

## References

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*'Reports that say that something hasn't happened are always interesting to me, because as we know, there are known knowns, there are things we know we know. We also know there are known unknowns. That is to say, we know there are some things we do not know. But there are also unknown unknowns — the ones we don't know we don't know.'*<sup>1</sup>  
(Rumsfeld D, 2003 'Foot in Mouth Winner')

Embedded within this quote, however, is the perfectly logical statement:

***There are things we know we know  
There are things we know we don't know  
There are things we don't know we don't know.***

## Early learning

From the day we are born we start to accumulate knowledge, gathering a vast amount of social knowledge.<sup>2</sup> As children we use this as a building block on which to scaffold our 'academic' knowledge.<sup>3</sup> The environment in which we live, however, is shaped by the activities of past generations;<sup>4</sup> learning therefore has previous history.<sup>5</sup> Under current structures, as we develop at school we rely more and more on facts, figures and theories. By the time our students leave school they are proficient in remembering, critiquing and analysing a wide variety of subjects.

***There are things that we know we know***

## Undergraduate learning

They arrive at our gates sure in what they know but knowing that for their chosen subject they know very little. They tend to be in the top quartile of their group and are socially and academically capable of progressing to university.

Students quickly become aware of how little academic knowledge they have, and as anyone who has been part of an initial brainstorming session will testify, are often reticent at accessing their social knowledge. Many first-year students need a lot of encouragement to 'guess' or to access their 'common knowledge'. As they progress, however, they acquire considerable academic knowledge — they know what they know and hopefully become aware of what they do not know, but need to know for their chosen career.

***There are things we know we don't know***

Learning is likely to be most effective when learners are active in formulating their own questions and developing their own strategies for solving problems or making use of information.<sup>3</sup> It is a social and collaborative enterprise, with reflection a fundamental element that helps learners to make explicit to themselves as well as others what they know, understand and can do. In

Glasgow the medical curriculum is delivered partly via problem-based learning process (PBL). There are seven Glasgow steps that will take the student from understanding the specific scenario through the enquiry to reflection on the learning process.

## Examples from PBL

Nine young adults start their first PBL session. They understand the process; one is chair, another scribe. Scenario — young boy falls off skateboard, goes to A&E, cuts and bruises. Silence ensues, until a brave young man complained he knew nothing, he had just left school. Another girl volunteers that all the medicine she knew came from *ER*. To encourage discussion they were asked who, as children, had fallen off their bicycle, and then to describe what they remembered. Slowly 'stories' emerge of cuts and scrapes requiring a cuddle from mum or stitches at A&E. As descriptions emerge some remembered that they had a Higher Grade or A Level in biology and know about blood, skin and clotting. Those who had been boy scouts and girl guides knew a considerable amount of first aid. Soon, by accessing their social knowledge, they were able to draw parallels and commence the session.

Through the following PBL sessions their learning rapidly expanded and they had less need of what several regarded as 'stories'. Within this group, however, were two who were working as nursing auxiliaries as a way of providing an income. They brought experiences to the group. They listened to the patients and discovered the power of gathering patients' experiences and accessing that knowledge in the form of symptoms, lifestyle and perceptions. The group, collectively, matured.

## Communication skills

When our students reach the third year, however, by focusing on their communication skills we hope that they will once again turn to their social knowledge. At Glasgow we use actors as simulated patients and video each 'consultation', with tutor and group members watching from an adjoining room. An example of accessing social knowledge came during a session on 'delivering bad news'. The simulated patient had come for results of a bronchoscopy and liver ultrasound. The student established rapport, but quickly began to explain the patient's various investigations. The camera picked up all aspects of what started as an adequate interaction, when suddenly he stopped explaining medical procedures and leaned forward. His voice dropped, his tone became gentler and less authoritative as he gave this lady her results. Later, during feedback, when asked what he was thinking at that moment, he explained he suddenly thought how his grandmother would respond to such news; he became a grandson and responded instinctively.

After 5 or 6 years our students satisfy the governing bodies that they are fit for purpose and emerge from the university clutching their degree. At the same time nurses, pharmacists, physiotherapists and dentists similarly emerge with their specialist knowledge. No one knows what everyone else knows and that is quite appropriate. But everyone has been educated in a biomedical model so they have similar knowledge. It is only when they go forth into the wider world, are they potentially going to enter an environment where there are things they don't know they don't know.

### Postgraduate learning

Adults rely on prior experience as major sources of motivation and they are stimulated by a person-centred, as opposed to a subject-centred, approach.<sup>6,7</sup> They should question what is delivered and seek personal meanings within their own experiences.<sup>8</sup>

Primary care, however, is evolving. It encompasses the wider health and social care perspectives, as well as those of housing and all the other professions that can have an effect on the health and wellbeing of our patients. Suddenly we have to work across these boundaries and we don't even know how social workers think, never mind what they know. Government edicts require that professions work in close harmony and this will necessitate a different approach to our current uniprofessional learning.

