



USING ANONYMIZED REFLECTION TO TEACH ETHICS: A PILOT STUDY

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Anonymized reflection was employed as an innovative way of teaching ethics in order to enhance students' ability in ethical decision making during a 'Care of the Dying Patient and Family' module. Both qualitative and quantitative data were collected from the first two student cohorts who experienced anonymized reflection ($n = 24$). The themes identified were the richness and relevance of scenarios, small-group work and a team approach to teaching. Students indicated that they preferred this style of teaching. This finding was verified by a postal questionnaire conducted four months later. The conclusions drawn from this study suggest that using anonymized reflection is an effective method for teaching ethics to nurses and indicates that learning about ethical issues in this way reduces uncertainties.

Introduction

In 2004 I attended a Summer School at the University of Surrey, UK, on 'Teaching ethics to healthcare students'. One of the teaching techniques explored there was the use of 'anonymized reflection' (AR), as devised by Professor Geoffrey Hunt. In ethics education AR can be described as the process of clarifying the meaning of an anonymized experience/situation with a view to developing new insights through small-group discussion and reasoned argument to enhance ethical decision making.

Professionals who care for patients with life-threatening diseases or those approaching death require the ability to analyse and be confident in ethical decision making. Without formal preparation, ethical decision making by nurses can fall to a reliance on intuition or an uncritical, unjustifiable personal sense of right and wrong.

I am the leader of a multiprofessional continuing professional development module, 'Care of the Dying Patient and Family' in the south of England. The module is designed to give nurses the opportunity to examine the care given to dying patients and their families within their own field of health practice. A theme threading through the module content is the moral/ethical dilemmas raised by caring for dying patients and the ethical decisions that nurses face in this field. The aim of palliative or supportive care is to relieve suffering and to improve quality of life for dying patients

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and their families.¹ In order to achieve this aim, palliative care requires a solid foundation on which to base clinical and subsequent ethical decision making.

Decision theory is about how people decide to take one kind of action over another.² The theory assumes that people will choose the action they think has the most value for them. However, Quinn² states that these choices of actions are based on probability rather than certainty. Similarly, ethical decision making is also uncertain, with the added complication that any choice made may lead to an unsatisfactory outcome. The purpose of teaching ethical decision making is to help nurses to practise within uncertainty. Ethical decisions, like other professional decisions, should be informed and based on knowledge. Yet many of the decisions in nursing, especially when caring for dying people, are emotive. These feelings are hard to dismiss, intangible, and often difficult to rationalize. The first step in any ethical decision making is to avoid making an immediate decision that is based solely on an emotional response to a dilemma. The process of critical thinking then follows, which may extricate the relevant details of the dilemma and get to its central concern, although this is not always obvious. However, once identified, it may provide a starting point for ethical decision making. Ethical decision making is an inherent part of nursing people who are dying, yet it is a difficult concept to teach.

There continues to be debate in the literature on what constitutes the best method of teaching ethics in nursing.³⁻⁷ Seedhouse⁸ suggested that a 'principles first' approach to ethics teaching can lead students into quicksand. In agreement, Holland⁹ warns that ethics teaching can often be too academic to be useful in practice. Woods⁷ further states that nurse educators must consider an overall approach to teaching ethics that is grounded in practice and promotes the learning of ethics in every and any nursing context. These findings suggest that the 'traditional' ethical approaches that rely on the principles, rules, theories and codes of ethics do not necessarily prepare nurses for ethical decision making in practice. Ethics education needs to equip nurses with ethical knowledge and critical thinking skills to enable them to participate in ethical decision making. This will enable decisions and their outcomes to be determined and defended.

ARs provide a focus for group discussion, which in turn facilitates the reflective learning process. AR as a teaching method ensures that an ethical dilemma is personal and meaningful and encourages students to participate in decision making.¹⁰ It is student led and concentrates on the uniqueness of the nurse-patient relationship and on the ethical requirements of the multidisciplinary team. Teaching ethics through the use of AR is concerned more with 'doing' and less about theoretical learning.

