

Developing Communication Skills of Undergraduate Students through Innovative Teaching Approaches

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Abstract

Strong oral communication skills are consistently rated of high importance for job applicants. Seventy-five percent of employers want colleges to place more emphasis on developing written and oral communication skills, particularly at the undergraduate level. Despite the recognized importance of strong discipline-specific oral communication skills, providing practice opportunities in real-life settings can be challenging for programs. This is particularly the case in dietetics programs training their students in counseling skills. A Counseling and Communication: Theory and Practice course was re-designed based on student focus group and internship preceptor input. The revamped course included counseling sessions with paid actors simulating real-life scenarios; actors were trained on their particular medical condition and life circumstances prior to the small-group session. Of students completing the course with actor-simulated sessions (n=13), 100% felt confident in their counseling skills three months after completing the course. Students responded to the question "This course stimulated my interest in the topic," as 3.6 on a 4 point scale, higher than the 2.5 and 3.2 in the previous years of the course. This innovative teaching and learning approach supports the benefit of creative methods of teaching to foster oral communication skills, thus better preparing students for future employment and success.

Introduction

Employers expect that prospective hires with an undergraduate college degree not only have expertise in their discipline, but strong communication skills as well. Behind integrity, executives rank communication skills as the second most important soft skill desired for job applicants (Robles, 2012). Currently, new employees' communication skills often do not meet the standards of employers (Leggette et al., 2011; Yale, 2014); more than 60% of employers report applicants lack "communication and interpersonal communication

skills," an increase of about 10% in two years (Workforce Solutions Group, 2013). A nationwide survey of more than 700 employers determined that the deficit between job candidates' required and actual skills was greatest for communication abilities (Yale, 2014). According to the annual Talent Shortage Survey (ManpowerGroup, 2013), one in five employers worldwide cannot fill positions because candidates lack soft skills including motivation, appearance, punctuality, flexibility and interpersonal communication skills.

In a recent survey, 75% of employers stated that they want colleges to place more emphasis on helping students develop written and oral communication skills (Association of American Colleges and Universities, 2013). Colleges must teach life and work skills necessary for students to obtain and maintain employment after graduation, particularly in agriculture, environmental and health-related disciplines (Evans et al., 2009; Leggette et al., 2011). According to the Association of American Colleges and Universities (2011), "Written and oral communication should be practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects and standards for performance." Employers want to hire applicants with strong interpersonal communication skills appropriate for the discipline. To that end, there is a need for undergraduate degree programs to develop courses, assignments and experiential learning opportunities for students to learn and practice their communication skills in innovative, engaging and real-life practical scenarios (Robles, 2012).

University instructors and administrators are using creative and innovative teaching methods to improve communication skills of students (Aschenbrener et al., 2010; Holston and O'Neil, 2008). At certain colleges, courses can earn a "communication-intensive" designation if they meet rigorous criteria for teaching multimodal communication skills. In addition, many colleges now offer

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and sometimes require new student orientation courses that include professional communication skills development (Ewing-Cooper and Parker, 2013). Service-learning courses, internships and training courses are examples of other opportunities where students can develop communication skills in a practical setting (Evans et al., 2009; Holston and O'Neil, 2008; Peffer, 2012; Stephenson et al., 2013). Student leadership programs, including student organizations and ambassador programs, also enable students to develop personal and professional leadership skills (Haber and Komives, 2009; Arnold, 2012). In 2012, Arnold evaluated 31 College of Agriculture student ambassador programs and found that every program offered a leadership retreat for ambassadors where students learned how to speak confidently. Participation in Agriculture Future of America (AFA) enhances a variety of work-life skills including interpersonal communication skills, writing skills and oral presentation skills (Svacina and Barkley, 2010).

Effective communication and counseling skills are essential for health care professionals to guide patients toward healthy lifestyles. Research illustrates that interpersonal communication plays a major role in a patient's health, including increased emotional well-being, satisfaction and improved chronic disease and physiological outcomes (Hancock et al., 2012; Puri et al., 2010). Dietitians translate biochemistry, physiology, anatomy and food science into practical recommendations for patients by employing a variety of verbal and nonverbal communication skills (Power and Lennie, 2012). A cross-sectional study of practicing dietitians found that 98% reported communication skills as being either very important or extremely important to working with patients (Whitehead et al., 2009). Per the Accreditation Council for Education in Nutrition and Dietetics (ACEND), Academy of Nutrition and Dietetics, dietetics educational programming must teach and develop student communication skills (Accreditation Council for Education in Nutrition and Dietetics, 2013).

