Using the Multiple Intelligences as a learning intervention: a model for coaching and mentoring

Colleen Harding, Bournemouth University, UK

Abstract

The purpose of this study was to explore the ways in which Gardner's Multiple Intelligences (MI) could be incorporated into a model for coaching and mentoring. The research was conducted through a qualitative study using Action Research. Six coach-mentors worked with six learners and devised interventions to emphasise the MI through the coaching-mentoring process in a variety of contexts. Both the impact on the progress of the learners and the impact on the practice of the coach-mentors were analysed. The study concluded by acknowledging that in emphasising a range of MI during the coaching-mentoring process learners were stimulated to progress their learning. The discipline of aiming to use all of the MI encouraged the coach-mentors to take risks in designing experiential interventions. The creation of a MI Model and a MI Toolbox for Coaching and Mentoring gave coach-mentors a structure in which to work and a language for discussing and developing their work. The Model and Toolbox exist as tangible outcomes of the study.

Key Words: Multiple Intelligence, coaching, mentoring, model, toolbox

Introduction

Gardner's work challenged the traditional view that intelligence could only be measured through linguistic or logical-mathematical means. Gardner argued that there are at least eight 'intelligences' that individuals use to solve problems (1983, 1993): Linguistic; Logical-mathematical; Spatial; Bodily-kinaesthetic; Musical; Interpersonal; Intrapersonal; and Naturalist.

As a report on human potential viewed from the psychobiological perspective, this work on Multiple Intelligences (MI) was intended for psychologists, but referred briefly to the implications of the theory for education (Gardner, 1983). A decade after the original work, the theory became one of the most popular in contemporary education (Kornhaber et al, 2004). Educators using MI theory have reported an increase in self-awareness that has helped them to develop their teaching practice to enhance the learning experience for their students (Hoerr, 2004; Kornhaber, 2004; Kornhaber et al, 2004; Noble, 2004; Shore, 2004).

More recently Gardner has expressed an interest in extending applications to new areas of practice, including applications of MI in the workplace, and using MI as a vehicle for changing minds (Gardner, 2004a, 2004b). Gardner has also acknowledged the usefulness of the theory for adults, who are able to benefit from reflecting on how they learn best. This can also be used to create a personalised education for each individual (Viens & Kallenbach, 2004).

The idea that it is possible to use MI as a vehicle for changing minds has some relevance for the world of coaching and mentoring. Organisations and individuals are using coaching and mentoring relationships to help facilitate the change process, as it provides an opportunity to design a personalised programme of development which can help an individual to 'learn how to learn' (Parsloe & Wray, 2001). In this approach to learning the individual acquires the learning from within

themselves with the aid of a coach, rather than being taught through hints and facts, and this is what separates coaching from traditional teaching (Whitmore, 2003).

Coaches and mentors need to be flexible in their approach to the learning relationship to increase their chances of helping individuals to achieve their goals (Hay, 1999).   This discipline of working with individuals in more creative ways means that coaches and mentors can benefit equally by learning new ways of working to enable individuals to achieve results (Parsloe & Wray, 2001).   It appeared from a study of the literature that the use of MI in coaching and mentoring was an area that has not yet been explored. The study therefore considered the need for coaches and mentors to facilitate learning in such a way that their learners were more likely to achieve their goals, and the need for coaches and mentors to develop their own practice in order to achieve the flexibility needed to work with different types of learner.

The study took place in a university in the south of England where six members of staff, including myself, took the roles of coach-mentors (sometimes referred to as 'we' in this article) and six took the role of 'learners'. 'Learners' is the term that we used to describe the individuals acting as recipients of the coaching or mentoring.   Two of the pairs worked in sporting contexts, two within learning technology contexts and two within business and personal development contexts.   The coach-mentors and learners have been given fictitious names in written accounts of the research.

The study sought to answer the following questions:

- How does emphasising the MI impact on the progress of the learners?
- How does incorporating the MI into a model for coaching and mentoring impact on the practice of the coach-mentors?
- How could MI theory be incorporated into a model for coaching and mentoring?

This article is structured in three parts. The first section explains the design of the study. The second section outlines the coaching and mentoring models chosen for the study: Graham Alexander's GROW model (West & Milan, 2001) and Clutterbuck's Mentoring Meeting model (Clutterbuck, 1998, 2004).   It explains the decisions that were needed about how to incorporate MI theory into these models for coaching and mentoring. Using quotes from the data some of the issues that arose from our decisions are highlighted. I draw comparisons between the model for using MI in coaching and mentoring and the Entry Points framework provided by Gardner (1999b) and the Compass Point Practices provided by Kornhaber et al (2004).

In the third section of the article the data collected from the reflective diaries, action learning sets and interviews is explored to identify how the coach-mentors devised interventions that would emphasise the MI. Using quotes from the data the importance of creating the right environment in which to set the interventions is highlighted along with the impact of emphasising the MI on the progress of the learners.

This study has taken inspiration from the literature that explains the use of MI theory in education. Working within recommended models for coaching and mentoring, the coach-mentors used the inspiration of MI theory and some of the theories about the brain and learning to emphasise the MI during the coaching-mentoring sessions with their learners. Drawing on the experiences of the coach-mentors and learners involved in the study a new model for coaching and mentoring is suggested, along with a toolbox of interventions.

