

**Reflective Practice for Performance Improvement**  
**Background Paper**  
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**Introduction**

The practice of reflecting on one's personal experience in carrying out the tasks of one's profession, in order to identify how one's performance may be improved, is now recognized as possibly the most effective process for life-long learning, for the translation of research findings into practice, for continuing education in the health and human services professions, and for performance improvement.

A growing number of systematic studies and evaluations of the effectiveness of different forms of continuing education have consistently found that the 'academic model' of continuing education – based on lectures, texts, and didactic teaching – is ineffective in helping health professionals to change to more efficacious and efficient practices, and fails to improve the desired improvements in outcomes for patients. During the 1980s and 1990s, many controlled scientific evaluations of the effectiveness of continuing medical education programs were conducted, with criteria measuring the extent to which they changed the practice of physicians, and whether these changes in practice resulted in improved outcomes for patients. These studies and the meta-analytic reviews of these studies consistently found that the prevalent academic didactic model of formal continuing medical education (CME) was not effective; in contrast, they found that active involvement of the learners in concrete activities tied to their working experience and areas of interest, undertaken in the contexts of their practices – often called by the general term 'reflective practice' – proved to be effective in changing health professionals' practices and improving the outcomes of care for patients. Some examples of the findings of these research studies are the following:

"Broadly defined CME interventions using practice-enabling or reinforcing strategies consistently improve physician performance and, in some instances, health care outcomes." (p. 1111)

(Davis, David A.; Thomson, M.A.; A.D. Oxman, A. D.; and Haynes, R.B. (1992).  
Evidence for

the effectiveness of CME: A review of 50 randomized controlled trials. *JAMA*, 268(9): 1111-1117.)

“We found 99 trials, containing 160 interventions. . . Effective change strategies included reminders, patient-mediated interventions, outreach visits, opinion leaders, and multifaceted activities. Audit with feedback and educational materials were less effective, and formal CME conferences or activities, without enabling or practice-reinforcing strategies, had relatively little impact.” (p. 700)

(Davis, D.A.; Thomson, M.A.; Oxman, A.D.; and Haynes, R.B. (1995). Changing physician performance. A systematic review of the effect of continuing medical education strategies. *JAMA*, 274(9): 700-5.)

“Our data show some evidence that interactive CME sessions that enhance participant activity and provide the opportunity to practice skills can effect change in professional practice and, on occasion, health care outcomes. Based on a small number of well-conducted trials, didactic sessions do not appear to be effective in changing physician performance.” (p. 867)

(Davis, D.; O’Brien, M.A.; Freemantle, N.; Wolf, F.M.; Mazmanian, P.; and Taylor-Vaisey, A. (1999). Impact of formal continuing medical education: do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? *JAMA*, 282(9): 867-74.)

“Interactive techniques (audit/feedback, academic detailing/outreach, and reminders) are the most effective at simultaneously changing physician care and patient outcomes. . . Didactic presentations and distributing printed information only have little or no beneficial effect in changing physician practice.” (p. 380)

(Bloom, B.S. (2005). Effects of continuing medical education on improving physician clinical care and patient health: a review of systematic reviews. *International Journal of Technology Assessment in Health Care*, 21(3): 380-5.)

**This Evidence has been largely Ignored**

Despite these findings, academic-style didactic presentations and related materials have continued to be the dominant form of continuing education promoted and supported by professional associations in their annual meetings and association-sponsored specialized CME programs. The academic model programs are more straightforward to organize and conduct, and they provide financial surpluses for the associations; in contrast, the truly effective continuing education practices involving reflection-on-practice must be locally-based and are not easy to organize or conduct since they depend so heavily on the personal initiative of the learner. Nevertheless, these reflective practice approaches are based on what is known about effective adult learning: active reflection-on-practice and activities that involve personal involvement in experimenting with potential new practices. These effective continuing education approaches, however, do not provide much in the way of revenues for academic institutions or the associations that sponsor continuing education. Unfortunately the financial incentives of professional associations and university medical centers, and the convenience of the academic model CME program presenters, are opposed to what health professionals need for improving their practices and improving the outcomes for patients.