As a result of the Summer School, a decision was taken to use this approach in a continuing professional development module and to undertake a pilot evaluative research study into the effectiveness of this approach. The teaching team wanted to determine whether there was an improvement in students' perceived ability to identify ethical frameworks in their assignments, and whether this method of teaching ethics prepares students better for ethical decision making in practice.

The purpose of this article is twofold. First, the process of AR as a teaching method will be discussed, followed by how it was implemented, with some reference to the literature related to small-group and team teaching. Second, data collection and findings from the evaluative research study are presented, together with conclusions drawn and recommendations made concerning the potential for using AR in the ethics teaching of health care professionals.

Learning theory to support anonymized reflection

The learning theory that underpins AR is 'situated learning'. Whitehead¹¹ argues that it is possible to provide students with knowledge in the classroom but this knowledge can then lie dormant if they are unable to use it in a practical sense. This raises the issue of relevance in learning. Brown *et al.*¹² suggest that teaching methods that are defined with fixed concepts, such as theories of ethics, fail to provide students with important insight into either the culture or the needs of members of that culture. If the teaching has no relevance it is unlikely to be useful to the learner. Brown *et al.*¹² proposed a new educational model, 'situated learning', based on the work of Vygotsky¹³ and Dewey,¹⁴ placing the acquisition of knowledge in the context of social relationships, but emphasizing that meaningful learning will take place only if it is embedded in the social and physical context within which it will be used.

Situated learning increases intrinsic motivation, which emerges from the desire to understand and to construct meaning.¹⁵ Brown *et al.*¹² suggest that relevant learning is about learning a subject within the context of its culture. Learning about ethics therefore needs to take place within the broader cultural contexts of nursing. It is the students' engagement in authentic activities, guided by experts and interacting with each other, that makes learning relevant.¹⁶

Using real-life situations taken directly from clinical practice is one way to make this happen.^{6,17} Co-operation among peers leads to a genuine exchange of thoughts and exploration, and assimilation of new ideas.^{18,19}

There is consensus in the literature that reflection is a dynamic process linking an experience with knowledge.^{14,20-22} Reflective learning, as a constructive and situated method, helps students to find meaning in an experience, especially an ethical situation, and to contemplate new ways of being and responding.²² Learning by exploring an experience is not a new concept.²³ Such an approach to learning is the focus of the work of Dewey,¹⁴ the first educationalist to write about reflection on an experience.

Reflection promotes critical thinking and can further develop the dynamics of decision making.²⁴ Critical thinking, through appraisal of situations or experiences (such as ARs), is a necessary process for development and learning to occur. The ideal critical thinker is a nurse who constantly re-evaluates, self-corrects and strives to improve.²⁵ In summary, AR employs a situated learning approach to ethics through the use of reflective thinking.

Implementing anonymized reflection

The nature of post-qualification educational programmes in the UK means that usually only one nurse from a clinical area is seconded to a course at any given time. Students undertaking the 'Care of the dying patient and family' module therefore come from different clinical areas and bring their own unique ethical situations to the class; they may not know each other beforehand; and group dynamics need to be established early on.

The entire process for learning ethics through AR uses a team teaching approach and small-group teaching methods. From a critical review of the literature on team teaching, three themes emerged, all of which impact on the value of a team teaching approach to AR. These themes are: encouraging multiple perspectives,²⁶⁻²⁹ encouraging student participation and dialogue,³⁰⁻³³ and modelling discourse.^{34,35}

From the literature on the value of small-group learning, three further themes emerge. These are: students' preference for co-operation and collaboration in the classroom,³⁶⁻³⁸ group problem solving³⁹ and mutual search for understanding.³⁹ All of the above themes seemed compatible with AR and were exactly what I was trying to create through the use of AR as a method for teaching ethical decision making.