Methodology

The experience of coaching and mentoring can be a very personal one, both for the coach-mentor and the learner. This study was designed in line with the epistemological perspective of constructivism in order that those involved in the study would be able to create their own meanings from their own experiences (Gray, 2004). Action Research was chosen as the methodology because of its focus on human development (Stringer, 1996), dealing with real issues in the workplace, the discovery of new ways of working, informing and evaluating change and because it could be facilitated in a participatory way (Denscombe, 2003).

The coach-mentors met in three action learning sets at the beginning, in the middle and at the end of the study. The nine hours of action learning set meetings were recorded and transcribed to provide data from the perspective of the coach-mentors. The coach-mentors and learners met for six coaching-mentoring sessions over a four month period. At the end of each coaching-mentoring session, and at other significant points during the process, they completed reflective diaries, which generated 80 individual accounts as data. At the end of the process the researcher conducted six one-hour semi-structured interviews with the learners, providing six hours of transcribed data.

Measurement in coaching and mentoring is often difficult (West & Milan, 2001) and sometimes measures only trivial things (Rogers, 2004). However, it can be used to provide data around which goal setting and action plans can be built (Skiffington & Zeus, 2003). To facilitate the learners in developing their goal for the coaching-mentoring process and to provide some way of measuring their progress through the project, the learners completed a measurement of competency exercise. The exercise measured the learners' own perception of their competence at the beginning and end of the coaching-mentoring process in the knowledge, skills and attributes that they believed described someone who was already successful at their intended goal. They rated themselves using a Likert scale (Denscombe, 2003) to give a numerical value to their opinion of their performance (Hussey & Hussey, 1997).

In order to strengthen validity, findings were triangulated at a number of different levels, as indicated in Table 1.

Between methods	Reflective diaries	Action learning sets	Interviews
Between multiple perspectives	Views of the coach-mentors	Views of the learners	My own views
Between contexts	Sports	Personal development	Learning technologies
Over time	Cycle One/ Cycle Two	Cycle One/ Cycle Two	Cycle One/ Cycle Two

Table 1: Triangulation of data

Action Research meets the test of action with people who are aiming to solve their own problems; it is also argued that action research meets the criteria of validity testing more than other forms of social research (Brydon-Miller et al, 2003). However, like many studies under the interpretivist paradigm, the study has low reliability (Hussey & Hussey, 1997). It would therefore be unwise to draw generalisations from this study on the basis of such a small sample (Gray, 2004).

A Multiple Intelligence Model for Coaching and Mentoring

The six coach-mentors combined two coaching-mentoring models with MI theory to facilitate a learning process that emphasised the MI. We chose The Mentoring Meeting model (Clutterbuck, 2004, 1998) and adapted it by adding the GROW model (Whitmore, 2003; West & Milan, 2001) to identify goals and the completion of reflective diaries. The amended model is shown in Figure1
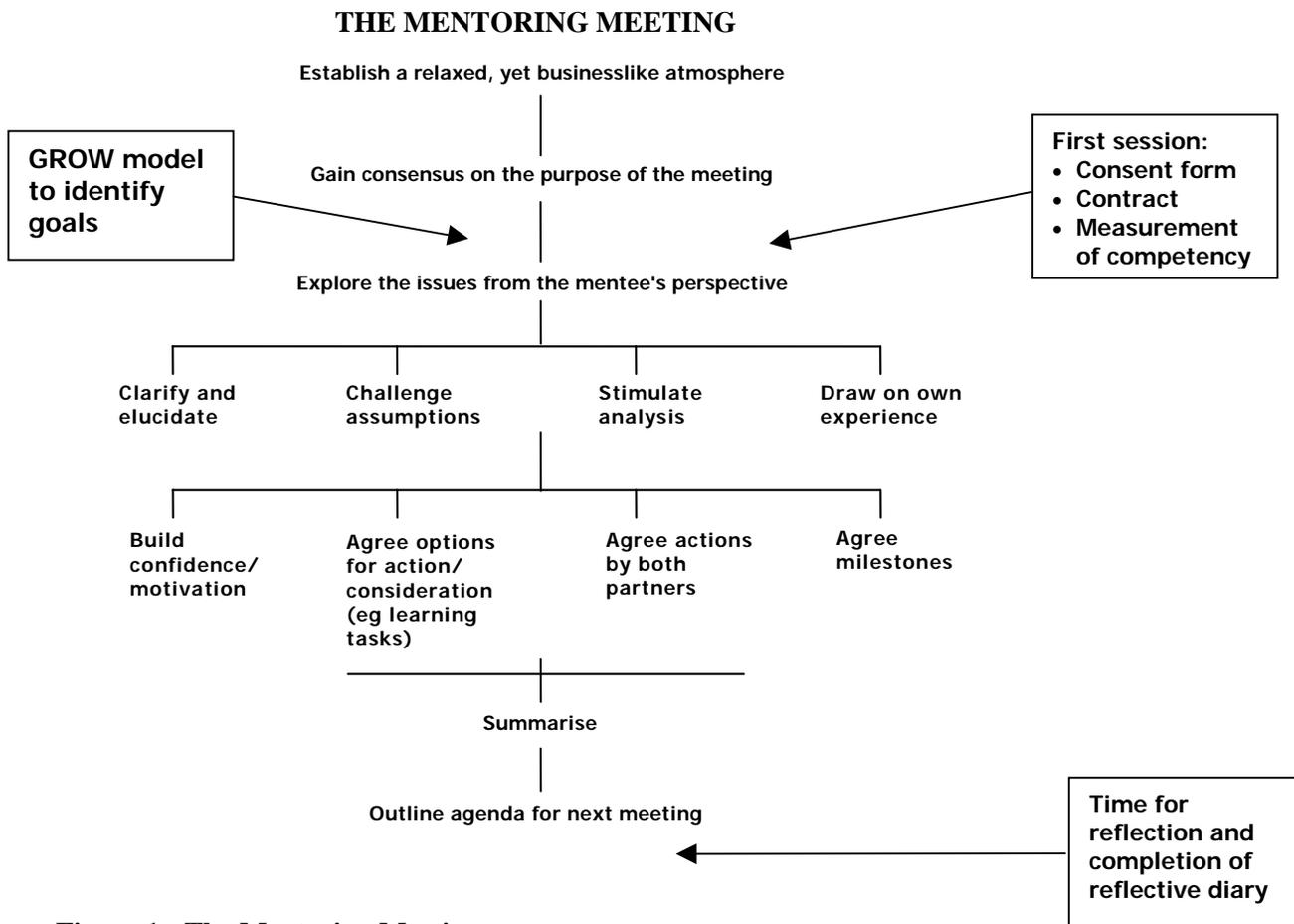
Figure 1: The Mentoring Meeting

