Nurses’ learning styles: promoting better integration of theory into practice

This study explores whether recognising learning styles could help to integrate theory and practice.

**AIM**
This study aims to highlight the importance of recognising individual learning styles, with the purpose of improving future training in the organisation in which the study was conducted. The hypothesis is that many training programmes lack effectiveness because teaching methods do not match individuals’ learning styles.

**METHOD**
The VAK questionnaire (Chislett and Chapman, 2005) consists of 30 questions to which respondents are asked to answer A, B or C. A self-selecting sample ($n=61$) was identified from within the organisation, an independent health and social care provider in Cheshire. Participants were asked to complete the VAK questionnaire while attending training events within the organisation. They were given questionnaires at the start of the events, to be completed immediately. Other staff were approached directly in their work setting and asked to complete questionnaires. Because of the way the survey was conducted a response rate of 100% was achieved. This method of data collection can be problematic as there is increased potential for bias associated with self-selecting and convenience sampling techniques.

The organisation in which this research was conducted employs approximately 200 nursing staff. Therefore, the sample size represents 32% of the total population. Because of the relatively small sample size further work would need to be carried out to establish the data’s reliability and applicability.

The questionnaire was used to explore staff learning styles in three main categories – visual, auditory and kinaesthetic learning.

People with a visual style tend to learn mostly through ‘sight’ – they often think in pictures and learn best from visual displays. Those with an auditory learning style will benefit most from listening to lectures, speeches and oral sessions. They prefer to hear an explanation of something rather than read about it. People with a kinaesthetic learning style prefer to carry out a physical activity, rather than listening to a lecture or merely watching a demonstration.

**LITERATURE REVIEW**
The current training model in the organisation concerned is based on traditional approaches where a lead facilitator attempts to teach a group of healthcare staff a clinical subject by sharing his or her knowledge and expertise. This approach uses a range of presentation skills which are usually relatively didactic, drawing on andragogical teaching methods in parts.

Training takes place in groups of 12–20 staff and the courses last for 1–3 days. Little consideration is given to group dynamics including: range of intellectual capability; previous experience; personality types; or individual learning styles. The group setting may be useful in contributing to learning but equally it may inhibit the sort of learning benefits we hope will be attained.
The training philosophy is crudely based on supply and demand, meeting targets and ensuring compliance with legal frameworks for the provision of mandatory training programmes. Staff are largely ‘sent’ or ‘instructed’ to attend under the label of mandatory training. The programmes are, however, meaningful, evidence-based and built on principles of best practice with a clear purpose of improving clinical care.

Currently low emphasis is placed on work-based practice supervision and mentorship. There is limited follow-up from training courses to see whether knowledge is being applied to practice, although most courses do involve completing a workbook during training for CPD evidence. Santos and Stuart (2003) highlighted that even though the principal aim of most training programmes is to improve performance, organisations often devote little attention to evaluating training effectiveness.

There is much evidence suggesting the current training model used by the organisation in which this study took place has limitations in relation to its passive and didactic teaching methods. There has been a cultural shift, particularly in relation to CPD, which is less concerned about classroom-based teaching and more concerned about interactive workplace learning.

Research on effective training reflects a need for a problem-centred, work-based learning programme incorporating high levels of clinical supervision and mentorship. Coffey (2004) found that responses to questions on the type of training nurses prefer demonstrates overwhelming interest in an ‘on-the-job’ training model. These findings are consistent with the learning style results of the VAK questionnaire.

Beck et al (2002) argued research has shown active learning is far more effective than passive learning. Fig 1 shows the percentage of information retained by participants 48 hours after obtaining it through a range of methods. It clearly demonstrates that active processes (at the bottom of the pyramid) are far more effective than the passive ones (at the top).

The research reviewed has demonstrated a need to remodel the organisation’s training system to adopt a more learner-centred, work-based approach. Severinsonn (1998) argued that education that takes place in clinical settings aims to train and develop logistical reasoning and thinking. It is in the clinical environment that students have the opportunity to integrate theory with practice to understand the unique nature of caring.

