Reflective Learning in Community-Based Dental Education

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Abstract: Learners gain additional value from community-based education when they are guided through a reflective process. The purpose of this article is to describe how structured reflection assignments and methods are incorporated in the University of North Carolina School of Dentistry's community-based DISC (Dentistry in Service to Communities) program. The following strategies are described as ways to enrich community-based learning experiences for dental students: photographic documentation; written narratives; critical incident reports; and mentored post-experiential small group discussions. Fieldwork and course-related examples are drawn from community-based dental experiences to illustrate how reflective teaching approaches can enhance student learning. A directed process of reflection is suggested as a way to increase the impact of the community learning experience.

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Experiential learning—a process by which the learner reflects on his or her experience and draws significance and meaning from such reflection—is gaining ground as a pedagogical tool that can contribute to student education and development. This reflective process can prompt learners to gain new insights and understanding about themselves and their environment.[1,2] It can also help students develop critical thinking and problem-solving skills as well as a stronger service ethic.[3,4]

In dentistry, community-based dental education is a type of experiential learning that provides students with clinical opportunities in community settings.[5] However, this type of education is not simply about sending students to a community setting; rather, through this experience, students enhance their appreciation and understanding of the larger social, economic, and cultural determinants of dental health care and how such forces affect the delivery of care.[6,7] By taking students' clinical and professional skills into community settings, community-based dental experiences give students a closer and broader view of their patients within varied social contexts and settings than they usually get in a typical dental school clinical encounter.[5,7]

The concept of reflection is implicit in experiential learning.[2] Reflection on an experience concretely connects an experience to the learning associated with it.[8] Community experiences that do not involve formal reflection are intrinsically limited in their ability to impact learning. Reflection opens the possibility for personal growth and professional development.[9] By pushing students to think, interpret, and construct meaning about a particular experience, reflective learning assignments prevent students from drawing premature conclusions and acting on those

conclusions.[9] Rather, such assignments prompt the student to first seek alternative explanations and choose from a range of possible courses of action. In short, formal reflection allows learners to define problems and consider possible solutions, and thereby serves as a catalyst to greater understanding and to developing potential solutions and more informed action.[9]

The purpose of this article is to describe how structured reflection assignments have been incorporated in the University of North Carolina (UNC) School of Dentistry's DISC (Dentistry in Service to Communities) community-based dental education program. Fieldwork and course-based examples are drawn from students' community-based experiences to illustrate the value of reflection in enhancing student learning.

Community-Based Education at the UNC School of Dentistry

The UNC School of Dentistry's program of elective and required community-based learning experiences incorporates opportunities for rotations and reflection at various junctures between the summer of the first year and the end of the fourth year. The school places all dental students for clinical education in community-based, non-private practice, sites. These rotations are a requirement for graduation and are well accepted by dental faculty and students. All students have at least two different month-long senior year externship experiences as part of the program. A variety of well-utilized elective rotations occur between the first and fourth years. All clinical preceptors hold faculty appointments at the UNC School of Dentistry. The clinical preceptors meet annually for continuing education sessions and to review the educational goals and policies of the program.

In this program, we seek to promote student site choice, and a matching lottery is held annually to afford students an opportunity to select their preferred locations. Last year, sixty-two North Carolina sites, sixty-nine U.S. sites outside of North Carolina, and thirteen international sites provided UNC dental students with rotations. Sites are evaluated by the DISC program director for the quantity and quality of the services delivered, their dedication to enhancing the health of the public, and the responsiveness of their faculty and staff to student educational needs. Community and health department sites that have attributes of private dental practice and have demonstrated a desire to include and accept students as emerging professionals provide excellent experiences for dental students.

The DISC Program occurs in cooperation with the North Carolina AHEC (Area Health Education Centers) Program and local organizations or agencies. The North Carolina State Board of Dental Examiners reviews and endorses North Carolina sites annually.

Clinical externships occur in many varied types of public, not-for-profit sites including county health departments, community health centers, Veterans Administration clinics, institutions for those with mental illness or developmental disabilities, geriatric dental facilities, and correctional institutions. The North Carolina State Practice Act does not permit dental students to have clinical experiences in private, for-profit, dental practices. The DISC program is accepted as a formal, credit-bearing part of the UNC School of Dentistry's curriculum and allows students to perform needed clinical care in community sites. Direct clinical services provided are logged, and students keep records of the social and personal impact of their experiences.

