means of chat rooms monitored by a project staff member. Throughout the program, workshops were scheduled based on the participants' interest and needs. Although the initial training provided the mentors with guidance, the mentors were able to decide what would best facilitate instruction, which provided the mentor freedom to tailor the program to the needs of the novice (McCaughtry et al., 2005).

Similarly, an induction model exists for the preparation of new music teachers, which attempts to prepare the novice music teacher for study via the situated learning process and the cohort model. The novice music teacher becomes a member of a cohort group and learns under the supervision of an experienced music teacher and a university professor. The novice interns for an extended period of time, learning to co-plan and co-teach under the expert. The novice accompanies the expert in meetings with administration, professional conferences, and interactions with parents and guardians. Electronic journals and videos are used to record observations. The members of the cohort are encouraged to respond to each other's observations, as well as discuss and reflect upon their observations with other cohort members and supervisors. The cohort members are able to relate their experiences with their own personal musical development (Conkling, 2007).

Furthermore, the need for induction programs in dental schools has been discussed in the literature (Tax et al., 2012). In 2004, the American Dental Education Association President's Commission on mentoring "recognized the value of mentoring programs and encouraged dental

schools to foster mentorship programs within their institutions” (p. 312). The premises of such programs are to remove the potential challenge and burden from individual mentorship and instead encourage a model of mentorship within a community of practice. As dental educators come together for the shared purpose of educating dental students, they are bound together by relationships formed from the common understanding of shared experiences. The educators share stories and experiences with one another; each member of the community understands these stories, adding his/her own perspectives to the story through means of personal experience. This type of mentoring program does not follow the traditional mentor-protégé structure, but instead supports the shared experiences that are built upon respect and collaboration with all community members. Mentoring programs in dental programs have the ability to foster confidence in new educators, which transforms their identities as educators as their participation increases (Tax et al., 2012).

In 2009, a study of a community of practice model was conducted to determine if the community of practice would benefit the clinical teaching section at Dalhousie University School of Dental Hygiene. The study was conducted to determine if participation in a community of practice facilitated the instructors’ application of new teaching strategies if they took advantage of continuing support in a community of practice. The development program consisted of seminars on adult learning theory, effective teaching strategies, new clinical teaching strategies, and role-playing techniques, as well as attendance at a pre-clinical meeting prior to clinic sessions. The findings suggested that participation in the community of practice helped the instructors make the effective changes necessary to their existing learning and teaching models. The members reported an increase in confidence and a sense of belonging within the community (Tax et al., 2012). Although this study was conducted with existing and experienced dental

hygiene faculty, it may serve as model for further study concerning induction programs for the new dental hygiene educator.

Formal induction programs for new faculty may help diminish the disparity between the roles of the health professional transitioning into academia. Coupled with the mentorship of experienced faculty, induction programs encourage collaboration and may help to dispel the myth that new faculty should understand academia on the premise that they are clinical professionals (Frantz & Smith, 2013). These programs encourage collaboration and faculty development within a community of practice, and therefore support the demand for further study concerning the instructional competency needs of the new dental hygiene educator.

Summary

Review of the literature reveals there is often no formal training for new dental hygiene faculty transitioning from clinical practice. Of the dental hygiene clinicians that do transition from clinical practice into education, many do so as a result of their clinical expertise and performance (Battrell et al., 2014). As data reveal that one of the top challenges facing dental hygiene programs in the future is the recruitment of qualified faculty, dental hygiene clinical instructors may be proficient in the clinical setting but may lack the pedagogical background to develop instructional competencies to support the transition from clinical practice to dental hygiene educator (Frantz & Smith, 2013; Hunt et al., 2011).

To support the need for further investigation in instructional competencies for the new dental hygiene educator, key learning theories involving situated cognition were examined. Lave and Wenger's (1991) situated learning theory within the construct of the community of practice was described as the theoretical framework supporting this study. Lave and Wenger suggested that knowledge and the action of learning are collective processes embedded in social context

where personal interaction takes place (Abma, 2007). Furthermore, Knowles, Holton, and Swanson (2015) supported the process of experiential learning, reasoning that apprenticeship can be applied to higher education, adult education, and lifelong learning. The concept of novice-expert may be applied to the transition of clinician-educator, as most educators in the healthcare education receive little or no training in instructional efficacy (Fiedler, 2015; Srinivasan et al., 2011). The importance of the healthcare educator developing conceptual, procedural and dispositional competencies was a consistent theme in the literature (Poindexter, 2013; Veal & Allen, (2014; Srinivasan et al., 2011). The literature described a need for a paradigm shift concerning pedagogy and healthcare instruction to approaches that extend beyond transitional methods and include immersion based experiences rich with peer collaboration and reflection (Parkison & Bartek, 2010). The review of the literature suggests that dental hygiene clinical education may benefit from situated learning, including apprenticeship, mentorship, and formal induction programs. Therefore, further investigation is warranted to gain understanding of the instructional competency needs of the new dental hygiene educator.

Chapter 3: Methodology

The primary goal of this study was to explore the perceptions of California dental hygiene educators who have transitioned from clinical practice into education in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. The study was designed to examine the shared experience of 14-20 dental hygienists within the community college system in the state of California who have transitioned from clinical practice to education in order to provide further understanding surrounding instructional competency within the dental hygiene curriculum. The methodology that was employed to test the research questions is presented in this chapter. This study explored the following research questions:

1. What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions and skills?
2. What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions and skills?

Research Design and Rationale

The researcher employed a qualitative phenomenological approach and utilized a semi-structured interview as the means for data collection. Maxwell (2005) stated that qualitative inquiry focuses on specific situations or people (dental hygiene educators) while emphasizing the importance of exploring the ways in which the participants make meaning of a phenomenon (the transition from clinician to educator). From these articulated descriptions, the meaning of the experience is derived (Moustakas, 1994). Phenomenological inquiry allowed the researcher to

understand the perceptions, ideas, and experiences of dental hygiene educators' instructional competency needs.

Phenomenological inquiry traces back to German mathematician Edmund Husserl, who developed a philosophy grounded in subjective openness, as well as the concept of epoché that urges one to set aside expectations and assumptions so that the focus is placed on the data elicited from the experience (Creswell, 2009, Pollio, Henley & Thompson, 1997). The phenomenological approach requires that the researcher set aside judgments or biases concerning the research, and strives to understand the topic from the participants' perspective of the lived experience or phenomenon. Phenomenology is used within nursing, health sciences, and education (Creswell, 2009). Thus, the researcher employed the phenomenological research design to capture the participants' shared experience.

For the purpose of this study, semi-structured interviews were used as the data collection strategy. According to Lunenburg and Irby (2008), the interview used in a phenomenological approach may be defined as the following: "The interview, both factual and meaningful, seeks to describe the meanings of central themes in the life world of subjects. The main task in interviewing is to understand the meaning of what the interviewees say" (p. 91). Interviews may be structured, semi-structured, or unstructured. The semi-structured interviews were guided by six questions aimed to address the research questions for this study. The guiding questions for the semi-structured interviews are included in Appendix A.

Validity/Trustworthiness of Study Design Setting

Validity and trustworthiness were also considered. Creswell (2013) described validity as a strength among qualitative studies. Creswell (2003) and Lincoln and Guba (2005) stressed the use of one or more techniques to safeguard research validity, including: (a) thick and rich

descriptions, (b) peer debriefing, (c) member checking, (d) identification of potential researcher bias, and (e) inclusion of disconfirming or contrary evidence. Additionally, member checking was also utilized. After the data were collected, the researcher reviewed the descriptions and themes with the participants to ensure the descriptions were complete and realistic and whether the themes are accurate, fair, and representative of their experience.

Population

The target population of this study included full-time and part-time (adjunct) dental hygiene educators who have previously taught or are currently teaching clinical and didactic dental hygiene courses within a community college setting in the state of California.

Study Sample and Sampling Procedures

The researcher sought to identify an ideal sample of 14 to 20 participants for this study. One-half of the participants were identified as dental hygiene part-time (adjunct) faculty within a California community college setting, and one-half of the participants were identified as dental hygiene full-time faculty within a California community college setting. The educators were identified using the snowball sampling technique. This method is known as the chain referral or network sampling method and is used to recruit participants utilizing contacts and relationships. The initial participants or “starters” were asked to recommend other dental hygiene educators who may be interested in participating in the study (Bernard & Ryan, 2010, p. 367). The purposive, homogenous sampling was based on the following criteria; (a) the participant will have had or currently has a minimum of 6 months or more of full-time or adjunct experience as a dental hygiene educator, (b) the participant will have been employed or is currently employed as an adjunct or full-time faculty member at a community college in the state of California, and (c) the participant will have taught or is currently teaching both clinical and didactic dental hygiene

courses. A letter of intent was requested and obtained from the participant (see Appendix B) or, if necessary, from the community college at which the dental hygiene educator is employed (see Appendix C). Permission to contact and sample participants was granted by Pepperdine University's Institutional Review Board (IRB).

Human Subject Considerations

The purpose of the IRB process is to ensure the safety and protection of human subjects involved in a research study. Thus, researcher complied with Pepperdine's Graduate School of Education and Psychology (GSEP) IRB guidelines and the research guidelines of the institutions at which participants were employed. To ensure appropriate consideration of human subjects, the researcher completed the required course in Human Subject Training through the Collaborative Institutional Training Initiative Program (CITI). Due to the nature of the study, the application for approval submitted to the IRB department included exempt subject participation status. Furthermore, the researcher followed GSEP IRB policies, including not contacting the subjects or collecting data until receiving GSEP IRB approval to begin data collection.

Upon receiving approval from the GSEP IRB department to conduct research, the researcher contacted interested participants via letter describing the purpose and nature of the research. If permission was needed from dental hygiene program directors or community colleges where the participant is employed, a formal letter was sent to the institutions to gain permission and access. In order to minimize risk to participants, educators interested in participation were required to give informed consent by signing the informed consent document before participating in the study. The participants will be informed that their participation in the study was voluntary and that they could cease participation in the study at any time. As an incentive, a \$25 gift card of the participants' choice was given to those participants who

volunteered for and complete participation in the study. If the participants chose to discontinue participation, they were advised that the incentive would no longer be offered.

Risks. The participants in this study experienced minimal risks that were not greater than what they would experience during a discussion with dental hygiene colleagues. As the interviews were confidential and voluntary, the risk to the participants was minor. The potential risks to participation included the loss of approximately 60 to 90 minutes of personal time, or mental fatigue from recollection of experiences. Additional risks included possible anxiety in responding to the questionnaire related to the participants' own feelings of lack of preparation they experienced during their transition from clinician to educator. To avoid any such risks, the researcher provided either face-to-face or virtual means for the 1:1 interview for participant convenience. The researcher concluded interviews within the planned time frame in order to respect participants' time. Participants requested breaks as needed during the interview process. Finally, the participants were advised that they might contact the researcher within 1 week of the interview and data collection if they had any questions, concerns, or changes to their interview testimony.

Benefits. There were no direct benefits to participants; however, this study may be of importance to existing and future dental hygiene students, dental hygiene educators, and the dental hygiene profession. The impact of this study may inform California dental hygiene educators and the perceptions of other allied-health educators statewide, as well as provide a more comprehensive understanding of the needs of new dental hygiene and allied-health faculty transitioning from clinical practice to education. A better understanding of new dental hygiene and allied-health faculty needs might result in better preparation of dental hygiene faculty and student instruction, and ultimately lead to improved patient care.

Study Permission and Informed Consent

Per Pepperdine's University's IRB instruction, if the educator's name and contact information appeared directly on the institution's departmental webpage, the researcher could contact the educator directly to solicit participation in the study. If the researcher wanted to contact an educator employed by a community college and his/her name and contact information did not appear directly on the institutions' departmental webpage, a request for study permission was necessary and a formal request to conduct research letter was sent to the community college where the educator is employed. The formal request contained information regarding the purpose of the study, potential risks, potential benefits, and the protection of participants' rights.

Participants were asked to sign a letter of informed consent (see Appendix D) granting permission for participation in the research study. The researcher also reviewed the consent form orally and offered the participants an opportunity to address questions involving the participation process. As part of the informed consent process, the researcher reviewed the interview protocol, requested consent to audio record and conduct a demographic survey, and indicated that participation was voluntary and participants had the have the right to withdraw at any time without negative consequences.

Instrumentation

Interview. Semi-structured interviews were used as the data collection tool for this study. The semi-structured interviews were guided by six questions aimed to address the research questions of this study. All six questions were open-ended to “draw out the participant[s'] views and opinions” (Creswell, 2003, p. 188). The interview questions were shared with the participants in advance of the interview to help them prepare and recollect their relevant experiences. The first interview question explored the participants' current clinical background

and experience in education. The second question examined the participants' first experiences as a dental hygiene educator, and examined the preparation experiences in the knowledge of pedagogy, clinical expertise, educational theories, values, and ethics. The third question examined preparation experiences in the dispositions of adjusting to academia, acceptance of constructive criticism, distinguishing the boundary between teacher and friend, effective collegial relationships, and complications relating to responsibility and authority. The fourth question examined the participants' experiences, if any, in a formal orientation program, as well as the preparation experiences in the skills of curriculum, policies and procedures, strategies for teaching, student supervision, and technology. The fifth question addressed what recommendations, if any, could have improved their personal transition from clinician to educator. Lastly, the sixth interview question allowed the participant to add further information to any of the former responses. The guiding questions for the semi-structured interviews are included in Appendix A and were generated from the literature review as shown in Table 1.

Focus of the interview. The interviews focused on exploring dental hygiene educators' preparation experiences surrounding the transition from clinician to educator specifically in the areas of knowledge, disposition, and skills. Furthermore, the interviews explored recommendations, if any, to better support new professors in developing instructional competency as related to knowledge, dispositions, and skills.

Specifics of process. Through a 60-90-minute semi-structured interview, the researcher gathered information from the participants to answer the research questions. The researcher used guiding questions for the interviews and audio recorded participant responses with permission. The researcher then transcribed the participants' responses.

Table 1

Relationship among Guiding Questions, Interview Questions, and Literature

Guiding questions	Interview questions	Literature sources
RQ1: Background and Experience	<ul style="list-style-type: none"> Describe the institutional setting of your first employment as a dental hygiene educator (Community college, private institution, other). In what capacity do you serve as a dental hygiene educator? (Full-time or adjunct) 	ADHA, 2014; Battrell et al., 2014; CODA Dental Hygiene Standards, 2013; DHCC, 2016; Gancarz, 2011; Frantz & Smith, 2013; Tax et al., 2012
RQ2: Reflecting on your first experiences as a dental hygiene educator, describe your first few months of teaching as related to preparation.	<ul style="list-style-type: none"> How long did you practice in clinical dental hygiene before making the transition from dental hygiene clinician to dental hygiene educator? How long have you (did you) practice (d) as a dental hygiene educator? How many clinical courses and/or didactic courses do you currently teach/have you taught? 	Field, 2012; Frantz & Smith, 2013; Hunt et al., 2011; McDonald 2010; McLeod et al., 2003; Mlyniec, 2012; Parkison & Bartek, 2010; Poindexter 2013; Srinivasan et al., 2011
How did you learn to be a dental hygiene instructor?		
How did you learn the following competencies?		
RQ3: Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following surrounding dispositions:	<ul style="list-style-type: none"> Knowledge of pedagogical methods, including feedback, assessment, and grading in clinical courses. Clinical expertise as well as knowledge of how to teach and evaluate students in a didactic and clinical setting. Knowledge educational theories, and evidence-based teaching practices and the ability to teach diverse learners. Knowledge of values and ethics relating to didactic and clinical instruction. 	Axley, 2008; Bilich et al., 2015; Coplan et al., 2011; Evans & Forbes, 2012; Lemaster et al., 2016; Schoening, 2009; Stegeman & Zydney, 2010
RQ4: Upon your employment as a new dental hygiene educator, describe your experiences in the following surrounding skills:	<ul style="list-style-type: none"> Describe your participation, if any, in an orientation prior to teaching. Do you feel you were prepared in the following competencies: curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation? Describe your preparation experiences, if any, utilizing technology in the classroom or clinic. Describe technological literacy as you feel it pertains to the new dental hygiene educator. 	Axley, 2008; Bilich et al., 2015; Coplan et al., 2011; Evans & Forbes, 2012; Lemaster et al., 2016; Schoening, 2009; Stegeman & Zydney, 2010
RQ5: Given your lived experience, what might be your recommendations, if any, to improve your transition from clinician to educator?		Frantz & Smith, 2013; Hunt et al., 2011; McCaughtry et al., 2005; Tax et al., 2012
RQ6: Is there anything else you would like to add to any of your responses?		

Content validity. The content validity of interview instrument was addressed via two means: (a) alignment of interview questions with guiding research questions and supporting literature sources, and (b) expert review of the instrument and proposed interview process through the instrumentation validity questionnaire (see Appendix E).

Expert review of instrument content. Two content experts reviewed the semi-structured interview questions (Creswell, 2007). One of the content experts serves as a tenured professor in a dental hygiene department in the California Community College system. This expert currently teaches both clinical and didactic courses, and has been a licensed dental hygienist for 40 years and a dental hygiene educator for 23 years. The second content expert serves as an adjunct faculty member in a dental hygiene department in the California Community College system. The expert has 20 years of dental hygiene clinical experience, and 15 years of educational experience. Each expert was asked to review the proposed interview questions using an instrumentation validity questionnaire (see Appendix E) in relation to the purpose of this study and the overarching study questions. The experts were asked to review each question for phrasing, clarity, and appropriateness. The researcher considered expert feedback and revised the interview instrument and process as appropriate.

Data Collection Procedures

The researcher set up appointments to interview the participants. The interview schedule was determined by participants' availability. The participants chose from personal face-to-face meeting or a virtual face-to-face meeting with Skype or Adobe Connect meeting technologies. At the initial start of the interview process, the researcher reviewed the confidentiality statement with the participant. The researcher outlined the timeframe of the interview process, indicating that the interview would take approximately 60-90 minutes. The participant was asked for

permission to audio record the interview. Participants were made aware that the interview would be transcribed at a later date and that the researcher would provide them with a copy of their transcript and the opportunity to review it for representativeness. A week was provided for transcript review response. Additionally, the researcher described the interview questions, including the number and complexity of the questions. The participants were advised that they might be asked to provide further explanations to the questions. See Appendix A for the interview script that the researcher implemented.

Data Management

The anonymity and confidentiality of the data were considered carefully. Maintaining confidentiality and security of the data collection helped to ensure that the risk to participants was minimal. In order to ensure confidentiality of collected data, all participant identity and school or university affiliation was kept confidential. No individual or institutional names are used during data collection; instead, participants' and institutional names were assigned research numbers known only to the researcher and a master list of codes was kept separate from the data. All information regarding the identity of the participants as kept private and confidential. In addition, no subject responses were linked in any way to individuals in order to protect subjects' identities. Participants' responses were transcribed and coded in a Microsoft Word document that was saved in an encrypted format on the researcher's personal computer. Per IRB requirements, all data—including audio recordings, transcripts, and research materials—were kept secure using password-protected computer files and locked file cabinets. All research records will be kept in locked cabinets for 5 years and then destroyed. Lastly, participants were informed that they may obtain a copy or summary of the study's findings by writing a letter, emailing, or telephoning the researcher.

Data Analysis

The qualitative data was audio recorded and then transcribed into a Microsoft Word document for data analysis preparation. To begin the data analysis process, the researcher first read each transcript as a whole, then read the transcript again, making notes about first impressions. The transcripts were read a third time, and the researcher began coding by initially highlighting key words, phrases, or meanings relating to the participants' supporting statements regarding preparation experiences and instructional competency needs of the new dental hygiene educator as related to knowledge, skills, and dispositions. The researcher then made notes about opinions, processes, actions, or any other information that might be relevant to the preparation experiences and instructional competency needs of the new dental hygiene educator as related to knowledge, skills, and dispositions. The application data coding was bracketed, according to patterns (i.e.. knowledge, skills, and dispositions), eliminating insignificant information (Moustakas, 1994). The data were then prepared, organized, transcribed, and imported into the qualitative analysis tool, Hyper-Research software (Hyper-Research, 2015), which was used to assist with data management (Bernard & Ryan, 2010). Utilizing this software, the data were coded and themed for interpretation. Coding and theming consisted of identifying codes, reducing codes to themes, counting frequency of codes, and categorical rating (Creswell, 2013). The researcher then analyzed the participants' experiences and synthesized them into a complete description of the phenomenon's essence (Moustakas, 1994). The researcher provided textural and structural descriptions, and supporting quotes from the text data were gathered to support emerging themes.

To provide inter-rater reliability, two experienced coders verified that the codes, frequency, categorical ratings, and emerging themes were accurate. The researcher distributed

the codebook to the external evaluators. The external evaluators independently examined the data using the codebook and suggested any modifications after coding the initial sample of data. The codes were discussed with the external evaluators and any needed clarification or exclusion issues were addressed. The researcher will present a discussion and further interpretation of the data findings in Chapter 5. The completed data analysis process may be reviewed in a list format in Appendix F.

Positionality

I attended a 2-year California Community College dental hygiene program and became a licensed dental hygienist in 1994. I have worked in clinical dental hygiene practice for the last 20 years in general practices, in periodontal offices, and as a pharmaceutical sales representative in the Southern, Central and Northern California regions. As a pharmaceutical representative, I was assigned to work with University of Southern California Dental and Dental Hygiene schools, as well as University of California at Los Angeles Dental and Dental Hygiene schools. During this time, I realized I enjoyed working with dental and dental hygiene students, and I decided to pursue my bachelor's degree with the aspiration of someday becoming a dental hygiene instructor.