In this study, students were given an explanation of AR (Figure 1) together with the documentation to record their reflection (Figure 2) at the end of day 1 of the module.

The students were requested to bring to day 2 of the module the completed stage 1 of their ARs. They were actively encouraged to look at any nursing issues or experience that posed an ethical dilemma. Day 2 of the module was scheduled to be the ethics teaching day and, before starting stage 2 of the AR, a brief facilitated session was provided to give the students a variety of practical guiding frameworks that may be used in different situations. These frameworks enable students to discuss critically their ethical situations in a practical and straightforward way. An example of such a framework is shown in Figure 3.

<p>Stage 1 Question: Think of an ethically unsatisfactory health care scenario in which you were involved as a professional. Write a brief anonymous discussion of it, including your own role/decision, in about 100 words. <i>Do not discuss; use upper section of the paper.</i> Place completed sheet in envelope for random shuffle.</p> <p>Stage 2 Read the account of the scenario. Write your anonymous view of the account in about 100 words, from an ethical perspective, linking your discussion to a framework. <i>Do not discuss; use lower section of paper.</i> Return to the envelope.</p> <p>Stage 3 Sheets photocopied and distributed to students. Tutor-led discussion of selected scenarios and comments. <i>On no account is anyone to identify themselves as either writer or commentator.</i></p>
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Figure 1 Explanation of anonymized shared reflection

<p>Important note: <i>Do not identify yourself or try to identify anyone as the writer of the scenario or as the commentator on one. Please write small but legibly.</i></p> <p>Stage 1: Think about an ethically unsatisfactory health care scenario in which you were involved as a professional. Write a brief anonymous account of it, including your own role/decisions in about 100 words. (When asked, place in envelope.)</p> <p>Stage 2: Read the account above, consider it carefully. Write your anonymous view in about 100 words, from an ethical perspective, trying to link your discussion to one of the frameworks. Do not discuss with others.</p>
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Figure 2 Anonymized reflection record

This simple pictorial framework uses the spectrum of 'always and never', illustrated as weighing scales balanced on the context of the problem. An example to illustrate this framework could be truth-telling about a terminally ill patient's diagnosis. Discussion could start with the viewpoint that one never lies to a patient and always tells the truth because truth-telling and disclosure centre on attempts to do good and avoid harm. However, as critical thinking is developed, patients are viewed within the context of illness, culture, age and personal views, which indicates that a movement along the spectrum can be determined, with a possible conclusion that for some cultures one should never tell a patient that he or she is dying because this takes away all hope from the patient. The patient and the family's culture may deem speaking of death as more harmful than the benefits of truth-telling. The ARs identify the problem or situation and then the use of a framework stimulates discussion and develops critical thinking by encouraging a contextual view of the reflection.

The written ARs were then collected and redistributed to students in such a way that they never reviewed their own scenario. Each AR was then reviewed by a second student, who was encouraged to apply one of the guiding frameworks to his or her response. When this activity was completed, the students were then divided into small groups.

Each group member again received a completed reviewed AR in such a way that each had a reflection that they had neither written nor reviewed. In the small groups the students discussed each reviewed AR and reached a consensus on a decision about the dilemma. This process mimicked discussion that may occur in practice within their clinical teams. The students were encouraged to raise as many viewpoints or options as possible. Two lecturers facilitated the session, moving among the groups. Many of the students made instant decisions about what they would do themselves in response to their AR. This is often an intuitive or an emotional response. The tutors' ability to stimulate and broaden the students' perspectives enabled the students to unpick their original intuitive decisions and to consider different options, justifying their choices. The aim was to enable the students to revise and re-interpret their previous knowledge in order to reconcile it with new thoughts and ideas about ethics; that is, to construct new meaning. Through the group discussion sessions based on the ARs, new knowledge is personally constructed but socially mediated.