“Traditional CME is a time-based system of credits awarded for attending conferences, workshops, or lectures. The activities are typically teacher-initiated, using passive education models (e.g. lecture). Recent studies suggest that physicians benefit from reflection on their progress and development of their next learning projects or questions. What can physicians do? Physicians should reconsider the perspective of CME consisting solely of lectures, grand rounds, or medical staff meetings. They should participate in educational activities that offer personal involvement in thinking about professional practice and in identifying learning needs. To achieve its greatest potential, CME must be truly continuing, not casual, sporadic, or opportunistic. Physicians must recognize the ongoing opportunities to generate important questions, interpret new knowledge, and judge how to apply that knowledge in clinical settings. Essentially, this means that CME must be self-directed by the physician, including management of the content of and context for learning. In turn, the opportunities for self-directed learning must enhance the knowledge and skills required for critical reflection on practice and measurement of improvement.” ( pp. 1059-1060)

(Mazmanian, Paul E.; and Davis, David A. (2002). Continuing medical education and the physician as a learner: Guide to the evidence. *JAMA*, 288(9): 1057-1060.)

### **The Adoption of Reflective Practice Methods**

This evidence of the ineffectiveness of the continuing education methods that have been prevalent in CME programs – didactic presentations at conferences, etc. – has motivated the search for approaches that give evidence of effectiveness, and that are consistent with what is known about adult learning. Studies of adult learning and of the acquisition of professional expertise have led to an official focus in the U.K. and elsewhere on various approaches that broadly are called “reflective practice.”

“The Royal Colleges and their Faculties have moved continuing professional development up the agenda of doctors in the UK. The low educational value and failure to change professional practice of much continuing medical education has led to criticism of its emphasis on formal, didactic teaching and academic knowledge. The ubiquitous scientific or technical bias in medical education makes questionable assumptions about the nature of professional knowledge, how professionals learn, and the linkage of theory and practice in professional work. Given its narrow conception of professional knowledge, it is hardly surprising that the effectiveness of continuing medical education has proven difficult to evaluate. These points of criticism suggest that a more systematic and coherent approach to continuing education is required. The adoption of the concept of continuing professional development, which draws on learning by reflective practice, marks an important step in this direction. Continuing professional development emphasizes

self-directed learning, professional self-awareness, learning developed in context, multidisciplinary and multilevel collaboration, the learning needs of individuals and their organizations, and an inquiry-based concept of professionalism. It also involves a widening of accountability to patients, the community, managers and policymakers, and a form of evaluation which is internal, participatory and collaborative rather than external and scientific in character.”

(Brigley, S., Young, Y., Littlejohns, P., and McEwen, J. (1997). Continuing education for medical professionals: a reflective model. *Postgraduate Medical Journal*, 73(): 23-26.)

The seminal work of Donald Schon, in describing the way in which experts develop their expertise in the first decade or so of their careers, and then continue to refine and

broaden that expertise through reflection on their experiences, has stimulated and oriented much of the inquiry into reflective practice approaches:

“It is this concept that knowledge emerges from actions and practice experiences that spearheaded writers as Schon (1983) to develop the concept of reflection as means for acquiring and developing professional knowledge. Schon (1983, 1987) was concerned that research based knowledge encapsulated in theories provided linear, certain and clear-cut solutions, but practice in reality is non-linear, uncertain, complex and conflicting. Therefore, research based knowledge as expressed by positivism does not provide answers to practitioners and does not guarantee best practice. According to Schon, practitioners need to implement reflective techniques to name and frame unique problematic situations and from there on, to find a workable unique solution to their problems. Furthermore, Schon advocated that, by consciously analysing the problematic situation and the implemented actions, lessons can be learned that can be used to inform future practice on what works and what is more effective. . .” (p. 220)

(Mantzoukas, Stefanos (2007). A review of evidence-based practice, nursing research and reflection: leveling the hierarchy. *Journal of Clinical Nursing*, 16: 214-223.)

Reflective practice is now being promoted extensively in the nursing profession and in other health-related professions.

“ . . . the nursing literature has alleged from its conception as a profession that it utilizes various types of knowledge, such as practical knowledge, personal knowledge, aesthetic knowledge and experiential knowledge. Whilst these types of knowledge were considered essential for providing information necessary to treat patients in a unique, holistic and individualistic manner, nonetheless they were largely ignored because on one hand they could not be formally developed or taught and on the other hand they remained in the realm of unconscious doing and intuitive practice. However, reflection and reflective techniques of practice provided the epistemological justification of the worthiness of these types of knowledge. Most importantly, reflection provided structure and guidance to transpose these unconscious and intuitive types of knowledge into conscious types and allowed for linkages to be developed with previous knowledge, formal theories and research knowledge. In this way, a repertoire of cases could be built that would enable justification of practice.” (p. 220)

(Mantzoukas, Stefanos (2007). A review of evidence-based practice, nursing research and reflection: leveling the hierarchy. *Journal of Clinical Nursing*, 16: 214-223.)