We believed that The Mentoring Meeting model would provide opportunities to incorporate interventions to emphasise the MI. Each stage of the model reflects good practice in coaching and mentoring as evidenced in the literature (Clutterbuck, 1998, 2004; Hay, 1999; Clutterbuck and Lane, 2004; Cranwell-Ward et al, 2004; Flaherty, 1999; Kline, 2003; Megginson & Boydell, 1979; Parsloe & Wray, 2001; Peltier, 2001; Rogers, 2004; Skiffington & Zeus, 2003; Whitmore, 2003)

We agreed that the GROW model (Table 2) is useful to use at the beginning of a coaching-mentoring relationship, or when new goals need to be established. The model, designed by Alexander in 1984, is widely used by coaches and follows all the necessary steps in a problem solving process (Milan & West, 2001; Gillen, 2000).

Goals – performance goal
Reality – the current situation; raising self -awareness
Options – identify alternative courses of action
Will – identify what will need to be done and make decisions on how to proceed

---

Table 2: The GROW Model

Completion of the reflective diary was added to the model because it formed part of the data collection exercise for the study. However, it had the added benefit of encouraging learners to reflect on the experience that they had during the coaching-mentoring sessions and helped to facilitate the cycle of learning (Kolb, 1984; Honey & Mumford, 1982, 1986).

Decisions and Issues for incorporating MI Theory into a Model for Coaching and Mentoring

In order to combine MI theory into the chosen model for coaching and mentoring, we believed that we needed to make three decisions:

♦ Whether or not to teach MI theory to the learners
♦ Whether or not to assess the profile of the learners' intelligence
♦ Whether or not to emphasise all of the MI in the coaching-mentoring process

Decision on whether or not to teach MI theory to the learners
We decided that we would explain MI theory to our learners at the beginning of the coaching-mentoring process. There were three reasons for our decision. The first was because we believed that being aware of MI theory would help the learners when completing their reflective diaries. The learners could reflect on the experience, recognise if a particular MI helped them in their learning and thus help them to 'learn how to learn'. The second reason was because this type of reflection could provide more useful data for the study. The third reason was because we anticipated that we would need to use a range of interventions in order to emphasise the MI to help the learners to achieve their goal. The interventions would include typical interventions used in coaching and mentoring such as conversation, but could also include more experiential exercises. We wanted to ensure that our learners understood why they were engaging in such activities.

Whether or not to assess the profile of the learners' intelligence
Although Gardner (1999a) recognises that people are keen to know their profile of intelligence, he had not at that point endorsed any of the existing tests and preferred instead to use MI to help people learn and not to categorise individuals. Some tests are now available that purport to assess an individual's intelligence (Shearer, 2004; Haley, 2004; Rose & Nicholl, 2004). In an earlier pilot study (Harding, 2004) I had used one of the tests with learners. The study identified that there had been no relationship between the 'preferred' intelligence of the learner and the intelligences that had been emphasised in the coaching and mentoring process that had resulted in useful learning experiences. Consequently we agreed that we would not test the profile of intelligence of our learners.

The coach-mentors were therefore not constrained by any knowledge of their learner's profile of intelligence and aimed to emphasise all eight MI in the learning process. As a result the learners were encouraged to engage in a number of activities that they may not normally have engaged in. The learners had been briefed on MI theory and said when interviewed that they had approached the sessions with open and interested minds, although some of them had a personal view on which intelligence may have been their strongest. As a result there were some surprises for the coach-mentors and learners about the learning experience.

