
Research Article

What the Novice Dental Educator Needs: Perceptions of the New Faculty Member

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Abstract

Purpose: According to the literature, there is an impending shortage of qualified dental and dental hygiene faculty; proper preparation of the clinicians as they transition to educator would be of great importance. This shortage occurs in many dental schools where the need for faculty supersedes the proper training deemed necessary to begin as a dental educator. This study's purpose is to compare the training dental educators received when transitioning to academia and evaluates it to determine if it was perceived as adequate.

Methods: Based on this study, this article explores and theorizes two types of training using the experiences of the current dental school faculty. The data were collected via individual interviews of twelve dental educators using a semi-structured interview guide; the data was transcribed and analyzed for similar themes.

Results: The data revealed that the majority of the participants (10 of 12) had no formal educational training, and/or an advanced degree in higher or adult education. This article is a brief summary of the type of training implemented as derived from participant narratives and conversations. This study further addresses the participants' needs as the clinician transitions into the college of dentistry culture as an educator.

Conclusion: In this sample, the individuals had similar experiences but felt the preparation they received was inadequate. The commonality was the desire to have a mentor. Transitioning from clinician to educator would have been less stressful if there had been a peer to offer guidance, direction, and advice.

Keywords

Clinician to educator; Dental educator; Generations of educators; Novice educator; Transition to academia; Narrative inquiry

Introduction

Dentistry offers many rewarding career options combining science and technology with helping people

enhance and maintain their oral health. The level of education and clinical training required earning a dental degree, and the high academic standards of dental schools, are comparable to medical schools and are essential to preparing dentists for the safe and efficient practice of oral health care. In 2006, data indicated that most dental faculty was in their fifties and sixties with retirement in their near future [1]. During the same time, few plans by universities were made to recruit and/or transition existing dentists to academia [1]. The American

Dental Education Association (ADEA) and the American Dental Association (ADA) were and are concerned that the academic community in dental schools will be unable to fill faculty vacancies that will appear in the foreseeable future [2,3]. In the last five years, it has become increasingly apparent that the United States is facing a critical faculty shortage in health care education, dentistry being no exception [4,5]. Nunn et al. reported in 2002, there were approximately 274 vacant faculty position postings in dental schools [4]. In 2000, seventy-five percent of those were in the clinical sciences [6]. In 2007, dental school deans reported 369 vacant budgeted faculty positions, and they were less than optimistic about being able to fill them [5]. The trend, an increase in empty positions from 2002 to 2007, indicates that these vacant positions may remain unfilled for a minimum of six months. In the past, dental educators were recruited from dental school classes and advanced education program graduates. According to ADEA, recently graduated students (within five years of graduation) comprise only seven percent of the total dental faculty in the United States [7]. Sixteen percent of open faculty positions will be filled by those graduating from advanced education programs. Optimistically, private practitioners will fill the remaining 62%. The problem is not merely to fill open positions with clinicians having little or no educational or teaching experience but, to address the future learning needs of dental students by being aware of the educational requirements of the new faculty member.

In 1999, the American Association of Dental Schools' (AADS) task force attempted to implement programs that would mentor, prepare and recruit faculty [3,8]. No change in the current lack of dental faculty ready to teach indicates an impending crisis in providing dental students access to a quality education. To address the imminent shortage of dental faculty, academic dental careers should be made more attractive or the process of training clinicians to become educators should be simplified [9].

Review of the Literature

From a review of the literature, it appears that those dental schools who did not promote faculty positions in academia were primarily concerned with developing student research endeavors. These findings prompted Haden et al., [6] to propose opportunities that would emphasize their choices associated with academic dentistry. Senior dental students interested in teaching could have the chance to act as a student teacher and involve themselves in the instruction of the dental student in the first term. Such an experience would provide an opportunity for these student teachers to develop an understanding of teaching theory and research; the experience would ideally provide practice in curriculum management and pedagogy [3]. Additional learning and teaching theory, gained from teaching with peers, offers an opportunity for the student teacher to reflection their experiences with peer mentors and make decisions regarding their future in academia [10]. Personal mentoring would possibly afford the student

teachers an occasion to teach important subject matter to incoming dental and dental hygiene students and thus instill confidence, and ultimately provide a significant milestone in their professional development [6]. Though this is a worthy proposal, it may not address the critical need for faculty in a timely manner to avoid the vacant positions on college campuses within dental educational programs. The literature did not indicate the number of dental schools having such a program. According to ADEA, four percent of the 2015 graduating class became dental school faculty [11].

