



The Internet Journal of Allied Health Sciences and Practice

<http://ijahsp.nova.edu>

A Peer Reviewed Publication of the College of Allied Health & Nursing at Nova Southeastern University

Dedicated to allied health professional practice and education

<http://ijahsp.nova.edu> Vol. 4 No. 2 ISSN 1540-580X

Developing an Ethics Curriculum Using Learner-Centered Pedagogy

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Citation:

Fornari, A. Developing an Ethics Curriculum Using Learner-Centered Pedagogy. *The Internet Journal of Allied Health Sciences and Practice*. Apr 2006, Volume 4 Number 2.

Abstract

Objective: Ethics education is an essential component of educational preparation for health care professionals. Learner-centered pedagogy can assist in the development of curricula that actively engage and challenge learners appropriately. This article describes a method for developing a case-based ethics curriculum that highlights the five areas of dietetics practice. **Methods:** A critical incident reporting technique was adapted to solicit real ethical dilemmas facing nutrition professionals in their daily practices. Educators ranked the reported dilemmas for importance in a nutrition curriculum, discussed appropriate use in selected courses, and linked the dilemmas to the American Dietetic Association's Code of Ethics. A representative curriculum was developed and further critiqued for content and design by selected experts both in nutrition education and in curriculum design. **Results:** Ninety-nine practitioners and 127 educators participated in the development of a learner-centered case-based ethics curriculum, representing a cross-section of the nutrition professionals with regard to gender, age, race/ethnic origin and highest academic degree. **Applications:** The curriculum developed can be a resource for educators to reinforce ethical decision-making early in students' professional education and training. A similar curriculum development process could be used to develop case-based resources for the education of health care professionals in all areas and at all levels of training, including professional development.

Introduction

Education should prepare future health care professionals to address the ethical issues they may encounter in their career.¹ Some educators have suggested that health care professionals, such as nutritionists, can educate themselves regarding ethics by using the appropriate professional standards.² Anderson showed that as a profession, dietetics practitioners require training in how to meet the ethical challenges that will continue to exist and that educators desire to meet that need.^{1, 3} The American Dietetics Association (ADA) states that "integrity in all professional and personal actions" is a core value.⁴ Because ethical behavior is critical to both professional decision-making and American life in general, it is essential that ethics be integrated into professional curricula at all levels.⁵⁻⁷ Consequently, professional students should be systematically exposed to ethical issues in their chosen profession.

This study delineates a process for developing an ethics curriculum for nutrition students based on a structured series of learning outcomes. Although this study focuses

on nutrition education, the methodology would be equally applicable to ethics education in other allied health fields. An additional goal of this study is to broaden the focus of ethics education to the major areas of nutrition education and practice: clinical dietetics, community nutrition, management, education and research, and business and consultation. As students become entry-level practitioners and their numbers in nontraditional settings increase, they will increasingly need training to handle a diversity of ethical dilemmas.^{2, 8-12} As these practitioners move into management, they will need training to handle the unavoidable ethical dilemmas in today's workplace. A curriculum based on learner-centered principles, as in this study, presents materials that students can absorb and incorporate into their thinking.

This study assumes the target student population reflects the cognitive development of undergraduate populations, as didactic education for nutrition professionals is usually at the undergraduate level.^{14,15} Perry's scheme represents the evolution of the ways students see the world, their knowledge and education, and their values.¹⁵

This scheme has been used by educators and researchers to understand the intellectual and ethical development of young adults in academic settings and as a guide for developing educational practice. Clinchy and Zimmerman and Belinky et al. further developed this work. Knefelkamp applied student development theory to curriculum development.¹⁵⁻¹⁷

Methods

General Research Design and Subjects

There were four phases involved in the curriculum design: (1) needs assessment, (2) draft curriculum document, (3) expert evaluation, and (4) final curriculum document.

Confidentiality of all participants was maintained throughout the data collection phases. Informed consent was obtained from all subjects and all stages were approved by the Columbia University Teacher's College Institutional Review Board. As each phase of data collection informed the next phase, data collection was iterative.

The use of multiple evaluation techniques in varying parts of the process overcame the intrinsic bias found in single-methods studies and validated the qualitative analysis.¹⁸ The use of experts for the evaluation phase assured the credibility of the curriculum among educators.

Phase I: Needs Assessment

Phase I had three components: a critical incident questionnaire answered by nutrition practitioners, a critical incident inventory for educators, and a focus group with educators.