One of the learners, Jenny, explained that whilst she would describe herself as a reflective learner, as a dyslexic she found writing the reflection notes very difficult. As a result her coach-mentor could have avoided emphasising the linguistic intelligence in its written form. However, as we were aiming to emphasise all the intelligences, her coach-mentor instead encouraged her to write a poem to reflect on her experiences during the journey towards her goal. Through the poem she seemed to lose the frustration of writing as she was able to concentrate much more on the structure of the poem to represent her reflections. The poem was an honest, moving and full account of her learning experience and this was an important part of the learning process for her:

> *"...I'd never written a poem before...I really quite enjoyed it...The poem's quite personal but in applying some kind of logic and rhyme and fitting things in and looking at different ways of phrasing...it gave it some structure... It didn't depersonalise it but it just made it easier to put it down."* (Jenny, interview, 44, 48, 50)

Paul was not anticipating that intrapersonal reflection would be useful for him. However, through his reflective diary he identified a pattern emerging in the ways in which he was most enjoying what he was learning, which encouraged him to spend more time on intrapersonal learning:

> *"...I could see that a pattern was emerging...one of the most important was spatial intelligence... This took me to a new domain... that was where I started really taking more interest between the sessions, realising...there was also much more I could achieve if I was prepared to put more time into this."* (Paul, interview, 12, 14)

This learner had been stimulated through an intervention to emphasise his linguistic and intrapersonal intelligences to recognise how putting the emphasis on a different intelligence in this learning context was helping him. This type of experience is endorsed by Kallenbach & Viens (2004) who discuss how reflecting on MI activities builds self-confidence and 'learning-to-learn' skills in adult learners. Where people engage in learning strategies that suit their preferred intelligence, they also become more motivated, engaged and competent (Dwyer, 2001; Goleman, 1996).

Whether or not to emphasise all of the MI in the coaching-mentoring process
Following our decision not to assess the profile of intelligence of our learners, we recognised that we would be unable to design the coaching-mentoring process to reflect their individual profiles. The alternative was for us to aim to emphasise all eight MI in the coaching-mentoring process. Gardner (1999a) guards against designing learning programmes to cover all MI for the sake of it as this superficial treatment of the learning experience is a waste of time and effort. Studies of using MI in education suggest that learning programmes should not necessarily be used to emphasise all of the MI, rather MI should be used to provide a suitable learning experience for the student (Kornhaber, 2004).

Despite this we decided that we would aim to use all eight of the MI in each of our contexts. This was because we believed that it would help both coach-mentor and learner to step outside of their

comfort zones and usual ways of thinking. We also wanted to know if it would be possible to use a broad range of MI in different contexts. We anticipated that if we did not set ourselves the discipline of using all eight, we might be tempted to revert to our more traditional ways of coaching and mentoring. We were keen to know what the impact of using MI would be on the progress of the learner and on the practice of the coach-mentor and did not think that we could answer the research questions without aiming to use all eight intelligences. However, we agreed that it would not be helpful or meaningful to emphasise all of the intelligences in each session, but that by the end of the six sessions we would have worked with learners in such a way that each of the MI would have been emphasised.

Our decision to devise interventions to emphasise the eight MI during the coaching-mentoring process and our agreement that the agenda for the coaching-mentoring belonged to the learner were sometimes in conflict. Designing appropriate interventions required a certain amount of thought and planning prior to the coaching-mentoring sessions. However, because the agenda belonged to the learner, this meant that sometimes the learner wanted to cover new ground at the next session. Another dilemma was if a learner failed to respond to an intervention, or if an intervention raised new issues. This led the coach-mentors to believe that they needed a 'tool-box' of interventions that they could draw from at any moment during the coaching-mentoring process. This was probably one of the most significant differences in incorporating MI in coaching and mentoring compared to the educational model. In the educational model a curriculum and lesson plan would have been decided and students would have the flexibility, freedom and anonymity that a classroom full of different learners with different profiles of intelligence affords. However, in the coaching-mentoring process if the learner wanted to change the agenda or was not comfortable with an intervention there would be considerable pressure on the coach-mentor to respond with a change of intervention or for the learner to engage with the intervention. This issue prompted significant discussion at the action learning sets and the challenge was recognised by all six coach-mentors in their reflective diaries.

A comparison between our approach and the Entry Points framework and Compass Point practices

When the study was complete, comparisons were drawn between the ways in which we had incorporated MI into a model for coaching and mentoring and the ways in which we had conducted the study with two existing frameworks for using MI in education: the Entry Points Framework, Gardner's recommended route for designing educational curriculum to incorporate the MI (Gardner, 1999b), and Compass Point practices, the practices adopted by over 40 Schools that associate MI theory with benefits for students (Kornhaber et al, 2004) . The comparison between our approach and the Entry Points framework can be seen in Table 3. The comparison between our approach and the Compass Point practices can be seen in Table 4.