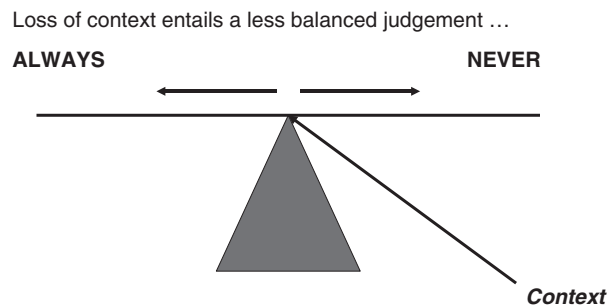


Figure 3 The 'always/never' simple guiding framework for decision making

The study

The aim of the study was to evaluate the effectiveness of using AR when teaching ethics in the 'Care of the dying patient and family' module. An illuminative evaluative research approach⁴⁰⁻⁴² was chosen to interpret AR from both the students' and lecturers' perspective, focusing through the data on what it was about AR that made it significant to student learning. The areas of focus for the study were: the students' and lecturers' perceptions of the ethics teaching in the module; whether students achieved the module learning outcome relating to ethics; the factors that may have affected the teaching and learning of ethics, such as group size, location, tutors' knowledge in the field of ethics and their skills in facilitation; and the experience of teaching and learning ethics using AR.

The research population included all the students who undertook the module and the lecturers who facilitated the teaching sessions. The students were all qualified nurses. The researchers assumed therefore that all participants had a basic knowledge of theories of ethics. This purposive sampling covered two student cohorts from two geographical areas. Purposive sampling targets a group of people believed to be typical or average, or a group of people specially picked for some unique purpose. The total sample was 24 students and two lecturers.

Multimethod qualitative and quantitative data were collected. The methods of data collection and methods of analysis are shown in Table 1.

Ethical considerations

The university's ethics committee granted ethical approval for the study.

Consent

A letter was handed to all the students on the last day of the module. This advised them of the research and asked them for their home postal address. The letter

Table 1 Data collection and analytical methods

Data collection	Analytical method
Completed anonymized reflection (including both the dilemma and the response) ($n = 24$)	Descriptive statistics
Copies of the students' theoretical assignments ($n = 15$)	Achievement of the module ethical learning outcome: descriptive statistics
Tutors' concept maps encompassing strengths and weaknesses of teaching ethics in this new way ($n = 2$)	Thematic analysis
Formative evaluations completed at the end of the ethics day ($n = 21$)	Descriptive statistics and thematic analysis
Tutors' personal reflections of the ethical teaching ($n = 2$)	Thematic analysis
Postal questionnaires sent to the students 5-6 weeks after finishing the module ($n = 10$)	Descriptive statistics and thematic analysis

emphasized that the students would not be disadvantaged in any way should they wish to withhold their addresses. The possibility of participating in the research had been discussed with the students before completing the formative evaluations at the end of the ethics teaching day. They were able to withdraw from the study by not completing their formative evaluations, by not giving their address or by not returning the postal questionnaire. Consent throughout the study was therefore implied, first through obtaining the students' postal addresses and second by the students returning their postal questionnaires.

Confidentiality

Confidentiality and anonymity were assured in all the letters and maintained throughout the research. Each questionnaire was assigned a research number; the ARs and formative evaluations were all anonymized throughout the module. The students' assignments were identifiable through their university number but the researcher was not able to correlate this with other data collected.

Findings and discussion

Owing to the small sample involved in this illuminative evaluation, it can be described only as a pilot study. Although the two cohorts were geographically diverse, the data did not demonstrate any differences between the groups; the results are therefore presented collectively. Descriptive statistics were adopted for the quantitative data. No inferential statistics were employed owing to the small sample size. Qualitative data from the formative evaluations and postal questionnaires from 21 of the original 24 students were systematically hand sorted and coded, which enabled emerging patterns and themes to be identified. Response to the postal questionnaire was 42% (10 responses) despite using strategies to encourage a high response rate. Certain aspects seem to have contributed significantly to the quality of the ethics learning experience.