I obtained my first teaching position in dental hygiene education in 2007. My first assignment was as an adjunct faculty member on the clinic floor, assisting the students with their clinical skills while working with patients. Other than being in dental hygiene school myself, I had limited experience with the curriculum and instructional competencies necessary for the dental hygiene educator. Prior to my first day on the clinic floor, I had no formal orientation to the educational program's curriculum, policies and procedures, strategies for teaching, student supervision and evaluation, or issues concerning multicultural diversity. Fortunately, one of the

full-time faculty members decided to mentor me. The full-time faculty member was not instructed to do so, but instead generously offered her support. I soon began working with her not only on the clinic floor, but also co-teaching with her as a didactic instructor in Introduction to Clinic. A short time later, one of the full-time faculty members fell ill, and I was asked to take on more responsibility teaching Oral Pathology. In teaching my own course I found I had limited experience in curriculum, grading, assessments, and evaluation. I felt lost in the world of academia, and I felt that most of my experience for those first few years was through trial and error. I knew how to be a clinician, and had many years of clinical experience in multiple capacities to share with the students. The problem was that I did not know how to translate my clinical experience to educational instruction.

I have been employed in the same institution for the past 10 years. Currently, I serve as a full-time tenured faculty member and lead instructor and supervisor for first year dental hygiene students. As I began supervising and supporting new dental hygiene faculty, I realized that there was a gap in calibration and understanding of instructional competencies among my colleagues. I felt this gap in calibration resulted from several factors. As the faculty had attended various institutions and had been taught via different methods of instruction, they often disagreed on teaching methodologies. The lack of consistency resulted in a lack of calibration among the faculty. The lack of calibration affected both the faculty and the students, and caused anxiety and confusion surrounding the correct teaching methodologies. The gap in consistent teaching methodologies existed, in part, because there had been no initial instruction and orientation at the beginning of new faculty teaching assignments.

The lack of formal orientation for new faculty is a result of several issues, the first being the issue of time. Most faculty members are hired on immediate need, and there is no time to

mentor new hires, as the educators must assume their roles immediately. Secondly, scheduling conflicts may also be an issue, as many adjunct faculty members are working alternative schedules in both education and clinical practice and may not have time to attend staff meetings to learn new instructional competency methods. I have experienced these issues with my own faculty, as I have struggled to schedule meetings with both the adjunct and the full-time faculty members that accommodate their varied schedules.

As a result of the aforementioned issues, I am interested in studying preparation experiences and instructional competency needs in order to further support the new dental hygiene educator. My goal in conducting this study is to provide more understanding surrounding instructional competency model for the new dental hygiene educator. That stated, due to my experience as a community college student and my time spent as an adjunct and full-time faculty member, I have several biases of which I am aware and that I need to explain. As a new dental hygiene educator I was not mentored through a formal orientation program or mentorship program, and struggled to understand instructional competency needs. Prior to my employment as a dental hygiene educator, I was not adequately supported by the dental hygiene administration. Additionally, in order to become a more effective dental hygiene educator, mentor, and leader, to the students and faculty I serve, I chose to pursue my master's degree in education and leadership, and ultimately my doctoral degree in education, leadership, administration, and policy. Although I am in favor of terminal degrees for dental hygiene educators, I understand that some educators may have circumstances that preclude them from advancing their education and may not have comparable preparation in instructional competency. These potential biases were mitigated in this study through the external review of the content,

methodology, review of the interview instrument, thick and rich descriptions, peer debriefing, member checking, and inclusion of disconfirming or contrary evidence.

Chapter 4: Results and Analysis

Overview

The purpose of this qualitative and phenomenological study was to explore the experiences and perceptions of 14-20 California dental hygiene educators who have transitioned from clinical practice into the community college education system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency.

Two overarching research questions guided the study. The research questions are as follows:

1. What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions and skills?
2. What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions, and skills?

This chapter is organized into three sections. Section 1 reviews the research design, and process for collecting and analyzing qualitative data, and participant demographics. Section 2 details the findings including a table of the collective interview questions, textural descriptions, structural descriptions, and essences for each participant and interview question. Section 3 presents the overarching theme from each research question and conveys the composite findings of the analysis.

Review of Research Design, Data Collection, Data Analysis and Participant Demographics

This study employed a qualitative, phenomenological approach to explore the lived experience of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions and skills. This approach allowed the researcher to gain an understanding of dental hygiene educators preparation experiences in order to further understand how dental hygiene programs might better support new professors in developing instructional competency.

Data collection. The researcher collected data by setting up appointments to interview the participants. The interview schedule was determined by the availability of the participants. Fourteen educators were invited to participate in the study, and all 14 educators completed participation in the study. The participants choose from personal face-to-face meeting, a virtual meeting with virtual meeting technologies or telephone interview. Seven individual interviews were conducted from personal face-to-face meetings, and seven interviews were conducted through virtual methods or telephone interview. The interviews took approximately 60-90 minutes to complete and were conducted between December 2016 and January 2017 with adherence to the study's approved interview protocol (see Appendix A). The participants were emailed copies of the interview transcripts within two weeks of the interviews taking place and approved the transcript of the interview.

The interviews began by outlining the research purpose, and all items related to informed consent and human subject protections. The researcher reiterated the fact that the interviews would be audio recorded and that all responses would be confidential. The researcher then outlined the questioning process, including number, type, and general subject of questions. The researcher then asked each of the interview questions in numerical order and participants

responded. Systematically throughout the data collection process, audio recordings were transcribed into a Microsoft Word document for further analysis. After all of the data was prepared and organized, the researcher engaged in the *époque* process, where the researcher sets aside judgments or preconceived experiences in order to understand the participants' experiences (Moustakas, 1994).

Data analysis. The qualitative data was audio recorded and then transcribed into a Word document for data analysis preparation. The data was prepared, organized, transcribed and imported into the qualitative analysis tool, Hyper-Research software (Hyper-Research, 2015). The software assisted in data management (Bernard & Ryan, 2010). The next step in the data analysis involved identifying key themes from initial codes and memos that indicate emerging patterns within the transcripts. In order to identify codes and themes, the data was subject to horizontalization and clustered into "meaning units" (Creswell, 1998, p. 150). Next, for each interview question, the researcher identified key significant statements that emerged from the participants lived experience. Lastly, the data was interpreted to "abstract out beyond the codes and themes to the larger meaning of the data" (Creswell, 2013, p. 187). To provide inter-rater reliability, two experienced coders verified that the themes, frequency, and categorical ratings were accurate.

Research participant demographics. The participants were selected based on the following criteria: (a) the participant had or currently has a minimum of six months or more of full-time or adjunct experience as a dental hygiene educator; (b) the participant was employed or is currently employed as an adjunct or full-time faculty member at a community college in the state of California; (c) the participant taught or is currently teaching both clinical and didactic dental hygiene courses.

Fourteen individuals meeting these criteria were selected, comprised of all female participants. The participants were all currently licensed Registered Dental Hygienists in the state of California. A narrative of each participant's background and experience follows.

- Participant 1: "My first experience goes back quite a few years where I was coordinating for a California community college's free clinic. I was coordinating the students coming into the free clinic, and then I did the same thing for a second free clinic in California. But my first official teaching as a dental hygiene educator, would have been for a community college located in central California and a community college located on the central coast of California. And previous to that, the other college would have been 14 or 15 years ago. Both of those I was on grant. I wasn't employed by the college, but I was educating. I was working with the students, but not in the classroom setting. I'm adjunct faculty at both institutions, and I'm on call at the institution as a temporary, but I have never done that. I have practiced as a dental hygienist officially 25 years. I did my student teaching and started last January, so it has been a year as a dental hygiene educator." Participant 1 holds a master's degree.
- Participant 2: "The institutional setting of my first employment as a dental hygiene educator was a small, fairly new community college. I think maybe it was open five to 7 years. I served as adjunct to start with and was adjunct 9 years. I was adjunct for 9 years adjunct, and then 4 years full-time. I practiced as a clinical dental hygienist in the clinical practice before making your transition into education 26 years. I say that because I was practicing teaching adjunct and in clinical practice until I started full-time. I was doing both. I practiced 3 days in private practice and 2 days at school. I've always worked many days. I taught both first year and second year students and taught multiple didactic

courses. I think I taught almost all of them. I earned my master's degree in healthcare management in 1990."

- Participant 3: "My first employment as a dental hygiene educator I worked at a community college as adjunct faculty. I actually started teaching dental assisting before I did hygiene for a year, and it was part-time one day a week in 1990. I didn't go back into hygiene until several years ago. This year was the first year that I had a regular spot. I was more like a sub and a tutor. Last spring, I taught preclinical for the juniors. They were in the lab and then we were in the clinic. In the fall, it was junior preclinical and then I did summation and an anesthesia with the seniors. I graduated (from dental hygiene school) in 1977. I practiced as a dental hygiene educator if you want to count subbing, around seven, 8 years on call. This year was the first year that I actually had a time spot on the schedule. I am not currently teaching and will not be teaching because the new regulations. They have me down as a professional expert, because you don't have to have a bachelor's. They are not honoring my teaching credential. So two of us were dropped from the schedule. They will have me come in and tutor in the fall when the new ones need extra help. That is mostly what I did, that and subbing previous to getting an actual class assignment. So I can still do that. I'm not planning to go back to school and get another degree." Participant 3 holds an associate degree.
- Participant 4: "My first employment as a dental hygiene educator I worked at a California community college. I served as both full-time and adjunct faculty, seven were adjunct and two were full-time. I practiced clinically from 1991 to 2009 -- 18 years. As an adjunct, I was still in clinical practice. I taught first-year clinic, second-year clinic, and didactic, five or six." Participant 4 holds a master's degree.

- Participant 5: “Regarding my first employment as a dental hygiene educator, I am employed in a community college setting. I have always been employed within a community college setting. I currently serve as a full-time dental hygiene educator, and have served as a full-time educator for 10 years. I was adjunct faculty before I became full-time for 9 years. It will be 20 years in fall of 2017 at the same institution. Prior to becoming an educator, I had 22 years of private practice before I started part time, then I did both until I got the full-time position in 2006. I was in a unique situation. I helped start the program in fall of ‘97 which was the first class at the institution. For the first 2 years, I did both didactic and clinical just because we only had one class and we had very few people starting. After we got more faculty and starting doing the rotation of first-year and the second-year, I went to just clinical until I started full-time. Then I did both. I taught preclinical; I taught first-year clinic; I taught advanced clinic; I have taught the seminars; I have taught local anesthesia, perio; I’ve taught dental health education; I have taught community; I have taught radiology lab. I have not taught oral path, I have not taught dental anatomy. I have not taught pharmacology.” Participant 5 holds a master’s degree in education.
- Participant 6: “My first employment as a dental hygiene educator I worked at a California community college. I only taught clinic one day a week, then I went to my second institution, which was a private university. There I taught clinic, radiology, junior lab, and morphology. Most of them were clinic and lab classes. In my full-time position, I teach juniors and senior clinic. I also teach radiology, dental materials, oral pathology, and possibly periodontics next year. At my first institution, I was adjunct, at the second institution, adjunct as well. And at my current institution, I was actually adjunct about 3

years before I became full-time. I'm into the second half of my second year as full-time faculty. How long in total did I practice in the private practice before you transitioning into education? I did both for a little bit. 11 years before I went in. I sub now." Participant 6 holds a master's degree in health professions education.

- Participant 7: "Regarding my first employment as a dental hygiene educator, I am employed in a community college setting. I have always been employed within a community college setting. I have served as both adjunct and full-time faculty. I was adjunct faculty for approximately 22 years, and then have been adjunct faculty for the past 5 years. All totaled, I practiced about 15 years clinically before making the transition from clinician to educator. I practiced dental hygiene while I was teaching for about 18 years by working one day a week on Friday. I have taught Clinic One, Two, and Three, and have taught Introduction to Clinic, the didactic lecture portion of that; Dental Health Ed, Nutrition; Anatomy; Patient Management; Community Oral Health; and Periodontics One." Participant 7 holds a master's degree.
- Participant 8: "Regarding my first employment as a dental hygiene educator, I am employed in a community college setting. I have always been employed within a community college setting. I currently serve as a full-time dental hygiene educator. I was part time for a couple years. I have been teaching 17 years, and practicing clinically for 22 years before making the transition from clinician to educator. I have always practiced clinically, and I still practice clinically two days a month. I have taught both first-year clinic and second-year clinic. Now, I'm just in second-year clinic. I began to teach didactic in the classroom when I was first hired as adjunct. Currently, I teach six didactic courses a year. Five of those I have been teaching for quite a while over the 17 years,

and I just got a new class this year, Community Dental Health. Our one teacher retired so I got it.” Participant 8 holds a master’s degree.

- Participant 9: “I began teaching in a community college. I currently serve as adjunct faculty in two different community college institutions. I practiced as a clinician 4 years before making the transition into education. I have practiced as a dental hygiene educator less than 1 year. I have done senior clinic with both schools. As for didactic courses, I have taught pharmacology; I have taught Perio Two. This semester I will be teaching local anesthesia, Perio One, and Practice Management.” Participant nine holds a bachelor’s degree and is currently enrolled in a master’s program in dental hygiene.
- Participant 10: “The institutional setting when I first became a dental hygiene educator was at a community college. That was my first experience teaching. I got that position because I did my student teaching there so I was at that community college. I applied for a full-time position and I got that job so I moved to another community college. The second community college is actually a bachelor’s program. So I went from the associate’s program into a bachelor’s program. I currently serve as a full-time educator. I have been full-time since August, this is my first semester. I was adjunct faculty, including my student teaching, for two and a half years. I started clinical practice in 1988, so 27 - 28 years. I still practice now one day a week. As an adjunct, I was a quote on quote guest lecturer so I would sub occasionally on the clinic floor for both first and second-year students. This last semester, I wasn’t lead in any courses. I was part of dental materials for the second year as an assistant. That was a lecture class, mostly it was all clinic.” Participant 10 holds a master’s degree in dental hygiene.

- Participant 11: “The institutional setting when I first became a dental hygiene educator was at a community college. I currently serve as adjunct faculty at the same institution for about 14 years. I practiced clinical dental hygiene before making the transition into education for about 6 years. For a short time, I practiced clinically as well as taught before I started with a grant program. I have been adjunct clinical instructor for both first and second year. Mainly, first year, first semester; and then third and fourth semester was with second year. Regarding classroom experiences: I haven’t really done any classroom, except for a year or two. I was part of a rotation where we taught preclinic on a rotation basis with one instructor being the lead instructor, but we all took turns doing the lecture portion. So there was a year or two where I did do some lectures.” Participant 11 holds a bachelor’s degree.
- Participant 12: “The institutional setting of my first employment as a dental hygiene educator was at a community college. I currently serve as adjunct faculty. I finished school in 2007, and I have been at the college assisting with teaching since 2014. That is about 8 years. I still practice clinically 5 days per week. I am teaching one day per week. I teach on the clinic floor with the second-year students. Last semester I helped out quite a bit in radiology first-year students in the lab and not in the classroom, always in a clinic setting. Participant number 12 holds a bachelor’s degree.
- Participant 13: “The institutional setting of my first employment as a dental hygiene educator was at a community college. I also assist in the master’s of science dental hygiene program at a University of California institution since 2012. I currently serve as adjunct faculty. I graduated in 1991, and I started teaching in 2012. That is when I finished my master’s of science program. I taught didactic radiology, didactic dental

materials, and then I have also taught on the clinic floor for first year and second year.”

Participant 13 holds a master’s of science degree in dental hygiene.

- Participant 14: “My first experience teaching was through Sacramento City College’s Continuing Education Department. Originally, 9 years ago, we had a woman who had her own business. But she was here full-time dental assisting director and then she ran anesthesia nitrous and soft tissue courses and that was really my first teaching job. I would do that three times a year for her. Then when I became adjunct, that was my first official teaching position at an institution. That was 5 years ago now. I did teach for about a year and a half at the University of the Pacific as well. I graduated in 1983. I started here as an educator 5 years ago, so 33 years. I am currently employed as a full-time tenure track faculty member. I was adjunct faculty for 3 years before becoming full-time faculty. I have been full-time faculty for 2 years, so 5 in total. As an adjunct, I started in the clinic and in labs. We do a lot of team teaching here. It was primarily radiology lab and senior clinic when I first started. Currently, in spring semester, I am the lead in first year. I’m the head and neck anatomy instructor. I teach a radiology lab and I teach in two senior clinics. Fall semester, I’m the first year pre-clinic lead and I teach in senior clinic and also community of dental health. We have a class called seminar and another class called period two, and I team teach in those two classes.” Participant 14 holds a bachelor’s degree.

Overall, the participants’ clinical experience ranged from 4 years to 22 years with an average of 21 years in clinical practice. Eleven of the participants had 20 or more years of clinical experience. The participants had served as a dental hygiene educator from 6 months to 22 years with average of 8 years of service. Six of the participants had served as a dental hygiene

educator less than 5 years. Seven of the participants had served or currently serve as adjunct faculty and seven of the participants had served or currently serve as full-time faculty. All seven participants who currently serve as full-time faculty began their teaching assignments as adjunct faculty. Nine of the participants held master's degrees, four participants held bachelor's degrees, and one participant held an associate degree. All 14 participants currently serve or have served as clinical instructors, and 11 participants currently serve or have served as didactic instructors.

Table 2 highlights the demographic data of the participants.

Table 2

Participant Demographics

Participant	Gender	Years in Clinical Practice	Years in Dental Hygiene Education	Adjunct (A) or Full-time (FT)	Education	Clinical Instruction	Didactic Instruction
Participant 1	F	25	1	A	Master's	X	X
Participant 2	F	26	12	FT	Master's	X	X
Participant 3	F	26	1	A	AA	X	
Participant 4	F	18	9	FT	Master's	X	X
Participant 5	F	22	19	FT	Master's	X	X
Participant 6	F	11	5	FT	Master's	X	X
Participant 7	F	33	22	A	Master's	X	X
Participant 8	F	39	17	FT	Master's	X	X
Participant 9	F	4	6 months	A	Bachelor's	X	X
Participant 10	F	28	3	FT	Master's	X	X
Participant 11	F	6	14	A	Bachelor's	X	
Participant 12	F	8	2	A	Bachelor's	X	
Participant 13	F	21	4	A	Master's	X	X
Participant 14	F	33	6	FT	Bachelor's	X	X

Findings

Thorough the data analysis process, the researcher keynoted major themes discussed by the participants and defined these as significant statements. The researcher determined that from the six interview questions 13 significant statements emerged. The findings are depicted in Table 3. Column one depicts the relationship of the research question with the interview question; column two depicts the number of significant statements per interview question, and column

three (*n*) depicts the number of occurrences per significant statement. The researcher determined that the statements were significant when seven or more of the 14 participants referenced the statements.

Table 3

Interview Questions Significant Statements and Frequency

Research Questions	Interview Questions	Significant Statements	<i>n</i>	
1. What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions, and skills?	1. Describe your background and experience as a Dental Hygiene educator?	I felt a little more prepared because I had my master's degree	7	
		I did not feel very prepared to transition from clinician to educator	10	
	2. Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following surrounding knowledge.	3. Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following surrounding dispositions.	I learned to be an educator primarily through observation or learning on my own	9
			I had difficulties with learning how to evaluate and discipline students	9
			Diversity training varied throughout institutions	7
			It would have been a better experience and if I knew how to relate to students	8
	4. Upon your employment as a new dental hygiene educator, describe your experiences in the following surrounding skills.	5. Given your lived experience, what might be your recommendations, if any, to improve your transition from clinician to educator?	The boundary between teacher and friend is one thing I think that becomes really challenging.	7
			There is a lack of consistency, communication, calibration, and inclusion between faculty	10
			I did not experience a formal orientation upon my employment and lacked preparation in one or more of the following: curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation	13
			I did not feel prepared at all to utilize any technology in the classroom.	7
2. What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions and skills?	6. Is there anything else you would like to add to any of your responses?	I think that a formalized orientation and mentorship program would be beneficial.	14	
		There is a need for pedagogical training for faculty and standardization of best practices for programs	7	
		Various responses reiterated a need for methodology and mentorship	7	

Research question one. Research question one explored the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions and skills. This research question was aligned with interview questions one, two, three and four. This section details the findings including the interview questions, textural descriptions, structural descriptions, and essences for each participant and interview question.

Interview question one. Interview Question 1 addressed the background and experience of the dental hygiene educator. The participants were asked: Describe your background and experience as a dental hygiene educator. One significant statement emerged from Interview Question 1. As previously outlined in Table 2, nine of the participants held Master's degrees. Eight out of the 14 participants suggested that earning a Master's degree had assisted them in their transition from dental hygiene clinician to dental hygiene educator. The following comments represent this statement.

Participant 7 stated,

I had no educational background in regards to being a teacher, per se. All of my education at that point had been clinic education. I had my bachelor's degree but that didn't include any teaching techniques on being an instructor. I felt unprepared and that is the reason I went to (back to school) to get my master's degree in education.

Participant 4 reported,

I felt a little more prepared than someone else because I was student teaching with my master's degree program, which was in dental hygiene, so I was kind of getting the didactic background I needed to be an educator through my education as I was applying it as an educator. But prior to that, very little preparation on how to put together and develop a course. And very little support from the administration to assist with that.

Participant 1 replied, “I had the background of taking teaching methodology and all of that when I got my master’s, so I feel like I had that, plus I had many years of lecturing.” Participant 8 recalled,

I felt pretty prepared because my master’s degree is in health professions education. I don’t think it is common to be prepared. For instance, I was ready for the classroom but not for the clinic. I felt prepared for classroom work but not very prepared for clinic work, so what I did is I imitated my teaching situation when I was in school. It was not successful.