Rising second- and third-year students participate in elective and voluntary community projects such as the UNC Mexico Dental Project. For this project, teams of ten students spend one month delivering primary dental care services to 800 children in a rural orphanage in Mexico. As part of this project, students also participate in a five-day introduction to the Mexican health care system and culture with a host dental faculty member in Mexico City.

In another experience, rising third- and fourth-year students participate in two required four-week clinical extramural rotations: one rotation with a community or public health facility, and the other with a hospital-based or special needs care delivery setting. In both cases, the students live in the field and work full-time in the setting, participating in the delivery of clinical dental care and contributing to increased clinical revenues. Both students and faculty evaluate each other and the educational content of the rotation. Students in community settings are poised to develop a level of professional autonomy as clinicians, with the knowledge that a preceptor is available for consultation on-site. Faculty roles in such settings are intended to be more collegial than hier-

archical and require role modeling more than close supervision. Students are exposed to aged, disabled, disenfranchised, minority, incarcerated, or institutionalized populations on their rotations. Richness of the experience is enhanced when students serve a large and diverse complement of patients each day.

To prepare for their entry to the field, students meet with dental school faculty and receive information about the site and community. Prior to the community-based experience, students complete coursework on culture, dental practice, the health care delivery system, and special needs populations. To show appreciation for their services, community preceptors, who are unpaid faculty of the school, along with their staffs, are invited to an annual meeting that includes continuing education at the School of Dentistry. In addition, all preceptors are extended an opportunity to participate in one free continuing education course of their choice. Such visits and ongoing communication contribute to stronger partnerships with sites.

Experiments in Reflection

Over the past several years, the UNC School of Dentistry has attempted innovations in reflection to determine whether learning in community settings can be enriched by guiding students through a formal process of reflection. These involve:

- photographic documentation;
- written narratives;
- critical incident reports; and
- mentored post-experiential small group discussions.

Photographic Documentation and Written Narrative Reflection

The photo-narrative method, a research method that has had a long tradition in anthropology, can be used as an educational tool for people to analyze photographs, draw meanings, and record their feelings and ideas.[10] Photo-narrative is an effective and vivid way to provoke emotion and insight into understanding individuals and cultures as illustrated in the pictures.[11] This method also serves as a starting point to stimulate thoughts and feelings that go beyond the scope of the photograph.[10,12]

Rising second- and third-year dental students participating in the UNC Mexico Dental Project receive training in documentary photography by staff members at the Duke University Center for Documentary Studies or the UNC School of Journalism. The team-based training involves discussions with the ten student volunteers about photographic documentation and how to use a camera to capture people's lives at a point in time. Students also view, analyze, and discuss the staff members' photographs. The School of Dentistry provides students with film or recycleable cameras, and students are asked to take many nontourist photographs in the orphanage setting. Students are also directed to let the children in the orphanage compose and shoot their own photographs and observe how the children approach the task.

At the conclusion of the rotation, photographs are evaluated by the team, its preceptor (RS), and a professional photojournalist for their general quality and use in media, in classroom presentations, and on a website dedicated to the Mexico project**.** Students also share their photographs and discuss their meaning in a required, formal seminar conducted at the School of Dentistry and guided by dental faculty members. Two professional photographers and two faculty members select a group of photographs considered to be creative and illustrative representations of aspects of the experience at the orphanage. After one of the Mexico projects, two of the authors (RW, BM) who were members of one of the groups developed enlarged photographs and collected written personal narratives about each photograph from the students who took them or who were portrayed in them. The paired photographs and narratives were featured in a premier university campus art gallery for a three-month-long exhibition. After the exhibition, a student (BM) developed a website to display the photographs (www.dent.unc.edu/mexico). It should be noted that funding for photographic documentation is derived from private donors, with the majority of donors being Mexico Project alumni. Activities associated with photographic documentation occur at no cost to the students**.**

Three examples of photo narratives appear in Figures 1-3. In the first narrative, the dental student describes how a young orphan girl's life story helped him cope with a tragic event.

