DISCUSSION PAPER

NTGPE has expanded its educational and training programs significantly over the past two years. Consequently, it is timely to review the way we approach teaching and learning in the various programs NTGPE offers.

Historically, vocational training methodologies have been common place in teaching medical students, junior doctors, registrars and international medical graduates. Vocational training models have a tendency to rely heavily on a master/apprenticeship model of training (sic).

Such an approach to training makes several assumptions. For example, expert/experienced clinician equals expert/experienced teacher. Although professional experience plays a key role in preparing clinicians to be teachers as well as learners, the model assumes that all people learn from their experiences. The apprenticeship model also assumes that the majority of clinically based experiences contribute to the clinician's understanding of their craft. This is not necessarily the case. There is a plethora of research which indicates that learning and problem solving are optimised when the learning activity is well planned and that the relationship between the expert and the novice is one of reciprocation rather than "master/servant".

Devaluing clinical experience would be a misgiving; nevertheless assuming someone with 20 years experience is abreast of the latest evidenced based practices is also a misnomer. The reality is that the amount of research and publications produced annually makes it near impossible for teachers and clinicians to keep abreast of recent developments and possible changes in approaches to patient care.

Consequently the challenge is reflected in a collective answer to questions such as,

- How do we (as educational providers), ensure that the majority of learning experiences are positive[1] ?
- What teaching/learning experiences do we value and why?
- How do we ensure that we have a consistent approach to teaching and learning in a variety of contexts?
- Why have we adopted a certain methodology in the first instance?
- How do we ensure inter-rater reliability when undertaking formative and summative assessments?
- How do we evaluate our own performance?

As a quality improvement exercise it is imperative that NTGPE has an explicit and consistent approach to teaching and learning in a variety of settings. The advantages of adopting a philosophy, including values, teaching learning methodologies, learning processes and outcomes and evaluative frameworks is that it should promote consumer satisfaction. It also allows NTGPE to measure its performance against agreed upon criteria. Some of which are process orientated whilst others are outcomes focused. The data collected can then be used to assist us to improve the quality of our programs.

[1] Positive learning experience does not mean the clinical situation or patient outcome is always positive. Rather the learner and hopefully the teacher have further developed problem solving skills and/or learnt something from the experience.

As you are probably aware they are numerous approaches all with their advantages and disadvantages. Examples include behavioralist, humanist, cognitive, experiential, neural, and materialism learning theories. Approaches include pedagogy, critical pedagogy, problem based learning and action learning.

I do not propose that we passively accept this approach. It is offered as a catalyst to facilitate discussion about how we wish to articulate and formalise NTGPE's approach to teaching and learning.

Action Learning

Action Learning is a means of development, intellectual, emotional or physical, that requires its subjects, through responsible involvement in some real, complex and stressful problem, to achieve intended change sufficient to improve his or her observable behaviour henceforth in the problem field. Learning-by-Doing may be, perhaps, a simpler description of this process, although action learning programs presume a design and organisation unnecessary in the everyday actions. In most action learning programs subjects learn with and from each other by mutual support, advice and criticism by addressing real problems, intended to be solved in whole or part. The learning achieved is not so much an acquaintance with new factual knowledge nor technical art conveyed by some authority such as an expert or a teacher (although such fresh acquaintance is not ruled out), as it is the more appropriate use, by reinterpretation, of the subject's existing knowledge, including his recollections of past lived experiences. This interpretation is a social process, carried on among two or more learners who, by the apparent incongruity of their exchanges, frequently cause each other to examine afresh many ideas that they would otherwise have continued to take for granted, however false or misconceived. Action learning particularly obliges subjects to become aware of their own value systems, by demanding that the real problems tackled carry some risk of personal failure, so that the subjects can truly help each other to evaluate in what they may genuinely believe. Action learning demands real-time and hence observable activity on the subject's parts and thus tests whether the subjects are committed to what they can, in other conditions, merely asseverate. This may well be done by followers of the case study, business game or other simulation, but is impossible in the Me-Here-and-Now of operational reality. Action learning therefore leads the subjects to undeceive themselves in ways denied to the seminar; since it also bears keen witness to the quality of its organisers.

An Action learning/research approach provides provide participants, GP Supervisors, Medical and Cultural Educators with opportunities to trial, analyse and develop responsive and contextualised individual learning plans tailored for the participants' specific learning needs.