Participant 9 stated,

If I hadn’t had my master’s work prior to teaching, I would not have been prepared at all as far as curriculum goes or how to write a syllabus. In fact, I have wanted to go into education I know I’m a new dental hygienist, I have only been practicing for 4 years, but I have known since day one that I wanted to go into education. I started applying for educator positions 2 years out of hygiene school. Although I wanted it, I secretly didn’t want to get the job because I felt so unprepared on educational theories, learning theories, curriculum development, all of those things. I knew that I was going to be getting my master’s, so part of me was hoping that I wouldn’t get any callbacks or job interviews. It wasn’t until I was in my master’s program and I had taken some of those courses that I started to feel comfortable with the idea of going on an interview and really taking on an educator position.

I was very lucky because part of my graduate degree requires that I do one semester of student teaching. For the most part, I did feel prepared; number one, because I had a lot of courses on education, specifically, dental hygiene education.

Participant 6 reported,

I was now in front of a class, I needed lesson plans and more of the structure and more of the how to, that is when it got more challenging. When I started, that is actually how I went into my master’s program. I thought I really need more background; I don’t have enough.

Participant 13 replied, “Do I think I would have been prepared (to make the transition from clinician to educator) prior to my master’s degree? Definitely not. I graduated with a bachelor’s degree from a UC as well, but no.” Participant 14 stated,

I cannot say enough good things about a degree completion program. Before I started my degree completion program, I didn’t even know what the word “pedagogy” meant. I did know that adults learned differently than children. Although, I recognized that adults like

to learn the way children do. We still like to do things like games and silly putty. I think it helps people relax and not be so stressed out and worry about memorizing 100 things. That is not how you're going to learn and retain for patient care.

Participant 10 commented,

When I was going through my master's, my instructor for methodology, I thought she was so picky. We fought head to head for the entire year. In retrospect, I understand why she was so specific about things. Now I have to do them. Now I understand why she was so specific. It's trial and error, but there is a reason why you need to do certain things when you are constructing a syllabus or running a classroom, what you have to watch for. Because when you actually have to do it, all of a sudden it makes sense.

Interview question two. Interview question two addressed the knowledge of the new dental hygiene educator. The participants were asked: Reflecting on your first experiences as a dental hygiene educator, describe your first few months of teaching as related to preparation? How did you learn the following competencies: knowledge of pedagogical methods, including feedback, assessment and grading in clinical courses; clinical expertise as well as knowledge of how to teach and evaluate students in a clinical and didactic setting; knowledge of educational theories and evidence-based teaching practices; ability to teach diverse learners, and the knowledge of values and ethics relating to didactic and clinical instruction. Four significant statements emerged from Interview Question 2. The first significant statement revealed that ten out of the 14 participants interviewed discussed they felt unprepared to transition from clinician to educator. The following comments illustrate this significant statement. Participant 1 replied,

Did I feel prepared once I hit the classroom? Well, first of all, I didn't know I had the job until the week before the job began. And then at my other institution, the same thing happened. The day before the class started they called me to tell me I had the position. I didn't feel real prepared. I got some stuff from my master's program; although, I will say that it was too basic. It was like, "Let's teach you origami so you will learn how to teach in the classroom." I think more than anything I had an instructor who walked me through a lot of it. And any time I had a question that sort of went to—because basically, for example, when I walked in the first day to give lecture, the teacher before me—I said, "You know how to hook this up? How do I do this?" And he said, "Ask the students. I don't know." So it was thrown in and do the best you can kind of a thing. When I was first hired at both institutions where I am currently employed, I was not given a manual

or any kind of instruction as far as the way of the clinic or the procedural issues. And in fact, I even had to ask for my textbooks. At one institution, I came in the week before and I had to ask for the textbook and I didn't get the textbook until the fourth week in class and that's because the one instructor gave it to me. And I was going off of what I what I could get online to teach what I was teaching.

Participant 2 stated, "Not at all. I don't think I really got any help at all. The students were just as helpful as one faculty that helped me a little bit." Participant 3 responded,

I prepared myself as best I could, but no I wasn't. There were no guidelines. The first day of class, you just show up. There is no preamble. I even offered when the instruments were coming in, I offered to go on my own time. I thought it would be a more informal opportunity to hear them talking about things. I wanted to be more prepared and see what they were using, but they said it wasn't necessary. When I first got there, I asked about a clinic manual and that was basically self-study. It has all the rules. I had to take it home and read it. They didn't say, "Here's the manual and you need to read this and that." I had to ask for the information. I wanted to be prepared. I didn't want to get there and have to wing it.

Participant 4 stated,

There was very little guidance. I did not receive a clinic manual, and I was actually instrumental in developing one myself and updating it. It needed updating and I took it upon myself to update and become a mentor. I wouldn't say that there was a lot of guidelines, like "This is how we do it; here is our system." There weren't a lot of guidelines. You did it the veteran's way or not at all.

Participant 5 recalled,

I had no clue what I was doing. The whole program was new. There wasn't a soul that had any experience in education at all because it was a new program. Because I helped put the program together, I knew we needed to have objectives.

Participant 7 commented, "I was totally unprepared." Participant 8 explained,

I don't recall there being any course of a way to learn how to be a teacher that was offered by the college. There wasn't any of that. I came with a set of skills, but I basically was outlining the chapter for students because I didn't know how to do it. Was there any clinic manual or instruction given? No, zero.

Participant 9 replied,

I only did student teaching at one of the institutions that I currently work at and I was assigned a specific mentor. However, all of the faculty that I interacted with during my student teaching voluntarily took me under their wing and provided me with valuable

information on how to interact with the students, different ways that they teach their courses. It really wasn't just one mentor. Everyone at that particular institution really wanted to see me succeed, and they helped me every step of the way. At the other institution, I was given absolutely no guidance. I was thrown to the wolves. I didn't get to see my classroom until the very first day of class. The first day of class I walked into the classroom and had to figure out how to work all the technology. I had no idea how their clinic runs. I haven't been given any kind of manual, haven't been given anything in writing on their policies and procedures. The dental hygiene department doesn't follow the academic calendar of the institution, so I haven't even been given their calendar. It has been very difficult at the other institution. Absolutely no guidance.

Participant 11 commented,

I was not very prepared (to make the transition from clinician to educator). I had gone to the same school that I was hired at, that is the school I graduated from. So everyone had this attitude that I could remember everything, having been a student there. But there was a 6-year interim between when I was a student and when I started teaching. It wasn't that easy. When I first got hired, they did give me a clinic manual for me to look over on my own. I didn't sit down with anyone to go over it.

Participant 12 stated,

As far as feeling prepared to make the transition from clinician to educator, I would say no and yes. Maybe 60% prepared because I'm a hygienist. The other 40%, I'm not a teacher so I was very overwhelmed and confused on what was going on. I had to refresh my memory from being a student, but that was almost 10 years ago. I would have to say yes and no. No because I wasn't aware of the different procedures on the campus with the program, different CODA and all those. I had no idea about all those organizations that regulate teaching.

The second significant statement that emerged from Interview Question 2 was: I learned to be a teacher primarily through observation or through learning on their own. The second significant statement revealed that seven out of the 14 participants interviewed discussed they learned to be an educator through observation or through learning on their own. The following comments represent this statement. Participant 3 stated, "You learn a lot from watching. You find the ones (other faculty) that are willing to share. Just keep observing and asking questions."

Participant 6 stated,

We had mentors, so my mentor reviewed with me what the tracking forms looked like, more protocol for the institution. The mentor was a full-time faculty member and was

assigned to me to mentor me. I could go with her with questions. We had two meetings before I actually started. And that was to get my badges, to get me logged in to certain things, all the HIPPA information. She would check in with me just as needed. I saw her all the time anyway, but we didn't really meet all that often unless something came up and I had a question. I have not experienced this in other institutions I have worked at, just in this particular one.

Participant 7 said,

I learned to be a teacher primarily through observation and paying attention to what the instructors who had experience were doing. I pretty much did what I was told. They said, "do this," and I did that. There wasn't a lot of innovation involved. It was more just repetitive exercise.

Participant 5 stated,

My daughter is in education and she is a math teacher. She got this fellowship and would go to these different workshops throughout the country. She would come back from these workshops and shared with me what she learned. Those are the things that I actually could bring into the classroom. My master's, it wasn't stuff that I could apply. It was philosophy and things like that. What I actually used in the classroom are things that my daughter brought back from her fellowship. That is how I did it.

Participant 2 replied,

The thing that helped me the most was that at some point in time I had to write some kind of review of what I was doing. There were questions on there that I didn't understand what the questions were because they had to do with education, and I didn't have a clue. I had to do research as to what these questions were all about and figure out why they were asking, so I got online and tried to figure out what all these words meant and what the school was asking me.

It would have been a better experience if I knew what I was doing, which I did not. And if I knew how to relate to students. It's a whole different world teaching than in private practice. In private practice, the relationship is one-on-one in your own little cubicle, and it is a very personal relationship. When you have got 24 different students looking at you, it is a whole different ball game. It was very difficult for me to figure out how to *relate and how to establish rapport* because there was so many people.

Participant 9,

I haven't even been able to watch other faculty so much. I have a friend, he teaches in the physics department, so I have had to go to him to ask him how to do things. I have had to ask him, "Where is the Scantron machine?" and "Who do I go to for copies?" My dental hygiene department really hasn't been able to answer my questions, or they just don't make me a priority. I have had to learn many things on my own. Just yesterday was

the first day of class and I was in a new room. My students were waiting outside the door and the room was locked. Nobody told me my room was going to be locked; no one told me I was going to need a key. Thank goodness a maintenance person happened to walk by at that moment to open the classroom for me; but had he not been there, I wouldn't have known who to go to open that classroom." At one of the institutions unfortunately I feel unsupported in both the clinical and didactic settings. Even though I have requested materials on their clinic procedures, on their different patient coding system, on their competencies, I have requested all that information, they tell me they don't have it. It has been a struggle in clinic at that institution because I have been basically going with what I have been doing at the other institution, which doesn't always correlate because every school does things differently. I have had students get frustrated with me and tell me, "We don't do things like that here." It's hard for me. How am I supposed to know? I'm supposed to act like the expert in front of students but it's very clear to them that there's a lot that I don't know.

Participant 11 stated,

In the classroom when I was developing your lectures for the preclinical course, the lead instructor did not help me with that. I figured it out on my own. Having been a student, I made an outline, read the chapter, went over the key points, but I was left hanging on my own. In one lecture, another instructor gave me her notes for that one lecture. It was helpful. I felt like I got the things that other people wanted to lecture about the least. I was on my own. No one sat down with me as a lead instructor or as a director and said, "this is how a lecture should be written." [They said] "these are the chapters we want you to lecture on" and that is all."

Participant 4 said,

There was a lack of mentorship. I feel that the person felt very threatened by new faculty members coming in, and that her methods may have been questioned. There was a reluctance to assist didactically, more so than the clinical aspect. Other mentors or a director was willing to assist; however, in the tight, tight curriculum that there is, that was limited by amount of time that that person had to give to me. It depended on the willingness of the veteran, tenured faculty, if they were willing to mentor you.

Participant 8 recalled,

I was the acting director of the dental hygiene program for 2 years. I created a faculty clinic manual because nobody had any instruction. We were getting hygienists coming from private practice who would like to teach, but they had no knowledge how to do that in a clinic setting. Most of them imitated what their teachers had done, which was hands off.

The third significant statement that emerged from Interview Question 2 was: I had difficulties with learning how to evaluate and discipline students. The third significant statement

revealed that nine out of the 14 participants interviewed discussed they had difficulties with evaluation procedures and learning how to discipline students. The following comments represent this statement. Participant 4 responded,

I was not given any guidelines with discipline and how to discipline students, and I learned through trial and error. I would say common consideration. As a new faculty member, pressure even from other faculty members to change an assessment of a student clinically. Learning that, I don't think there were any real guidelines given. I would have loved to see some of that, this is how we deal with some of that.

Participant 2 said,

Learning that (how to evaluate students) was a horrible experience. The first semester that I was there in the clinic, which was the first year I was out at the college, the clinical competencies were set up so that one instructor graded on all instruments for three or four students. I had no idea how anybody else was grading or what the students should be doing at that point in time. It turns out I was really rough on everybody because I had no clue as to what the expectation was for somebody at the end of the first year clinic.

Participant 3 stated,

I learned to clinically evaluate by talking to the other instructors in clinic. I would go to them if there was something I wasn't sure about. Where I went to school, if you had to take sheet calculus or glandular granular calculus, that removal was all graded out. Every patient was disclosed at the end. Where here, if you teach to a test, they do ask "is it applicable?" Are we only teaching to the test or are we teaching to what the patient needs, like if you were in private practice. I saw discrepancies there. If you want to be invited back, you couldn't make too many waves. You could make suggestions.

Participant 9 recalled,

I was not been given any training on the procedures or the logistics of teaching at an institution. By procedures and logistics, I mean how to input grades into their system, how to request textbooks from the different publishers, how to put in a request at the bookstore. I didn't know how to do any of that. I didn't like that because the students pick up on that, and I feel like it makes you look less credible to the students. I had to learn them basically in the moment, asking other instructors, sometimes asking students. Flying by the seat of my pants and learning it then and there. As far as a program policy for discipline, I have not been given information from either of the institutions. That is one thing I feel I'm not prepared for. I wasn't really prepared for that coming into teaching, and I'm still learning that.

Participant 7 said,

I had difficulties with evaluation procedures and understanding how to evaluate. I didn't really understand the concept of entry-level experience or entry-level technical skills. Having been in an office setting for that many years, you don't realize the standard to which you hold yourself, which is a lot higher than it certainly was when you were back in college. Your skills evolve so much during that period of time, you forget what it was like when you first started out and how difficult those first three months were trying to see all those patients in one day.

Regarding first evaluations, as new faculty member getting an evaluation that was less than hurts your feelings. You're putting your all into this and it is like your baby and you want to do well and any kind of criticism gives you a little sting. But it happens, so you try to take it and try to be realistic about it. No one talked to me about (the evaluations or outcomes), I pretty much had to figure it out on my own.

As far as ethical situations dealing with disciplining students, I definitely had difficulties learning how to do that. When a student makes a mistake, they are all usually innocence that first time. Even the severity of that infraction, which may be extreme even though it's extreme, they don't have that knowledge background basis to really severely and rashly discipline them because they haven't had that foundation yet. It was difficult to match the punishment with the infraction and make it fit accordingly.

Participant 5 said,

What I have seen is that the new faculty, they do fine in assessing, they just don't know what to do with it after they have assessed. Where you put the grades, how do you stay organized, the software that we have for the grades.

Participant 8 shared,

As a new faculty member coming in and it (assessment and grading) having already been established, that is a problem. There is a huge learning curve and everything is online, so that is more of a concern. I think that we need to spend more time mentoring. This past semester was the first time we did online grading. I was in the clinic for 45 minutes to an hour catching up on gradings after each clinic session. We had a tutorial that we listened to and we could refer back to but there was not any hands on before we got on the clinic floor. We didn't have nearly enough practice. It was designed and set up so you can practice as much as you want, but I would have loved to do a group of some grading online. This is how it looks, this is how it's going to be.

When I received negative feedback on my student evaluations, there was no discussion. I did feel very alone. I would have loved to have someone to talk about. For instance, if I would of had a mentor to talk to it about. Even the program director did not discuss them. She just let us come to our own conclusion and make alterations as necessary.

Participant 12 said,

Thinking about how to assess students and grade students, was that difficult for to learn when I first started? Yes. Even now, 2 years, I have been at school and it is still difficult. I have to really take my thinking and change my thoughts. I'm seeing a student on a level of where I am as a hygienist, where I have to really take back and say, "No, they are still learning and they don't know yet and they are still growing." I see in the program now, in hindsight, the things that we're teaching; it doesn't reflect where they need to be when they graduate. So I think my mind is there. Sometimes I get a slap on the hand, no, not yet. There's only 6 months left. They need to know this before they graduate. So yes, it's difficult to transition. If we had some type of manual to really break it down, because I don't recall what you learn in this class and this class and this class. So if I had more of an understanding then I could say, okay, they are here. They should know this and I can help them grow the whole 2 years through the program. But it's difficult to slow it down and to assess them.

For me, I'm not good at discipline. My heart, I need to learn how to trigger that switch off. So if someone is in trouble, someone did something wrong, it's hard. Even with my own kids. If they went to juvenile hall for 10 years, I would not give someone a time out or take away points. But if you cross a line that can hurt someone, then I'm very strict. That is my heart because I'm labeled as mean. So I am "tuck in your shirt, put your hair up, wash your hands." I'm strict. Little, tiny things, whatever they might do -- notes not done out correctly, okay, we can work on that. I have told you three times already, but okay, we will work on that. Serious concerns, then they see a whole different side of me.

The fourth significant statement that emerged from Interview Question 2 revealed that formalized diversity training varied thought their institution and department. Seven out of the 14 participants interviewed discussed formalized diversity training varied throughout their institution and department. Participant 4 stated,

There wasn't anything formal. The institution was very diverse so you had to learn that, but it was on the job learning more than formal. I believe the university had a training on diversity, quote on quote, institution wise. But in the close proximity of dental hygiene, it should have been greater.

Participant 2 said,

No, I did not [have cultural diversity training] But I was certainly aware that I was more open and more aware than other people. There is one instructor that when I took over a class that she was teaching, part of her final exam was to name Santa's reindeers – which, great for you and me, blonde, white skinned people but what about the minorities that don't have a clue. That didn't occur to the instructor that that was unfair. As a matter a fact, not only were there not any courses taught, but it was never even thought about by

the director. It didn't even occur to her to teach the faculty, or to be more aware herself in different ways of dealing with different cultures and ethnic backgrounds.

Participant 6 shared,

We had one [diversity course as a department]. One of our faculty left to go finish her master's program. Her capstone was on cultural diversity, so she came back and did an in-service for us. So we had some training.

Participant 3 said,

The school has workshops for adjunct faculty and a lot of it has to do with working with students from all different backgrounds and always staying positive. We would go to these workshops to learn about the goals and policies of the college, and I learned some things there on how to work with all the different personalities and backgrounds of students and having sensitivities to that.

Participant 8 recalled,

Our dental hygiene program is very diverse. We have lots of Hispanic students, we have a good number of students from the Pacific Islands and Asian students, way more diverse than the national average. But the college feels we don't have enough diversity in our in the dental hygiene program we don't have the same diversity as the main college. There was no instruction given on managing cultural differences. There are all kinds of issues because we don't know what we do not know. I put my foot in my mouth because I ask questions about their culture. I found out that is the incorrect thing to do because I need to be more respectful. There is lots of training going on at our college with inclusion and diversity over the past year. I just went to a big training last fall about cultural inclusion and diversity, but through the institution not the department itself.

Participant 9 said, "Cultural diversity has not been addressed so much. The only training I have had with cultural diversity would be in my undergraduate work." Participant 12 shared,

I'm guessing before our new director, it would be possible that there were some concerns at the college. The director we have now, there are no concerns at all because she's very open. She explains to us what her vision is for the campus, diverse staff, and diverse students. She's very open to all that and it is encouraged.

Participant 13 said,

I have my didactic class, and over 50% are English as a second language. Many times, I don't understand what they are telling me. I know they have difficulty on exams about what certain words mean. I find it totally entertaining because they bring so much more to the environment and how they view dental healthcare. Many of their clients that they bring in are mostly from their family or friends and that client population has different

dental IQs. It's very fascinating to see the approach that they all bring. Many times it is not important whether you lose a tooth or not or if you even see a hygienist and what a hygienist is. It's fun having the conversations. This semester, the second years, they are more culturally diverse. I enjoy the diversity.

Participant 14 stated,

So for me, I eat up that cultural diversity. In community dental health, one of the most fun things we do is a cultural potluck. Toni Adams, if you ever get a chance to meet Toni or if you need someone to talk about cultural competency or cultural diversity, she's an author. She's written a series of books from this area but she's fantastic and she has this kind and gentle way of helping to bring people around and see how beautiful cultural diversity can be. So when she's my speaker, that day, everybody brings food and we have a potluck. If you were to walk around this campus, you would see every color, every ethnicity. People from all around the world come here. Before you leave, out in that reception room is a project I started with storyboards. The student storyboards tell where they have come from and how they got here. Even in the junior class, we have people from Russia, Thailand, and South America. We always have a very diverse class. We have a very strong equity officer in this institution and in the district. Student equity far exceeds anything that we do. We are expected to go that extra mile to make sure that the student feels that we're doing everything to make them feel equitable. Equitable. Not equal, but equitable. So things like religious freedom and specific cultural things, we do ask for documentation just for the record to keep in their file in case we are ever challenged on that later.

Interview question 3. Interview question 3 addressed the dispositions of the new dental hygiene educator. The participants were asked: Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following: Adjusting to academia, acceptance of constructive criticism from colleagues and students; distinguishing the boundary between teacher and friend; difficulties forming effective professional relationships and collegial interactions due to cultural and philosophical differences; and complications relating to responsibility and authority. Three significant statements emerged from Interview Question 3. The first significant statement revealed 8 out of the 14 participants suggested that they had difficulties with adjustments to academia and acceptance of constructive criticism from colleagues and students. The following comments represent this statement. Participant 2 stated,

How did I adjust coming out of the clinical world and the clinical practice to the academic world? Not well, not well at all. It was really rough on me emotionally. It would have been a better experience if I knew what I was doing, which I did not, and if I knew how to relate to students. It's a whole different world teaching than in private practice. In private practice, the relationship is one-on-one in your own little cubical, and it is a very personal relationship. When you have got 24 different students looking at you, it is a whole different ball game. It was very difficult for me to figure out how to relate and how to establish rapport because there were so many people.

Participant 1 stated,

I think that my biggest adjustment was some of the students' attitudes. It kind of surprised me. I had a student the first week that I was there come into class intoxicated, and I had to do something about that right away. And later in the semester, I had a student fall asleep in class. And I had to do something about that right away, which some of the students didn't like, but I do need to manage my classroom. So adjustments, some of it was kind of shocking. I didn't think that I would be telling someone that it is unacceptable to fall asleep on the table when they are clearly intoxicated. I didn't think that was going to be part of my job, but it is. Because I have to bring the level of acceptance to the level that it belongs at. The other thing that I noticed—and I had never thought about this before—was the teaching method from one school to another school. I would watch one person doing it exactly like they did it at the other school and then two other instructors who just kind of went off on their own. The little things. There wasn't time to get those things corrected either because I was going from one class to another.