### Multiprofessional learning

One recent example of multiprofessional learning was at a protected learning event for those working in a LHCC in Glasgow. The outcome of this significant event analysis was to design a protocol for use by all staff at a health centre.

#### The 'Event'

*A woman comes into a surgery clutching three small children; she is smelling strongly of alcohol and stating that she had no money or food with which to feed her children. It is almost 6 o'clock on a Friday afternoon and the only person left on duty has to deal with the problem.*

One group discussing this scenario consisted of a GP, a health visitor, a practice nurse, a district nurse, a physiotherapist, a receptionist, a clerk and a student nurse, as well as a social worker. After heated discussion the consensus of opinion was that, assuming the children appeared to be healthy, this was an issue best handled by social services, who should therefore be telephoned and the problem handed over. However, most around the table commented quite vociferously how difficult it was to get a social worker during the day, never mind in the evening. Defending her profession, the

social worker argued that because approximately six people are on call during out of hours, all calls are put in a queue. Everyone acknowledged that they did not know that and would in future hold on for longer. One cynic in the group, however, suggested that all the social worker would do is provide money for the errant mother to buy more alcohol. Again, coming to the aid of her profession our resident social worker explained the process by which the mother would be provided with a box of groceries and a family member or friend would be called on to provide help until the effects of the alcohol had worn off. Once again everyone commented that they did not know.

Later someone suggested that perhaps the family unit of the local police force could help, but there were no representatives from that organisation so the group never did discover what they could do.

*There are things we don't know we don't know.*

### Discussion

If we accept the premise that human beings are not only products of their genetics but are also shaped by their environment, including the society in which they live and the culture to which they belong, then the way we learn must require an understanding of and interaction with the past as well as the present.<sup>4</sup> Learning should be tailored towards learners.

Education, however, has been designed to meet the collective needs of societies and not the developing needs of the individual. Success is measured in outcomes that are centrally controlled. Those who do not conform fail, and our educational structures are generally not designed to take account of and learn from those individuals whose uniqueness we neither understand nor readily accept.

The curriculum at postgraduate level should not be the ultimate goal but a means to a personal end. The route taken should vary and so will impact on the outcome — we must embrace originality and offer the freedom that that requires; otherwise we risk stagnation. Just as we are unique our enquiry should be personal in path and goal. It is an educator's role to awaken a wondering, to supply experiences that generate real questions. Student and teacher must both want to understand, to own both the enquiry itself and the method of enquiry. Teachers should be co-enquirers and learners.

Knowledge is created and recreated between people; each bringing their unique experiences,<sup>4</sup> but this relationship between the learner and his environment is complex, combining experience, perception, cognition and behaviour.<sup>9</sup> The more we

know about adult learners; the changes they go through and how these changes motivate and interact with learning, the better we can structure learning experiences that both respond to and stimulate their development.<sup>10</sup>

If students are to be encouraged to share personal experiences, exploring the balance between emotional involvement and technical communication, teachers must be aware of the impact of their response. We bring something of ourselves to every situation — this is what makes us all different. Every situation is interpreted, analysed, filtered and perceived based on the unique set of experiences and learning.<sup>7</sup>

To learn we must perceive the message, attach a meaning and judge the value of the new material before we decide to act upon it.<sup>11</sup> What we learn, however, depends on our ability to reflect, about being aware of what we know and realising what we don't know.<sup>12</sup> What information, skills or attitudes mean is indivisible from what we think they mean, but what matters is how we apply this knowledge.<sup>2</sup>

We can't improve without feedback — it allows us to monitor our progress towards a goal and adjust behaviour when necessary.<sup>10</sup> It can provide motivation, offer knowledge about the results of that behaviour, act as a form of reinforcement for the listener and can encourage the speaker to continue. Part of our feedback must include an explanation, and that could be interpretative, descriptive, and/or reason giving.<sup>13</sup> When we understand we feel satisfied, and recognise coherence and connectedness with the issues. Learners have to feel confident to leave their comfort zone and participate without being defensive. Our aim, therefore, should be to provide students with the curiosity and willingness to start again, realising that there will always be things they do not know, but with the skills to 'keep digging'.

If learning is to be more than a process, if it is to be accepted as a lifelong activity that enhances our life, then teachers at both university and practice level must be open to embrace learning from every source. We learn from our students, and our patients, as they bring fresh perspectives, unique problems and new solutions.

What lifts our knowledge and enquiry to new levels, however, is the daily, unusual, unexpected and enlightening insights that are there if we listen and hear; if, as we ask of our students, we open our mind and embrace learning from all around us.

Then we will discover things we didn't know we didn't know.

Sandra McGregor