Within the occupational therapy literature, discussions related to the need for research in our field (Barris & Kielhofner, 1985; Baum, Boyle, & Edwards, 1984; Grady, 1987; Polatajko & MacKinnon, 1987) and investigations of clinicians’ attitudes toward research and research activities (Colborn, 1993; Cusick, Franklin, & Rotem, 1999; Cusick & Rotem, 1994) are clearly evident. However, a review of the literature revealed few current descriptions (Bloomer, 1995; Clark, 1986) of how occupational therapy educators actually translate their beliefs about the fundamental importance of research into educational practice. Occupational therapy educators have not articulated a range of strategies designed to help students become researchers. In addition, we have virtually no feedback about the impact of various educational strategies on students’ beliefs and behaviors toward ongoing involvement in research activities beyond the academic requirement.

The purpose of this article is to describe the outcomes of an innovative research course for entry-level occupational therapy students that addressed the aforementioned issues by (a) presenting concepts and techniques inherent to qualitative research, (b) promoting the belief that students need to be actively socialized into pursuing research, and (c) enabling students to learn about the complex issues related to occupational therapy and research firsthand. A semester-long project was embedded in the course.

Course Description

During the spring semester of 1999, I designed and taught Introduction to Qualitative Research. This 2-credit lecture and laboratory course was scheduled for one 2 1/2-hour session per week. Although the overriding spirit of this course was the importance of pursuing research in occupational therapy, the specific purpose was to introduce students to qualitative research through readings, discussions, and classroom activities that focused on the theoretical frameworks, research designs, and data analysis methods that characterize qualitative research.

During the first hour of each class session, we discussed content specific to qualitative research, including theoretical orientations, research designs, methods for collecting data, ensuring trustworthiness, data processing and analysis, and reporting of results. We also discussed issues related to ethics in research, obtaining grant funding, and submitting Institutional Review Board applications. The content was organized along an order and sequence that would occur during the design and implementation of a research project. Ely’s (1991) Doing Qualitative Research: Circles Within Circles was the required textbook because it weaves together knowledge of specific content and reflections on personal experiences in a way that I wanted to emulate in the overall course design.
During the second 1 1/2 hours of each class session, students worked in groups of six to design and conduct their own mini qualitative research projects. The purposes of the guided research projects were to enhance students’ understandings of qualitative research and their skills as beginning researchers and to provide them with opportunities to apply theoretical knowledge to real-life practice. My rationale was to incorporate instructional strategies that would enable the students to “live” the course content.

The overall topic of the mini qualitative research project was occupational therapists and research. Each student group was responsible for designing a small, manageable qualitative research project that would address the broad parameters of this topic in some way. I purposefully selected this topic for several reasons. First, I hoped that the topic would help students to increase their understanding of an issue that our profession struggles with on many different levels virtually every day. Second, I believed that the research experience would be more meaningful to the students if they designed projects that were directly related to the course. Third, I believed that occupational therapy students often have difficulty understanding their roles and capabilities as researchers. If students could learn firsthand about research and engage in a time-limited research project, they might have a more positive feeling about their current and future capabilities as researchers.

Students were given time during each class session to work on a different aspect of their research projects, including developing research questions, conducting literature reviews, designing research instruments, and gathering, analyzing, and reporting data. Each project was worth 40% of the overall course grade. I received Institutional Review Board approval for the research project assignment, which enabled the students to contact occupational therapists in the community and to gather data.

Throughout the projects, students practiced authentic, albeit beginning, qualitative research skills. For example, they developed open-ended questionnaires and semistructured interviews that were revised subsequent to pilot testing on their classmates or myself. They addressed issues of trustworthiness by triangulating information from multiple methods (which usually included interviews and questionnaires), accessing between three and six participants, transcribing all interviews, maintaining audit trails, using peers as a peer debriefer throughout the process, and offering their participants the opportunity to member check the findings. Finally, students engaged in a two-part data analysis whereby they first individually reviewed their data to identify emerging themes and then worked as a team to arrive at some consensus of the findings. Results were written up as a final research report.

Project Samples
Three student groups designed projects that were directed toward understanding occupational therapists’ motivations for doing research. Although all the groups addressed this common issue, each approached the topic with a slightly different focus. Within these projects, students focused on such issues as how occupational therapists make the role transition from clinician to researcher and what factors contribute to or detract from therapists’ participation in research activities. A fourth group developed a project directed toward understanding how occupational therapists use research in day-to-day practice. Students recruited local community therapists, fieldwork supervisors, and occupational therapy faculty members from Duquesne University and neighboring institutions as project participants.

Results of the Projects
Mentoring, an overall value placed on inquiry, and feelings of professional responsibility were repeatedly cited as contributing to the participants’ motivation to pursue research and research-related activities. The participants revealed a variety of strategies that enabled them to maintain their motivation to pursue research interests within difficult practice environments. These strategies included building upon their experiences and collaborating whenever possible. Peers, mentors, and fieldwork students were all cited as potential collaborators. Participants believed that collaboration enabled them to compensate for lack of experience, time, or knowledge. They also indicated the importance of creating a work environment that supported ongoing and routine research activities.