Participant 4 said,

Personally, taking [constructive criticism] from faculty was much easier. In my experience, students had too much say in their constructive criticism. Meaning that if they didn't like something, they knew that they could take it higher and higher and higher. They could take it to other faculty members, take it to a director, take it to a dean. I feel that students had difficulty coming and giving you constructive criticism, and sometimes students were given too much power when they don't know what they don't know, when it shouldn't be constructive criticism. They were allowed far too much leeway with that.

Participant 11 reported,

I think I can handle constructive criticism. What I don't handle very well are personal attacks. There was an instance where it was more of a personal attack than it constructive criticism. That is difficult. I would rather know if I'm making a mistake. I would rather be telling the students the right thing, so if I'm making a mistake, I want to be told about it so I don't continue to make that mistake.

Participant 12 said,

Did I have difficulty as a new educator dealing with constructive criticism either from faculty or student? I won't say difficulty. The first semester you work there, they do evaluations. So most of the students said I was very quiet. The ones that did work with me said that they enjoyed it. Some I didn't work with at all. What was surprising was different comments that the faculty had made, where you think everything is going okay because if it is not please just tell me. But you would hear behind the scenes that such and such said or they thought—why didn't you just tell me and I can change whatever the problem is. That was more hurting than anything.

Participant 5 stated,

I do have to say, the students totally took me off guard and hurt my feelings if I didn't get the top score [on my evaluations] from everybody. I was devastated if a student said they didn't like me or complained about something that I had done. My goal had been to be as fair as possible. Every now and again someone would say, "Oh, she isn't fair" or "She was mean." I was not prepared at first. Now, I have realized that is the way it is. You do the best you can and try to be as fair as you can. I mean, it still bothers me. Constructive criticism is fine, but the personal part of it, I wasn't prepared for. I think we all kind of went, "Wait a minute, we are really nice people." There was a little comfort in saying, "Okay, well, they don't like you either." Let's listen to what they have to say and then either make changes or throw it.

Participant 6 said,

At the second institution, students evaluations are every term. It's funny because, first of all, you know their writing and you know this is coming because they argued a question. So you already know it is coming, this is their one chance to get back at the instructor. I always take them with a grain of salt. The first time I got them, I was blown out of my seat. I know why they said this, so I think initially it was hard.

I did speak to another colleague who had been there a little bit longer than I. She actually said to me before we even got them, "When you get your evals, it's going to sting, they are going to remember that one time in clinic and just zap you." I thought no way. But of course it did. I went back and told her she was right. She said, "You can take it all in and beat yourself up about it and be sad, or just hear it and take what you can from it and take one piece of the criticism and drop all that the other ugly stuff attached to it and let it help you evolve and be different." I'm glad I bounced that off of her because I would not have had that opportunity.

Regarding student evaluations, participant 8 stated,

You only remember the negatives ones. I remember the negative ones as being: doesn't provide instruction; tends to be a checker versus an educator, which is something I have worked very hard on over the last 17 years; works very quickly, which is a good one. I don't keep students waiting, but that goes hand in hand with being a checker. With those comments that the students made, when you first received the negative comments, how

did you handle that? Was there anyone you could talk about or were you on your own with dealing with that? Was there any discussion amongst your faculty about these things? No, no discussion. I did feel very alone. I would have loved to have had someone to talk about. For instance, if I had a mentor to talk to it about. Even the program director did not discuss them. She just let us come to our own conclusion and make alterations as necessary.

The second significant statement that emerged from Interview Question 3 was: The boundary between teacher and friend is one thing I think that becomes really challenging. The second significant statement revealed that seven out of the 14 participants interviewed discussed they had difficulties distinguishing boundaries between teacher and friend. The following comments represent this statement. Participant 6 stated,

The boundary between teacher and friend is one thing I think that becomes really challenging. The second institution there was definitely obvious, you don't fraternize or go have drinks, let me back up. From my own perspective, I know better. But they put boundaries on no Facebook friends, no private emails, only school emails. It was explained to the students and faculty. At my third institution, this has just become a new thing right now. The no Facebook friends stuff. At the same time, I think that we naturally gravitate to people who are similar to us, usually the top students, usually older students that have more life experiences that are sort of similar to yours. Regardless, they are already people you would be friends with anyway. That becomes hard, because then they become seen as the favorites. It's a harmless thing that's perceived differently, and that becomes difficult. We do have those discussions at faculty meetings. I think that that would be seen in any situation. If you are at a job place, doesn't necessarily have to be a dental office, just any place of business, there are certain people that you are automatically drawn to. That may be your manager. Not that I'm a favorite employee, but we just have more in common and personalities click.

Participant 5 said,

My husband said to me early on, if you can't leave that at school and not bring it home, you're going to have to find a different job or a different way to handle it. It was coming in between my relationships with my kids and him because I would come home upset. He finally called me out on it and said you can't keep bringing this home like you are. It was a real wake up call, and it set my path a little bit differently. Definitely compassion and fairness and listening and being there, but not letting it influence everything I did when I got home.

I learned really quick you can't be their friend. I actually tell them at the beginning, "I'm not here to be your best friend. I'm here to teach you about dental hygiene. I'm the teacher and you're the student." Having a different place to eat my

lunch is important. They will invite you to go places or meet places with the class, and I have found that it is not a good idea to be anything except for the instructor. It creates more problems than we need to. It is not productive. I listen to what they say, but I can't bring it home and sleep with it at night.

Participant 9 stated,

As far as drawing the line between instructor and student, that has been very difficult for me because I am younger, I'm quite similar in age to the students, so I feel this desire to be their friend. Also my personality, I'm a very sensitive person so I have this desire to be liked. I want them to open up to me and treat me like a friend and like me; yet in the back of my mind, I know that that kind of relationship has to be very limited. I'm still struggling with that. I think I'm getting better at learning how to be nice to the students and make them feel that they can trust me but also being strict with them and having authority over them. It has been a learning process.

Participant 3 said,

When we [component leaders] went to House of Delegates, some of the students from a local dental hygiene program were there. We were at lunch and they had gotten pizza and they saw us at the restaurant and said, "Can we sit with you?" and I said, "Sure." And then other student said, "Oh, no, we're not supposed to fraternize." And so I said, "We are at dental hygiene meeting, it is okay. We are at a professional event; yes, you can sit at our table." So I actually learned then how much the dental hygiene faculty stress upon that policy with the students. Never had a word said to me ever about the fraternization policy, maybe they just assumed that I knew about it.

Participant 7 recalled,

I used to have the year-end parties at my house. At a point in our director decided that was probably not a good idea. It was better to keep that distance and maintain that, rather than partying with the students at the end of the year. It probably wasn't appropriate professionally or from a legality standpoint either. We terminated that. We try to keep a distance, a professional distance. I did get myself in trouble once with a student who I became very good friends with, but this wasn't until she had dropped out of the program. We became very good friends and we did a lot of things together and I really valued her friendship. She decided to reenter the program again. I felt under her new circumstances, she would be successful. However, she was not, and there was a lot of pressure on the friendship because I really think that she believed that I would help her pass all of her classes and be successful in the program. I was putting more effort into it than she was. When she was finally dismissed from the program, I was also dismissed as a friend.

Participant 2 shared,

There was a time where the director of the program took one special student aside and tutored her for some of the tests. It was somebody from her hometown. I know in the past she helped in clinical practice some of the students she really likes in private practice. I don't know whether it was brought to her attention that maybe that wasn't the thing to do. The students knew that one of [their classmates] was being tutored after hours.

Participant 8 said,

Early in my career I was very clear. I was the teacher; they were the student that was it. The more I teach, the narrower the boundary is. I think it's the opposite for a lot of people. I'm discovering that my teaching style is humor and compassion and empathy. If I demonstrate my personality, they respond better to remembering the material and to feeling more at ease when asking questions. I still have boundaries, but it is not as important to me anymore that I'm the teacher and they are the student.

The third significant statement that emerged from Interview Question 3 was: There is a lack of consistency, calibration, communication and inclusion between faculty. The third significant statement revealed that 9 out of the 14 participants interviewed discussed there was a lack of consistency, calibration, communication and inclusion between faculty. The following comments represent this statement. Participant 3 stated,

Were there any kind of calibration sessions between the faculty for clinic? Not with the part-timers, only the full-time faculty. The part-time people aren't always included when they have department meeting and things. If you ask, you could probably go, but you're not invited as far as calibrating and getting everybody on the same page. If you ask, you could be included, so I would when I could. An example: The first instructor I worked with was very welcoming. She was giving me the handouts and materials. She was more organized. It was very straightforward. Lab instructors didn't walk around with questions. I did not enjoy the same experience in the fall. My fall semester, it was like night and day different. Same course, but different instructor. She was behind. The syllabus she gave us, we got about three weeks behind, and we were never doing what it said. There would be things that she would tell students that weren't in the textbook because she said "there would be a new book coming out in the spring and we don't want to spend the money on it now". I really should have gone in and done the lecture with her on my own time. Interesting personality. One of the other instructors said, "Well, she likes it that way because it makes her look good because she has the specific knowledge she has just given the students but not the lab instructors." I would just be bamboozled sometimes on the stuff she came up with. This is really a challenge because you're not sticking to your syllabus. That also influences my opinion on going back.

Participant 1 said,

I think the hardest thing there was we had one instructor who had been at this for a very long time who was teaching something different so that was a little bit frustrating. It was like we didn't calibrate in the same method that we would other places. The other thing that I noticed—and I had never thought about this before—was the teaching method from one school to another school. I would watch one person doing it exactly like they did it at the other school and then two other instructors who just kind of went off on their own. The little things. There wasn't time to get those things corrected either because I was going from one class to another.

And I believe that when we look at clinical expertise, I have my strengths; other teachers have their strengths. I think you have to look at that in both settings and get the person who is the best at sharpening or the person who is best at infection control and utilize them as much as possible, but that has to be then calibrated so that we are all saying the same thing. I think that is important. That it is not happening on the clinic floor, that you give enough time for that to be happening for the new person coming in ahead of time. I don't see some of the evaluation, like the students self-evaluations, happening as much as I'd like to see them. I think that it is an important part of them owning where their strengths are and where their weaknesses are because they are going to be out in the field, and if we haven't taught them to look at themselves to see where their strengths are and where their weaknesses are, that is not good for the learner.

Participant 2 said,

When I first started, I didn't really know what the other classes taught. I didn't know that other instructors were teaching similar or the same things at the same time, so I didn't know who was teaching what. I didn't really know what I should be teaching. I didn't occur to me that I was repeating what the students had already heard.

Participant 4 shared,

Was there consistency? Absolutely not. If you would ask if there was consistency between faculty members, I would say no. We tried. It was getting better. I can elaborate. There was one faculty member who was so veteran that things couldn't ever change. So if things went against her way of thinking, it was a huge mess. The cohesiveness of the group as faculty members progressively began to change and then definitely a more cohesive group once her retirement occurred. So I wouldn't say it was consistent, because one faculty member didn't want it to be consistent or it went again everything how she had done things. But the cohesiveness of the rest of the group was definitely there. As adjunct faculty, I felt included as a faculty member, but I didn't feel that my voice was heard because I didn't have a full-time position. It was looked upon as if my position didn't count as great as theirs. I was part of the process but not necessarily looked upon. There were many times when only full-time faculty made decisions. I would say it was sort of deliberate, there was a divide; although, they tried to be inclusive.

There are many who went out of hygiene and are now educators “Well, I think I’m going to do something else after being out of clinical practice for 6 years.” They are educators now because we put the title behind them. You are a dental hygiene educator that means you are ready to go. You’re turned loose in the classroom. I’m not sure that is the greatest thing. Institutions do not have the availability to do it or the time if you were to work with a veteran teacher in the class. Many veteran faculty are reluctant to share their curriculum with the new incoming. So you have a repeated revolving door of constant, new curriculum being developed because the existing curriculum isn’t being shared from faculty to faculty. I see lots of flaws don’t have lots of answers. I think, how do we get those answers? I think by brainstorming and sharing knowledge. I think there is a lot of times fear among of the tenured faculty to share the knowledge. We get very stagnant in teaching the same course over and over and over, or teachers who teach 20 years. I don’t think that is the best practice. Anyone with in the faculty should be able to take an X-ray and mentor radiographs to students. It shouldn’t be just one person, one faculty member. So I see that being a problem. We’re not drawing upon enough that we can really learn from each other.

Participant 6 stated,

We do one staff meeting a semester. We do one in the summer for the fall and then one in the evening for the springtime. Most of the adjuncts aren’t there on our didactic days because that is their clinic days. That is a hard position to be in as an adjunct versus a full-time faculty. At the second institution, there was pressure to keep students, period, in the program. Really, failure is not an option. So you get to whatever that takes to make sure they succeed. With that said, it was a challenge to have the full-time faculty who had the superiority thing of “I’m full-time so I know and you’re adjunct so you don’t know.” Which is silly, but that is the mentality there. There is a definite stigma that the adjunct faculty didn’t know as much as the full-time necessarily.

Participant 8 said,

Concerning teaching methodology and technologies, we need a clinical calibration. We have tried to do clinical calibrations but have not been very successful. We have tried to do calibration with probing and what we have found is the end result is the same but the way that we got there is very different. We tried to do clinical techniques but that was difficult because everyone went to a different school and has a different way of doing it, which adds tons of confusion for students.

Participant 9 reported,

When it comes to the clinical aspect of hygiene, it’s not so bad. There are a few differences between the institutions so there are some calibration issues. I wish that at the other institution someone had sat down with me or there was some kind of group faculty meeting where we get calibrated on coding, exploring, probing, everything. In general, I have been going with what I think is right in clinic. Sometimes that causes conflicts

between myself and the students because the other faculty there does things differently; yet I have not been told anything.

At the one institution where I do my student teaching, I have a lot of one-on-one meetings with the program director. She's always available for me. I can call her, email her, and she'll answer questions for me. Also, I attended a weekly staff meeting at that school, which I truly felt has helped me be more calibrated with the rest of the faculty. At the other institution, no. The program director is quite difficult to reach. She's very busy, so it's hard to talk with her one-on-one. Currently, they do not hold weekly or monthly staff meetings.

Participant 11 said,

As adjunct faculty and not being there every day, there are difficulties feeling like you are on the same page as faculty that is there all the time. It is really hard being there one day a week. Many times student will do things that I may not know about, and they will blindside me with something. Later, I will find out it's because of something that happened the day before. I have to check with the other instructors what is really going on. Sometimes our director will change the rules. I will be operating on one rule and then she changes her mind and forgets to tell me about the new rule or the laxation of a rule. I feel like I look like I don't know what I'm talking about. That is hard. I am not involved in staff meetings or collaboration with the other faculty at this point. When I first started, I felt like I was a part of a team. The faculty is not a cohesive unit right now. Over the years, whereas I used to be invited to staff meetings, now I'm not. I understand that it's because of the scheduling and they wanted to make them during school hours. During that time, I work at a different place, so it would be hard for me to make it. I can understand all that. We are given staff notes, but I don't feel that I have any input, nor do I feel that anyone really cares about my opinion on anything. Even in the last couple years when we, as a faculty, would get together and discuss awards, I felt like they were not interested in what I had to say. I would say for the past 3 or 4 years, I have no input whatsoever.

In some ways, you are set up for failure in that regard. They want to be the ones to know everything; it's just a weird dynamic. It is like they want to keep it to themselves and not be forthcoming to other instructors to help them learn technology that they have in the lab. Like they are the ones who know everything, and they are someone the students can go to. We're just adjunct. We are just there to fill in the space. You have to be told about the procedures, what's expected, any new technology you should be introduced to. They are talking about for instance, glass ionomers. Some of them will be able to help the students, but not everyone. I think that's kind of shooting yourself in the foot when you don't have everybody on board. There needs to be more communication among the faculty as far as what we're teaching, what's expected, and all of that. It needs to be ongoing, not just when you're new. Certainly, that needs to be addressed when you are new, but as time goes on it needs to be shared.

Participant 13 stated,

I have been a clinician for 20 some odd years and I have been on the [clinic] floor and apparently I wasn't doing it right. This dentist came up and he said, "Looks like you're going to be here for a while so I'm going to tell you how to do it the right way." But it was never said, when you come on the clinic floor, this is how you need to do it. Of course, I want to do it exactly how the students are doing it. So I'd ask them and they'd go, "sure." It wasn't calibrated. That was my biggest problem. We're not all calibrated on the floor with the other faculty members, and it's very frustrating for me. I have heard other faculty members say, "Oh, you have me today, so this is the way we're going to do it." I would overhear this thinking, what do you mean this is how we're going to do it? Because you say it? Isn't there a standard that we have to do it that way? It's frustrating.

Participant 14 shared,

When I look at some educators and I listen to them, I think, open your heart just a little bit, and not to put us as educators on some pedestal. I think for us, as educators, we really need to check our attitudes at the door sometimes. We need to remember we're people and we need to treat each other with kindness and respect. And share knowledge with each other. Instead of saying, it's mine and my academic property and academic freedom. Those two words, I had never heard in my life. Well, I teach in the same program as you. I'm not trying to steal your work. I think we should be able to come together as first year leads and we should be able to talk and say, "What works? What is not working? What have you done?"

Interview question 4. Interview question 4 addressed the skills for the new dental hygiene educator. The participants were asked: Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following: Describe your participation, if any, in an orientation program prior to teaching. Do you feel that you were prepared in the following competencies: curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation? Two significant statements emerged from Interview Question 4. The first significant statement was: I did not experience a formal orientation upon my employment and I lacked preparation in in curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation. The first significant statement revealed 13 out of the 14 participants suggested that they had not experienced a formal orientation upon their employment and lacked preparation in one or more of the following competencies: curriculum

management, departmental policies and procedures, strategies for teaching, and student supervision and evaluation. The following comments represent this statement. Participant 1 said,

I had orientation at both schools regarding being an employee of the district. Kind of went over health things, sexual abuse, those kinds of things, but nothing that really went over curriculum, policies, or procedures, nothing that went over strategic plan or those kinds of things. It was all about being a part of district.” I do not feel I was prepared in policies and procedures of the department or student supervision and evaluation. I did feel prepared in strategies for teaching through my master’s work.

Participant 2 stated, “There was no orientation at all. Not even with the school itself. I was not prepared in curriculum, strategies for teaching, or student supervision and evaluation.”

Participant 3 recalled,

I prepared myself as best I could, but no I wasn’t. As far as all the paper work -- there’s no kind of orientation. They have an orientation for the students in the beginning, with like the ethics and the rules, but I think they should include the faculty too. I do not feel I was prepared in curriculum, or strategies for teaching; while policies and procedures and student supervision were self-taught or learned through my own experience.

Participant 4 said,

We had orientation prior to coming into my employment as a dental hygiene educator, but it was institution wide. For me, it was very informal, kind of explaining, “there you go, there is the paperwork.” I do not feel I was prepared in curriculum, strategies for teaching, and student supervision and evaluation. I was probably prepared in clinic supervision but not in a formal way, some if it is instinct.

Participant 5 reported,

We do have a manual that is on the clinic floor, so we do have a clinic manual, but we don’t actually have a formal orientation day set aside for new faculty. I did not feel prepared in prepared in curriculum management, policies and procedures, strategies for teaching, or student supervision and evaluation.

Participant 7 said,

When I first came in to teach in the program, did I have any formal orientation with the department itself? No. Most of the orientation I was given was from the interim director who was getting the program started. But his job and what I was supposed to do as my job were very different. It was just the basic background of the program itself.” I did not feel prepared in prepared in curriculum management, policies and procedures, strategies for teaching, or student supervision and evaluation.

Participant 8 shared,

[When I was acting director, I held] a one-on-one meeting for maybe half hour, 45 minutes. Then I handed them a manual and there was a video that when with it that they watched. It was very brief. Since then, that has gone away. They have no faculty orientation.

Participant 9 recalled,

At the one institution there was no formal orientation for me. At the other institution with my student teaching, I had orientation because of my student teaching process. I did not feel prepared in policies and procedures of the clinic. I felt prepared in curriculum, strategies for teaching, and student supervision and evaluation through my student teaching experience or my master's work.

Participant 10 said,

There was not any formal orientation program coming in to teaching at my second institution. That was a huge deal. When I got the position, I said, "I really want to be able to shadow somebody so I don't walk into clinic completely raw and not know what to do. Is there a mentorship available?" I had asked those questions prior to that. Unfortunately, there is not an organized system. I decided at the end of this semester that I might make that one of my tenure projects. I would like to put together some kind of program or notebook or something that new hires can go through and figure out the process. When I started last semester, I was thrown into junior clinic with nobody that had prior experience with junior clinic. There was an expectation on what I should do and how I should do it, only nobody told me what the expectation was. I knew what the final expectation was, but there was no direction on how to conduct the clinic. I wasn't sure what to do. To answer your question, there should have been, but there wasn't. I did not feel prepared in policies and procedures of the clinic, or student supervision and evaluation.

Participant 11 shared,

I remember getting a clinic manual, and we might have talked a little bit, but nothing formal. A quick review of all the paperwork and where it was. It was very informal and brief. I was not prepared in curriculum management, policies and procedures, strategies for teaching, or student supervision and evaluation.

When asked whether he/she had an orientation program through the institution or department or both, participant 12 said, "None at all. I did not feel prepared in curriculum management, policies and procedures of the clinic, strategies for teaching, or student supervision or evaluation." Participant 13 said,

I did not have an orientation at [the first institution]. I was scheduled to have an orientation with the dean and she cancelled, so no. At the second institution they did make an effort to have one but it never transpired.” I did not feel prepared in the curriculum management, policies and procedures of the clinic, strategies for teaching. With student supervision and evaluation in my didactic classes, I had to follow what was taught before, so I guess.