A phenomenological approach was used to analyze the qualitative data from the initial questionnaire and critical incident reports. An initial open-coding technique was used to identify practice categories for the critical incidents. Responses on the initial questionnaire, the critical incident reports, and focus group audiotapes were analyzed using open coding.¹⁹

Phase 1A: Critical Incident Reporting from Nutrition Practitioners

A needs assessment survey is used to solicit public opinion about possible solutions to a problem.²⁰ A self-constructed Critical Incident Reporting Form, based on Brookfield's model, and a questionnaire were mailed to selected practitioners.²¹ The critical incident technique presumes that learners' general assumptions are embedded in, and can be inferred from, their descriptions of particular events. The emphasis is on recalling specific situations, events, and people rather than identifying general assumptions.²¹ Participants provided one detailed account of a specific professional event related to ethics and practice. This data was used

to create the Critical Issues Inventory, which was used by nutrition educators in phase 1B.

The nutrition practitioners are registered dietitians (RD) who had graduated from an undergraduate didactic program in nutrition, completed a post-baccalaureate supervised practice program, passed the National Registered Dietitian exam, and were current members of selected practice groups residing in the New York—New Jersey—Connecticut tri-state area. This convenience sample represented 16% of the total ADA membership, based on ADA membership data provided in June, 2000. The limited geographic region allowed surveying a larger number of dietetic practice groups (DPGs). The seven DPG selected to receive questionnaires were: Public Health Nutrition; General Clinical Practice; Nutrition Entrepreneurs; Management in Food and Nutrition Systems; Clinical Nutrition Management; Dietetic Educators of Practitioners; and Research. Surveying practitioners in a wide variety of practice settings provided a broad range of possible ethics topics.

The sampling objective was to achieve a 30% response rate from each of the seven DPGs. This was achieved 3 weeks after the first mailing and no additional mailings were necessary. Reporting was anonymous unless the respondents chose to identify themselves. Descriptive demographic data (such as gender, age, race/ethnic group, degree, employment, title) were also collected.

Phase 1B: Nutrition Educators' Inventory

Educators were selected using a convenience sample from the Dietetic Educators of Practitioners practice group (DEP) residing in the tri-state area (n=44).

The critical incidents reported in Phase 1A were categorized into the five areas of practice. Then, 127 nutrition educators rated the importance of each issue using a Critical Issues Inventory instrument adapted from Mackin's work on ethics education for nurses.²³

Phase 1C: Focus Group

Based on the preliminary needs assessment, a more in-depth assessment using a focus group of nutrition educators was conducted. A focus group of 7-10 participants can be effective in improving the planning and designing of programs in detailed complex topic areas such as ethics education.²⁴ The group was composed of nutrition educators in the New York City metropolitan area from four types of education programs (2-year, 4-year didactic, internship, and Master's level). Procedures for monitoring and managing the group discussion and for summarizing the data obtained were based on Krueger's guidelines.²⁴

Six educators participated in the focus group, which addressed the priority ethical issues listed in the critical issues inventory, explored how nutrition educators currently included ethics in the curriculum, and examined which existing courses could easily incorporate material

on ethics. These topics were also examined relative to the ADA/Commission on Dietetic Registration (CDR) Code of Ethics for the Profession.²⁵

Phase II: Draft Curriculum Document

In Phase II, a draft curriculum document was developed. The design of the draft curriculum document reflected learner-centered instruction theories, the Kolb learning model, and McCarthy's concept of curriculum design around the wheel.²⁶⁻²⁹ Kolb described four distinct phases of the learning cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation.²⁸ McCarthy related learning models to curriculum design by focusing on pedagogy, content expertise, and the instructor's orchestration of the learning process, relying on Kolb's model as an umbrella to describe the different ways people learn.²⁸⁻²⁹ Curriculum design and teaching should progress through the learning cycle described by this model.

Knefelkamp adapted these theories to practical use by identifying four developmental instruction variables that educators should use in designing courses that will encourage the developmental transitions described in the work of Pery and Clinchy.^{14,30-33} In brief, the variables are structure, experiential learning, diversity of perspective, and personalism (i.e., students are encouraged to personalize the issue). These concepts were used in the development of activities for the curriculum, as was the Teacher Tetrahedron and Basic Problem-Solving Model.³⁴

The curriculum document included a general description of the project, goals and objectives, target audience, and methods or guidelines. Specific information on the design elements of each curriculum unit, the developmental instruction process and learning styles, and samples of the curriculum (based on the themes identified from the needs assessment data, both quantitative and qualitative) were included, as were descriptions of the instructor's role, primary intellectual tasks (based on Perry and Belinky et al.) and sources of challenge and support.^{14,15,29-31} The final section of the curriculum document identified resources and references used in its development.

Content and implementation themes from the focus group discussion were incorporated into the draft document, as were data from phases 1A and 1B. A review of nutrition education literature collected ethical issues that had not been reported in the critical incident reports. The complete data captured the complexity and richness of the experiences of nutrition practitioners and educators.³⁵

Learner-centered resources were used to create lesson plans and activities in a case vignette study format that would meet the needs of diverse learners.²⁷⁻²⁹ Students using a curriculum following this experiential learning model will be comfortable at times and challenged at

other times.²⁸ The mix of classroom activities and assessments assured that student diversity in abilities and needs were addressed while providing an open and learner-centered classroom.