RESULTS
The findings suggest that staff predominantly prefer visual (n=34) or kinaesthetic (n=17) learning, with auditory (n=12) the least preferred. This means the current training programme is not meeting their learning needs and the organisation needs to review its strategy. Failure to do so means training will continue to have reduced effectiveness. This could lead to a workforce lacking the appropriate skills to fulfil their role competently. This could in turn affect patient care and increase the risk of unsafe practice.

It is possible that staff will be unsure of their role or what is expected of them as the professional development programme is not meeting their learning needs. In the long term, ineffective learning may lead to decreased motivation because staff members lack confidence in their ability to perform their role effectively, or through increased sickness rates and high staff turnover. This leads to a lack of continuity of care and destabilises the therapeutic environment.

A change in practice in a one-to-one or small group situation, with training staff using visual and creative research-based teaching strategies would be more effective. These strategies would include techniques such as supervised practice, mentorship, evidence-based learning and problem-based learning, which would lead to a more competent workforce.

DISCUSSION
Staff members’ ability to learn and then apply learning to practice has a significant impact on delivering effective clinical care. A skilled and competent workforce ensures patient safety, and will be able to recognise and respond to clinical need more appropriately.

I believe that the knowledge and application of a range of learning theories, concepts and approaches is the foundation for building and managing effective learning environments. An eclectic model is therefore proposed, which combines the individual’s complex learning needs with the organisation’s practice requirements.

In considering an adapted practice model, substantial research highlights the usefulness of work-based mentorship and supervision as part of effective training strategies. Studies claim the one-to-one supervisory relationship was the most important element in clinical instruction (Saarikoski and Leino-Kilpi, 2002). Mentorship also facilitates learning opportunities, and supervises and assesses staff in the practice setting.

Terminology frequently used to describe a mentor includes teacher, supporter, coach, facilitator, assessor, role model and supervisor (Hughes, 2004; Chow and Suen, 2001). This is supported by models advocating self-directed, evidence-based and problem-based learning.

It is beneficial to provide people with the skills to seek, analyse and use information effectively, anticipating that through the use of such models they will more successfully implement theory in practice.

Much of the available research tends to draw similar conclusions, that is, that training should not be confined to the classroom and should include practical as well as theoretical aspects. There should also be good supervision which promotes accountability while providing feedback in a supportive environment (Saravana et al, 2006; Nancarrow and Mackey, 2005).
It is important to understand the theoretical foundation for describing how people learn and perform within an organisation. If learning methods differ from teaching methods staff will never develop a full understanding of the subject and theory can never be completed applied to practice.

Experiential learning theory
Knowing a person’s learning style enables learning to be orientated according to their preferred method. Kolb (1984) developed a model that provides a framework for identifying a person’s learning style, and suggested that learning is a process as well as an outcome and that it involves four stages (see Box 1).

Kolb’s theory states that the different stages are associated with distinct learning styles:
- Activist – Active experimentation (simulations, case study, homework)
- Reflector – reflective observations (logs, journals, brainstorming)
- Theorist – abstract conceptualisation (lectures)
- Pragmatist – concrete experience (observations, application to practice)

Source: Kolb (1984)

Reflective practice models
Reflection is an important tool when attempting to integrate theory with practice. Severinson’s (1998) study indicated that personal growth enhanced participants’ skills and ability to reflect on clinical situations. The reflective approach, focusing on ways in which knowledge can be used in practice, enables nurses to develop their personal knowledge and practice.

Reflective practice, therefore, offers nurses an opportunity to review their decisions and evaluate learning to learn from past lessons and positively influence practice in the future. Watson et al (2002) hypothesised that experiential learning is an essential aspect to reflect on and analyse one’s own practice. Reflection is presumed to have a key role either in experiential learning or in enabling experiential learning.

For nurses to successfully implement theory into practice, they must be able to reflect critically on their own practice and the implications of their interventions.

Some nurses may find reflection difficult due to the self-awareness needed to critically reflect in an analytical manner. This is because practitioners have been socialised to see themselves as passive recipients of knowledge rather than as critical constructors (Severinson, 1998). Teekman (2000) found that reflective thinking included the cognitive activities of comparing and contrasting phenomena, recognising patterns, categorising perceptions, framing and self-questioning to create meaning and understanding.