Participant 14 recalled,

As a new employee, you go through two other specific orientations with H.R. but here on campus, we don't have a formal new teacher day, other than what the director does. If you're brand new faculty, typically you would come in and meet with our director first. She has her checklist of things she goes over, even with supervising doctors.

The second significant statement that emerged from interview question 4 was: I did not feel prepared at all to utilize any technology in the classroom. The second significant statement revealed that seven out of the 14 participants suggested that they had not felt prepared to utilize technology in the classroom. The following comments represent this statement. Participant 3 said,

The school has some [technology training] that you can attend not through the program but through the college itself. I have attended some, but you have to seek those out yourself, if you want to learn it. We did just get new computers so they just started doing digital charting. I needed to know how to put my signature on there, because you do that with your finger. A lot of times, I didn't need to put my password in. That was a concern for me. It was my own experience from other places of how you need to go about learning procedures. It costs money to get people trained to the adjunct didn't get any training on that.

Participant 6 shared,

The technology part, as far as schools goes, I have learned all through [training provided by the institution, not department]. I have had to go back and teach the older faculty, you really need to quit doing that, you don't need to print that for them, you can have them do it on the iPad.

Participant 9 recalled,

Technology for the classroom was not dealt with at all in my master's work. It was learned on day one, walking in there, fiddling around with all the smart whatever that stuff is. It was figured out right then and there. I still have problems with it. It would have been nice if I had been given training at each of the institutions on how use the

equipment. I haven't had any training on the technology. I have had to figure it out or have the students come up and help me, which is kind of embarrassing.

Participant 11 said,

I did not feel prepared at all to utilize any technology in the classroom. I was trying to use the overhead projector for something and one of the students got it working, so I was able to do that with the PowerPoint. I wasn't shown how to do it. It was just do it any which way you want. In fact, there was one instructor that said they don't do PowerPoint because they didn't know how. They said "I don't know anything about any technology." I have not been shown technology like digital X-rays or anything like that. They had that [the training] on a day when I wasn't there and they never made any arrangements to include me. It's really hard because students do ask me to come back there and help them. I do the best I can, but I know that I'm not a good person for them to come to. I don't know what I'm doing.

Participant 13 stated,

Because there are so many changes that are happening right now, I wasn't prepared. But there are classes or you can meet with an IT person on campus to help you get through those things. Digital X-rays, I had to learn that on the job. I had to go in early and look everything up. I always ask a younger person, even a student, "How do I get the audio set up?" They are helpful.

Participant 5 said, "The mentor for the class that they are teaching says, 'This works, this is how I have done it in the past.' Pretty much anybody that's hired is good with the technology. It's so user friendly now." Participant 4 shared,

If we really think about some of your faculty members have been teaching longer than those have been out, so they are not as well versed in the new technology. Some of your new faculty coming on are more familiar with the technology and can introduce it.

Research question two. Research question two explored what recommendations, if any, might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, disposition and skills?

This research question was aligned with interview questions five and six.

Interview question 5. Interview question 5 addressed recommendations that dental hygiene educators might offer to better support new professors in developing instructional

competency as related to knowledge, dispositions, and skills. The participants were asked: Given your lived experience, what might be your recommendations to improve your transition from clinician to educator? Two significant statements emerged from interview question 5.

The first significant statement was: I think that a formalized orientation and mentorship program would be beneficial. The first significant statement revealed 14 out of the 14 participants suggested that formalized orientation and mentorship program would be beneficial.

The following comments represent this statement. Participant 1 said,

The first thing I would like to see a mentor assigned to the instructor, to the new instructor. And that mentor is given so many hours to come into the classroom to help you. I think the mentorship program should last a couple of years. And I think it would be important that somebody be compensated here. And it just needs to be built in. It just needs to be part of it. They would come and observe in the classroom; they would be trained ahead of time, of course, so that we make sure that they are up to standards because like I said, no offense, there are some people who aren't, and it's really sad that they are teaching these students.

Participant 2 shared,

I would have some kind of 4-week orientation, maybe 6-week orientation. My experience with mentorship and the environment that I was working in, there would be nobody that would be willing or good or care to be a mentor. Now, if you had somebody that wanted to do mentoring and it was important to them and they cared, that is a whole different thing. Maybe I'm just more attuned to learning on my own, doing my own research, and that kind of thing. Do I think a mentorship program, if the person cared, would be beneficial? Yes, I do.

Participant 3 stated,

I think you should have the opportunity to shadow and come in and be trained. I took it on my own to come in and absorb as much as I could, but that was on my own initiative. I would direct them to people who I think would be helpful in mentoring in that particular setting. I feel that even in academics, science, engineering, they don't get any instruction as instructors. They are experts in their field, but they don't have any teaching methodology or any of that. So across the board in teaching college, they should have basic training on adult learners, basics about discriminations, those things.

Participant 4 contributed,

I'm not sure if a formal class or some kind of mentorship with faculty within a time frame before they are put in and evaluated. Just because someone has a terminal degree doesn't mean they have teaching methodologies. I do agree with methodology in the area you are teaching; however, what I see is that now a requirement in our state without having the courses available, and then anybody can set up shop and say that they are going to teach methodology now. But are they truly the expert in methodology?

Participant 5 offered,

If each school came up with a webinar or mentorship that would work for them, I think that would be a good idea. So much of that varies from school to school. As far as a general thing, it would be hard to do for all of California dental hygiene schools. Our school wants their syllabus to look like this, in this order, and including all of these things. But this is different for different schools. If each individual school wanted to do that for new members, it would be very beneficial. The other thing that you may have trouble with is we have a Watch Doc Group on our campus as far as the number of hours we can put in. We have to put in 85.5 hours of extra work. We're actually paid for those 85 hours. The union says that you should not be working more than your 85.5 hours. A lot of those hours are taken up with meetings and committees that you need to have campus wide. When they come and do your accreditation, the full-time faculty have to be a part of those meetings. Our particular union is very clear and careful about doing work that you're only paid for. Our actual union rep used to be our dean. We are on a first name basis as far as our union rep is concerned. That would be the only obstacle that I see as far as the effort and time and being a benefit to the student learning. There is definitely the argument the better prepared the instructors are the better the student will be. But they are very careful about us not doing something we aren't getting paid for.

Participant 6 suggested,

I do think having someone to go to [a mentor], it's a really good issue and it should be a standard. I think coming into institution as a new faculty even with a master's, you still feel like a fish out of water because you're not familiar, so having that would help. But I don't think mentorship would be the director's position. I think it should be [overseen by] another full-time faculty.

Participant 7 said,

I think there should be an orientation program for all new faculty, and I think it should be fairly formalized. I think there should be some kind of dental hygiene faculty handbook. We are given the handbook for the instructors across the street, which has nothing to do with Dental Hygiene or how we run the program. I think that would be a good, strong foundation so everybody knew what everybody else's job was. I think it would be beneficial to assign a new instructor a mentor, one of the full-time faculty that is in the program. The new instructor could "shadow" the mentor for a couple of weeks. I think that would be very beneficial for somebody coming in as new faculty. A mentorship program along with more formalized instruction. It really should be the director's

responsibility. However, sometimes that just isn't possible with time. Especially if a new instructor comes in when school is undergoing accreditation. But certainly another senior full-time faculty could be assigned, or even two, if time is a factor with one of them, split it up between two people. If someone is going to teach clinic and the classroom, somebody take the clinical aspect; somebody take the classroom aspect. I would say three months or one semester. Meet on a weekly basis, and then after the semester is over, meet and assess from there.

When I started teaching, I didn't know what a PowerPoint was or how to build a syllabus, Excel spreadsheets, or anything like that. The college does assessments on us every so many years. I think that would be important for a new instructor, especially if they have a weak area. How would we know?

Participant 8 stated,

Mentors should be somebody that can accept all different teaching styles. I'm on three different tenure review committees. I love it because I get to see different teaching styles. I don't ever fault anybody for their teaching style, only for effectiveness. It should be somebody that's very open to whatever technology that they bring in. I know that some people won't think that my humor works. So if someone was to be my mentor, they would have to know how my teaching style works.

Participant 9 noted,

I think that one semester of mentorship would be adequate, although, it might have to be a case-by-case basis. Perhaps, for one person, those four months might be easier for one than for someone else because if someone is coming in without any kind of background in education, they should have to learn that material when they are doing that during their apprenticeship. I think that doing the student teaching, which was like an apprenticeship, was so helpful for me. If we had more of that, we would have better educators. If there was a formal mentorship program within the institution, I would suggest a meeting with your mentor at least once a week, at least in the beginning. As the semester progresses, it could taper down; but in the beginning, at least once a week.

Participant 10 said,

I think having something tangible to hold on to, like a day to day, this is what happens in clinic. Some kind of road map would have been a great thing to have going from one to the other. I love the student teaching. Wish there was more of that, where you were able to jump in. But then again, learning on your feet and not being completely emerged is not a bad way to go.

Do I think it would be beneficial for one person to be assigned to mentor? I definitely don't think it should be the director. I think it should be a faculty member, not necessarily a lead, somebody that has been in the institution for a good amount of time but also somebody that is well versed in all the subjects. Everyone is quirky. That new

faculty member has been one of my best go to mentors. She's done all facets. They had her teaching everything. She has that knowledge. She knows how the evaluations work. She knows how the competencies work. She's very well calibrated with everybody.

I think a semester of mentorship should be required. I like having a mentor. I like having someone who has been there a long time to bounce things off of. Teaching itself is a very fluid career. You have to change; you have to adapt. Being able to bounce off somebody would be great. If you could create a relationship with someone who had been your mentor, that would be fabulous. If not, then I would definitely encourage a new educator to find somebody. Find your people.

I would probably participate in a webinar, but I like having somebody at the institution that I could go to. I like that more personal aspect. Just having somebody to talk to, somebody to direct you. My biggest mistake was trying to do everything all at once. I ended up being there 12 to 15 hours a day. And I have a two-hour commute one-way. I think time management is a huge thing that people should talk about. Time management is something that nobody ever talked about.

Participant 11 suggested,

I think if someone is coming in and they are doing a didactic class with written work and exams, it would be nice to have the mentorship where someone actually shows you how to do all of that. How to prepare a lecture, how to prepare an exam, where you can go to find out what is pertinent to the national board, a refresher course on all of that. Once you graduate and you have been out for so many years, it's hard to remember where to go to find all that stuff.

Also for someone like me, the governing board has changed since I graduated. Where to go to help the student know what to study, those kinds of things need to be incorporated into something to help that teacher in helping the students reach their goal of passing the board and being a successful RDH.

I think it would be good to be able to sit in on a class or two and see other teaching styles. Just like if were you a student teacher, you go and observe another professor and how they operate, how they lecture, how they organize their students and grades. Having a faculty that is open to being helpful to other faculty members. Again, it can be difficult because as an adjunct, you're not there with everybody else, but the ones that are there could be mentors, which would be helpful. In order for that to happen, you would need to have a cohesive faculty that is all on the same page.

Participant 12 said,

I think [a formal mentorship program] would be great, but they need to factor in some extra pay. I was unaware that this lady who helped me and she helps the program, she does all this extra stuff, and she's not compensated anything extra. I think it is a great program; mentorship is so important. I tell them all the time, I went here in 2007, I

graduated, and you are still my mentors. I want to be just like you. But the two leads, they need a higher pay, that is a lot of work. The director doesn't have time, and full-time faculty—we only have two at my current institution so they don't have time. Part-time faculty with the experience and knowledge needed, but approved from the director or the full-time staff so we don't have someone with 2 years' experience trying to teach someone else. But someone with 15 years that they trust to say, yes, they know what the school is about; they can mentor.

I have an office hour but no one comes. But if I stay an hour in clinic, then the students are talking to me and asking questions. That would be the perfect time. If the mentorship program had things you could read or watch during that time while the staff are waiting to talk to students and those students come, they could also just go through their videos or papers with that mentorship. I think a mentorship should be for 1 year. My first semester, the students are doing one thing. The second semester I come back, assuming it's the same, it wasn't. My mind, my thinking and training—I felt bad asking all these questions. I think it should be a year program because each semester is not the same.

Participant 13 said,

There are certain people that are geared and they have the personality to mentor you. Then there are certain people that wouldn't give you the time of day because they are really on the clock. It's a shame. They should look at that when they interview someone. Do you know you have to spend 5 more minutes, 10 more minutes locking things up? Maybe you're done at 4:00, you think in your mind, but there is all this stuff you have to close down. It's exactly like you're at work. I always think there is something wrong with me for being the last one out. I don't know if it is a personality or if I'm not working efficiently enough. I go back and forth about why am I always late. So the mentorship and some kind of video and then also understanding who that mentor is and having some kind of compensation for them because they do give a lot.

As far as how long should the program be for an adjunct faculty member hired on? Probably a semester to get through all the questions that you need. I volunteered the entire year. I know that gave me enough foundation that I felt like I could work there and not be able to bring everything I could to the student. There is so much to learn. Making myself have the ability to be a close friend with somebody that worked out so well, that she's still my friend. We're socially close as well. Maybe they just don't want to help you because they don't find you as someone they want to spend time with. But if someone is designed to be a mentor, they probably can hone their skills and then be able to deliver that information in a clear and concise way.

If the mentorship program evolved I don't think the director has time [to run the mentorship program]. I have seen my director mentor a new dentist coming on the floor and it takes away from the student time because she should have been on the clinic floor doing the faculty part. So I was picking up for her because she was helping the dentist on the floor. I don't think it necessarily has to be a full-time faculty or the director because I

know the part time faculty in clinic, for example, the one that basically mentors me is part time and she's been there 23 years. She knows and she can mentor excellently towards what is going on. I think someone part time can be paid for an office hour. She says, nobody comes to visit me, but she has to sit in that little room for an hour. Which on one side, you're getting paid, but you're just sitting there. That would be the perfect time to mentor somebody or write or develop the manual. During at that time, they are getting paid. Not to say she doesn't stay after for clinic and it is compensated out, but if she's sitting there, she would rather be doing something. So there is an avenue to deliver that to part time faculty. I was thinking about it needing to be a year and I was thinking if it was somebody that was coming on board, they could go, "This is my second year, now I have got these questions too" and shoot them out to their mentor and have this ongoing relationship. We all want to do the best we can, so just an ongoing mentorship would be important.

Participant 14 offered,

I think that that a formal mentorship program could be very beneficial. As long as those two people get along well. The new person needs to feel that they can bring up anything to that mentor and not feel belittled. You need to feel that you have room to make mistakes and room to grow. I always tell the students when I make a mistake, "work in progress here." I try to make humor to help people understand that we're all going to do these things. We don't intend to, but they happen. I think it would be neat if you had someone, like yourself, when you have your doctorate, say you want to run a workshop weekend for new educators. People can come and sit around tables and say, "This is what happened to me. This is what I did about it. This is how it helped me. Yeah, I cried my own set of tears." I think that the more you can talk to people that are in your same situation would be neat. If people could feel comfortable enough to be able to say, "I don't know what to do about this and I'm not getting support at my institution. How did you handle it?" And to be able to know that it stays confidential and that you feel that you're safe. Your mentor doesn't necessarily have to be at your school. Your mentor could be somebody else in another institution who teaches the same courses you do, who knows the walk you walk. Or just somebody you know who you admire and you know that they have gone through the fire. I know what you're going through getting your PhD. If there were opportunities for new educators—say you've only been teaching for only a couple of years, where you could go and really just talk to people.

The second significant statement that emerged from interview question 5 was: There is a need for pedagogical training for faculty and standardization of best practices for programs. The second significant statement revealed 7 out of the 14 participants suggested that there is a need for pedagogical training for faculty and standardization of best practices for programs. The following comments represent this statement. Participant 1 said,

I would like to see in the State Dental Practice Act, it has that you have to take teaching methodology. It shouldn't just be teaching methodology. It should be more defined, because I think that we've got to make sure that all of our teachers have the same skills, the basic skills that we need. The other thing that I would say is, the third thing, is I believe if someone is going to be teaching for 30 years, which I commend them for doing that, that we have got to make sure that they are teaching correctly. There's got to be a way to follow through to make sure that we're using evidence-based dentistry. That we're not just going off on our own things because we have taught for 30 years. I think the yearly course is a great idea, but I also think that somebody needs to be in charge of calibration at the school and that it should not be left up to an individual. It should be up to that department on what you're asking for. For example, if I'm going to teach someone to disclose someone, I should be following a basic step of how to disclose someone. I can't just add "Oh, spray air in this year and see if there is disclosing solution there." Because that's not a valid scientifically-proven method of checking for disclosing for the plaque level. And so with something as basic as that, we have got to teach a concept, and if someone doesn't want to teach that concept then they need to not be a part of that program. I think it has to be weekly calibrations as part of what you're doing. I think it should be taught by the lead instructor, and it's determined by the department. So the lead instructor brings their curriculum in and says, "Here is what I'm going to be teaching." And it is reviewed, and then it is taught first to the instructors, then to the students. And we keep rechecking calibration.

First of all, when you plan a program, you should be putting enough hours in for that adjunct person to get the hours that they need in order to be trained just like everybody else. If they can't come at a specific time, you can do an online meeting on a Saturday. Or you can do an online meeting at another time. There is a way to get around this. We have technology to get around this. I think that it has to be something that we make people aware of, and we have set up a system. A standardized system might entail an evaluation of each year of the curriculum and an evaluation of what we're doing. Looking at the standards, looking at anything that is new, assigning out each teacher. Let's say it is over period. Are we teaching people to do both a vertical and a horizontal bitewing? Or are we just teaching them to do a horizontal bitewing because that is what a lot of people are doing? It is making sure that everybody is staying up to date.

Participant 2 stated,

I think it should be a class, kind of a Cliff notes of what people who get their master's in education know, People who get their PhD in education know, condensed, basic facts. This is what "didactic" means, this is what "pedagogy" means, all those terms that you don't hear in clinical. It's sure hard to learn it as you go along. I think if anybody has any kind of background at all in education, it's a big advantage. I think that it would be ideal if only people with a master's in education would be hired full-time, but that is not going to happen. There aren't very many instructors with that background, with degrees in education.

Participant 3 suggested,

Knowing how things are done today, it would be great if there were series of webinars on teaching methodology, students, rules and regulations, stuff like discrimination. I think for California community colleges there should be one basic set of standards. I think that should be available, that you could do those webinars at your leisure. It would be nice if you got paid for it too, but at least have it available. Some of the workshops that we went to, it would be somebody from the arts department and they would take about the ways people learned, and it was good to collaborate with faculty other than dental hygiene because some of the world thinks differently than we do. I think they should have a core, basic, like teaching adult learners. I think there should be a standard type of thing and then hybridize it to their own particular setting.

Participant 4 offered,

Regarding some type of manual that we could standardize for new faculty as far as this is how you build curriculum, this talks about diversity issues, thing that aren't normally mentioned: I do think some type of manual, but who even makes the manual across the country? In looking at California, what even makes it minimum knowledge that they come in with to be current with what's going on within the profession? I don't know. Is it a test someone takes and that is a great measure in what makes a great didactic professor verses a great clinical professor? How do you even run a clinic rotation? How we do all of that was by trial and error as well. Well, we reinvent the wheel and looking at students and you can't put that one here, and some of that. There's just so much to it that how do you even bring them up on mentorship and looking at what makes a good program. I don't know how you judge that. Because you could say well, they all have been at the institution for 30 years and they all have tenure and no one is moving and there is no movement. Is that a good thing? When you have someone that has been at the institution, I would think another program could be exchanges, much like the nursing model of floating professors, and doing some of that. And not always hiring because they are convenient but really looking at who is the best candidate is for that. What I have seen across the institutions, that isn't always how the hiring processes work. It's hard to penetrate. Is it because that person is your best friend and they get to come in and be a clinical faculty member? I don't have all the answers, and you see lots of problems. I think standardization could be a great place to start, but the choices, we know that we are aligning to certain textbooks. Having our textbooks companies have resources and having that time to prepare their curriculum is difficult and a challenge with short semester breaks. Consistency, faculty being willing to take on a new course. We get very stagnant in teaching the same course over and over and over, or teachers who teach 20 years. I don't think that is the best practice. Anyone with in the faculty should be able to take an X-ray and mentor radiographs to students. It shouldn't be just one person, one faculty member. So I see that being a problem. Maybe within every 5 years, they take on new roles and everyone has the chance to be the clinic coordinator, junior and senior. Putting time limits on how long you can teach a course before moving on. That is difficult, but you would have a very well balanced staff after a certain amount of time because they could pick up one another's class and understand the challenges of that particular class. What are the challenges with being senior clinic coordinator? Let's start with the basics and juniors' coordinator as well and switch around. I think that would

help, because there is a huge transition between those 2 years. Moving around who teaches anatomy and hard science classes versus not so hard science classes. You have to have a willingness to move, but people get very comfortable. Moving them outside their comfort zone a little bit. I think everyone needs the course, not just new (faculty). And then what other content in that course, in that methodology course. Not just everyone can set up shop to do the methodology to share best practices cross the country, not just with in our little area.

Participant 5 said,

Regarding faculty sitting down with their director going over policies and procedures; this is how you build a syllabus; do you understand assessment: I think that would be beneficial for incoming new faculty. I think because we haven't been in a situation of hiring for about 10 years, except for last fall. I think that would be very beneficial. If we had the new faculty that we just hired sit down and say, "What did you need that you didn't get?" It would be more productive than us trying to guess what the new faculty needed. We can go, "This is what we saw that you needed help with," but we don't know what they need. Sometimes it is intimidating to ask. Sometimes adjunct faculty has come to me for help, but I didn't know that they needed it. That is a really good point. If they can just sit down and say, "This would make my transition into teaching, this is what I didn't know." That would have been nice. I think that we should follow up on that. That is a good idea.