Action Learning identifies that participants have different learning needs; it recognises that learners have life experience that enables them to draw on those experiences in learning and practice settings. Action Learning is being increasingly used in General Practice projects around the country (including the National Primary Care Collaborative). The value of this approach to adult learning in General Practice is becoming increasingly evident and it is likely that the learners will be involved in throughout their careers.

Action Learning (Synopsis)

Action Learning can be defined as a process in which a group of people comes together more or less regularly to help each other to learn from their experience. Adults have different learning needs, for instance, in order for learning to be meaningful, content and practice needs to be relevant, interesting, outcome focused, wherever possible utilise their past life and professional experience.
One strategy for facilitating this state of affairs is to pose problems associated with their practice setting, such as Situation Improvement Packages (SIPs), case studies, vignettes and scenarios pertaining to the their role in general practice.
It is also acknowledged that GP supervisors, medical and cultural educators are also adults, and may possess alternative strategies. Alternatives approaches are encouraged, implemented, monitored, analysed and evaluated to

determine desirable outcomes. At all times during the training the outcomes for trainees are the most important considerations, as GP supervisors, medical and cultural educators and supervisors we are only the vehicles through those outcomes are achieved.

Action Research

Action Research is a process by which change and understanding can be pursued at the one time. It is usually described as cyclic, with action and critical reflection taking place in turn. The reflection is used to review the previous action and plan the next one.

It is commonly undertaken by a group of people, though sometimes individuals use it to improve their practice. It has been used often in the field of education for this purpose. It is not unusual for there to be someone from outside the team who acts as a facilitator.

Experiential Learning

Both Action Research and Action Learning may be compared to Experiential Learning.

As usually described, it is a process for drawing learning from experience. The experience can be something that is taking place, or more often is set up for the occasion by a GP supervisor, medical and cultural educator or facilitator. Clearly, both Action Research and Action Learning are about learning from experience. The experience is usually drawn from some task assumed by a person or team.

All are cyclic. All involve action and reflection on that action. All have learning as one of their goals. You might say that Experiential Learning is the basis for the learning component of both Action Learning and Action Research.

Action Learning and Action Research are intended to improve practice. Action Research intends to introduce some change; Action Learning uses some intended change as a vehicle for learning through reflection.

In action research, the learners draw their learning from the same change activity. All are stakeholders in this activity. In action learning, the learning and the activity used needs to be unique to each learner.

The Experiential Learning Cycle

The following simple learning cycle captures the main features of Experiential Learning, Action Research, and Action Learning.

At its simplest, it consists of two stages: action and reflection:

action --> reflection

In an ongoing series of cycles.

However, the reflection gains its point by leading to learning, which in turn leads to changed behaviour in the future:

action --> reflection --> action

We can therefore expand the reflection component. We want to take into account that it is partly a critical review of the last action. It is also, partly, planning for what will happen next.

action --> review --> planning --> action

As a consequence experiential learning functions by a dual alternation: between action and reflection; between informal and formal theories. By engaging with both of these in a cyclic procedure, they are integrated, that is knowing 'how' and knowing 'that'.

In each, action informs reflection and is informed by it. The reflection produces the learning (in Action Learning) or research (in Action Research).

The Action Learning model for NTGPE has been modified to some extent; although it retains the central tenets but includes a circular model comprised of the following:

- Planning some action (information to be learned / understood)
- Take action to carry out the plan: identify characteristics pertaining to successful outcomes
- Observe the outcomes
- Reflect/evaluate on the outcomes.

Example:

- Plan individual LP's that will clarify training and workplace problems and may assist to resolve the problems
- Take action to carry out the plan with the people who have helped to formulate it
- Observe the impact of your action on the situation of interest
- Reflect on the outcomes as a way of deciding what actions to take next.

Action Research / Learning recognise that when one tries to investigate teaching and learning needs, two other processes inevitably occur as well:

- The fact that someone is talking with people and collecting information begins to help resolve problems. Action Research / Learning, recognises that the investigation itself can contribute a lot to solving problems
- Partial solutions can be introduced as soon as they emerge. Action Research / Learning recognise that solutions can be trialled while problems are still being understood.