Perceived benefits of combining research activities with day-to-day practice included demonstrating the efficacy of current intervention methods, furthering personal knowledge and skill, and extending occupational therapy’s influence into various practice environments. For example, some participants described small outcomes projects they had designed to validate the use of certain pieces of adaptive equipment in order to receive insurance reimbursement. They also described incorporating research results into their treatment sessions as a way to enhance their confidence as they interacted with patients, family members, and other health care professionals. Several participants described research-related activities that they pursued in clinical practice, including reading journal articles to remain informed about treatment techniques and to assist with treatment decisions, keeping current with developments in legislative and reimbursement issues, and participating in student research projects.

Perhaps the most notable finding was that of becoming a researcher. Informal conversations with the students throughout the semester yielded the impression that the students were learning as much about the many complex issues related to pursuing research as a professional as they were learning the specific course content. I believe that the research topic resulted in projects that enabled the students to understand firsthand some of the challenges, opportunities, and rewards of doing research. For example, although
each therapist who participated in the students’ projects placed a high value on research for the occupational therapy profession, relatively few were actually involved in research activities. Time constraints, insufficient institutional support, and lack of knowledge were cited as barriers to research involvement. Although it is important to exercise caution when interpreting the students’ results, as theirs were novice, extended class projects, it is interesting to note that most of their project results were consistent with the existing occupational therapy literature (Colborn, 1993; Cusick et al., 1999; Taylor & Mitchell, 1990).

Students indicated a high level of satisfaction with the course. Course evaluation scores on the 10-item Duquesne University Teaching Effectiveness Questionnaire averaged 4.4 on a 5-point scale. Supplemental course evaluation items that addressed students’ perceptions of the meaningfulness of the research project also revealed a high level of satisfaction. Examples of student comments were that the project “enhanced my abilities as a beginning researcher,” “enabled me to enhance my understanding of qualitative research,” and “provided opportunities for me to apply theoretical knowledge to ‘real-life’ practice.”

Course evaluation feedback also indicated that students seemed to feel confident about their own beginning research abilities and understood the importance of continuing their research activities as therapists. Examples of students’ responses to my question regarding how, if at all, their thoughts about their ability to do research changed during the semester are as follows:

I changed my feelings a great deal. At the beginning of the course, I felt overwhelmed, that research was this huge unaccomplishable thing. But as I look back, I see how much easier it was than when I [originally] thought…by doing the project in steps each week…made it bearable and organized. Therefore, I guess I learned that being organized with your topic and taking things one step at a time are imperative aspects to successful research.

What I learned was that….IT IS NOT THAT HARD. Granted, it takes time and is intimidating at first, but actually doing a project (and others since) has made it a doable task for me. I’m hoping that other people are doing these small projects, too, so that more new grads coming out of school are understanding the importance of research as well as how it might fit into their lives.

In addition to the university course evaluation, I asked the students to reflect on issues related to becoming a researcher. They responded to a variety of open-ended questions related to their impressions of occupational therapists and research. Many reported that one of the greatest obstacles in the project was locating occupational therapists who believed they participated in research activities at all. Although the therapists who participated in the students’ projects seemed quite positive about their own personal research activities, the students’ overall impression seemed to be that occupational therapists do not participate in research:

Clinicians are not doing formal research projects or studies out in the field, mainly because of time. Most of the [occupational therapists] we interviewed saw it as important to the vitality of the field, but didn’t have the supports, resources, funds, or time in place to carry it out.

It seems as though the practitioners that were contacted about the projects noted the importance of research in protecting the future of our profession and improving OT as a whole. But, completing, or even thinking about, a RESEARCH PROJECT seems like such a big deal, out of their reach.

Some students commented on the difficulties of pursuing research in a managed care environment:

I saw that research is very secondary to practice, especially in the hospital scene. It is not a priority like it should be….It’s not that clinicians are lazy, although some may have little incentive or education to do research, but managed care seems like the biggest barrier, and time constraints.

However, they also seemed to understand the catch-22 that therapists encounter, as one student noted:

Insurance companies want you to verify your services are worthy of reimbursement and are effective, which is best developed by outcomes research…which is exactly what we don’t have time for because of insurance pressures.

Some perceived differences in academic and clinical priorities for research:

As a student, not being out in the “real world” and dealing with the day-to-day issues and stresses of health care, it is easy for us to sit in a classroom and talk about the importance of research and how it must be done. And while this is true…it is much easier said than done.

Conclusion

Colborn (1993) explored the personal, educational, and workplace factors believed to affect therapists’ abilities to integrate research with practice. Her results indicated that no single educational experience was found to advance the research role. Formal research courses were considered important; however, the need for a “personal research commitment” (p. 699) was emphasized. This qualitative research course and the related student research projects were designed to foster such a commitment and promote a “research frame of mind.” Many students came to understand that it is not “someone else” who does research; in fact, they had the foundational knowledge and skills to design or participate in small research projects, and that research was an important and viable aspect of their professional practice.

Faculty members have expressed interest in other program evaluation activities that could determine the impact, if any, of this course and other elements of the department’s research sequence on students’ research frames of mind and subsequent research activities. Such program evaluation activities could be adapted to fit the existing course assignment because students could pursue qualitative projects directed toward understanding how, if at all, recent program graduates are becoming researchers.

The course described in this article was designed with the specific intent of matching educational purpose with educational method. Although the findings from this course and the students’ projects reflect the ongoing struggle to
promote the involvement of clinicians in research activities, the students did not appear to be discouraged. They seemed energized. As one student expressed, “I guess it needs to start with our generation. We need to consistently harp on the importance of research to anyone that will listen and then take the time to follow through!” Hopefully, the voice of this new generation will be heard.

References