Participant 12 stated,

The main thing to transition easier would be a manual. When you get hired, there has to be some kind of manual that has to have all the procedures, all the protocols, an orientation itself. I can go home and read this book, but how much can I really retain? The handbook is for the students. So we are just reviewing what the student expectations are, not ours. I think anyone transitioning—dentists, hygienists, assistants, everyone—orientation and a handbook to say exactly what student are expected to do, what we are expected to do, and the outcome of the program itself. We have to know. I had a lot of mistakes. But I was lucky that the instructor next to me had been there for 20 years and had been my instructor, so she held my hand and I followed right behind her. But other than that, other instructors are busy, they don't have time to stop and help you. When it's 5:00, they are gone. I stay late and help. I think a handbook. And it would be nice to have all the schools—I know you can't have them all on the same page, but something more similar. I go to one institution and talk to the students for CDHA and they are on a different page than another institution. So I try to bring it together, but the schools teach on different levels. I think it is important that we learn more together. Webinars for new faculty to learn curriculum, especially in the classroom would be great. Webinar in person and have the new faculty sign off. Because the thing that was kind of amazing is we're reading this handbook from different organizations, not the union but whoever—united doctor something-something. It says when you are hired, you are supposed to be a professional—there is a term they use. But it's like, how am I supposed to come in brand new at this level when I'm brand new? You have to have all the tools you need in order

to qualify at that position expectation that they are expecting from you. So, yes, webinars, one-on-one training, group setting training, refresher classes, all that.

Participant 13 offered,

A handbook. We used to always have it in the dental office when someone is brand new just to see what the protocols are. I'm all about the emergency protocols. Everything about what I'm learning. If you have a situation, apparently, you want to refer it to the student to the director, but it sounds like the director is going to refer that student to some kind of health counseling. So you have the channels of what is available. This handbook would be helpful on what are the emergencies protocols in the clinic. I'm all over this because I sub in clinic a lot and I don't know what the emergency protocols are. I found out only because I was in a situation at one institution. Other than that, I couldn't tell you what the procedures are at the other institution. I don't think it has to be written on a plastic laminated chart, or maybe it could be, because the dentist today said, "Does he have to keep writing all these things?" He has to sign on a cheat sheet and bring it out every time or this should be out for everybody to review. I sign this, I sign this, I sign this. So having something written or an orientation. If it is not a webinar, maybe a video you see just to say, oh yeah, I come in, I get my PP in, I have to wear my badge on the outside. I can't wear dangle earrings. So you know exactly what is expected of you.

At one institution, again, they are both different. They are not the same. The attire at one institution is so much different than the other institution. You have to wear a certain kind of shoes at one institution. I had a pair that was not appropriate, apparently, but I could wear that at the other institution. A manual or some kind of YouTube video that you can get on and refresh your memory would be helpful. And then have it available on an ongoing basis that is updated every so often. I don't think it would be that hard because of all the questions that we're asking every time. Well, let's put that down. I feel ridiculous because it is like, here she goes again. She probably thinks I'm crazy because here I'm again asking that same question. When I subbed in there, it was exactly three months later. I don't remember how to do this. Subs do happen, so having a manual would be excellent.

Interview question 6. Interview question 6 addressed the participants need to add or clarify their responses to the previous interview questions. The participants were asked: Is there anything else you would like to add to any of your responses? Seven participants answered interview question 6, which through various responses reinforced the need for methodology and mentorship. The following comments represent the participants' responses. Participant 4 said, "There are people who have been teaching 10 to 15 years, and they don't have the methodologies either, so it is not just limited to new faculty." Participant 6 said,

I think mentorships are a no brainer on how that would roll but I get that many places don't do that. I think it could be an easy transition for somebody. I'm thinking specifically about the dentist who will be coming in. She doesn't have that background because she was trained as a dentist, not as an instructor. I don't feel someone should really be able to come in and teach without something of that background, because until you get that other information and other education, your effectiveness is not going to affect the students. Technically, it is going to hinder things and maybe even go against some of the general knowledge of what we know now about learning styles. She was taught in a different format than how we teach now. Everyone I teach with, except for one, has at least their master's degree. That is at a junior college level. That says a lot because everyone's degree is in education field.

Participant 10 offered,

The decision to become an educator was the best thing I have done for myself. I loved getting my master's. I absolutely love teaching. I love my students. I love what I do. It is challenging and keeps me on my toes. I would recommend this profession to a myriad of people.

Participant 11 responded,

I think it is good to be able to sit in on a class or two and see other teaching styles. Just like if were you a student teacher, you go and observe another professor and how they operate, how they lecture, how they organize their students and grades. Having a faculty that is open to being helpful to other faculty members. Again, it can be difficult because as an adjunct, you're not there with everybody else, but the ones that are there could be mentors, which would be helpful. In order for that to happen, you would need to have a cohesive faculty that is all on the same page.

Participant 12 suggested,

I think just the manual. The manual should include all the different organizations. As a hygienist, I think I'm on point. I know so much about hygiene. As a teacher, educator, it is way over my head. When my director is throwing out acronyms, I'm like, "What is that?" All I know is "dental board," "hygiene committee." It's a whole other world. So the language of academia basically can be a small course within itself. Just to understand teaching and where it comes from. Not even what happens on campus and what I need to know for my job, but just a history of teaching. I know the history of hygiene, but the history of teaching.

Participant 13 stated,

This study is about someone leaving clinical hygiene and moving into the educational arena. The biggest thing that I found is I knew it was going to be a lot of work, and I love doing it, but I didn't realize—I get this basic syllabus and these are the student learning outcomes I need to deliver to the students and then developing the PowerPoint. There's

all these hours which you need to put into it, which is wonderful. I hear after three or 4 years of doing the same class, you don't have to put as much into it even though you are changing. There are many, many more hours than saying, "I teach a 2-hour course called oral healthcare and dental hygiene." It's 2 hours, but I prepare constantly. I had this person who was interested in the master's of science and dental hygiene program, because she wants to become a faculty teacher and an instructor and she says, "Well do I get paid more as a faculty person?" I tried to explain the amount of hours that you put in, probably not. It was almost like the conversation is over. If this isn't going to bring me any more money, I don't want to do it. It's being honest for her though. I thought maybe I should have worded it a little different. But it is true. The amount of hours that you put in, then you have to join other groups on campus and you have to go to Flex Day and you have to do these other courses and go to CDHEA [California Dental Hygiene Educators Association], you don't have to, but you have to take teaching methodology classes besides your own continuing education. Your continuing education is full of doing classes that are geared toward teaching a didactic class, if that is what you want to do. And then not just the didactic class but it would be also perio or using an ultrasonic, those classes. Because on our audit, we are supposed to do all that. It's a whole different space. It is an education with in itself, rather than just saying, "I want to be a teacher." You bring so much more. You have to be creative. One of the students in the master's program didn't understand. What do you mean you are supposed to write a teaching philosophy? I said, "Did you enjoy when you were in school when someone just did a PowerPoint or did you like hands on? Did you like it when you used clickers and got to participate using your smart phone? Learning different ways." That is a philosophy that you want to bring instead of just saying, "I'm going to read out of the book today." You try to create something to keep them engaged.

Participant 14 stated,

I think if you are a new educator, you need to learn to have patience with yourself. You have to know when good enough is good enough for this moment and not be really hard on yourself. You want to be better, but not to feel defeated if something didn't go 100% right the way you thought it was going to go. And to be able to talk about it. Don't keep it all in because you're going to be miserable.

Themes for research question one. This section presents the overarching themes from each research question and conveys the composite findings of the analysis. Research question one explored the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions, and skills. Using the interview data, the researcher identified 10 significant statements relating to research question one. From

these significant statements, three themes emerged: A lack of supportive structures for faculty, a lack of established pedagogical practices, and lack of staff development.

A lack of supportive structures for new faculty. The majority of the participants described a lack of supportive structures to aid in the transition from clinician to educator. Some participants described an inconstancy in formal orientation programs and preparation materials that resulted in learning to teach by observation rather than formal instruction. Additionally, some participants described feelings of exclusion, anxiety and embarrassment in front of the students due to the lack of support and training.

A lack of established pedagogical practices. Lack of preparation in curriculum management, pedagogy, supervision and evaluation, and technology were a consistent theme among the participants' responses. Some participants referenced a lack of established protocols and best practices and a variation among institutions. The participants who did have their master's degree felt slightly more prepared to transition into education than those who did not. The educators who did not have their master's degree expressed the need to "know condensed basic facts and academic terminology such as 'didactic' and 'pedagogy' and all the terms you do not hear in clinical (practice)."

A lack of staff development. The participants lived experiences described a lack of staff development that resulted in communication and calibration issues. Some of the participants described a need for constructive criticism among their colleagues and program directors, while others described a need for inclusion in staff meetings to promote consistency and collaboration between the faculty. The adjunct faculty specifically described feelings of exclusion and separation from full-time faculty, resulting in confusion over "what they should be teaching" which directly affected calibration within the department. Furthermore, the participants also

voiced a variation between institutions in cultural diversity instruction and training, which “in the close proximity of dental hygiene should have been greater”.

Themes for research question two. Research question two explored the recommendations dental hygiene educators might offer to better support new professors in developing instructional competency as related to knowledge, dispositions and skills. Using the interview data, the researcher identified three significant statements relating to research question two. From these significant statements, three key themes emerged: Recommendations for a formal orientation and mentorship program, pedagogical training for faculty, and standardized best practices.

Recommendations for a formal orientation and mentorship program. Each of the 14 participants recommended formalized orientation and mentorship programs to support incoming faculty. The participants stressed a need for a mentor assigned to new faculty, as well as the need for a manual or faculty handbook describing departmental procedures and protocols. All 14 participants recommended a formal orientation and mentorship program should be required for new faculty citing the need for “someone to go to and something tangible to hold on to” and the need to build “a good strong foundation”.

Recommendations for pedagogical training for faculty. The participants recommended pedagogical training for faculty delivered in the form of classroom or webinar setting. Furthermore, the participants discussed the benefit of observation of other faculty “to sit in on a class or two and see other teaching styles, just like if you were a student teacher you go and observe another professor and how they operate and how they lecture.”

Recommendations for standardized protocol. The participants recommended standardization of best practices and consistent evidence-based practices throughout institutions.

The participants echoed the urgency to share knowledge with faculty and dispel the “fear among the tenured faculty to share the knowledge”, or the issues in faculty “getting stagnant in teaching the same course over and over” resulting in a lack of best practices.

An overview of the findings is depicted in Table 4. Column one depicts the research question; column two presents the interview questions, column three lists the number of significant statements per interview question, and column four depicts the key themes that emerged from the significant statements.

Table 4

Research Question, Significant Statements, and Themes Overview

Research Question	Interview Questions	Significant Statements	Themes
Research question one: What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions, and skills?	1. Describe your background and experience as a Dental Hygiene educator?	I felt a little more prepared because I had my master’s degree	1. A lack of supportive structures for faculty
	2. Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following surrounding knowledge.	I did not feel very prepared to transition from clinician to educator	2. A lack of established pedagogical practices
		I learned to be an educator primarily through observation or learning on my own	3. A lack of staff development.
		I had difficulties with learning how to evaluate and discipline students	
		The institution was very diverse so you had to learn that, but it was on the job learning more than formal	

(continued)

Research Question	Interview Questions	Significant Statements	Themes
	3. Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following surrounding dispositions.	<p>It would have been a better experience and if I knew how to relate to students</p> <p>The boundary between teacher and friend is one thing I think that becomes really challenging.</p> <p>There is a lack of consistency, communication, calibration, and inclusion between faculty.</p>	
	4. Upon your employment as a new dental hygiene educator, describe your experiences in the following surrounding skills.	<p>I did not experience a formal orientation upon my employment and lacked preparation in one or more of the following; curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation</p> <p>I did not feel prepared at all to utilize any technology in the classroom.</p>	
Research question two: What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions and skills?	<p>5. Given your lived experience, what might be your recommendations, if any, to improve your transition from clinician to educator?</p> <p>6. Is there anything else you would like to add to any of your responses?</p>	<p>I think that a formalized orientation and mentorship program would be beneficial.</p> <p>There is a need for pedagogical training for faculty and standardization of best practices for programs</p> <p>Various responses reiterated the need for methodology and mentorship</p>	<p>1. Recommendations for a formal orientation and mentorship program</p> <p>2. Pedagogical training for faculty</p> <p>3. Established or (standardized) best practices.</p>

Summary of Data Findings

This chapter detailed the findings of this qualitative and phenomenological study that explored the experiences and perceptions of 14 California dental hygiene educators who have

Summary of Data Findings

This chapter detailed the findings of this qualitative and phenomenological study that explored the experiences and perceptions of 14 California dental hygiene educators who have transitioned from clinical practice into the community college educational system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. The participants were asked 6 interview questions relating to the following research questions: research question one: What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions, and skills; and research question two: What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions and skills. Using the interview data, the researcher identified ten significant statements relating to research question one. From these significant statements, three themes emerged: A lack of supportive structures for faculty, a lack of established pedagogical practices, and lack of staff development. Additionally, the researcher identified two significant statements relating to research question two. From these significant statements, three key themes emerged: Recommendations for a formal orientation and mentorship program, pedagogical training for faculty, and standardized best practices.

Chapter 5: Discussion of Findings, Conclusions and Recommendations

Many dental hygienists become dental hygiene clinical educators as a result of their clinical expertise and performance (Battrell et al., 2014; Franz, 2013; Tax et al., 2012). New dental hygiene clinical instructors may be proficient in the clinical setting but may lack the pedagogical background to develop instructional competencies to support the transition from clinical practice to dental hygiene educators (Franz, 2013). A problem exists, as there is often no formal training for new dental hygiene faculty transitioning from clinical practice to the classroom. As a result, dental hygiene programs may hire faculty that lack preparation as instructors (Battrell et al., 2014; Carr et al., 2010).

This study explored the lived experiences of dental hygiene educators who have transitioned from clinical practice in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. The following research questions were explored in the course of this research:

1. What were the lived experiences of dental hygiene educators in preparation experiences and instructional competence as related to knowledge, dispositions and skills?
2. What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, dispositions, and skills?

This study utilized a qualitative, phenomenological approach to research design; the researcher collected the data by conducting semi-structured interviews with 14 participants representing dental hygiene educators within the California community college education system. The instrument used was composed of six interview questions (see Appendix A) that

were grounded in the literature reviewed in Chapter 2; all six questions were open-ended in order to “draw out the participant[s’] views and opinions” (Creswell, 2003, p. 188) and to allow the participants to provide detailed responses and explanations. Essential to the research development was a peer review process that occurred with both a fellow doctoral student and a work colleague, which allowed the researcher to discuss the research process, codes, overarching themes, and findings.

Discussion of Key Findings for Research Question One

In regard to research question one, three themes emerged as the most common and therefore the most key findings for this study. These three themes are as follows:

1. A lack of supportive structures for new faculty.
2. A lack of established pedagogical practices.
3. A lack of staff development.

A lack of supportive structures for new faculty. The most common theme for research question one was a lack of supportive structures for incoming faculty. As the participants discussed the lived experience transitioning from clinician to educator, 10 out of the 14 participants’ statements reflected the feeling that they were not prepared to make the transition. This theme clearly surfaced throughout the participants’ interviews, demonstrating a lack of preparation in the form of a formal orientation for new faculty as well as a lack of preparation materials. Additionally, the participants discussed the lack of a formalized review of the clinic manual, including guidelines on policies and procedures of the clinic. The lack of preparation is echoed in the literature, which describes a lack of formal training for new dental hygiene faculty transitioning from clinical practice to education, resulting in dental hygiene programs hiring

faculty that may lack preparation as instructors (Battrell et al., 2014; Carr et al., 2010, Poindexter, 2013).

Furthermore, the participants described the inconstancy in formal orientation programs and preparation materials resulted in learning to teach by observation rather than formal instruction. Nine out of the 14 participants asserted that they learned how to become educators primarily through learning to teach on their own, by observation of colleagues, or through the willingness of veteran faculty that chose to mentor them. The lack of supportive structures and faculty orientation programs is reflected in the literature, which suggests that few health educators have formal skill preparations and faculty orientation programs, and the contents of those programs that do exist may vary widely among learning institutions (Shoenig, 2009). As a result of the lack of supportive structures, some of the participants described feelings of isolation as well as student frustration due to a lack of knowledge and preparation. This statement is supported by the literature, which states that lack of preparation for the new educator may result in feelings of isolation, uncertainty, and frustration (Ritter, 2011).

A lack of established pedagogical practices. The second theme that emerged from research question one was the lack of established pedagogical practices. As the literature suggests, a lack of preparation may exist as new dental hygiene faculty often have a minimal overview of adult learning theory and practice methodologies (Bartell et al., 2014; Carr et al., 2010; CODA Dental Hygiene Standards, 2013). Nine of the participants described the need to return to school after they had begun teaching, as they felt they needed more preparation in teaching pedagogical practices. Of the nine participants that did return to school to obtain their master's degrees, seven participants described their knowledge of pedagogical practices developed as a result of their degree rather than formalized instruction upon their employment.

Although the participants who had earned their master's degrees asserted that they were better prepared in pedagogical practices as a result of their prior academic work, they still voiced a need for formalized pedagogical instruction upon employment. For those four participants who did not have their master's degrees, the participants voiced an even greater need for instruction in pedagogical principles. Additionally, 10 participants expressed the need for consistency, standardization of best practices, and established protocols among individual institutions, as well as across the state.

A lack of staff development. The third theme that emerged from research question one was a lack of staff development. The participants' lived experiences described a lack of staff development that resulted in communication and calibration issues. Three of the participants described a need for constructive criticism among their colleagues and program directors, whereas four participants described a need for inclusion in staff meetings to promote consistency and collaboration among faculty members. Interestingly, five participants described the reluctance of full-time faculty to share knowledge with adjunct faculty, which resulted in feelings of separation and a lack of unity within the department. Seven participants reported having a lack of additional diversity training, and seven participants described a lack of technology training. Thirteen participants spoke to a lack of training in curriculum management, clinical policies and procedures, strategies for teaching, and student supervision and evaluation. The lack of development for faculty a consistent theme in the literature, with most educators in healthcare education receiving little to no training in instructional efficacy; these findings stress the need for the healthcare educator to facilitate the development of conceptual, procedural, and dispositional competences (Fiedler, 2015; Poindexter, 2013; Srinivasan, 2011; Veal & Allen, 2014).

Discussion of Key Findings for Research Question Two

In regard to research question two, three themes emerged as the most common and therefore the most key findings for this study. These three themes are as follows:

1. Formal orientation and mentorship program.
2. Pedagogical training for faculty.
3. Standardized best practices.

Formal orientation and mentorship program. The most common theme for research question two was a formal orientation and mentorship program for new faculty. Each of the 14 participants recommended formalized orientation and mentorship programs to support incoming faculty. The participants discussed the need for a formalized orientation program upon employment to help new educators obtain foundational knowledge of the basic policies, procedures and shared responsibilities of the dental hygiene department. Five of the participants suggested the need for a faculty handbook or manual to outline expectations of students, faculty, and program outcomes. Four participants suggested a course in the form of a webinar or classroom setting to help new faculty gain knowledge of departmental policies and procedures. Furthermore, all 14 participants stressed a need for a formal mentorship program for new faculty. The participants discussed a need for a new faculty member assigned to a mentor to *shadow* a seasoned faculty member in both clinical and didactic protocol, including guidance in classroom organization, curriculum management, lecture and exam preparation, evaluation, disciplinary procedures, and technology training. Four of the participants stated that the mentorship program should be one semester in duration, whereas two participants felt the mentorship program should be offered for 1 year or more to best support the mentor-mentee relationship. Three of the participants emphasized that the disposition of the mentor was vital to the success of the

mentorship program, stressing that the mentor must have motivation to mentor, have an imperturbable disposition, and adapt to different teaching styles. Four of the participants suggested that the mentorship should not be led by the program director due to excess administrative responsibilities, but rather led by a full-time faculty member or seasoned adjunct faculty member. Three of the participants discussed the need for compensation for mentors, whereas two participants suggested the mentor might be compensated in exchange for an office hour. The participants' recommendation for a formal orientation and mentorship program is grounded in the literature, which describes situated cognition involving active participation within the shared learning process, and supports knowledge and actions formed through communities of practice (Abma, 2007, Brown, et al., 1989, Collins et al., 1989, Lave & Wenger, 1991).

Pedagogical training for faculty. The second theme that emerged from research question two was the need for pedagogical training for faculty. Four of the participants recommended pedagogical training for faculty, expressing a need for new faculty to be exposed to the language of academia. As a new educator, the participants described being unfamiliar with such terms as *pedagogy*, *andragogy*, and *didactic*. The participants also stressed the need for instruction in teaching methodologies. The participants' recommendation is supported by the literature, which describes the need for the novice healthcare educator to learn a variety of instructional competencies, including knowledge of pedagogical methods such as the interrelation of feedback, assessment, and grading in clinical courses (McDonald, 2010; Mlyniec, 2012; Srinivasan et al., 2011; Poindexter, 2013). Furthermore, the literature suggests that new instructors may not understand pedagogical principles, and separate themselves from teaching

and learning to teach. Without pedagogical training, several years may pass before the new educator gains a profound understanding of pedagogical practices (Field, 2012).