Entry Points Framework (Gardner, 1999b, p. 186-199; Kornhaber et al 2004, p.8-9)	Our Approach
Narrative. The use of stories, dramatic narrative, mime and cinema to emphasise the linguistic, interpersonal and intrapersonal intelligences	We utilised the 'consensus on purpose' and 'exploring issue from the learner's perspective' stages of the mentoring meeting model and GROW model to encourage the learner to tell their own story
Logical-quantitative. Numerical aspects of a topic and/or logical, deductive reasoning, relationships and implications	We utilised the 'measurement of competency' exercise to encourage the learner to rate their competence against their own list of criteria to help them to plan a logical route to achieving their goal
Aesthetic. Engaging artistic elements or representations of a topic or sensory features associated with a topic	We had examples of using visualisation, mind-maps, bodily-kinaesthetic activities and music to engage some aesthetic and sensory elements
Experiential 'hands-on'. Engaging in practical exercises/activities	The discipline of emphasising the bodily-kinaesthetic, spatial, musical and naturalist intelligences encouraged us to use experiential interventions in the coaching-mentoring process
Interpersonal. Working with others to learn about a topic	The foundations of coaching and mentoring are working with another person to learn and develop. These were engaged when setting the right atmosphere at the start of the session and also through the 'clarifying and elucidating' stages and drawing on the experience of the coach-mentor
Existential/foundational. Fundamental, philosophical questions about the nature of the topic, why it exists and/or its meaning or purpose	The opportunity to engage at this level was created through the narrative section where the learner was encouraged to tell their own story and the coach-mentor helped them to explore their story to aid the goal-setting process. Also in the 'challenging assumptions' and 'stimulating analysis' stages.

Table 3: A comparison between our approach and the Entry Points framework

A recommended model for using MI as a learning intervention in coaching and mentoring

The adapted Mentoring Meeting model (Figure 1) provided a functional framework within which we were able to emphasise the MI in coaching and mentoring sessions. Emphasising a range of MI provided some interesting learning moments for some learners, but there was a tension between the coach-mentor's need to plan for the coaching-mentoring sessions and the agreement that the agenda belonged to the learner. As a result coach-mentors recommended the need for a 'toolbox' of interventions. Thus a comparison between our model and the way in which we conducted the study was made against the Entry Points and Compass Points frameworks. The result is a new recommended model for using MI as a learning intervention in coaching and mentoring and is shown in Figure 2.

Compass Points (Kornhaber et al 2004, p.17-29)	Our Approach
Culture. Values, beliefs and attitudes that include: a belief in children's strength and potential; advocacy of care and respect; a belief that learning is exciting; educators work hard	The coach-mentors involved in the project were already working in supportive and developmental relationships and were sympathetic to these values, beliefs and attitudes. They were prepared (and did) work hard and were motivated by the MI, which made the process more exciting for them
Readiness: preparing people to work with MI and other new ideas. The timing of the introduction of the theory. Building awareness of different types of learners. Apply MI at a rate that feels sensible	The coach-mentors were already familiar with some learning style theories. The parameters of the study meant that we needed to apply MI throughout the study, but each coach-mentor decided when and what was appropriate for their learner. We recognised the need for a flexible approach and the need to know when to use or change an intervention
Tool: MI is used as a means to foster high quality work. Using MI as a means of helping students acquire knowledge and skills rather than adapting learning experience to meet the theory. Deciding whether to teach MI theory explicitly to the students	We told our learners about MI theory and because of the nature of the study we aimed to emphasise all eight MI during the process. Some of them used this knowledge to help them to 'learn how to learn.' This was a good discipline for the development of our practice as coach-mentors as well as for the learners. However, we recognised the danger of using interventions to emphasise the MI for the sake of it and the need for responsiveness and flexibility in approach
Collaboration: informal and formal exchanges. Because educators have their own profiles of strengths, but are expected to create learning environments that serve a wide range of students, formal and informal exchanges encourage dialogue in which educators can learn from each other	The coach-mentors collaborated formally through the action learning sets. However, informal exchanges also existed outside of the sets when a particular issue arose for a coach-mentor
Choice: meaningful curriculum and assessment options. Providing meaningful choices for learning and for demonstrating knowledge that are of interest to the individual and to society as a whole. Choices are guided or controlled to build confidence in other areas	This was an area that was more developed by the end of the study than it was at the beginning. Throughout the study the discipline of designing interventions to emphasise different MI increased the choice of ways to learn. The development of the 'toolbox' will provide the coach-mentors with an opportunity to extend the choice to future learners
Arts: A significant role in the school. The use of the arts, particularly those which emphasise musical and spatial intelligence, which are fundamental ways of solving problems	There were examples of all of the coach-mentors using interventions that emphasised the spatial intelligence and five emphasised the musical intelligence in their contexts