Phase III: Expert Evaluation

Phase III was adapted from the methodology of Mackin.²³ The draft curriculum was examined by experts in ethics, nutrition education, and learner-centered pedagogy. Two evaluation instruments were developed to assist this process, one specific to ethical issues and one specific to developmental learner-centered instruction. The latter evaluation examined whether the design incorporated all four dimensions and principles of the Kolb learning model.²⁷ Content evaluation included how well the material reflected the ADA Code of Ethics and its fit with nutrition courses.¹³ Both evaluation instruments were analyzed for themes and specific comments, which were incorporated into the final curriculum document when feasible.

Phase IV: Final Curriculum

Following the expert evaluation, the curriculum was revised in light of the expert comments.³⁶

Results and Discussion

Practitioner Results

Demographic data was collected for 93 practitioners (25.5%), which is a good result for blind solicitation. The gender, age, race, and current area of nutrition practice were consistent with that reported for ADA members nationally.⁸ Of 365 dietetic practitioners solicited, 99 (27.1%) reported an ethical dilemma they confronted in practice. Of the 99 critical incidents: 38 (10.4%) were clinical dilemmas; 11 (3%) community dilemmas; 29 (7.9%) food and nutrition management dilemmas; 7 (1.9%) education and research dilemmas; and 14 (3.8%) business and consultation dilemmas.

Educators Results

Demographic data was collected for 63 (49.6%) of the educators. Gender, age, and race distribution were comparable to the total ADA membership.⁸ Of all respondents, 61.9% reported a Master's degree and 38.1% a Doctorate as their highest degree, which are both higher than the national averages. Ninety-five percent reported participation in decision-making about curriculum content.

Sixty-four (50.4%) of the nutrition educators returned the completed Critical Issues Inventory. The issues reported clustered in clinical issues (n=38), food and nutrition management (n=29), and business and consultation (n=14). In all areas except education and research, certain ethical issues were rated by >60% of the dietetics educators as "Very Important." Education and research issues also received a very low rating as "Not Applicable." This consistency reinforced the internal validity of the responses.

Focus Group Data

The focus group addressed the bases for ethical decision making, such as the difference between legal requirements and ethical behavior. The group also examined the implementation of ethics education and agreed that the curriculum needed to be flexible, given that practice standards are constantly changing and need to stay current. Students need skills that will assist them in handling ethical dilemmas in practice. For this reason, the research and education dilemmas were ranked lower, as issues such as plagiarism and the use of human subjects in studies were deemed less critical to clinical practice. Overall, the group felt that ethical conflicts in other areas of practice needed to receive more attention in nutrition education.

The group thought that ethical issues were best discussed with advanced students in a senior seminar or similar environment. They also discussed the need to formally evaluate the educational impact of ethics instruction. Instruments such as Rest's Defining Issues test were mentioned as possible assessment tools.³⁷

Curriculum Outcome

In order to develop a practical curriculum, the 99 ethical dilemmas identified in Phase 1 were reduced to a resource list of 20-25 priority ethical issues, 4-5 per practice area. From this list, one ethical issue for each area was developed using Kolb's learning wheel model.²⁸ An issue was included if it:

1. was rated as "Very Important" in the inventory [if internal validity (receiving a low ranking as either "Not Important" or "Not Applicable") was satisfied];
2. corresponded to one or more of the 19 principles in the ADA Code of Ethics for the Profession,¹³ or,
3. was discussed in the focus group (if it also met other criteria).

In addition, the researcher reviewed and considered ethical issues identified in the nutrition education literature for the curriculum. The goal for the final curriculum was five ethical dilemmas, distributed evenly among the five practice areas and covering a diverse number of ADA ethical principles.

In clinical practice, quality of patient care governed the issues reported by nutrition professionals. The primary focus was nutritionists advocating for patients with other individuals (physicians, patient care staff, and family members). The clinical issues centered on ethical principles of informed consent, confidentiality, and documentation in permanent medical records.

In community practice, allocation of resources/services governed the issues reported by nutritionists. The

situations revolved around the nutritionist placed in a dilemma that affected a client served by the agency. Some principles addressed were confidentiality, conflict interest, and provision of objective and respectful professional services.

In the food and nutrition practice area, interpersonal interaction between the nutritionist and a supervisor (not necessarily an RD) governed the issues reported. The nutritionist, usually in a managerial role, observes or is told of an unethical dilemma, and must decide how to approach and resolve the situation while considering the employees involved. The primary ethical principle addressed here was "conducts himself/herself with honesty, integrity, and fairness."¹³ As Principle 1, it connotes the most general of the ethical principles in the Code. The other dominant principle, Principle 11, related to objective evaluations of employee performance.