Standardized best practices. The third theme that emerged from research question two was the need for standardization of best practices. Four of the participants recommended standardization of best practices and consistent evidence-based practices throughout institutions. The participants described a lack of established protocols and best practices that varied among institutions, which resulted in a breakdown in communication and calibration between the faculty and the department. The participants recommended a course or handbook that would outline standardized best practices and evidenced-based teaching practices within the institution and also discussed a need for standardized practices among dental hygiene schools statewide. The participants suggested that standardization of best practices would assist in communication and faculty and support both new and seasoned faculty members in achieving consistency and calibration. The participants' recommendations of standardization of best practices in order to foster collaboration between faculty is supported by the literature, which describes collaborative environments for faculty that dispel the assumption that healthcare educators should understand academia based on the premise that they are healthcare professionals (Franz et al., 2013).

Conclusions

Four main conclusions were derived from the study findings. These conclusions are supported by the existing literature.

Conclusion one. A formal preparation program to support the transition of dental hygiene clinicians to become dental hygiene educators did not exist for the study participants and this may be the case statewide. This situation has left new dental hygiene educators on their own and underprepared to make a smooth/successful transition. Despite the Dental Hygiene

Committee of California's (DHCC) requirement of an orientation prior to teaching, 10 out of the 14 participants stated that they did not feel prepared to transition from clinician to educator and lacked the pedagogical background necessary to understand academia. This conclusion is supported by the following participant statement, "I prepared myself as best I could, but no I wasn't. There were no guidelines. The first day of class, you just show up. There is no preamble." Another participant noted,

How did I adjust coming out of the clinical world and the clinical practice to the academic world? Not well, not well at all. It was really rough on me emotionally. It would have been a better experience if I knew what I was doing, which I did not, and if I knew how to relate to students. It's a whole different world teaching than in private practice. In private practice, the relationship is one-on-one in your own little cubicle, and it is a very personal relationship. When you have got 24 different students looking at you, it is a whole different ball game.

Furthermore, seven participants felt the lack of preparation resulted in the educators returning to school to pursue their master's degrees. One participant noted,

I had no educational background in regards to being a teacher, per se. All of my education at that point had been clinic education. I had my bachelor's degree but that didn't include any teaching techniques on being an instructor. I felt unprepared and that is the reason I went back to school to get my master's degree in education.

Another participant added,

If I hadn't had my master's work prior to teaching, I would not have been prepared at all as far as curriculum goes or how to write a syllabus. In fact, I have wanted to go into education I know I'm a new dental hygienist; I have only been practicing for 4 years, educator positions 2 years out of hygiene school. Although I wanted it, I secretly didn't want to get the job because I felt so unprepared on educational theories, learning theories, curriculum development, all of those things. I knew that I was going to be getting my master's, so part of me was hoping that I wouldn't get any callbacks or job interviews. It wasn't until I was in my master's program and I had taken some of those courses that I started to feel comfortable with the idea of going on an interview and really taking on an educator position.

As related to the literature in Chapter 2, expert clinicians who transition from clinical careers to academia often discover they are unprepared to undertake their new role as an

educator (Poindexter, 2013). As a result, dental hygiene programs may hire faculty that lack preparation as instructors (Battrell et al., 2014; Carr et al., 2010). New dental hygiene faculty often have a minimal overview of adult learning theories and practice methodologies (CODA Dental Hygiene Standards, 2013). Additionally, research describes that it is challenging for the clinician to transition from clinical practice into education due to changes in environment, culture, expectations, and professional development (Franz, 2013).

Conclusion two. Developing instructional competency as a dental hygiene educator requires formal professional development and ongoing support that is currently lacking for new dental hygiene educators in California. There is a need for additional supportive structures to help the new educator develop knowledge, dispositions, and skills such as teaching methodology, evaluation, discipline, teacher-student boundaries, diversity training, and technology training. Seven participants discussed the need to incorporate teaching methodology education for the new educator. One participant expressed,

I would like to see in the State Dental Practice Act, it has that you have to take teaching methodology. It shouldn't just be teaching methodology. It should be more defined, because I think that we've got to make sure that all of our teachers have the same skills, the basic skills that we need.

Another participant suggested, "Knowing how things are done today, it would be great if there were series of webinars on teaching methodology, students, rules and regulations, things like discrimination." Additionally, nine out of the 14 participants interviewed discussed they had difficulties with evaluation procedures and learning how to discipline students. One participant recalled,

I was not given any guidelines with discipline and how to discipline students, and I learned through trial and error. I would say common consideration. As a new faculty clinically learning that, I don't think there were any real guidelines given. I would have loved to see (some guidance); this is how we deal with some of that.

Another participant expressed,

I was not been given any training on the procedures or the logistics of teaching at an institution. By procedures and logistics, I mean how to input grades into their system, how to request textbooks from the different publishers, how to put in a request at the bookstore. I didn't know how to do any of that. I didn't like that because the students pick up on that, and I feel like it makes you look less credible to the students. I had to learn them basically in the moment, asking other instructors, sometimes asking students. Flying by the seat of my pants and learning it then and there. As far as a program policy for discipline, I have not been given information from either of the institutions. That is one thing I feel I'm not prepared for. I wasn't really prepared for that coming into teaching, and I'm still learning that.

Moreover, seven participants asserted that they had difficulties distinguishing boundaries between teacher and friend, and suggested the need for support in developing healthy student-teacher relations. One participant recalled,

As far as drawing the line between instructor and student, that has been very difficult for me because I am younger, I'm quite similar in age to the students, so I feel this desire to be their friend. Also my personality, I'm a very sensitive person so I have this desire to be liked. I want them to open up to me and treat me like a friend and like me; yet in the back of my mind, I know that that kind of relationship has to be very limited. I'm still struggling with that. I think I'm getting better at learning how to be nice to the students and make them feel that they can trust me but also being strict with them and having authority over them. It has been a learning process.

Seven participants also discussed the need for supportive structures in developing diversity training. One participant shared,

There wasn't anything formal. The institution was very diverse so you had to learn that, but it was on the job learning more than formal. I believe the university had a training on diversity, quote on quote, institution wise. But in the close proximity of dental hygiene, it should have been greater.

Another participant expressed, "Cultural diversity has not been addressed so much. The only training I have had with cultural diversity would be in my undergraduate work."

Lastly, seven participants discussed the need for supportive structures in developing technology training. One participant stated,

I did not feel prepared at all to utilize any technology in the classroom. I was trying to use the overhead projector for something and one of the students got it working, so I was able to do that with the PowerPoint. I wasn't shown how to do it. It was just do it any which way you want. In fact, there was one instructor that said they don't do PowerPoint because they didn't know how. They said, "I don't know anything about any technology." I have not been shown technology like digital X-rays or anything like that. They had that [the training] on a day when I wasn't there and they never made any arrangements to include me. It's really hard because students do ask me to come back there and help them. I do the best I can, but I know that I'm not a good person for them to come to. I don't know what I'm doing.

Another participant expressed,

Because there are so many changes that are happening right now, I wasn't prepared. There are classes or you can meet with an IT person on campus to help you get through those things. Digital X-rays, I had to learn that on the job. I had to go in early and look everything up. I always ask a younger person, even a student, "How do I get the audio set up?" They are helpful.

This conclusion is supported by the literature, which suggests that novice educators receive little or no training instructional efficacy, but are expected to assume entry-level teaching positions with specific levels of established proficiency in competencies of knowledge (Fiedler, 2015; Poindexter, 2013; Srinivasan et al., 2011). Furthermore, Carroll (2012) and Giovacco-Johnson (2005) discussed several dispositional obstacles facing the new educator, including: adjusting to academia; acceptance of constructive criticism; distinguishing the boundary between teacher and friend; difficulties forming effective professional relationships and collegial interactions due to cultural, experiential, and philosophical differences; and complications related to responsibility and authority. Moreover, the literature suggests since the character and reputation of dental hygiene programs depend on the academic qualifications of their faculty members, it will be essential to recruit and retain faculty that possess both formal educational as well as technological skills (Coplen et al., 2011; Franz, 2013).

Conclusion three. New dental hygiene educators need supportive collaboration from fellow colleagues in order to increase their consistency, communication, inclusion, and

calibration. Ten participants reported a lack of consistency, communication, inclusion, and calibration among faculty members. One participant expressed,

When I first started, I didn't really know what the other classes taught. I didn't know that other instructors were teaching similar or the same things at the same time, so I didn't know who was teaching what. I didn't really know what I should be teaching. I didn't occur to me that I was repeating what the students had already heard.

Another participant shared,

I think the hardest thing there was we had one instructor who had been at this for a very long time who was teaching something different so that was a little bit frustrating. It was like we didn't calibrate in this before—was the teaching method from one school to another school. I would watch one person doing it exactly like they did it at the other school and then two other instructors who just kind of went off on their own.

Another participant noted,

I have been a clinician for 20 some odd years and I have been on the [clinic] floor and apparently I wasn't doing it right. This dentist came up and he said, "Looks like you're going to be here for a while so I'm going to tell you how to do it the right way." But it was never said, when you come on the clinic floor, this is how you need to do it. Of course, I want to do it exactly how the students are doing it. So I'd ask them and they'd go, "sure." It wasn't calibrated. That was my biggest problem. We're not all calibrated on the floor with the other faculty members, and it's very frustrating for me. I have heard other faculty members say, "Oh, you have me today, so this is the way we're going to do it." I would overhear this thinking, what do you mean this is how we're going to do it? Because you say it? Isn't there a standard that we have to do it that way? It's frustrating.

Yet another participant went on to say,

I think for us, as educators, we really need to check our attitudes at the door sometimes. We need to remember we're people and we need to treat each other with kindness and respect. And share knowledge with each other. Instead of saying, it's mine and my academic property and academic freedom. Those two words, I had never heard in my life. Well, I teach in the same program as you. I'm not trying to steal your work. I think we should be able to come together as first year leads and we should be able to talk and say, "What works? What is not working? What have you done?"

The need for supportive collaboration for dental hygiene educators from fellow colleagues in order to increase consistency, communication, inclusion, and calibration is supported by the literature, which describes the essential dispositional components of the

healthcare educator as the ability to communicate within multidisciplinary healthcare agencies, the demonstration of positive and collaborative working relationships, and the establishment of effective communication skills with colleagues and patients (Poindexter, 2012). Carroll (2005) emphasized that dispositions are not developed naturally and dispositions are acquired and developed through a *community effort*. In order to attain dispositional competency, new healthcare educators need the assistance of more experienced colleagues in order to model dispositions in professional contexts, support collaborative inquiry, and help interpret past experiences. As the dispositions of the new educator are developed through daily experiences and observations of experienced faculty and colleagues, dispositions are shaped through the process of identity. The development of identity through observation of others directly relates to Wenger's (1998) concept of communities of practice. Wegner describes this repertoire of practice and identity of practice as inseparably linked. The virtues of a person are the result of intentional and strategic actions "leading to the development of a repertoire of practice" (Carroll, 2012, p. 43). Dispositions in teaching operate as a process, connecting belief and value with strategic, purposeful, and intentional actions. Actions equate to accomplishment, and therefore result in desired outcomes. As the dispositions of the new educator are shaped through a repertoire of practice, it is essential for the new dental hygiene educator to assess his/her dispositional competency upon hiring.

Conclusion four. New dental hygiene educators in California would benefit from a formal orientation and mentorship program that would help them understand policies and procedures of the program, student-learning outcomes, and teaching methodologies. All 14 participants suggested that a formal orientation or mentorship program would be beneficial for the new dental hygiene educator. One participant stated,

I would have some kind of 4-week orientation, maybe 6-week orientation. My experience with mentorship and the environment that I was working in, there would be nobody that would be willing or good or care to be a mentor. Now, if you had somebody that wanted to do mentoring and it was important to them and they cared, that is a whole different thing. Maybe I'm just more attuned to learning on my own, doing my own research, and that kind of thing. Do I think a mentorship program, if the person cared, would be beneficial? Yes, I do.

Another participant added,

I think you should have the opportunity to shadow and come in and be trained. I took it on my own to come in and absorb as much as I could, but that was on my own initiative. I would direct them to people who I think would be helpful in mentoring in that particular setting. I feel that even in academics, science, engineering, they don't get any instruction as instructors. They are experts in their field, but they don't have any teaching methodology or any of that. So across the board in teaching college, they should have basic training on adult learners, basics about discriminations, those things.

Another participant expressed,

The first thing I would like to see a mentor assigned to the instructor, to the new instructor. And that mentor is given so many hours to come into the classroom to help you. I think the mentorship program should last a couple of years. And I think it would be important that somebody be compensated here. And it just needs to be built in. It just needs to be part of it. They would come and observe in the classroom; they would be trained ahead of time, of course, so that we make sure that they are up to standards because like I said, no offense, there are some people who aren't, and it's really sad that they are teaching these students.

Another participant noted,

I think a semester of mentorship should be required. I like having a mentor. I like having someone who has been there a long time to bounce things off of. Teaching itself is a very fluid career. You have to change; you have to adapt. Being able to bounce off somebody would be great. If you could create a relationship with someone who had been your mentor, that would be fabulous. If not, then I would definitely encourage a new educator to find somebody. Find your people.

The conclusion that new dental hygiene educators in California would benefit from a formal orientation and mentorship program is supported by the literature and is the theoretical framework of this study; situated learning theory within the construct of the community of practice (Lave & Wagner 1991). Situated cognition emphasizes that learning and doing are

inextricable (Brown et al. 1989). Situated learning theories dispel the traditional models of evaluation, citing that learning should not isolate and distance the learner from the active learning process (Abma, 2007). The situated learning model coincides with the apprenticeship-learning model, an early model dating back to Greek and Roman times that describes the master/apprentice relationship (Caldwell, 2011). The expert teaches a craft to the apprentice through means of modeling, coaching, articulation, reflection, exploration and explanation of problem solving through experience in order to solve real-world problems (Brown et al., 1989; Collins et.al., 1989). Apprenticeship learning supports cognitive thinking, as well as the apprentices' experiences moving through the transition process from novice to expert. As the novice is unprepared for individual work, this relationship allows the novice to improve and grow as a learner until tasks may be accomplished alone. Through the apprenticeship model, novice clinical educators are able to see how experts solve problems through guided experience (Hendricks, 2001). The novice clinical educator is given small tasks with responsibility, and then moves into more difficult tasks with added responsibility and experience (Caldwell, 2011). As the novice becomes more skilled and acquires competence in the subject matter, the learner then moves from apprentice to expert (Lave & Wenger, 1991; Vygotsky, 1978). As the apprentice moves from novice to master, the individual is admitted to the community of practice fully embedded within the behaviors and culture of the community (Caldwell, 2011). Situated theorists deem apprenticeship and mentorship necessary within the clinical setting in order to draw clinicians and educators together to renew the relationship between apprentice and master to restore the "assessment of expertise" (Caldwell, 2011, p. 3).

Recommendations for policy and practice. This study was designed to explore the experiences and perceptions of 14-20 California dental hygiene educators who have transitioned

from clinical practice into the community college education system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. The findings from this study can be used to inform California dental hygiene educators and other allied-health educators statewide, in addition to providing a more comprehensive understanding of the needs of new dental hygiene and allied-health faculty transitioning from clinical practice to education. Findings and conclusions from the study support the following five recommendations.

Recommendation one. It is recommended that dental hygiene departments expand ways to increase communication between adjunct and full-time faculty. The findings of this study reflect a need for increased consistency, communication, inclusion, and calibration between new and experienced faculty members. As adjunct and full-time faculty work schedules may vary, it is recommended to find alternative ways to increase communication utilizing virtual technological advances. Increased communication is essential to the new educator as it influences behavior and personal growth toward students, colleagues and communities that affect student development (Carroll, 2012).

Recommendation two. In order to support the 21st century student more effectively, it is recommended that technology training for new and existing faculty be increased. A review of the literature suggests that technological literacy is an essential skill for dental hygiene faculty (Coplen et al., 2011; Stegeman & Zydney, 2010). Due to the rapidly changing healthcare environment, coupled with a decrease in qualified faculty due to the advanced degree requirements for California dental hygiene educators, more dental hygiene courses may be taught online. Distance education may be replacing traditional methods of instruction, as well as advanced and terminal degree completion programs.

Recommendation three. It is recommended that the new dental hygiene educator receive additional education in teaching methodologies. Findings from this study suggest that additional pedagogical training is needed for new educators, specifically educators who do not hold a master's degree. The recommendation for additional education in teaching methodologies is supported by the literature, which suggests that new dental hygiene faculty often have a minimal overview of adult learning theory and practice methodologies (CODA Dental Hygiene Standards, 2013).

Recommendation four. It is recommended that new dental hygiene faculty experience a formal orientation upon employment. Findings from this study suggest that most new dental hygiene educators have not experienced a formal orientation program prior to their employment. As mandated by the Dental Hygiene Committee of California (DHCC): *Each faculty member shall participate in an orientation prior to teaching, including but not limited to, the educational program's curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation* (Committee on Dental Auxiliaries, 2016 p. 188) A review of the literature suggested that few health educators have formal skill preparation to be new educators, and faculty orientation programs may vary widely among learning intuitions (Schoening, 2009). As a result, dental hygiene programs may have not defined and implemented a formal orientation protocol, and may need assistance in preparing formal orientation programs and defining desirable qualification skills for the new dental hygiene educator.

Recommendation five. It is recommended that a formal mentorship program be implemented into dental hygiene programs. Findings from this study suggest that a formal mentorship program would support new faculty by enhancing preparation experiences and instructional competency needs in knowledge, disposition and skills. As the literature suggests,

the understanding of content-specific pedagogy is developed partly by emulating the actions of more experienced teacher-educators through the theoretical constructs of situated learning theory (Field, 2012; Lave & Wenger, 2009; McLeod et al., 2003; Paulis, 2011).

Recommendations for an Instructional Competency Model for New Dental Hygiene

Faculty

The findings from this study can be used to inform an instructional competency model for new faculty. Based on researcher insight and supported by the literature, the researcher suggests a three-part model to best support new dental hygiene faculty in instructional competencies of knowledge, disposition, and skill. The following recommendations are offered for an instructional competency model for new dental hygiene faculty.

A formal orientation prior to employment. It is recommended that dental hygiene programs implement a formal orientation for new faculty members upon employment. A formal orientation program would better support new faculty transitioning from clinician to educator by providing an opportunity for new educators to become acclimated to their new department, colleagues, and work expectations. The orientation may consist of the implementation of a faculty handbook, manual or webinar outlining the policies, procedures, and expectations of the department. Formal meetings should be scheduled with the new faculty member and program director or assigned mentor to discuss the faculty handbook and its contents. As the literature suggests, effective orientations provide benefits for employers and employees, and can facilitate an improved transition into the new workplace (Miami-Dade Community College District, Florida, 1989; Wolverton, 1995).

Teaching methodology training for faculty. It is recommended that dental hygiene programs implement training in teaching methodology for new faculty. As the literature

suggests, many dental hygienists become dental hygiene clinical educators as a result of their clinical expertise and performance and may be proficient in the clinical setting, but may lack the pedagogical background and minimum overview of adult learning theories and practice methodology to develop instructional competencies needed to support the transition from clinical practice to dental hygiene educator (Battrell et al., 2014; Frantz & Smith, 2013; Tax et al., 2012). Research from this study reflects a need for dental hygiene departments to incorporate teaching methodology, including general principles, pedagogy and management strategies used for classroom instruction.

A formal mentorship program. It is recommended that dental hygiene programs implement a formal mentorship program for new faculty. Findings from this study reflect the assertion that formal mentorship programs would support the new educator in developing instructional competency in knowledge, disposition and skill. A formal mentorship/apprenticeship model is highly applicable to the dental hygienist transitioning from clinical practice into a community of higher education. As the dental hygienist transitions from clinical practice to education, he/she develops a new identity as a dental hygiene instructor. As experiences are shared among the community, it fosters a culture of support among its members. With mentorship, time, and experience, the novice educator transitions to master. The master educator continues to foster new hygienists transitioning from clinical practice to education via apprenticeship learning, thus contributing to the next generation of a community of practice of dental hygiene educators.

Furthermore, the literature suggests that new faculty who had mentors remained in the teaching field longer and experienced fewer difficulties in the transition than those who did not (McCaughy et al., 2005; Smith & Ingersoll, 2004). Moreover, the literature also suggests that if

the positive effects of a mentorship program are seen in new faculty, then mentorship may also be an effective practice with more experienced faculty who need guidance or are in need of positive reinforcement (McCaughtry et al., 2005).

As successful mentoring programs depend on the mentor's effectiveness, it is recommended that mentorship be led by a faculty member who has rich knowledge in pedagogy, curriculum, and content, as well as effective communication and personal motivation. Research findings from this study conclude that the optimal length of a mentorship program should be a minimum of one semester to a year or more, and compensation for mentors should be considered. Existing models of formal induction programs may provide guidance for the implementation of a formal mentorship program for dental hygiene programs.

Recommendations for Further Research

The research study represents an initial step in examining the instructional competency needs of the new dental hygiene educator. Recommendations for further research were drawn from this study's findings and the interpretation of the findings. The research recommendations are offered in four areas and not presented in order of importance; each recommendation has the potential to become a meaningful study in and of itself.

Study of instructional competency of new dental hygiene educator employed within a 4-year university or private institution. The researcher recommends a study of instructional competency needs of the new dental hygiene educator employed within a 4-year university or private institution. As this study was conducted to represent new dental hygiene educators in a community college setting, more research may add to the literature on the instructional competency needs of dental hygiene educators employed in private institutions or universities.

Study of instructional competency of the new dental hygiene educator nationwide.

As this study was conducted in the state of California, further research is indicated to determine the instructional competency needs of the new dental hygiene educator statewide. Further study in this area would also be beneficial in gaining additional insight on national standardization of best practices for dental hygiene programs.

A study to examine the optimal academic qualifications for entry-level dental hygiene professors. As existing literature as well as data from this study suggests, dental hygiene instructors may lack the pedagogical background to transition effectively from clinicians to educators. Furthermore, data from this study suggest that dental hygiene educators that did transition from clinicians to educators went on to further their education in order to gain more understanding surrounding teaching methodologies. Further research to determine the optimal academic qualifications for entry-level dental hygiene professors would help licensing agencies for dental hygienists such as the DHCC or state dental boards determine optimal academic qualifications for new dental hygiene faculty.