Table 4: A comparison between our approach and the Compass Point practices

## A Multiple Intelligence Model for Coaching and Mentoring
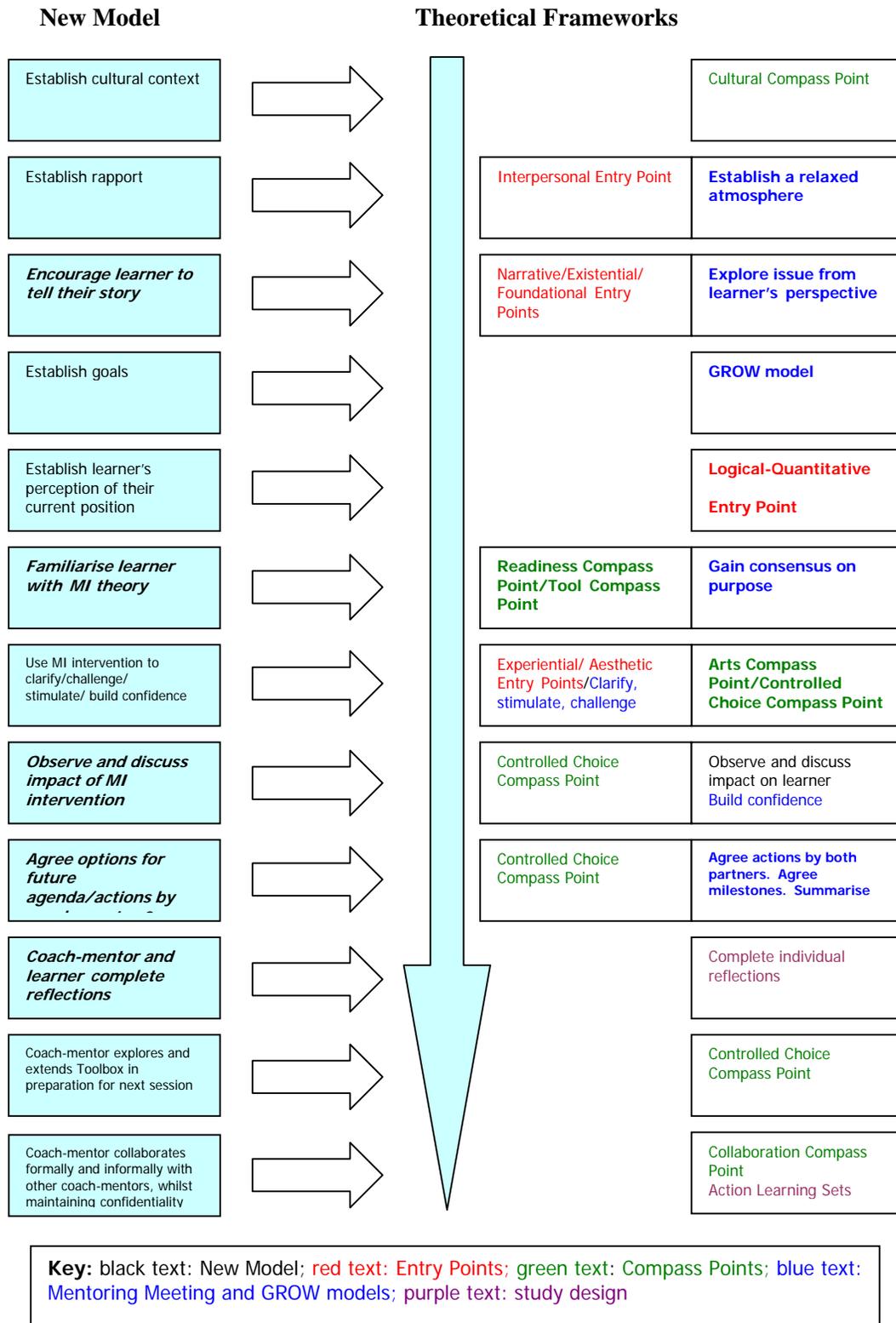
Figure 2 A Model for Coaching and Mentoring

A Multiple Intelligence Toolbox for Coaching and Mentoring

One of the biggest challenges facing us as coach-mentors was how to devise interventions to emphasise the MI that would be appropriate for the context in which we were working and that would help our learners to achieve their goals. We each acknowledged in our reflective diaries and at the action learning sets how necessary it was to forward plan the interventions to be used in the coaching-mentoring sessions to emphasise the MI. Two of the coach-mentors experienced situations where their learners were uncomfortable with an intervention. They needed to be able to respond, either with a different intervention that would achieve the same aim, or to change direction in the coaching-mentoring session. This ability to be 'in the moment' with the learner and to be able to respond appropriately is a critical requirement in coaching (Skiffington & Zeus, 2003). However the coach-mentors said that they were also conscious that the study was about emphasising the MI and were keen to ensure that the way in which they responded was true to the spirit of the study. This prompted us to explore at the action learning sets how we could respond in such situations and whether or not it was possible to deal with a difficult situation whilst respecting our decisions to use MI interventions. We came to the conclusion that not only would it be helpful to have a 'toolbox' of interventions to call upon in a coaching-mentoring session, but that interventions fell into two categories. The first category were the interventions that we were already familiar with using in coaching and mentoring, such as conversation, asking questions, logical thinking and reflection that emphasised the interpersonal, linguistic, logical-mathematical, and intrapersonal intelligences. The second category involved interventions that in some ways we were not so familiar with that encouraged a more experiential approach to the learning experience and involved the bodily-kinaesthetic, musical, spatial and naturalist intelligences.

In order to give some indication of the ways in which each of the MI were emphasised, the following sections will outline some of the interventions used.

Setting the 'cultural context'
The data indicated that it was important that the coaching-mentoring sessions were set in an appropriate 'cultural context'. Creating an environment conducive to learning and achievement is important in educational contexts (Daines et al, 2000). In coaching-mentoring literature the importance of setting up the relationship between the coach-mentor and learner is often discussed, but the environment is not. However, relationships are shaped by the environment in which they are set (Cox, 2003, p.9). The learners and coach mentors all believed that it was important to create the right environment and the evidence suggests that location and music helped to create an appropriate atmosphere.