In this type of learning remedies can be evolving while the research/evaluation continues on into the second, third or fourth spiral of planning, acting, observing and reflection.

An important consequence of thinking about needs analysis, as a form of action research is that it gives emphasis to close integration of data and results.

Adult Learning Principles

It is imperative that Learners, GP supervisors, medical and cultural educators understand the basic tenets of adult learning (Andragogy). A rudimentary understanding of the following basic theoretical concepts will greatly assist all participants in the project to achieve successful outcomes, increase satisfaction and reduce problems.

The key tenets of Andragogy are that adults, as learners:

- Become ready to learn when they recognise a deficiency in their own skills and accept that they need to take action to remedy it.
- Want learning to be problem based, leading to the solution of particular problems facing the individual. In training terms, there must be a clear need to know.
- Want to be treated as adults, enjoying the respect of the supervisor, medical and cultural educator (facilitator) and other learners, and to have the experiences that they bring with them accepted as valid.
- Bring to the learning situation their unique mixture of characteristics such as;
  - Self-confidence, self esteem and self image;
  - Learning style and pace of learning;
  - Physical state, complete with acquired impairments;
  - Personality

These aforementioned have important implications for the way in which learning take place in the clinical setting. The implications are related to five factors:

- Meaningfulness
- Prerequisites
- Modelling
- Novelty
- Clarity

Learning from Practice

Practice is an important component of Adult Learning and the Action Learning Concept. They are also essential for participants to be able to experience the physical components associated with the complexity of general practice in a variety of remote and rural settings.

To obtain the full benefits associated with learning in practice, scenarios will be prepared and, communication established with the GP supervisor to enable practical exercises. Standards that relate to the scenarios will be identified and practical exercises, which reflect the applicable Standard(s), must be introduced. To be successful as a GP supervisor, medical and cultural educator, adults must be treated as equals; they must also be encouraged to explore and learn by serendipity (discovery) where possible.
GP supervisors, medical and cultural educators should utilise their knowledge of the practical and theoretical components of the associated Standards to encourage discovery, empowerment and ultimately competency. Guiding, yet not directing the participants towards the solution(s) encourages a serendipitous approach to problem solving.

When a problem is resolved, discussion should focus on how it was resolved, what were the barriers, and, what is the relationship, if any, between it and other Standards, Instructions and Specifications. Questions should also reflect on how learners may become confused and how they will benefit from a specific approach.

Formative Assessment

Formative Assessment is an opportunity to gauge the learning and comprehension of learners involved in the pilot program. GP supervisors, medical and cultural educators are in a position to gain a great deal of information via formative assessment. Consequently, the information gleaned can be used to identify the learning gaps, modify learning plans and tailor supervision and facilitation to assist the learner to successfully address their learning needs. It is also an opportunity for GP supervisors, medical and cultural educators to revise their own practices and modify to ensure that the participants' training experience is positive and well supported.

In summary, formative assessments are a valuable instrument for identifying, addressing and developing participants' knowledge and understanding of complex areas of general practice. The assessment time is critical if it is to challenge participants' knowledge and skills.

When GP supervisors, medical and cultural educators know how participants are progressing and where they are having trouble, they can use this information to make necessary instructional adjustments, such as re-teaching, trying alternative supervisory approaches, or offering more opportunities for practice. These activities can lead to improved success.

Summative Assessment

While Formative Assessment is an opportunity to gauge the learning and comprehension of learners involved in the pilot program, Summative Assessment is a comprehensive assessment of their learning and progress. As discussed earlier, Formative Assessment offers opportunities for learners, GP supervisors, medical and cultural educators to analyse their progress and address those areas requiring attention.

The following points indicate the how Summative Assessments identify where changes in both learning and teaching practices will benefit both Learners, GP supervisors, Medical and Cultural educators.

Summative Assessments Provide:

1. A basis for comparing participants achievements with reference groups and/or external performance criteria, namely standards
2. A means of determining effectiveness of training activities
3. Objective information pertaining to grading, if required
4. Comparative data to determine progress and future practice placements
5. A means of comparing outcomes from different locations
6. Content specific information to inform Managers and future GP supervisors, medical and cultural educators
7. Diagnostic information about the strengths and weaknesses in performance
8. Research data to determine achievement of curriculum performance standards