## **The Methodology of Reflective Practice**

There are many ways in which 'reflective practice' can be undertaken. Common to all of them, however, are the two core activities of first reflecting on one's personal experience and on one's personal perception of how the activities one has engaged in could be revised for better outcomes, and second, progressively articulating the conscious results of these reflections in explicit ways, such as writing descriptions of ideal ways to undertake an intervention.

"In summary, reflection is viewed as a process of transforming unconscious types of knowledge and practices into conscious, explicit and logically articulated knowledge and practices that allows for transparent and justifiable clinical decision making. . . The underpinning element of reflection is primarily the experiences the practitioner possesses and the individual patient with specific needs. Equally, important is the conscious effort of the practitioner to link this reflective knowledge with other types of knowledge and consequentially, develop a set of case repertoires.

Eventually, reflection is viewed as a process that can be compartmentalized in a series of steps that practitioners can follow." (pp. 220-221)

(Mantzoukas, Stefanos (2007). A review of evidence-based practice, nursing research and reflection: leveling the hierarchy. *Journal of Clinical Nursing*, 16: 214-223.)

Epstein has described reflective practice as an on-going process of learning in the midst of everyday professional practice, by being mindful of what one is experiencing and doing, and mentally reviewing how the practice is achieving its objectives:

"Mindful practitioners attend in a nonjudgmental way to their own physical and mental processes during ordinary, everyday tasks. This critical self-reflection enables physicians to listen attentively to patients' distress, recognize their own errors, refine their technical skills, make evidence-based decisions, and clarify their values so that they can act with compassion, technical competence, presence, and insight. Mindfulness informs all types of professionally relevant knowledge, including propositional facts, personal experiences, processes, and know-how, each of which may be tacit or explicit. Explicit knowledge is readily taught, accessible to awareness, quantifiable and easily translated into evidence-based guidelines. Tacit knowledge is usually learned during observation and practice, includes prior experiences, theories-in-action, and deeply held values, and is usually applied more inductively. Mindful practitioners use a variety of means to enhance their ability to engage in moment-to-moment self-monitoring, bring to consciousness their tacit personal knowledge and deeply held values, use peripheral

vision and subsidiary awareness to become aware of new information and perspectives, and adopt curiosity in both ordinary and novel situations. In contrast, mindfulness may account for some deviations from professionalism and errors in judgment and technique. Although mindfulness cannot be taught explicitly, it can be modeled by mentors and cultivated in learners. As a link between relationship-centered care and evidence-based medicine, mindfulness should be considered a characteristic of good clinical practice.” (p. 833)

(Ronald M. Epstein (1999). Mindful practice. *JAMA*, 282(9): 833-839.)

This practice-oriented reflection draws on the formal knowledge of the profession, but in the process of applying it to concrete cases transforms it into practice knowledge. This applied practice knowledge makes explicit and conscious the tacit understanding that has guided action in the complex and uncertain interpersonal dynamics of clinical encounters. Reflecting on the experience of what is happening in one’s practice can bring into consciousness the underlying formal knowledge that has been applied in a particular case, but is not immediately in one’s awareness. This applied version of the formal knowledge of one’s discipline can then be documented for one’s case repertoire, and shared with colleagues for comment and refinement:

“Short of firsthand study, only documents produced by the rank-and-file practitioners and their clients can show us the ultimate transformation by which a considerably modified, even contrary, version of formal knowledge is finally expressed in living practice.” (p. 229)

(Eliot Freidson (1986). *Professional Powers: A Study of the Institutionalization of Formal Knowledge*. Chicago: University of Chicago Press.)

This reflective practice documentation by practitioners, in order to be useful for the building of a discipline’s practice-oriented knowledge base, need to describe in considerable detail the concrete circumstances and context in which decisions and actions are undertaken, along with descriptions of the practices or interventions and the outcomes that could be observed from the practice.

“. . . knowledge emerging from reflective analysis is a process that can be compartmentalized in a series of steps that practitioners can follow. These steps include

- (i) the description or framing of feelings, situations and context;
- (ii) the analysis and evaluation of the situation by using various types of knowledge;

- (iii) verbalizing understandings, drawing conclusions and developing a hypothesis or an action plan about the specific situation;
- (iv) implementing the action plan;
- (v) evaluating the outcomes of the action plan and integrating the unique situation with other types of knowledge and experiences.” (p. 220)

(Mantzoukas, Stefanos (2007). A review of evidence-based practice, nursing research and reflection: leveling the hierarchy. *Journal of Clinical Nursing*, 16: 214-223.)