> *"During this session we explored some deep issues…I thought it would be useful to change environments for a more informal feel."* (Joe, reflective diary, 6)

> *"During the session we played background music…[it] took me out of my normal work mode. When the music stopped…the room felt empty, cold and less relaxing." (Sophie, reflective diary, 9)*

Interpersonal Intelligence
This intelligence indicates a person's capacity to understand the goals and motivations of others and to use the information pragmatically to influence, persuade or counsel individuals towards a purpose (Gardner, 1999a; Armstrong, 2003). The relationship between coach-mentor and learner is

fundamental to the success of the process (Skiffington & Zeus, 2003; Flaherty, 1999; Landsberg, 1996). The coach-mentors and learners were particularly conscious of the importance of establishing an appropriate level of trust because the coach-mentors knew that they themselves would be taking some risks and the learners knew that they would be engaging in some new activities in order to emphasise the MI. One of the learners said:

> *"Because you've got to really trust the person that you're sitting down with and be quite open... I couldn't have gone down the path that I went down if I hadn't trusted [my coach-mentor]."* (Jenny, interview, 12,16)

Logical-Mathematical Intelligence

The logical-mathematical intelligence was emphasised at the beginning of the coaching-mentoring relationships when the learners completed the measurement of competency exercise described in the methodology section. Used as an Entry Point to a subject the logical intelligence can be one of the fundamental levers in mind changing (Gardner, 2004a). One of the coach-mentors reminded us that whilst this was one of the traditionally perceived intelligences, it was as important and useful as the others and we should not dismiss it in favour of more exciting MI interventions:

> *"Occasionally I found use for the logical-mathematical MI and every time I used this intelligence I found that it had the 'Oh that's why' factor and the light bulb switched on."* (Abbie, reflective diary, 58 and discussed at the third action learning set)

Intrapersonal Intelligence

The intrapersonal intelligence was emphasised through the reflective diaries. Emphasising intrapersonal intelligence is integral to the MI inspired learning and teaching (Hoerr, 2004). Not everyone is comfortable writing a reflective diary and alternatives such as writing a story or poem or drawing a picture could be used to encourage those who prefer to reflect in other ways (Moon, 2002). Whilst we agreed that we would use reflective diaries in this study in order that there would be comparable forms of data, Jenny found that writing a poem was a more powerful form of reflection for her than writing a diary.

The reflection process was also useful to the coach-mentors as it helped us to acknowledge what we had learned about our learners following an intervention, to help us in planning future sessions. Reflection on MI inspired learning programmes has been a useful feature in some of the educational environments where MI has been successfully implemented. Viens & Kallenbach (2004) report on the use of 'MI Reflections' by teachers on adult literacy programmes and how this provides an 'MI lens' through which they can recognise the strengths and interests of their students.

Linguistic Intelligence

The linguistic intelligence was emphasised in a number of ways; the most obvious and naturally occurring way was in the course of conversation between coach-mentor and learner. Gardner (1999a) recognises the linguistic intelligence as the capacity to use language to achieve goals, whilst Flaherty (1999) discusses how fundamental change can be achieved through the conversation between the coach-mentor and client. The use of language has also been shown to be helpful in facilitating change as demonstrated by Lyddon et al (2001) in their study into the use of metaphorical language in counselling relationships. However, the coach-mentors recognised that whilst it was easy to have a conversation with a learner and that this might be a cathartic experience for them, on its own this would not lead to the achievement of their goals. One of the coach-mentors said:

"I think the MI helped structure the process and give a focus…Even though we did talk a lot, when we actually did something [the learner] felt it was more productive…[the learner] got more out of it." (Karen, action learning set 3, 35, 110, 279)

Bodily-Kinaesthetic Intelligence

Gardner (1999a) says that bodily-kinaesthetic intelligence entails the potential of using the body or parts of the body to solve problems or make something. For the coaching-mentoring pair working with the goal relating to swimming confidence it was natural for them to engage in swimming activities in a pool. Four of us believed that using bodily-kinaesthetic interventions would help our learners to increase their confidence. I already knew that my learner could present effectively and had received good feedback on a presentation. However, she said to me:

"It doesn't matter that other people say I've done a good job of the presentation, it is how I feel inside that matters, and I don't think I have done well." (Rachel, first coaching-mentoring session)

I believed that part of the issue was that she did not know how good she was and aimed to use interventions to raise her self-awareness in her ability. I introduced a number of interventions that included:

♦ Observation in front of a mirror and using body posture to enhance vocal projection;
♦ Encouraging her to tape record the rehearsal of a presentation in time with music to change the pace and pause of their presentation;
♦ Using a video camera to record giving a mock presentation so that she could observe her body language, posture and vocal projection and identify ways in which she could improve or things that she liked.