> After aiding in unsuccessful efforts to revive a drowning victim en route to the hospital, I returned to the orphanage with a lingering feeling of helplessness. I went to the chapel to check on and comfort another

of the team members who had accompanied me on the ride to the hospital. As we were in the chapel, Maria, the girl in the picture, came up and started asking why we were upset. At first I danced around the issue in an effort to avoid putting any bad images into the mind of this little girl. However, as we talked for a while, I came to appreciate the scope of experiences Maria had undergone during her short life and I ended up telling her the story.

Maria revealed to me that she was in the orphanage with her brother and sister because her father had killed their younger sister. At this point I realized that keeping the information about the gentleman drowning in the pool was insignificant in light of what she had been through. As it turned out, she had already heard about the incident but did not know the details. She then offered to take us on a tour of the orphanage from her perspective and it was by far the best tour of the orphanage we were given. It was truly a joy to be with this girl and I hope to see her again someday. (Narrative by Rafael Rivera; photo by Katherine Garrett)

In the second example, the narrator focuses on two children resting after having performed chores for the orphanage. The student recognizes the values of work ethic and self-motivation with which the two boys did their work.

On this particular day the chore delegated to these two boys consisted of cutting back the weeds growing in and around the walkways throughout the orphanage. After we had finished our clinic time for the day, we were on our way back to our living quarters and I saw the boys taking a break from the hot afternoon sun. The boys were exhausted from their hard work, but nevertheless, they were back to work within a few minutes. One of the things that impressed me about the children was the work ethic and self-motivation they had towards their chores to help keep the orphanage clean and safe. (Narrative and photo by Robert Williamson)

In the final sample photo-narrative, the dental student describes the inspiration provided by the orphan children who had been her patients. The narrator realizes that despite multiple adversities in their lives, the children at the orphanage possess special strengths.

There is no greater gift than a smile from a child. In Mexico, I saw first-hand the amazing strength of children . . . no family, no money, no true home—but nonetheless, full of dreams for tomorrow. I went to Mexico wanting to provide care for their teeth and repair their smiles, and these children showed me strength, character, and faith like I have rarely seen. In modest return, our team provided them with dental work that will help to maintain their amazing smiles. I hope they will never stop smiling. (Narrative by Caroline Carver, photo by Stephanie Parker)

Critical Incident Reports and Mentored Post-Experiential Small Group Discussions

Critical incidents are experiences in practice settings that carry a significant meaning for the observer.[13,14] Students are instructed that critical incidents are events that raise important personal and/or

Figure 1. Smiling Maria and a dental student

professional issues. Incidents could be positive or negative events, which the students either participated in or witnessed and thus did not play an active role in.

At the end of the rotational period, whether elective for rising second- and third-year students or required for rising fourth-year students, each student writes a three to five page reflective essay about a particular incident that occurred during the rotation. Specifically, students are directed to write about:

- What were they thinking when this incident occurred?
- How do they think the incident relates to their professional responsibilities?
- Why do they think the people involved in the incident acted the way they did?
- How did they feel when the incident occurred?
- If they were placed in the same situation again, what would they do differently?
- What questions does this incident raise for them as a health professional?
- What kinds of conclusions can they draw?

Post-experience, the students submit their reflection essays to the faculty at the beginning of the academic fall semester. Soon after, and as a culminating experience, students meet in groups of eight to ten for a two-hour session with a trained faculty leader. These groups provide a forum that allows students to reflect orally on their critical incidents and hear others' reflections. By hearing others' perspectives, students are implicitly encouraged to evaluate their own values, beliefs, and attitudes. Evidence suggests that small group discussions can help students to learn from the reflections of their peers and increase students' involvement in their own learning.[3,15] Students are free to share the clinical implications of the incident, but mostly they discuss the personal and professional growth aspects of the experiences and discuss the lessons learned from them. Students reflect on the impact that their incidents and community-based dental rotation in general have made on their career choices and professional responsibilities and how their rotational experiences have influenced their attitudes and values regarding patient care.

The lengths of the essays prevent their duplication in this article; however, excerpts from three are included as illustrations.