Dietetics educators are developing innovative learning opportunities to promote communication skills. Computer-assisted instruction (CAI) is one tool being used to teaching counseling skills to dietetics students. In CAI, students work through online modules developed by experienced dietitians to instruct on theory and provide real-life examples of counseling sessions. A study of 452 undergraduate students from eleven different dietetics programs found that the use of CAI can improve communication and counseling skills in these students (Puri et al., 2010).

Service-learning activities are another tool being utilized to teach communication skills to dietetics and other healthcare discipline students (Stephenson et al., 2013). One such example is a mixed-discipline aged-care student clinic where dietetics students worked with other healthcare professionals to evaluate recently discharged patients and to establish health care needs (Kent et al., 2014). Through this activity, both students and faculty reported enhanced inter-professional communication

skills. To better meet the communication needs of their dietetics students, a Medical Nutrition Therapy course was redesigned as a communication-intensive, service-learning course. Students designed educational nutrition modules on cardiovascular disease, cancer, diabetes and obesity for use by Cooperative Extension agents. Then, students presented these modules at professional meetings, conferences and seminars. Students reported that the revamped course improved their communication skills and ability to work as a team with other students and community professionals (Holston and O'Neil, 2008).

Despite the employer and faculty recognition of the importance of communication skills to professional achievements, student attitudes towards learning communication skills are varied. Interestingly, in dietetics students, students in earlier years of undergraduate training have more positive attitudes towards learning communication skills than students approaching graduation (Ahn et al., 2009; Khashab, 2006; Power and Lennie, 2012).

The use of improvisational actors to teach communication skills has recently been explored as an effective way to educate students from a variety of disciplines (Anderson et al., 2014; Bell et al., 2014; Webster, 2013). The purpose of this study was to (1.) explore student attitudes towards the use of actors and (2.) evaluate student-rated confidence in communication skills as measured through counseling in an upper-level dietetics course.

Methods

Course Design

Counseling and Communication: Theory and Practice is a senior-level course required for dietetics students in the accredited dietetics program at the University of Kentucky (UK). The course is taught every fall in tandem with an advanced medical nutrition therapy course. In 2010, the counseling course was offered as a 75-minute lecture meeting twice weekly. In 2011, the same course was offered as a 75-minute lecture two days per week, but also included a one-time practice counseling session for each student. The patient role was played by the teaching assistant for the course. In 2012, the course was revamped as a 50-minute lecture two days per week and a two hour lab one day per week. The patient role in 2012 was played by paid theater students from the university's theater department. Two sections of the lab were offered weekly to provide students with a smaller learning environment and more opportunities to practice their counseling skills. All students in the class completed a case study about a patient prior to lab each week and four students in each lab prepared to be the counselor for the week. The four students in each lab counseled the actor/actress and then peers and the instructor provided constructive feedback.

Focus Group, Course and Preceptor Evaluation

Focus groups were conducted with students who completed the senior level dietetics counseling class in

2010 (Cohort 1, n=7), 2011 (Cohort 2, n=12), or 2012 (Cohort 3, n=13). Focus group participants were recruited via email from the director of undergraduate studies for the dietetics and human nutrition program. All students who had completed the course in Fall 2010, 2011 and 2012 were invited to participate in the focus groups, which were held in April 2011, 2012 and 2013. Some students were unable to participate in the focus group discussions because they had graduated in December (immediately following completion of the counseling class) and were completing an internship, or had started a job, away from Lexington, KY. The focus group discussions were led by the academic coordinator and the director of undergraduate studies for the Department of Dietetics and Human Nutrition. Students were asked about the importance of counseling and communication skills, their confidence in counseling and communicating with future patients and how they thought they may best learn counseling and communication skills.

Dietetic internship preceptors were also surveyed to assess student communication skills. Preceptors specifically addressed questions about student competency and confidence in counseling during the internship rotation. The communication specific survey questions were included in the annual online program evaluation completed by preceptors.

Lastly, formal university course evaluations for Fall 2010, Fall 2011 and Fall 2012 were accessed and evaluated as quantitative and qualitative measures of course satisfaction and student learning.

The University of Kentucky Institutional Review Board approved the study protocol and all participants provided written informed consent prior to participation in the study.

Results and Discussion

The communication-intensive Counseling and Communication: Theory and Practice course was offered as a traditional lecture to 44 students in Fall 2010, as a lecture with lab and peer-counseling experiences to 51 students in Fall 2011 and as a lecture with lab and actor-counseling experiences to 41 students in Fall 2012. All students enrolled in the course were upper-level dietetics students.

Student Focus Groups

Table 1 summarizes the characteristics of the three focus groups. Cohort 1 (n=7) was predominately female (86%) and Caucasian (86%). Cohort 2 (n=12) was also predominately female (92%) and Caucasian (100%). Cohort 3 (n=13) had a slightly lower percentage of female participants (77%) and, again, all were Caucasian (100%). The cumulative GPA of Cohort 2 was significantly (p=0.003) higher than that of Cohort 3. The demographics of focus group participants closely matched the demographics of the students enrolled in the courses each year.