In an illuminative evaluative study, curriculum intention and the learning milieu are both identified as significant areas for evaluation.^{40,43} The students evaluated the curriculum intention positively in terms of achievement of the theoretical learning outcomes; however, only 15 assignments were available for reviewing at the time. Topics raised in the students' theoretical assignments included patients choosing to withdraw from active treatment, pain management, resuscitation status and advance directives, truth-telling and collusion, advocacy, withholding intravenous fluids and withdrawing active treatment.

Further positive findings (100%) from the students related to their perceptions of the relevance and content of their ARs ($n = 24$). The relevance of the students' reflections ensured that they were bringing an ethical dilemma that was pertinent to their individual practice environment. This implies that the learning was meaningful because it reflected how the students' new knowledge could be used in practice. This confirms the concept of situated learning.¹² Woods⁷ supports this, stating that nurse educators must consider approaches to teaching ethics that are grounded in practice and promote learning of ethics in any nursing context. Kerka¹⁶ further endorses this view by emphasizing that teaching processes must use authentic activities.

Brown *et al.*¹² state that a situated learning environment provides authentic activities that are ill defined and therefore the students need to find, as well as solve, their problems. It would appear that AR meets the criteria for an authentic activity in situated learning.

All ($n = 24$) the students thought that their knowledge of ethics had increased, and, in the postal questionnaire response, this view was sustained after the course finished. Interestingly, in the student evaluations ARs did not feature highly as an effective learning strategy. It is possible that this was because the students considered their ARs more as a trigger to stimulate discussion of the day and therefore outside the learning process, rather than part of the learning process itself. The findings show that the students perceived the group discussions about the dilemmas to be the place where learning happened.

All nurses are encouraged to be reflective in and on actions throughout their training and professional life. This may account for the ease with which the students undertook the process of writing ARs. The anonymity of the students' reflections was significant to them because, as students, qualified nurses were reflecting on situations that had troubled them in the past, and their role within the reflective situation may have had consequences for the outcome. Group discussion of the situation could have left the nurses feeling vulnerable and defenceless, and with the possible need to justify their action. Anonymity of the students' reflections prevented this occurring.

Active participation through group work and the lecturers' role during the ethics day were key factors in influencing the learning environment and were identified in both the formative and postal questionnaires. Both participating lecturers identified in their concept maps the phrase 'exciting to teach' as a positive outcome of the ethics teaching day. The themes of 'lecturers' support' and 'two lecturers for support' from the student postal questionnaire data substantiate this view. Two students wrote: 'Having two lecturers gives a variety of opinions and makes it more interesting' and 'Two lecturers allowed two views and more discussion.'

The importance of lecturers' facilitative abilities and characteristics is documented in the literature. Kaufman and Holmes,⁴⁴ MacPherson *et al.*,⁴⁵ Dolmans *et al.*,⁴⁶ and Caplow *et al.*⁴⁷ all found that the individual facilitative skill and ability of the lecturer impacted significantly on students' perceptions of their learning in small groups. These characteristics and skills include the ability to promote problem solving and critical thinking, an ability to create a positive group atmosphere, and a discernable interest in helping students to learn. The ability of the lecturer to act as a metacognitive guide was borne out in the findings of Steinert,⁴⁸ Mayo *et al.*⁴⁹ and Barrows.⁵⁰

The positive interpersonal relationship between the two lecturers was cited by students as important in the learning process and may have created an experience of 'intellectual excitement'³¹ for them. This was reinforced by the students' perceived confidence in the knowledge and abilities of the lecturers.