Factors facilitating or impeding the change process
The learning environment has been recognised as either encouraging or impeding a positive learning experience for nurses. However, giving them the appropriate level of learning support and supervision has a number of specific difficulties. For much of their time junior nurses work without supervision from a more senior peer professional.

Mentors are unlikely to be able to provide the level of mentorship and supervision required to have a significant impact on learning, without increasing their workload. Coffey (2004) reported that while nursing staff welcomed involvement in training and assessment, 62% of senior nurses were uninterested in being personally involved in
training. Reasons given were mainly ‘no time’ and complaints of an ‘already heavy workload’. Some nurses also felt they were ‘not qualified to teach’.

Nurses are not a homogenous group and variations may occur in the following: individual people's emotional states (Antonacopoulou and Gabriel, 2001); motivation to learn; personality type; prior knowledge and experience; attitude towards their role (Santos and Stuart, 2003); and cognitive ability (Jones, 1998).

The work environment is also an important variable and may be an obstacle to implementing learning. For example, this may be difficult if an individual feels unsupported by other team members. Such variables could threaten patient safety and care quality and are also likely to affect how the individual responds to any kind of learning opportunity within the organisation.

Antonacopoulou and Gabriel (2001) argued that emotion is an important factor in the learning process. They postulated that emotion and learning are interrelated, interactive, interdependent and something that many organisations tend to neglect. Antonacopoulou and Gabriel (2001) reported that emotion can inhibit learning and that certain people may be anxious about all types of adult learning. These worries may be triggered by earlier experiences of failure or by threatening feelings of uncertainty, dependency and vulnerability.

Education in an organisation is based on the single dominant cultural factor rather than recognising multiple cultural differences and this may also impede the change process. Pewewardy (2002) reported that differences in learning styles may be influenced by language, culture and heritage. They also highlighted that men and women learn differently. An organisation that employs nurses from a variety of ethnic backgrounds must accommodate individual learning needs. For example, people whose first language is not English may find didactic training courses difficult to follow.

IMPLICATIONS

There are several ways to assess the application of theory into practice. These include: a more empowered and motivated workforce; reduction in incidents/accidents because staff apply good theory-based practice; improved performance standards; increased staff retention; and decreased sickness levels. In parallel to this, outcome evaluation is concerned with establishing the outcomes of training and development programmes. The focus may be on individuals and any changes in their knowledge, skills, attitudes and behaviour, individual and/or organisational performance or on changes in organisational culture and climate.

This is evident in the results of a study by Santos and Stuart (2003). They studied the perceived outcomes for 165 participants of an organisational training programme. The results demonstrate that individuals benefit from improved confidence and self-efficacy and increased enjoyment in work, and need less supervision. Santos and Stuart (2003) also reported that if people feel there has been investment in them, their trust in the organisation increases. This has an indirect benefit for their work and ultimately for performance-related issues.

Well-designed and administered training programmes can be expected to lead to improvements in nurses’ overall job performance. However, in my experience, a positive reaction to training does not necessarily predict the learning it produces. Organisations should determine whether the training provided was effective in improving participants' practice, rather than simply asking their opinion of the training.

This review has highlighted methods of closing the theory-practice gap through effective learning. Harrison (1993) hypothesised that people have learnt something when they have acquired new or changed knowledge, skills or attitudes that stay with them, becoming part of regular behaviour or performance. The relatively permanent change in behaviour is brought about by practising something they have been taught, until it has been fully absorbed. It is then possible to state that theory has been applied to practice.

Where training has been successful it can lead to a more skilled and competent workforce, which in turn improves clinical outcomes and patient experiences. Santos and Stuart (2003) argued that the impact of training is linked by a cause-and-effect chain, whereby 'training leads to reactions, which lead to learning, which leads to changes in job behaviour, which leads to changes in the organisation, which lead to changes in the achievement of ultimate goals'.

REFERENCES


CONCLUSION

Consideration for individual learning styles is fundamental in designing effective training programmes. The results highlight that most staff prefer a visual learning style and increased emphasis should be given to work-based learning rather than traditional classroom-based didactic teaching methods.

Owing to the study’s limitations, such as the small sample size, further research would be useful to establish practical solutions to implement work-based learning programmes, and how individual learning programmes can be facilitated within organisations. ■

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