In the first, the student describes an educational experience with an elderly patient. Prior to the rotation, the student harbored certain preconceived notions about potential difficulties in treating the elderly. Reflecting on the experience prompts the learner to reexamine those notions and gain more accurate insights into caring for elderly patients:

> Initially my preconceptions towards elderly patients included a mixture of the following: they are difficult to treat in a physical sense because of their frailty; they are not conversational and might have difficulty

Figure 2. Two exhausted boys resting after performing their chores

hearing or understanding my instructions; their medical history or long list of medications may pose barriers to successful treatment; and basically I have to provide constant assistance for them from the moment they arrive at the clinic.

All of these unfounded preconceptions changed radically after cleaning Odessa's teeth. Odessa is a healthy and vital patient of 91 years, who pleasantly enlightened me on how the elderly should be understood and cared for. After meeting her, I brought her into the operatory and tried to aid her in sitting down in the chair. She instantly scolded me, saying, "I can do it myself." We went over her medical history form and I was surprised that she was only taking one medication. She kept saying how lucky and blessed she was to have no major medical complications at all. We talked freely and easily—she talked about the recent death of her husband a year ago and how they had such a wonderful life together. Tears welled up in both of our eyes as we shared her memories. She also talked about living by herself now and how she had never lived alone. The memories of her husband, children, and grandchildren keep her strong and now she expects to live many more years.

Odessa taught me many things that day. She looked only at the positive of what each day offers and reflects on the good things from days past. It was important to her to keep an active mind and to always thank God for the life she was given. Her positive energy made me reflect after our session on how I think of other patients, friends, and family. It also made me reflect on the open-mindedness that I must strive for when dealing with all patients and how I can learn from patients of all ages, not just about treating their teeth but about their lives and relationships. I know now that I enjoy working with the elderly and possess a better understanding of their needs and outlook. I owe this to . . . the many special patients like Odessa that have enriched my dental experience.

In the next narrative, the incident provokes the student to recognize that dentistry has greater implications than simply restoring teeth. Aside from realizing how a simple dental procedure resulted in a major negative consequence, the student shows attentiveness to and empathy for the patient's situation:

Figure 3. Providing dental services at the orphanage

> During my rotation I had the unique opportunity of becoming acquainted with a cardiac surgeon who was at the prime of his career. However during my entire stay this surgeon was not once conscious. Such talent was confined to his hospital bed, limp and without life, due to the effects of osteoradionecrosis. Early in his life this talented surgeon had the misfortune of being stricken with cancer, which was treated with radiation therapy. The effects of the treatment adversely affected his lung function and mistakenly irradiated parts of his jawbones. After recovering from his plight with cancer and years later, the surgeon had his third molars removed. A seemingly simple procedure sent the surgeon into the fight of his life. . . . Many dental students think of dentistry as "just teeth"; however, the field involves real people with problems that we as

health professionals must notice in order to provide quality care. When one thinks of "teeth," the thought of actually causing death does not seem like a true possibility. However, this possibility was well illustrated to me this summer. Every day that passed on oral surgery rounds, I expected to walk in to the cardiac surgeon's room and find him awake and full of life . . . but that never happened.

One day while rounding, we walked in the surgeon's room and it looked as if he was in a body bag when in actuality he was being rotated to prevent bed sores. Nonetheless, one of the residents made the comment: "Hoo-ray . . . I thought he was dead, and we would not have to round on him anymore." I was stunned that such a comment could come out of his mouth. How could someone giving care to another be so uncompassionate? I rationalized that viewing death on a daily basis perhaps made the oral surgery resident numb to what life really means and, unfortunately, the resident did not view the surgeon as a person, only as a patient. During my four-week stay, I felt like I built a friendship with one of the first-year residents. Before I left, I asked him to make an honest attempt not to let the concept of death consume him and to remember that his patients are real with families at home.