Sixty per cent of the respondents to the postal questionnaire stated that their ability to participate in ethical decision making had improved, suggesting the development of critical thinking skills. This view challenges the work of Chenoweth⁵¹ and Facione and Facione,⁵² who argue that such skills cannot be taught. However, Thompson *et al.*⁵³ actively support teaching critical thinking as an approach to ethical decision making. Although the critical thinking advocated by Thompson *et al.*⁵³ seems to have an element of time involved, only one day was set aside in the module to

develop these skills, although the whole module encouraged the development of critical thinking skills. This view was further endorsed by a student's response: 'I feel you cannot learn/understand ethical decision making in one session. It gave me an understanding of what is involved.'

Critical reflection is the ultimate skill in the development of ethical decision makers. However, measurement of this was outside the scope of this study. Consequently, the notion that AR, in conjunction with the use of guiding frameworks, enables critical thinking and reflection to come together to form critical reflection remains untested. Further research is needed to examine the impact of the AR process on the development of critical reflection.

Limitations

As with any small study it is questionable if the results are representative and reliable when compared with larger studies. Using a combined method of data collection and collecting data from both students and lecturers increases reliability. All the data demonstrated similar trends and patterns and thus the results were considered to be reliable. However, a response rate of 42% to the postal questionnaire was disappointing, and could have affected the reliability of the results.

As in all research where investigators carry out research into their own practice, bias remains a potential problem. The lecturers' enthusiasm to use AR in the ethics component of the teaching module may have introduced an element of bias in their own reflective accounts and their concept maps. However, in the light of the students' responses to the formative evaluations and the postal questionnaires, similar findings emerged to those identified by the lecturers. Evaluative data collection will continue from future cohorts of students.

Conclusion

Although the students thought that their ethical decision-making ability had improved, the collated evidence is subjective, suggesting that further research is required. However, the study's results gave the overall impression that AR is an exciting and relevant way of teaching and learning ethics. It is stimulating without too much theoretical input and gives students a clear insight into the ethical dilemmas they meet in practice. AR has the potential to influence nursing ethics education in the future. The use of AR was evaluated as part of continuing professional development and there was an intrinsic assumption that the students on this module had some prior knowledge of ethics. If AR is to be incorporated into the preregistration nursing curriculum, consideration would need to be given to the level of underlying ethics knowledge that would be needed prior to its introduction. What does emerge from this study is that team teaching contributes to the successful implementation of AR. This increases the resource requirements because two lecturers were occupied in teaching the amount of ethics that one lecturer would normally undertake. This extra resource demand would need to be weighed against the positive outcome of students' learning of ethics using AR.