Focus group participants provided a comprehensive list of characteristics associated with a good counselor.

Table 1. Characteristics of Focus Group Participants (n=32)

	Age (years)	Gender	Race	Cumulative GPA
Cohort 1 n=7	24.2 ± 1.80	1 male 6 female	6 Caucasian 1 African-American	3.37 ± 0.31
Cohort 2 n=12	22.4 ± 0.79	1 male 11 female	12 Caucasian	3.62 ± 0.22
Cohort 3 n=13	22.8 ± 2.30	3 male 10 females	13 Caucasian	3.25 ± 0.32*

*p=0.003 vs cumulative GPA in Cohort 2

Table 2. Focus group responses (n=32) to the question "What do you feel are the most important characteristics of a good counselor?"

Cohort 1 (n=7)	Cohort 2 (n=12)	Cohort 3 (n=13)
Active listener	Active listener	Active listener
Relatable	Good communication skills	Critical thinker
Inspiring	Provides support	Patient-centered
Sympathetic	Genuine	Good communication skills
Patient-centered	Relatable	Motivator
	Understanding	Leads by example
	Asks open-ended questions	Genuine
	Confident	Patient
		Relatable
		Adaptable

Table 2 summarizes these characteristics by cohort. All cohorts spoke of the importance of being an active listener and being relatable. Cohorts 2 and 3 were able to provide more characteristics than Cohort 1, indicating a better understanding of motivational interviewing and counseling in a healthcare setting. These two cohorts specifically addressed the importance of good communication skills in a counseling setting. Similar to this finding, Whitehead et al. (2009) found that 98% of dietitians thought communication skills were either very important or extremely important in patient consultations.

When responding to the question "I felt prepared to counsel a patient," none of the seven students in Cohort 1 (0%) and only five of 12 students (42%) in Cohort 2 felt prepared to counsel patients at the start of their supervised internship. In comparison, 13 of 13 students (100%) in Cohort 3 reported feeling prepared to counsel after taking the counseling course. For those in Cohorts 1 and 2, the reasons given for not feeling prepared to counsel patients included: lack of practice, only one semester of a counseling course, no realistic examples given in the course and lack of real world skills.

These results are similar to those found in other disciplines; students report difficulty in transferring classroom-based knowledge of "good" communication skills to their own professional interactions (Aled, 2007). Providing guided communication and activities in coursework can promote student confidence in their communication skills (Wagner et al., 2002). Individuals who lack confidence experience problems when communicating with others (Erozkan, 2013); therefore, it is vital to ensure students are adequately prepared to counsel patients upon graduation.

Focus group participants were asked to provide specific examples of how the course could be enhanced to better prepare them for counseling and communication in a real-world setting. Students in Cohorts 1 and 2 suggested showing more realistic counseling videos as

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examples and providing more in-class time to practice counseling. Students in Cohort 2 responded favorably when asked about the possibility of using paid actors to role play as patients during counseling sessions for future offerings of the course. These students indicated the real-life application and feedback from the instructor, peers and actor would be beneficial. They also felt that utilizing outside actors would provide more realistic examples of scenarios they may encounter in the future as dietitians and would motivate them to be better prepared for the counseling session.

Cohort 3 students who took the course with actor-stimulated counseling sessions reported that they specifically gained interviewing and probing skills after working with the actors. Through mock counseling sessions with actors, students learned about setting attainable goals with clients, focusing on small changes one at a time and meeting patients “where they are.” According to the work of Bell et al. (2014), realism, actor feedback, layperson perspective, depth of emotion and improvisation skills are most important for realistic and effective simulations using actors. The scenarios with actors should not be overly scripted to more closely mirror a counseling session.

Students reported several strengths of the new course structure. To start, students valued the small group setting of the lab where they received feedback from several classmates in a supportive setting. Hampl et al. (1999) also reported that dietetics students found feedback to be helpful, informative and encouraging after working with standardized patients during classroom counseling sessions.

When asked how students felt about practicing their counseling skills in front of classmates, responses included “nerve racking, but something we will have to do; it was a good place to start and the experience was positive; and, classmates provided constructive feedback.” According to research by Laidlaw (2009), students with a higher level of social anxiety have more negative attitudes towards learning communication skills. Students who experience severe anxiety and nervousness in communication-intensive courses report less enjoyment of such experiences, with a subsequent negative impact on student learning and skill mastery (Stein and Stein, 2008).