In the final example, the dental student is confronted with treating a patient who has HIV. Having become aware that this patient has been denied dental care in the past, the student begins to question the ethics and integrity of the student's chosen profession. In what follows, the student makes ethical appraisals of the situation and relates them to caring for patients with HIV:

I asked my preceptor why the chart was a different color and he explained this meant the patient was HIV+. This was to be my first experience treating an openly aware HIV+ patient. I had considered this situation a hundred times in my head and reminded myself I should be more worried about the larger percentage of the population who are unaware of their HIV+ status. Quite frankly, I was neither concerned nor worried about this patient's HIV status. I have full faith in the universal precautions used in dentistry. Moreover, I entered this profession hoping I could make a difference for every person who entered my office. Armed with this thought I was shocked with what followed. . . . For the sake of confidentiality, we'll call this patient Mr. Smith.

. . . Mr. Smith was recently at the Oregon coast for a midsummer vacation when he developed a severe toothache. He went to five different dental offices in search of care. Being HIV+, he told them of his infection. Astonishingly, no dentists would treat him. Two of these dentists refused to treat him saying they were not "equipped" to treat an HIV+ patient. . . . I was shocked and almost felt sick in the stomach. I didn't know how to react. This certainly weighed heavily on my mind. I couldn't fathom the possibility that a health care provider in today's society would turn away a patient simply based on their HIV status. I began to question the ethics and integrity of the profession. It seems the profession I hold so dear in my heart has a few skeletons in the closet. It was naïve to think all health care professionals share the same thought process in dealing with HIV patients.

As the weeks progressed, I treated other HIV+ patients and inquired about their dental experiences. It seems that nearly all of them had a similar experience. I am still unsure how to deal with this. While I openly treat and welcome all of these patients, I wonder why others will not. As a professional I almost feel it is my duty to encourage and educate dentists regarding treatment of HIV+ patients. If placed in the same situation, I believe I would handle it the same way. I gave Mr. Smith some encouraging words and the same TLC each of my patients deserves and received. I tried to allay his dental concerns and fears while attempting to change his perception of the profession. In turn, I was verbally rewarded.

I don't know what could have prepared me for what happened that day. I thought the days of refusing treatment based on medi-

cal history were a thing of the past. It seems I was wrong. I originally thought providers who did this were crude and ignorant. Now I realize I am equally ignorant for being so naïve and blind. I can only conclude that we are human, and regardless of our education level, we can always have certain fears that in our mind can somehow be substantiated.

Discussion

Reflective learning represents an important component of the community-based dental education program at the University of North Carolina. Its integration into the program reflects the recognition that community-based education must not only strive to enhance the students' knowledge and clinical skills, but also facilitate their personal and professional development.

Patient encounters and experiences in the community alone may not necessarily lead to learning and growth, professional or personal. Worse yet, a model that simply asks students to experience new worlds outside of the dental school could be potentially damaging, as an unexamined experience may serve to confirm stereotypes and faulty assumptions about patients. What must be in place is a mechanism that challenges students to draw meaning from their service experiences and to relate them to personal and professional responsibilities. Unless learning is made deliberate and active, valuable lessons in the field may go unrecognized, thus defeating the underlying purpose of the field experience.

We offer formal structured reflection as such a mechanism. Schön highlighted how reflection, when incorporated into professional education, can counteract the risk of students' repeating bad habits and failing to learn from their experiences.[16,17] Reflective activities encourage students to capitalize on the rich potential of a clinical encounter; that is, each encounter can teach the learner something new, either about the learner or the patient or both.[1,3] Reflection helps learners to process emotions generated from, and gain insights into, issues and situations not typically encountered in traditional dental education.

As many of our students have indicated in their evaluations of community-based experiences, reflective activities offer an occasion in their dental education to ponder and analyze how their values, attitudes, and even stereotypes relate to the ideals of the profession. The opportunity to analyze experiences and to identify and express emotions and insights on social and ethical issues serves to legitimize the worth of student perceptions and engages them in ethical and critical reasoning.

We believe that reflective activities address an important need seldom emphasized in health professions education, namely, the need to develop a reflective practitioner.[14,18-21] Learning to be a good dentist requires the ability to reflect on and examine one's attitudes, emotions, values, and actions and how these facilitate or hinder delivery of effective patient care.[22] Fostering reflective inquiry and self-critique, however, is not a simple task and it requires time. Accordingly, if students are to develop lifelong reflective and self-assessing skills and habits, dental faculty would be well advised to include formal reflection as early and as extensively in the curriculum as possible.