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References

- ¹ World Health Organization. *Cancer pain relief and palliative care*. Geneva: WHO, 2003.
- ² Quinn FM. *Principles and practice of nurse education*, fourth edition. Cheltenham: Stanley Thornes, 2000.
- ³ Erickson J. Putting ethics into education. *Can Nurs* 1993; **89**: 18–20.
- ⁴ Cummings C. Tips for a successful ethics workshop. *Nurs Staff Dev Insider* 1994; **3**(4): 7–8.
- ⁵ Allmark P. Uncertainties in the teaching of ethics to students of nursing. *J Adv Nurs* 1995; **22**: 374–78.
- ⁶ Dinç L, Görgülü RS. Teaching ethics in nursing. *Nurs Ethics* 2002; **9**: 259–68.
- ⁷ Woods M. Nursing ethics education: are we really delivering the good(s)? *Nurs Ethics* 2005; **12**: 5–18.
- ⁸ Seedhouse D. *Ethics: the heart of health care*, second edition. Chichester: Wiley, 1998.
- ⁹ Holland S. Teaching nursing ethics by cases: a personal perspective. *Nurs Ethics* 1999; **6**: 434–36.
- ¹⁰ Hunt G. Engaged ethics: toolkit for professionals, activists and teachers. Paper presented at the Surrey Summer School: *Teaching Ethics to Healthcare Students*; 2006 July 12–14; University of Surrey, Guildford.
- ¹¹ Whitehead AN. *The aims of education*. Cambridge, MA: Cambridge University Press, 1929.
- ¹² Brown JS, Collins A, Duguid P *et al*. Situated cognition and the culture of learning. *Educ Res* 1989; **18**(1): 32–42.
- ¹³ Vygotsky L. *Mind in society*. London: Harvard University Press, 1978.
- ¹⁴ Dewey J. *How we think*. Boston, MA: Heath, 1933.
- ¹⁵ Billett S. Towards a model of workplace learning: the learning curriculum. *Stud Contin Educ* 1996; **18**(1): 43–58.
- ¹⁶ Kerka S. Constructivism, workplace learning and vocational education accessed through the Education Resource Information Center (ERIC) Digest (181) 1997. Retrieved 15 October, 2006, from: <http://www.ericdigests.org/1998-1/learning.htm>
- ¹⁷ Bergman R. Ethics: concepts and practice. *Int Nurs Rev* 1973; **20**: 140–41.
- ¹⁸ Falchikov N. *Learning together: peer tutoring in higher education*. London: Routledge Farmer, 2001.
- ¹⁹ Johnson SD, Thomas RG. Implications of cognitive science for industrial design in technology education. *J Tech Stud* 1994; **20**(1): 33–45.
- ²⁰ Boyd E, Fales A. Reflective learning: key to learning from experience. *J Humanistic Psychol* 1983, **23**: 99–117.
- ²¹ Duke S, Appleton J. The use of reflection in a palliative care programme: a quantitative study of the development of reflective skills over an academic year. *J Adv Nurs* 2000; **32**: 1557–68.
- ²² Johns C. *Becoming a reflective practitioner*, second edition. Oxford: Blackwell, 2004.
- ²³ Burns S, Bulman C. *Reflective practice in nursing: the growth of the professional practitioner*, second edition. London: Blackwell Science, 2000.
- ²⁴ Daly W. Critical thinking as an outcome of nursing education. What is it? Why is it important to nursing practice? *J Adv Nurs* 1998; **28**: 323–31.
- ²⁵ Youngblood N, Beitz JM. Developing critical thinking with active learning strategies. *Nurs Educ* 2001; **26**(1): 39–42.
- ²⁶ Anderson LR. *Improve the quality of instruction through interdisciplinary internationally-oriented faculty resource teams*. Washington DC: Fund for the improvement of post-secondary education. 1991. Retrieved through the Education Resource Information Center (ERIC) Reproduction Service no. ED369 309, 11 July, 2007, from: <http://www.ERIC.ed.gov>
- ²⁷ Crossman DM, Behrens SG. *Affective strategies for effective learning*. Paper presented at the Annual Conference of the Association for Educational Communications and Technology, 1992. Retrieved through the Education Resource Information Center (ERIC) Reproduction Service no. ED 344 573, 11 July, 2007, from: www.ERIC.ed.gov
- ²⁸ Fu GS, Chase M. Team teaching as a form of staff development: when are two teachers better than one? *Guidelines* 1991; **13**(2): 81–87.
- ²⁹ Garner AE, Thillen C. Is your school of nursing ready to implement interdisciplinary team teaching? *J Nurs Educ* 1997; **16**(7): 27–30.