In the education and research practice area, the reported dilemmas involved either two professionals or a student and professional. The primary ethical principle addressed was evaluating the performance of students.

In the business and consultation practice area, a majority of ethical dilemmas involved two professionals, but no client. The ethical principles included confidentiality, promotion/endorsement of products, conflict of interest, and recognizing/exercising professional judgment.

The experts suggested courses that naturally fell into similar content areas as the dilemmas. Education and research issues were evaluated as being of concern to faculty rather than students, although they might be included in a senior seminar. The issues for business and consultation were more eclectic and could fit various classes, based on the specific content of the issue. One expert commented, "It would be nice to have an example [ethical issue] for each ethical principle [in the Code]." A tabulation of expert opinions on the reported top-five ethical dilemmas revealed that all but four of the nineteen principles of the Code were addressed. The experts felt that ethical principles #13, 16, 17, and 18 were not addressed in the dilemmas they evaluated. These are the principles regarding advertising, credentialing, mental competence, and legal discipline.¹³

The curriculum was designed to be flexible, so that any of the 99 ethical dilemmas could be used in the classroom syllabi. Educators could select ethical dilemmas for their courses based on course content and instructor interest. Instructors could also select ethical issues based on the principles in the Code they wished to address with their students. Six ethical issues, one from each practice area, were examined in detail and outlined on a learning wheel to exemplify the concept of learner-centered curriculum/lessons.^{28,29} Two external curriculum design experts examined these six issues and verified their adherence to the design principles of Kolb and Knefelkamp.^{28,30}

Applications and Limitations

One of the most notable findings was the variety and complexity of the ethical dilemmas faced in all areas of nutrition practice. Particularly disturbing were issues where several practitioners were involved, e.g., "Professional is asked by Clinical Manager (supervising professional) to review charts and identify missing information and add the information with the original (i.e., not the current) date." This complexity further accentuates the need for ethics instruction in nutrition and health professional curricula. In addition, the initial conversations in the focus group with educators focused more on trivial aspects of the ethical dilemmas presented (grammar, selected words, etc.) than on the more global impact of the actual dilemma and its affect on practice for the individual involved and the larger institution. To the researcher this demonstrated that even experienced educators need continuing education on ethical decision-making for their own areas of practice.

Also of interest was the debate in the focus group of what constituted an ethical issue. One participant stated relative to a particular issue, "I do not believe that's an ethical issue ... I think it's a legal issue and I think it's something of an administrative issue, but I don't really see it as an ethical issue." The distinction between legal and ethical behavior is substantial, and the presence of laws does not obliterate the ethical dilemma encountered. It is important to consider the difference between ethical and non-ethical considerations.

Discovering the grounds for ethical choices is a process of self-discovery and developing a deeper understanding of what is right or wrong.³⁸ This requires dialogue and self-reflection and these must be part of the curriculum development and implementation process to assure deeper understanding is achieved.

An entirely new course in ethics was recognized as not being a feasible alternative in already-constrained curricula. Even additional content in existing courses raised questions about time constraints. However, other skills (e.g., writing skills and critical thinking skills) are infused across the curriculum, and ethics material could be addressed similarly.

Health professional curricula are competency-based, so the total content of programs at different institutions is

more comparable than individual courses. Consequently, discussion of the place of ethics within specific courses is more limited than the place of ethics overall. The experience of nutrition educators and practitioners with ethics material is also varied. Phase 1 was specifically designed to allow the inclusion of this variety of experience in the study. However, the length of the critical incident inventory (99 dilemmas) required substantial commitment on the part of the educators reviewing the material. Some effort to shorten this in the future should be considered, although the willingness of participants to follow-through with this study suggests that a commitment to ethics education is present among educators.

Conclusion

The importance of ethics education for health care professionals, including nutritionists and students, was clearly demonstrated in this study. Equally important is the focus on the learner using student development theory in the creation of curricula.^{14,16,17,28,29,32,33} This focus leads to a curriculum that is empowering to both learner and teacher, assuring that elements of support and challenge are consistently present. Unfortunately, health care educators are not well-versed in many of the education frameworks used in this research. The development of resources making these pedagogic principles accessible to health care educators is therefore needed. Knefelkamp's work provides clear descriptions of the requirements to be addressed in such faculty development.^{26,34,39} However, this also would require acceptance from administrators who would be willing to support this focus.

Using a curriculum developed in this manner would be an iterative process, so that the curriculum would grow and change based on the needs and responses of students and the overall profession. Establishing ethics as a basis for professional action requires that students and practitioners be constantly exposed to ethical questions and processes for ethical decision making. As the health care arena changes, so too would the issues that would have to be addressed. Although this study focused on nutrition education, ethical decision-making is critical to all aspects of health care and this curriculum-development methodology ought to be adapted to other health care fields.

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