At UNC, reflection is incorporated into the program early and in different ways, using, for example, photographic narratives, critical incident essays, and small group discussions. There are, of course, other ways to incorporate reflection. These may include case studies, journals, videos, and focus groups. Each, in its own manner, helps the student to organize and analyze the field experience in ways that lead to growth and learning.

Participants in the reflective learning activities have enthusiastically endorsed such activities, noting that as a result they find their community-based experiences more meaningful, rewarding, and interesting. The quality of the students' narratives, photographs, essays, and peer group discussions lend support to our finding that the reflection-based community-based dental education experience has had a positive impact on participating students.

Providing students with the opportunity to formally reflect on their experiences can be a successful dental educational innovation. As one student stated: "This patient population gave me so much more knowledge and wisdom than any textbook or lecture could teach. I feel that I gained a new perspective on my responsibilities as a dental care provider. . . . This experience has enhanced my life both professionally and personally. When I overcame the newness of treating such compromised patients, I was able to connect with them on an emotional level and thereby became a more effective provider. Thanks for giving me the opportunity to reflect."

REFERENCES

1. Benner P. Taking a good stand on experiential learning and good practice. Am J Crit Care 2001;10:60-2.
2. Smith CS, Irby DM. The roles of experience and reflection in ambulatory care education. Acad Med 1997;72:32-5.
3. Dunn D, Chaput de Saintonge M. Experiential learning. Med Educ 1997;31(Suppl 1):25-8.
4. Maudsley G, Strivens J. Promoting professional knowledge, experiential learning and critical thinking of medical students. Med Educ 2000;34:535-44.
5. Skelton J, Raynor MR, Kaplan AL, West KP, Smith TA. University of Kentucky community-based field experience: program description. J Dent Educ 2001;65:1238-42.
6. Shreve WB, Clark LL, McNeal DR. An extramural dental education program in a rural setting in Florida. J Comm Health 1989;14:53-60.
7. Heise AL, Lewis GP, Bader JD, Harris JH. Experiential education for dental students at the University of Kentucky. J Dent Educ 1976;40:272-5.
8. Saltmarsh J. Education for critical citizenship: John Dewey's contribution to the pedagogy of community service learning. Mich J Comm Service Learning 1996;3:13-21.
9. Eyler J, Giles DG, Schmiede A. A practitioner's guide to reflection in service-learning: student voices and reflections. Nashville: Vanderbilt University Press, 1996.
10. Collier J Jr, Collier M. Visual anthropology: photography as a research method. Albuquerque: University of New Mexico Press, 1986.
11. Bender DE, Harbour C, Thorp J, Morris P. Tell me what you mean by "si": perceptions of quality of prenatal care among immigrant Latina women. Qual Health Res 2001;6:780-94.
12. Hanna KM, Jacobs PM, Guthrie D. Exploring the concept of health among adolescents with diabetes using photography. J Pediatr Nur 1995;10:321-7.
13. Mofidi M, Strauss RP, Pitner LL, Sandler ES. Dental students' reflections on their community-based experiences: the use of critical incidents. J Dent Educ 2003;67:515-23.
14. Flanagan JC. The critical incident technique. Psycholog Bull 1954;51:327-58.
15. Westberg J, Jason H. Fostering learner's reflection and self-assessment. Family Med 1994;26:278-81.
16. Schön DA. Educating the reflective practitioner: towards a new design for teaching and learning in the professions. San Francisco: Jossey-Bass, 1987.
17. Schön DA. The reflective practitioner: how professionals think in action. Aldershot: Ashgate Arena, 1991.
18. Hershey HG. Professors and professionals: higher education's role in developing ethical dentists. J Am Coll Dent 1994;61:29-33.
19. Novack DH, Epstein RM, Paulsen RH. Toward creating physician-healers: fostering medical students' self-awareness, personal growth, and well-being. Acad Med 1999;74:516-9.
20. Swick HM. Toward a normative definition of medical professionalism. Acad Med 2000;75:612-6.
21. Friedman LD. The precarious position of the medical humanities in the medical school curriculum. Acad Med 2002;77:320-2.
22. Cook SH. The self in self-awareness. J Adv Nur 1999;29:1292-9.