- ³⁰ Herzog CJ, Lieble C, Arts and Science/School of Education. *A cooperative approach to the teaching of geography*. Proceedings of the National Conference on Successful College Teaching, Orlando, FL, 1994. Retrieved through the Education Resource Information Center ERIC Document Reproduction no. ED 390 470, 11 July, 2007, from: www.ERIC.ed.gov
- ³¹ Rinn FJ, Weir SB. *Improving college and university teaching*. 1984; **32**(1): 5–10. Retrieved through the Education Resource Information Center ERIC Document Reproduction no. EJ 298 332, 12 September, 2007, from: www.ERIC.ed.gov
- ³² Hatcher T, Hinton B, Swartz J. Graduate students' perceptions of university team teaching. *Coll Stud J* 1996; **30**(3): 367–76.
- ³³ Nead MJ. A team taught business course. *Bus Educ Forum* 1995; **49**(3): 33–35.
- ³⁴ Colarulli GC, McDaniel EA. Interdisciplinary general education: five ways of promoting good freshman teaching and learning. *J Freshman Year Exp* 1990; **2**(1): 107–17.
- ³⁵ Bowen BA, Nantz KA. Where the breakthroughs came: team teaching across the disciplines. *Issues Writing* 1992; **5**(1): 23–36.
- ³⁶ Jongeling S. Practice what we preach: experience cooperative small group learning and feel the difference. Higher education in transition. In: Pettigrove M, Pearson M eds. *A collection of papers presented at the 20th annual National Conference of Higher Education Research and Development Society of Australasia*; 1994 July 6–10; Australian National University, Canberra, ACT. Milperra, NSW: HERSDA, 1995 [pagination not available].
- ³⁷ Steinert Y. Student perceptions of effective small group teaching. *Med Educ* 2004; **38**: 286–93.
- ³⁸ Johnson D, Johnson R, Smith K. *Co-operative learning: increasing college faculty instructional productivity*. ASHE_ERIC Higher Education Report 1991; (4). Washington, DC: George Washington University, 1991.
- ³⁹ Goodsell A, Maher M, Tinto V. *Collaborative learning: a sourcebook for higher education*. University Park, PA: National Centre on Post-Secondary Teaching, Learning and Assessment, 1992.
- ⁴⁰ Parlett M, Hamilton D. *Evaluation as illumination*. Edinburgh: Centre for Research in the Educational Sciences, 1972.
- ⁴¹ Parlett M, Dearden G eds. *Introduction to illuminative evaluation*. Cardiff-by-the Sea, CA: Pacific Sounding Press, 1977.
- ⁴² Miller C, Tomlinson A, Jones M. *Learning styles and facilitating reflection*. (Researching Professional Education Series.) London: English National Board for Nursing Midwifery and Health Visiting, 1994.
- ⁴³ Ellis L. Illuminative case study design: a new approach to the evaluation of continuing professional education. *Nurs Res* 2003; **10**(3): 48–59.
- ⁴⁴ Kaufman D, Holmes D. Tutoring in problem-based learning: perceptions of teachers and students. *Med Educ* 1996; **30**: 371–77.
- ⁴⁵ MacPherson R, Jones A, Whitehouse C, O'Neill P. Small group learning in the final year of a medical degree: a quantitative and qualitative evaluation. *Med Teach* 2001; **23**: 494–502.
- ⁴⁶ Dolmans D, Wolfhagen I, Scherpbier A, Vleuten CP. Relationship of tutors' group-dynamics skills to their performance ratings in problem-based learning. *Acad Med* 2001; **76**: 473–76.
- ⁴⁷ Caplow J, Donaldson J, Kardash C, Osokawa M. Learning in a problem-based medical curriculum: students' conceptions. *Med Educ* 1997; **31**: 440–47.
- ⁴⁸ Steinert Y. Student perceptions of effective small group teaching. *Med Educ* 2004; **38**: 286–93.
- ⁴⁹ Mayo P, Donnelly MB, Nash PP, Schwartz RW *et al*. Student perceptions of tutor effectiveness in a problem-based surgery clerkship. *Teach Learning Med* 1993; **5**: 227–33.
- ⁵⁰ Barrows H. *The tutorial process*. Springfield, IL: Southern Illinois University, 1988.
- ⁵¹ Chenoweth L. Facilitating the process of critical thinking in nursing. *Nurs Educ Today* 1998; **18**: 281–92.
- ⁵² Facione NC, Facione PA. *Holistic critical thinking scoring rubric*. Millbrae, CA: California Academic Press, 1994.
- ⁵³ Thompson IE, Melia KM, Boyd KM. *Nursing Ethics*, fourth edition. London: Churchill Livingstone, 2003.

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