Researchers and scholars have agreed that colleges of dentistry face a common issue: "recruitment and retention of a sustainable and diverse workforce to meet future demands" in academia [12]. It is important to address factors that attract potential faculty and the professional development available once the clinician is recruited. According to the Projection Faculty Appointments Survey conducted by Harvard University in 2001, the top factors that determine satisfaction in the workplace are: 1) institutional support in research, 2) available time for personal obligations 3) quality attributes of the department 4) teaching assignments and 5) flexibility of the work schedule [13]. In summary, new graduates seeking academic careers want balance, meaningful work, and a comfortable life.

Historically, dental faculty was born in between 1946-1964. These "baby boomers" sought stellar careers and a title associated with academia. They were prone to accept the hierarchy that exists in dental schools as the norm. These individuals emphasize work commitment and are convicted in their academic beliefs [6]. Younger academicians belonging to Generation X (1965-1984) and Millennials (1982-2000) seek to change "the rules"; they want to participate in a multidisciplinary and problem - solving research agenda and are less concerned with tenure and awards based on merit [6]. At an individual level, dental students are more likely to suffer at the hands of ill-prepared educators, especially those with different expectations based on generational differences, as opposed to a congruent and well-prepared faculty. Clinicians that convert to instructors initially tend to teach using the traditional methods typical of teacher-directed practices (lecture, mid-term, and final exam). As clinicians slowly learn to recognize the type of teaching necessary to be successful in education, one can be hopeful that they will teach their students not only the subject matter but incorporate higher order thinking skills.

This article concentrates on the intersection of teaching and learning, and so affects the future of a profession [14]. The experiences of dental school faculty are varied. According to those interviewed, each has their own individual expectation, though similarities exist. This article pinpoints transition/transformation in the academic lives of the dental educator. Any educational effort within a profession demands a well-qualified faculty as an essential element for success [8]. Dental education and its future are closely associated with this

premise. It is relevant to discuss the educational and training needs of future dental faculty. A portion of dental school faculty who entered academia were recruited and hired when enrollments were high, and the emphasis was on clinical instruction [8]. Dental schools with no investment in faculty development will produce dental faculty unable to adapt to the “new” dental student and his/her needs. Will we be successful in making academic dentistry attractive in the future if we fail to develop a plan for faculty development which encourages adult education theory? Alternatively, at the very least, incorporates the very basic elements of pedagogy?

Mentoring is an elective relationship that can deeply affect the mentee, and such a relationship can influence the density of the future mentor, as well. Studies of mentoring have defined the mentoring relationship as one that enhances careers develops the individual, challenges the novice and simultaneously affects the mentor positively as a counselor, advisor, and friend [15]. Kalianov defines the mentoring relationship as a long-term relationship based on a strong interaction, role-modeling, and a one-to-one learning process between a senior academic and those at the beginning of their academic careers [16]. Most mentees’ conceptualizations of mentorship are typically consistent in that they all expected that a mentor should provide both professional and personal support to her/his mentee [17]. Such mentoring relationships may often offer unique opportunities for professional and personal growth [18]. Any clinical learning is an experience in health care professionals’ training; it exists in undergraduate instruction, graduate education, and institutional, professional development for the educator. In a clinical environment, such as Dentistry or Dental Hygiene, learning from experience is a multifaceted process that requires both supervision and guidance. The clinical educator’s role has come to be, in recent years, a clinical supervisor, a clinical preceptor, a clinical educator, a clinical teacher, a practice facilitator and mentor. Although clinical instruction has been given different names, it appears that it is consistently associated with preceptorship and mentorship [19]. Mentoring can be formally arranged or follow the natural course of friendship; it does, however, have historical components in what may be referred to as “the hierarchical power” prototype or what has been considered the ‘norm’ for advancement in a given field [20].

Malcolm Knowles, a distinguished educator and often referred to as the “father of adult learning,” anticipated that lifelong learning would become the organizing standard of education, and now, a few decades later, the term lifelong learning is part of the normal vernacular in education [21]. An important component of lifelong learning- for both the seasoned practitioner/educator and the novice educator- may be a mentor, or a guide. Such an experience may be beneficial to individuals looking to expand or change their career in dentistry. In a field as multifaceted and extensive as dentistry, locating a suitable mentor that grasps specific

professional challenges, interests, and career goals can be a key component of the lifelong learning process [22].

So many dentists are excellent practitioners and are successful in caring for their patients. Their success in private practice is not dependent on how well they can teach another their particular set of skills. Education in the practice is usually that which involves the patient. When dentists choose to leave their private practice and transition to academia, their previous skill set is no longer what dictates their success. As previous experts in subject matter, suddenly they are prompted to accept and develop attributes of calibration, formative and summative assessment, public communication, technology, case-based learning, and academic portfolios [23]. How well will they transition to the instructional methods necessary to teach a student and especially students who learn in different ways? Conversion to an academic career may afford job satisfaction and revitalize a career in dentistry but must simultaneously satisfy the need for qualified faculty in our dental schools [24].