### **Implementing Reflective Practice**

Reflective practice can be implemented in various ways. When implemented effectively, however, it will result in a fairly extensive number of case descriptions and analyses of the practice experiences of practitioners. These cases will be described in sufficient detail to enable their use by other practitioners as systematic plans for possibly conducting similar practices for closely similar contexts and cases. When situations and contexts arise that are closely similar to one or more of the case descriptions that are on file in the shared repertoire of practices, the applied knowledge articulated in the practice descriptions offers a starting point for mindful practice. Developing detailed case descriptions from reflection-on-practice, although not easy, is the sure path toward performance improvement in a professional discipline.

“In dealing with situations characterized by uncertainty and uniqueness – in other words, situations where formalized, positivistic knowledge may be of limited practical utility – Schon suggested that professionals reflect. By reflecting-in-action, practitioners use a form of tacit knowledge, in which the ‘science’ or ‘theory’ informing activity is embedded in the activity itself. As such, Schon observed, reflective professionals may have great difficulty in articulating the rationale for what they do.” (p. 279)

(Hannigan, Ben (2001). A discussion of the strengths and weaknesses of ‘reflection’ in nursing practice and education. *Journal of Clinical Nursing*, 10: 278-283.)

Articulating the formal rationale of innovative practices tailored for particular needs and problematic circumstances is the process of building a professional discipline. It is a shared responsibility among practitioners of a discipline. These reflective practice descriptions of interventions will need to be evaluated and refined through cooperative

discussion among the discipline's practitioners, and need to be tested for usefulness and validity, for inclusion in the discipline's repertoire of practices.

When the submission of case and practice descriptions is a requirement of some sort for advancement or as part of a formal educational program for students, the possibility of creative writing instead of reflection-on-experience is a problem.

"A major issue with reflective practice is truth. Are students only writing what they think their tutor wants to hear or is it their true lived experience, or writing items, which will help them achieve academic success? This is a major barrier to strengthening the knowledge base. . . Also educators themselves must be comfortable and knowledgeable about using reflective practice before they can teach students how to utilize it. Students may not recall events exactly as they happened. Also time constraints and workload impinge on contemporaneous writing of the event and the longer before it is written, the poorer the recall. However, as continuing professional development is necessary for the nursing profession, utilization and knowledge of reflection is increasing." (p. 53)

(Moloney, Josephine and Hahessy, Sinead (2006). Using reflection in everyday orthopaedic nursing practice. *Journal of Orthopaedic Nursing*, 10(): 49-55.)

The remedy for this possible problem is the requirement that observational terms be provided with operational definitions, and that the descriptions of practice be reviewed in peer discussions.

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Schon, Donald (1987). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass.

### **A Chronological List of a few Articles on Reflective Practice in Nursing**

Kathryn A. Getliffe (1996). An examination of the use of reflection in the assessment of practice for undergraduate nursing students. *International Journal of Nursing Studies*, 33(4): 361-374.

Bert Teekman (2000). Exploring reflective thinking in nursing practice. *Journal of Advanced Nursing*, 31(5): 1125-1135.

Bev Williams (2001). Developing critical reflection for professional practice through problem-based learning. *Journal of Advanced Nursing*, 34(1): 27-34.

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Leena Liimatainen, Marita Poskiparta, Paivi Karhila, and Auli Sjogren (2001). The development of reflective learning in the context of health counseling and health promotion during nurse education. *Journal of Advanced Nursing*, 34(5): 648-658.

Lisa A. Ruth-Sahd (2003). Reflective practice: a critical analysis of data-based studies and implications for nursing education, *Journal of Nursing Education*, 42(11): 488-497.

Judith MacIntosh (2003). Reworking professional nursing identity. *Western Journal of Nursing Research*, 25(6): 725-741.

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Karen Mann, Jill Gordon, and Anna MacLeod (2007). Reflection and collective practice in health professions education: a systematic review. *Advances in Health Science Education*, (Nov 5 e-print): 27 pages

Anita Duffy (2007). A concept analysis of reflective practice: determining its value to nurses, *British Journal of Nursing*,

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## **Notes**

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