Internship Preceptor Feedback

Internship preceptors provided feedback on the communication and counseling skills of interns from the UK undergraduate dietetics program. Seventy-eight percent of preceptors rated the counseling skills of the program’s interns as “good” or “excellent.” When asked about the counseling skills of UK interns compared to the counseling skills of interns from other universities, 62% of preceptors reported that the counseling skills of UK interns were “up to par” or “above” those of students from other dietetics programs. Preceptors ranked the top three strengths of UK students as (1.) knowledge base, (2.) confidence in ability and (3.) preparedness

Table 3. Course and teaching evaluations for counseling course taught in Fall 2010 (n=44), Fall 2011 (n=51), and Fall 2012 (n=42). Scores based on a 4 point Likert scale.

	Overall Value of the Course 1=poor 4=excellent	Overall Value of the Teaching 1=poor 4=excellent	“This course stimulated my interest in the topic.” 1=Completely disagree 4=Completely agree
Fall 2010	2.6	2.8	2.5
Fall 2011	3.3	3.3	3.2
Fall 2012	3.6	3.7	3.6

to counsel. The most common weakness reported by the preceptors was lack of experience. Preceptors suggested that students receive more practice and formal training, consistent with the changes that were made to the course between Fall 2010 and Fall 2012.

Evaluating Changes to Course

Students completed formal course evaluations during the final week of class in Fall 2010, Fall 2011 and Fall 2012. Results from the course evaluations were available to the instructor of the course approximately eight weeks following the completion of the semester. Students were asked to rate the overall value of the course and overall value of the teaching on a Likert-type scale where 1 is poor and 4 is excellent. Students also responded to the statement, “This course stimulated my interest in the topic.” Table 3 provides a summary of the responses from Fall 2010, Fall 2011 and Fall 2012. All parameters received below-average scores in Fall 2010; by Fall 2011 all scores had increased significantly from baseline (Fall 2010). Of particular importance was the fact that students taking the course with actor-stimulated counseling sessions (Fall 2012), reported being more interested in the topic of the course, counseling and communication skills.

Actor-Based Simulations: Two years later

The counseling in dietetics course continues to be offered as a lecture with embedded lab design, with lab time dedicated to practicing counseling skills. Students practice their counseling skills through actor-simulated sessions where actors are paid and trained on their specific scenario. Scenarios are developed by the course instructor, with input from faculty, internship directors, preceptors and students. Then, actors are trained by the course instructor and teaching assistant with emphasis placed on matching actors who can best role-play certain scenarios. Several actors return year-to-year to participate in the simulated sessions.

Based on focus group and preceptor feedback, faculty continue to develop a variety of real-life scenarios students are likely to see during their internship experience. These scenarios have evolved based on student feedback, preceptor feedback and trends in the field. One specific trend is providing students with more experience in working with patients from a variety of cultures, consuming predominately ethnic foods. In a study of third-year undergraduate students, nearly half preferred to counsel clients from their own cultural (McArthur et al., 2011). For dietetics students, developing

cultural competency and confidence in communicating with those of different cultures is important to counseling success and effectiveness. Kessler et al. (2010) reported through focus group findings that one-half of dietetics students at The California State Polytechnic University did not feel comfortable interacting with a Spanish-only speaking client. As the counseling course continues to evolve, one area of focus for the future is allowing students the opportunity to work with interpreters as part of the actor-simulated counseling sessions. Others have used interactive, Web-based learning modules to allow students to practice communicating through interpreters (Kalet et al., 2002).

Summary

According to hiring managers, only 44% of new college graduates are very or completely prepared to communicate with authority figures and clients and 44% are very or completely prepared for public speaking (Chegg and Harris Interactive, 2013). Educators are challenged with developing innovative and engaging discipline-specific courses and learning experiences to promote oral communication skills. In dietetics and related healthcare disciplines, communication is considered a core skill and professional competency; indeed, patients recognize good communication skills as an important skill for a positive counseling experience (Hancock et al., 2012; Stenner et al., 2011). Interprofessional student clinics (Kent et al., 2014), web-based simulations (Cant and Cooper, 2014; Litchfield et al., 2000; Turner et al., 2000) and clinical simulations (Krautscheid, 2008) are examples of innovative techniques to promote communication skills of undergraduate students.

Students value creative teaching, particularly those approaches that promote applied learning (Aschenbrener et al., 2010). The use of trained improvisational actors to simulate real-life counseling scenarios offers students the opportunity to practice their communication skills in a controlled and safe environment. Preliminary evidence from nursing education supports the use of trained actors to promote student learning and student confidence in their communication skills (Webster et al., 2012). This project also supports the value of actor-simulated counseling sessions to develop communication skills and confidence in counseling in upper-level dietetics students. Through focus groups, it was found that 100% of students who completed the course when actor-simulated counseling sessions were required reported feeling prepared to counsel clients during their internship. Students were also able to provide a more comprehensive list of characteristics of a good counselor, providing evidence of improved knowledge through the course.

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