Although less than dynamic educators in a dental school are not new commodities, critical examinations of academic preparation are gaining momentum. Early research on teacher preparation in dental schools focused mostly on “see it, do it, teach it” training. However, similar patterns that appeared in dental educator training started being discussed and explored in studies conducted by the American Dental Education Association. Since then, ADEA has widened the focus on training to include professional development in educational approaches. In particular, the proper method of instruction has gained major attention by increasing interest in the ADEA Institute for Teaching and Learning. In the same way, dental students spend long hours in didactic and clinical education, so should the practicing dentist spend a comparable amount of time to prepare for instruction and seek a specialized educational technique that addresses the needs of the learner. Novice instructors are not prone to foster methods conducive to adequate instruction and learning. The very basic of requirements are for the individual who has completed four years of dental school that either enters a specialty program with formal training in basic science or the seasoned practitioner who brings experience and maturity. Based on the literature and what is known about the present status of dental schools and the existing deterrents to an academic career, it is reasonable to predict a lack of well-qualified dental faculty. In particular, based on research, it is not viable to expect that dental faculty would be current in their clinical discipline, convey knowledge using the most advanced pedagogical methods, master the latest technology or be involved in progressive research. One may assume that educational transfer is promulgated by those with little or no actual training.

In dental schools, the subject of proper instruction technique has not been explored extensively until very recently. Higher and adult educational methodology are and

have been unexplored topics; those who have considered themselves scholars, researchers, and professionals are unaware that their ways of teaching may indeed fall short of acceptable practice. Contemporary models of instruction in professional and vocational education have not been utilized by dental school faculty as a group. One may question then if teaching and instruction, without proper educational development, is a practice that is both unprofessional and unprincipled?

Methods

The qualitative research approach of narrative inquiry was implemented for the study of twelve (12) dental clinic faculty members within the dental school of a university in the southeastern United States. Recruitment of faculty for the interview was based on purposeful sampling and availability; each was surveyed in multiple settings and in person. The interviews varied in time from thirty minutes to one hour, depending on the verbosity of the interviewee. The interview solicited information from the participants about their academic experiences as clinicians transitioning to an educator role. A semi-structured interview guide with a mix of questions was utilized, as the research topic had the potential to be perceived by the interviewee as personal [25]. Open-ended interview questions were related to practices in the classroom and the clinical environments as well as prior life experiences. The questions were constructed so as not to hinder, but promote open communication. Each interview was recorded, transcribed, organized, and examined for similar themes. Each interviewee was assigned a pseudonym. This article addresses two types of transition as expressed by the respondents; (a) one with formal education and (b) one with merely brief instruction and the possibility of some form of future professional development or mentoring experience.

Qualitative research, such as implemented in this study, is concerned with the thoughtful understanding of the subject matter. The theoretical perspective is merely a possible view of a methodology. The way in which one views the world often shapes the way they research the world [26]. This study attempts to understand, as well as explain, human and social reality as perceived by the novice dental educator. In this context, interpretive understanding should arrive at a causal explanation of the actions of the interviewees.

This study received approval from the IRB as exempted research.

Results

The analysis of the data revealed that those clinicians transitioning to educators manifested it in two ways:

- a) Preparation to teach supplemented by formal courses in post-graduate education
- b) Preparation to teach merely using “trial-by-fire”; offering little or no direction.

Those individuals interviewed felt that neither method was thought to empower the clinician to feel confident in engaging and instructing dental students. Results from the interviews indicated that little preparation is given to the training of new instructors, as identified in such responses as “self-taught educator,” “had to seek courses that dealt with educational methodology,” “on the job training,” “I felt totally like a fish out of water” and “I demonstrate and let the dental student try it.” Though these response types may indicate that the clinicians persevered and made the transition to educator, the professional student population is not constant and will undoubtedly change as soon Generation X and Millennials will constitute the majority of the student body; these students may find the instructors ill-prepared and question their “teaching” ability. All of those interviewed were age 50 and older and tend to emulate the professors they had in school; the common feeling was “it was good enough for my education; it should be good enough for my students”. According to the participants, lectures are still the norm; notes are taken by students and quizzes appear to be the primary means of student engagement.