A study to examine existing formal induction programs. Further study to examine existing formal induction programs would contribute greatly to the needs of a formal orientation and mentorship program for new dental hygiene faculty. Exploration of existing models of formal induction programs within allied-health education such as cohorts, apprenticeship, mentorship, and situated learning models would better inform dental hygiene departments in the implementation of formal orientation and mentorship programs.

Final Thoughts

As noted in Chapter 1, many dental hygienists become dental hygiene clinical educators as a result of their clinical expertise and performance (Battrell et al., 2014; Frantz & Smith,

2013; Tax et al., 2012). New dental hygiene clinical instructors may be proficient in the clinical setting, but may lack the pedagogical background to develop instructional competencies to support the transition from clinical practice to dental hygiene educators (Frantz & Smith, 2013). As a result, dental hygiene programs may hire faculty that lack preparation as instructors (Battrell et al., 2014; Carr et al., 2010).

As the dental hygiene profession continues to evolve and the enrollment in dental hygiene programs increases, highly educated dental hygiene educators are in demand. As noted in Chapter 2 and outlined in the literature review, novice educators receive little to no training in instructional efficacy, but are expected to assume entry-level teaching positions with specific levels of established proficiency in competencies of knowledge (Fiedler, 2015; Srinivasan et al., 2011). Furthermore, academic leaders do not require healthcare instructors to undergo formal or informal instruction on teaching methodologies before transitioning into education. As data from this study suggest, it is imperative that the new dental hygiene educator receives preparation in the instructional competencies of knowledge, disposition, and skills, including teaching strategies that employ critical and independent thinking, technology training, curriculum management, and pedagogical instruction. Research findings from this study suggest that the establishment of formal orientation and mentorship programs would also be beneficial support structures for new dental hygiene faculty.

Formal orientation and mentorship programs for new dental hygiene faculty that incorporate apprenticeship learning and support cognitive thinking allow the new educator to not only be mentored by veteran faculty, but also promote a relationship between faculty within a community of practice. Collaboration and sharing information among faculty is important for the growth of the dental hygiene educator within not only each individual institution, but the

profession on a state and national level. As stated articulately by a participant in this study, “I think we should be able to come together, and we should be able to talk and say, ‘What works? What is not working? What have you done?’”

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APPENDIX A

Interview Protocol

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

Position of Interviewee (Full-time or Part-Time Educator):

The following interview questions will ask the participant to reflect back on their lived experiences as a new dental hygiene educator.

Questions:

1. This question addresses the background and experience of the dental hygiene educator.

- Describe the institutional setting of your first employment as a dental hygiene educator. (Community college/private institution or other)
- In what capacity do you currently serve as a dental hygiene educator? (Full-time or adjunct)
- How long have you practiced as a clinical dental hygiene before making the transition from dental hygiene clinician to dental hygiene educator?
- How long have you (did you) practice (d) as a dental hygiene educator?
- How many clinical courses and/or didactic courses do you currently teach/have you taught?

2. This question addresses knowledge of the new dental hygiene educator.

Reflecting on your first experiences as a dental hygiene educator, describe your first few months of teaching as related to preparation.

How did you learn to be a dental hygiene instructor?

How did you learn the following competencies?

- knowledge of pedagogical methods to include feedback, assessment, and grading in clinical courses;
- clinical expertise as well as knowledge of how to teach and evaluate students in a didactic and clinical setting;
- knowledge educational theories, and evidence-based teaching practices and the ability to teach diverse learners; and
- knowledge of values and ethics relating to didactic and clinical instruction.

3. This question addresses dispositions of the new dental hygiene educator.

Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following:

- adjusting to academia;
- acceptance of constructive criticism from colleagues and students;
- distinguishing the boundary between teacher and friend;
- difficulties forming effective professional relationships and collegial; interactions due to cultural and philosophical differences; and
- complications relating to responsibility and authority.

Question 4: This question addresses skills for the new dental hygiene educator.

Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following:

- Describe your participation, if any, in an orientation prior to teaching. Do you feel you were prepared in the following competencies: curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation?
- Describe your preparation experiences, if any, utilizing technology in the classroom or clinic.
- Describe technological literacy as you feel it pertains to the new dental hygiene educator.

Question 5: Given your lived experience, what might be your recommendations to improve your transition from clinician to educator?

Question 6: Is there anything else you would like to add to any of your responses?

Please do not stop until you feel that you have described your experiences as a new dental hygiene educator concerning instructional competency needs completely as possible. Thank you for participating in this interview. Confidentiality to all participants is assured.

APPENDIX B

Letter of Intent

October 22, 2016

Dear Participant:

My name is Kelly Donovan, RDH, MAEd. I am currently a dissertation student in Pepperdine University's Educational Leadership, Administration, and Policy (ELAP) Ed.D. program. My dissertation chair is Linda Purrington, Ed.D, Senior Lecturer, ELAP Program. I am studying the experiences and perceptions of 14-18 California dental hygiene educators who have transitioned from clinical practice into the community college education system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency.

As the literature suggests, new dental hygiene instructors may be proficient in the clinical setting but may lack the pedagogical background and methodologies to develop instructional competencies to support the transition from clinical practice to dental hygiene educator. Furthermore, there is often no formal training for new dental hygiene faculty transitioning from clinical practice to the classroom. The intent of this phenomenological study is to explore the needs of the new dental hygiene educator to gain understanding in the development of an instructional competency model for new dental hygiene faculty.

The study will consist of one interview along with a follow-up interview from December 2016 through March 2017. Each interview will take approximately 60-90 minutes. The interview will take place either at your campus or at a mutually designated location. You will receive a \$25.00 gift card for your participation.

If you would be interested in participating in this study, please contact me at (██████████) ██████████; or by email at ██████████ with the most convenient time and method of contact.

As a fellow dental hygiene educator I appreciate your consideration of this invitation to participate in my study.

Sincerely,

Kelly Donovan, RDH, MAEd.

APPENDIX C

Permission To Conduct Research Study Example

Date: Monday, October 24, 2016

Institution Name
Institution Address
Institution City, State, Zip

Name
Director, Dental Hygiene Department
Dear (Director):

My name is Kelly Donovan. I am currently a dissertation student in Pepperdine University's Educational Leadership, Administration, and Policy (ELAP) Ed.D. program. My dissertation chair is Linda Purrington, Ed.D, Senior Lecturer, ELAP Program. I would like to request permission to recruit potential participants for my dissertation study through the dental hygiene department at your institution. I am a full-time dental hygiene educator in the California community college system, and wish to connect with dental hygiene educators who may find my study of interest.

The purpose of my study is to explore the experiences and perceptions of 14-18 California dental hygiene educators who have transitioned from clinical practice into the community college education system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. As the literature suggests, new dental hygiene instructors may be proficient in the clinical setting but may lack the pedagogical background and methodologies to develop instructional competencies to support the transition from clinical practice to dental hygiene educator. Furthermore, there is often no formal training for new dental hygiene faculty transitioning from clinical practice to the classroom. The intent of this phenomenological study is to explore the needs of the new dental hygiene educator to gain understanding in the development of an instructional competency model for new dental hygiene faculty.

The impact of this study may inform California dental hygiene educators and the perceptions of other allied- health educators statewide, and provide a more comprehensive understanding of the needs of new dental hygiene and allied-health faculty transitioning from clinical practice to education. A better understanding of new dental hygiene and allied-health faculty needs may result in better preparation of dental hygiene faculty and student instruction, and ultimately lead to improved patient care.

The questions guiding my study are the following:

1. What do current dental hygiene educators' perceive to be the needs of the new dental hygiene educator in preparation experiences and instructional competence as related to knowledge, disposition and skills?
2. What recommendations might dental hygiene educators offer to better support new professors in developing instructional competency as related to knowledge, disposition and skills?

I would like permission to solicit dental hygiene educators who are employed under your direction as adjunct or full-time faculty to inquire if they might be interested in participating in my study. I am also requesting permission to conduct interviews with interested participants on site at the institution, or off-site at the convenience of the participant. My intent is not to disturb the educators during instructional time.

The methodology for the study includes data collection through interviews. The participants will be asked approximately 6 questions, and the interviews will be approximately 60 minutes in length, conducted in person, or via phone or Skype. The interviews will be audio taped (identification will be kept confidential by alpha coding) and transcribed for clarity. I will keep all data password protected and locked so that confidentiality of the institution and participants is protected through the process. The participants will be provided a copy of the transcription with one week to respond with the edits to the transcription. All participants may request a copy of the study as well upon completion.

To indicate your response to this request for permission please email your response and please include official logo in your communication.

Sample Response:

(Must include district logo if emailed)

I have read Kelly Donovan's request for permission to solicit interviews and interview willing participants to support her dissertation study at the (Institution name) and I grant permission for study as proposed in her request letter.

Sincerely,

Name Title Date

Thank you for your consideration.

Kindest Regards,

Kelly Donovan RDH, MAEd.

Professor, Dental Hygiene

APPENDIX D

Letter of Informed Consent

Pepperdine University
Educational Leadership, Administration, and Policy (ELAP) Program

“ A phenomenological study is to explore the needs of the new dental hygiene educator employed as a part-time or full-time faculty member in the California community college system to gain understanding in the development of instructional competency”

Principal Investigator: Kelly Donovan

You are asked to take part in a research project that examines the needs of the new dental hygiene educator employed as a part-time or full-time faculty member in the California community college system to gain understanding in the development of instructional competency. The researcher is Kelly Donovan, RDH, MAEd., doctoral student in the Educational Leadership, Administration, and Policy (ELAP) Program at Pepperdine University. If you have further questions regarding this study, please contact dissertation chair Linda Purrington, Ed.D, Senior Lecturer, ELAP Program at linda.purrington@pepperdine.edu

Description of the project:

This qualitative, phenomenological study will examine the experiences and perceptions of 14-18 California dental hygiene educators who have transitioned from clinical practice into the community college education system in order to further understand how dental hygiene programs might better support new professors in developing instructional competency. As the literature suggests, new dental hygiene instructors may be proficient in the clinical setting but may lack the pedagogical background and methodologies to develop instructional competencies to support the transition from clinical practice to dental hygiene educator. Furthermore, there is often no formal training for new dental hygiene faculty transitioning from clinical practice to the classroom. The intent of this phenomenological study is to explore the needs of the new dental hygiene educator to gain understanding in the development of an instructional competency model for new dental hygiene faculty.

Risks or Discomforts:

The participants in this study will experience minimal risks that are not greater than what they experience during a discussion with dental hygiene colleagues. As the interviews are confidential and voluntary, the risk to the participant is minor. The potential risks to participation will include the loss of approximately 60 to 90 minutes of personal time, or mental fatigue from recollection of experiences. Additional risks may include the possible anxiety answering the questionnaire, which may uncover the participants' own feelings of non-support they may have experienced during their transition from clinician to educator.

Confidentiality and Anonymity:

Your part in this research is confidential. That is, the information gathered for this project will not be published or presented in any way that would allow anyone to identify you. Information gathered for this project will be stored in a locked file and only the researcher will have access to the data.

Voluntary Participation:

The decision whether or not to take part in this research study is voluntary. If you do decide to take part in this study, you may terminate participation at any time without consequence. If you wish to terminate participation, you should telephone the investigator at ([REDACTED]). The only penalty incurred upon early termination will be forsaking the \$25.00 gift card.

Rights:

You have the right to ask questions about this research before you sign this form and at any time during this study. You may email the researcher's chairperson, Dr. Linda Purrington at linda.purrington@pepperdine.edu. If you have any questions about your rights as a research participant, please contact Pepperdine University Institutional Review Board (IRB) at <https://irb.pepperdine.edu>.

I HAVE READ THE CONSENT FORM. MY QUESTIONS HAVE BEEN ANSWERED. MY SIGNATURE ON THIS FORM INDICATES THAT I CONSENT TO PARTICIPATE IN THIS STUDY.

Signature of Participant

Date

Signature of Researcher

Date

Typed/Printed Name of Participant

Typed/Printed Name of Researcher

APPENDIX E

Instrumentation Validity Questionnaire

Dear Expert Panel:

My research will include interviews that explore the preparation and instructional competency needs of the new dental hygiene educator.

I am asking that you please review these questions for appropriateness and clarity. Please mark suitable descriptors. Also, please feel free to annotate the questions. Thank you.

Questions:

1. This question addresses the dental hygiene educators' background and experience.

Describe the institutional setting of your first employment as a dental hygiene educator. (Community College/Private Institution/Other)

(Comments:

___ Appropriate

_____)

(Comments:

___ Inappropriate

_____)

(Comments:

___ Clear

_____)

(Comments:

___ Unclear

_____)

In what capacity do you serve as a dental hygiene educator? (Full-time or Adjunct)

(Comments:

___ Appropriate

_____)

(Comments:

___ Inappropriate

_____)

(Comments:

___ Clear

_____)

(Comments:

___ Unclear

_____)

<input type="checkbox"/> Appropriate <input type="checkbox"/> Inappropriate <input type="checkbox"/> Clear <input type="checkbox"/> Unclear	<p>How long have you (did you) practice (d) as a dental hygiene educator? (Comments: _____ _____)</p> <p>How many clinical courses and/or didactic courses do you currently teach/have you taught? (Comments: _____ _____)</p>
<input type="checkbox"/> Appropriate <input type="checkbox"/> Inappropriate <input type="checkbox"/> Clear <input type="checkbox"/> Unclear	<p>How many clinical courses and/or didactic courses do you currently teach/have you taught? (Comments: _____ _____)</p>

2. This question addresses knowledge of the new dental hygiene educator. Reflecting on your first experiences as a dental hygiene educator, describe your first few months of teaching as related to preparation.

How did you learn to be a dental hygiene instructor?

How did you learn the following competencies?

<input type="checkbox"/> Appropriate <input type="checkbox"/> Inappropriate <input type="checkbox"/> Clear	<ul style="list-style-type: none"> ● knowledge of pedagogical methods to include feedback, assessment, and grading in clinical courses; (Comments: _____ _____)
<input type="checkbox"/> Appropriate <input type="checkbox"/> Inappropriate <input type="checkbox"/> Clear	(Comments: _____ _____)

___ Unclear	(Comments: _____ _____) <ul style="list-style-type: none"> ● clinical expertise as well as knowledge of how to teach and evaluate students in a didactic and clinical setting;
___ Appropriate	(Comments: _____ _____)
___ Inappropriate	(Comments: _____ _____)
___ Clear	(Comments: _____ _____)
___ Unclear	(Comments: _____ _____) <ul style="list-style-type: none"> ● knowledge educational theories, and evidence-based teaching practices and the ability to teach diverse learners; and
___ Appropriate	(Comments: _____ _____)
___ Inappropriate	(Comments: _____ _____)
___ Clear	(Comments: _____ _____)
___ Unclear	(Comments: _____ _____) <ul style="list-style-type: none"> ● knowledge of values and ethics relating to didactic and clinical instruction.
___ Appropriate	(Comments: _____ _____)
___ Inappropriate	(Comments: _____ _____)
___ Clear	(Comments: _____ _____)
___ Unclear	(Comments: _____ _____)

3. This question addresses dispositions of the new dental hygiene educator. Upon your employment as a new dental hygiene educator, describe your preparation experiences in the following:

(Comments:

_____)

(Comments:

___ Appropriate

_____)

(Comments:

___ Inappropriate

_____)

(Comments:

___ Clear

_____)

(Comments:

___ Unclear

_____)

acceptance of constructive criticism from colleagues and students;

(Comments:

___ Appropriate

_____)

(Comments:

___ Inappropriate

_____)

(Comments:

___ Clear

_____)

(Comments:

___ Unclear

_____)

distinguishing the boundary between teacher and friend;

(Comments:

___ Appropriate

_____)

(Comments:

___ Inappropriate

_____)

(Comments:

___ Clear

_____)

(Comments:

___ Unclear

_____)

_____)
difficulties forming effective professional relationships
and collegial; interactions due to cultural and philosophical
differences; and

_____ Appropriate _____
(Comments: _____)

_____ Inappropriate _____
(Comments: _____)

_____ Clear _____
(Comments: _____)

_____ Unclear _____
(Comments: _____)

_____)
complications relating to responsibility and authority.

_____ Appropriate _____
(Comments: _____)

_____ Inappropriate _____
(Comments: _____)

_____ Clear _____
(Comments: _____)

_____ Unclear _____
(Comments: _____)

_____)

4. This question addresses skills for the new dental hygiene educator. Upon your employment as a new dental hygiene educator, describe your experiences in the following surrounding skills:

- Describe your participation, if any, in an orientation prior to teaching. Do you feel you were prepared in the following competencies: curriculum, policies and procedures, strategies for teaching, and student supervision and evaluation?

_____ Appropriate _____
(Comments: _____)

_____ Inappropriate _____
(Comments: _____)

_____ Clear _____
(Comments: _____)

<input type="checkbox"/> Unclear	_____ (Comments: _____)
<input type="checkbox"/> Appropriate	_____ Describe your preparation experiences, if any, utilizing technology in the classroom or clinic. (Comments: _____)
<input type="checkbox"/> Inappropriate	_____ (Comments: _____)
<input type="checkbox"/> Clear	_____ (Comments: _____)
<input type="checkbox"/> Unclear	_____ Describe technological literacy as you feel it pertains to the new dental hygiene educator. (Comments: _____)
<input type="checkbox"/> Appropriate	_____ (Comments: _____)
<input type="checkbox"/> Inappropriate	_____ (Comments: _____)
<input type="checkbox"/> Clear	_____ (Comments: _____)
<input type="checkbox"/> Unclear	_____ (Comments: _____)

5. Given your lived experience, what might be your recommendations to improve your transition from clinician to educator?

<input type="checkbox"/> Appropriate	(Comments: _____ _____)
<input type="checkbox"/> Inappropriate	(Comments: _____ _____)
<input type="checkbox"/> Clear	(Comments: _____ _____)

_____ Unclear _____)
(Comments: _____)
_____)

6. Is there anything else you would like to add to any of your responses?
(Comments: _____)

_____ Appropriate _____)
(Comments: _____)

_____ Inappropriate _____)
(Comments: _____)

_____ Clear _____)
(Comments: _____)

_____ Unclear _____)
(Comments: _____)

_____ Unclear _____)
(Comments: _____)

_____ Unclear _____)
(Comments: _____)

APPENDIX F

Data Analysis Process

1. The text (data) was read as a whole
2. The data was read again making notes about first impressions
3. The data was read a third time and the researcher highlighted key words, phrases, or meanings relating to the participants' supporting statements regarding preparation experiences and instructional competency needs of the new dental hygiene educator as related to knowledge, skills, and dispositions.
4. The researcher then made notes about opinions, processes, actions or any other information that might be relevant to the preparation experiences and instructional competency needs of the new dental hygiene educator as related to knowledge, skills, and dispositions.
5. The data coding was bracketed according to patterns (i.e.) eliminating insignificant information (Moustakas, 1994).
6. Themes were created, labeled, and the connection between them were evaluated
7. The researcher then explicates experiences and synthesizes them into a composite description of the phenomenon essence (Moustakas, 1994)
8. The researcher provided textural (what) descriptions
9. The researcher provided structural (how) descriptions
10. Supporting quotes from the text data were gathered to support emerging themes

APPENDIX G

IRB Approval



Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: December 12, 2016

Protocol Investigator Name: Kelly Donovan

Protocol #: 16-11-445

Project Title: PREPARATION AND INSTRUCTIONAL COMPETENCY NEEDS OF THE NEW DENTAL HYGIENE EDUCATOR: A PHENOMENOLOGICAL STUDY

School: Graduate School of Education and Psychology

Dear Kelly Donovan:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

Page: 1

APPENDIX H

Permission to Reprint Figures 1-2

From: Burstyn, Sarah <BurstynS@adea.org>
Subject: RE: Permission to use statistical data
Date: June 29, 2017 at 11:48 AM
To: Kelly Donovan [REDACTED]

***** This is an EXTERNAL EMAIL. Stop and think before replying, clicking links or opening attachments. *****

Hi Ms. Donovan,

If you plan to use the figures as presented, yes you may use them with attribution to ADEA. The data are from the ADA though, so if you are only using the data but presented in a different form, you should cite the ADA.

Best regards,
Sarah

Sarah Burstyn
JDE Project Manager
American Dental Education Association
655 K Street NW, Suite 800, Washington, DC 20001
202-289-7201 | burstyns@adea.org | adea.org
The Voice of Dental Education™

From: Kelly Donovan [REDACTED]
Sent: Wednesday, June 28, 2017 11:11 PM
To: Burstyn, Sarah <BurstynS@adea.org>
Subject: Permission to use statistical data

Hello Ms. Burstyn,

I am a doctoral student in the Educational Leadership Administration and Policy at Pepperdine University in Malibu, CA, currently in APA Review. I am also a professor of dental hygiene at Taft College in Taft CA, and have written my dissertation on instructional competency needs of the new dental hygiene educator.

I would like to ask your permission to include the following figures representing statistical data in my dissertation study which will be published to ProQuest:

Applicant and Enrollee Trends
Application and Acceptances Dental Hygiene Program 2002-2003 2015-2016

Graduates
Dental Hygiene Graduates 1990-2015

APPENDIX I

Permission to Reprint Figures 3-5

***** This is an EXTERNAL EMAIL. Stop and think before replying, clicking links or opening attachments. *****

Hello Ms. Donovan,

I will be happy to send a gratis permission for figure use in your dissertation.

I will be out of the office next week.

I expect to send the letter by July 14.

Thankyou.

Mary Ann Muller – Permissions Coordinator, US Journals Division

My Work Schedule is Tuesday, Wednesday, and Friday.

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