An unanticipated conversational response from the majority (10 of 12), was the need and desire to have a mentor. This was not as a “hand-holding” experience but, rather a desire to have a guide, coach, or friend. These individuals expressed a wish to have one individual to direct them to various resources available within the institution. Further questioning indicated that the individual designated as a mentor was most often the department chair; providing a less comfortable relationship than what was desired. The department chair was not always the mentee’s choice for a mentor; reasons for this were: 1) availability or lack of such 2) existing or perceived lack of interest 3) hierarchical position. Ten of the twelve interviewed stated they would prefer a “peer” or someone that had recently experienced the same situation. Kram states there are four stages of mentoring: initiation, cultivation, separation, and redefinition. Each stage is necessary to proceed with such an extensive and engaging process as educator mentoring [27].

Researchers and scholars have agreed that colleges of dentistry face a common issue: “recruitment and retention of a sustainable and diverse work force to meet future demands” in academia [12]. It is important to address factors that attract potential faculty and the professional development available once the clinician is recruited. According to the Projection Faculty Appointments conducted by Harvard University in 2001, the top factors that determine satisfaction in the work place are: 1) institutional support in research, 2) available time for personal obligations 3) quality attributes of the department 4) teaching assignments and 5) flexibility of the work schedule [13]. In summary, new graduates seeking academic careers want balance, meaningful work, and a comfortable life.

Discussion

Each response from the interviewees was given careful consideration by their researcher as any future needs within

the institution may be uncovered and, consequently, must be considered for improvement. As classroom research continues, checking educators' assumptions about instructional practices against the students' perceptions of those same practices can point them to assumptions on which they can depend and those they may need to address. Existing faculty must make a deliberate effort to introduce numerous perspectives into classroom discussions, syllabi, texts, and assignments, even though some students are prone to resist the effort [28]. Instructors must be better prepared to make good decisions about appropriate instructional methods, student engagement, accurate assessment criteria, proper curricular sequencing, and useful solutions to problems. Therefore, informed decision making can be considered the nature of good mentoring, leading, and teaching [29]. The literature on teacher thinking and decision-making support this contention, emphasizing the importance of teachers checking their assumptions about good practice against the insights from "seasoned" colleagues and peers [28]. Additional review of classroom research and assessment, as well as individual class evaluations, may provide a wealth of examples of knowledge transfer from students describing their learning practices which may help teachers ground their actions in an informed understanding of classroom dynamics [30].

Conclusion

Proper preparation of the clinical instructor has become a critical problem in many dental schools. One interviewee sought formal training and attended continuing education classes for personal and professional development. Ten of those interviewed had no training in educational methodology before teaching. One participated in the ADEA Center for Lifelong Learning Institute. Commonalities in thoughts and ideas on the correct method to prepare the dental educator were varied. Though somewhat similar in thought, each interviewee held a strong opinion regarding the indicators of adequate preparation to teach. Inadequate training affects the educational organization by creating an environment where novice educators without any academic qualifications merely push instruction upon the student, and lifelong learning is subsequently thwarted. This type of educational glitch could affect the process in which a university produces qualified dentists and could consequently result in decrease efficiency and productivity. If dental schools are to continue creating optimal learning environments for all students, then the focus must be shifted to examine how instructors are trained in educational methodology. Such instances of training impacts are teaching, learning, and institutional policies in multiple areas of professional education [16].

As well as examining how colleagues' perceptions and students' opinions can help teachers extract and challenge their assumptions, it is necessary for the new dental educator to explore his/her autobiographical experiences as learners. They must see themselves as educators and no longer identify with

just the clinician they were previously. The study of educational theory can help them view their practice from different lenses. Though the novice educator may desire a particular form of the instructional method during the transition from former clinician status to newly acquired academic appointment, the professionalism gained from the specific career choice may supersede, and the life-long learner within will promote a successful transformation.

Though interviewees sought to distinguish their individual focus on professional development and the desire for a mentor, more research is necessary to include additional important and relevant factors within departments of dental schools. Participants recanted their personal view of professional development initiatives and were possibly affected by personal feelings. It would be prudent to follow a study of this type by implementing long-term follow-up studies and the use of control or comparison groups. As O'Sullivan and Irby suggested in 2011, program effects at varying levels beyond the participants of such a study; it ultimately impacts students, patients, and institutions [31]. Studies including faculty development activities are often unique to the institution.

Researchers, hoping to understand the results of professional development and mentoring should look to measurable outcomes but also try to understand the dynamics of creating successful educators and the ability to retain them in our dental institutions [32]. It is prudent to consider carefully whether our current dental education system and the way it is regulated, still allows dental education to continue to lead the profession forth. Education is not just about teaching others what we know [32]. If one is interested in the future of dentistry, we need to recognize that education is an exceedingly important means of social change, and it is up to dental educators to ensure that the changes our education system brings about are advantageous to all concerned.

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