Rachel confirmed the value of this MI activity:

"I was nervous to begin with – hearing my voice and watching myself felt unnatural to begin with…I began to realise that I didn't look or sound as bad as I thought, I felt much calmer, and more confident. After seeing myself improve on video…I know that I can do it." (Rachel, reflective diary, 6, 22)

Sophie's coach-mentor encouraged her to use the 'Disney Strategy' (O'Connor & Seymour, 1994) to explore issues relating to her goal from the perspective of a dreamer, a realist and a critic. She was asked to move to different parts of the room for each of the three stages:

"…we moved around the room and it was helpful because it made you think from a different perspective…actually moving physically helped to refocus." (Sophie, I, 58)

Another coach-mentor used video analysis to reflect on the learner's performance in a real-life situation where she was coaching a cricket team. The learner was encouraged by her coach-mentor to use a number of breathing techniques to help her and she was able to observe the difference that this made on the video:

"I've learned to speak more clearly, so I do that in my coaching now… I did that through the breathing technique, so I use that before I coach … [I'm] definitely getting better with the group." (Samantha, interview, 227, 229)

It appeared that emphasising bodily-kinaesthetic intelligence helped to connect both the mind and body in the coaching-mentoring process and for these learners it helped them to progress towards their goal. Encouraging the learners to engage with an experience helped them to benefit from the 'empowerment' that can be gained through experiential learning (Moon, 2004). Marsh (1990) suggests that this is because these kinds of experiential approaches can help to raise self-awareness and Cockerill (1995) agrees saying that using physical activity can develop self-esteem.

However, it was important not to become so inspired by the 'excitement' of using these approaches that the sessions lost control. Whilst the bodily-kinaesthetic approach worked for some of the learners, two of the learners urged caution. Although one of them wanted to be 'hands-on' during the sessions, they recognised that the practical exercises meant that sometimes the control of the session was lost:

"I kept ahead of [my coach-mentor] as things happened. Excitement led to my brain careering off in all directions – so there was no flow to the session." (Paul, reflective diary, 9, 10)

His coach-mentor agreed:

"[The session was] slightly out of control…I had to react and re-plan the session…[I need to] be wary of the tasks set." (Sally, reflective diary, 23, 25)

This reminded us that whilst using MI interventions to emphasise bodily-kinaesthetic intelligence can be useful in coaching-mentoring, the coach-mentor needs to be able to retain control of the process.

Musical Intelligence
I have already discussed how music was used by some of the coach-mentors to create a relaxed atmosphere for the coaching-mentoring sessions. However, Gardner (1999a) suggests that emphasising the musical intelligence is achieved through using the construction of a piece of music to aid learning. One of the coach-mentors and I used music to encourage our learners to explore pace and pause to encourage them to breathe more frequently when public speaking. We thought that slowing down to the pace of the music and breathing more frequently would help their nerves. We used the same piece of classical music, which had a different effect on our learners. One of the learners said:

"I used music to help me slow my speed down…the music made me feel calmer…Using music seemed to be a major breakthrough – I immediately felt calmer and was able to speak slowly and confidently in time. I was able to use the memory of how I felt with the music later on when I practised without it." (Rachel, reflective diary, 5,6,7)

Whilst Rachel already knew and appreciated this piece of music, Samantha did not respond in the same way:

"It was supposed to slow my talking down but I found it quite hard and slightly off-putting…There were moments of laughter and I felt a bit silly. I think it did slow me down but I kept losing my words…I think it was just the fact that it was classical music and I was

[teasing my coach-mentor] so I wasn't being very sensible." (Samantha, reflective diary, 5, and interview, 100, 154)

This experience was a reminder that, whilst music can be beneficial in the learning process and using it in certain ways can either relax the learner or help to emphasise their musical intelligence, we should be cautious in our choice of music. Music affects feelings and feelings affect learning and the right music can have a beneficial effect on the learning process. However, there is no recommended music to use in the learning process. The music is only 'right' if it contributes to the 'relaxation, alertness, openness and optimal learning' for the learner (Meier, 2000, p. 118).

Spatial Intelligence

The coach-mentors used practical interventions to emphasise the spatial intelligence. Gardner (1999a) says that spatial intelligence is the potential to recognise and manipulate the patterns in spaces. He draws a distinction between spatial intelligence and visual perception, as a blind person can also have spatial intelligence through the tactile modality, which parallels the visual modality in a seeing person. In addition to using video to review what the learners had achieved through emphasising their bodily-kinaesthetic intelligence we emphasised the spatial intelligence in three more ways: through visualisation, the use of patterns in space and through visual interpretation.

The pattern in space approach was used by the coach-mentor and the learner working in the swimming context, in combination with the bodily-kinaesthetic intelligence. This helped the learner to 'stand outside' of herself and appreciate the impact of parts of their body on the stroke she was learning:

"[We used it as] a technique to enable my learner to see and feel what their arms and legs should be doing." (Abbie, reflective diary, 60)

I used it with my learner, again in combination with the bodily-kinaesthetic intelligence, to rearrange the room and practice presenting in the environment that they had created in preparation for their presentation. This was intended to help her feel that she 'owned' the space in which she was working and so feel more confident when presenting:

"...we looked at the room and use of space and used a theatre metaphor. [The learner] liked moving the room [to create the layout most suitable for their presentation and rehearsing within the space.]" (Colleen, reflective diary, 9)

The visual perception approach was used by one of the coach-mentors to assist in the goal-setting and planning stage. The learner built a visual interpretation of her goal by using mind-mapping software:

"Mind Manager is a very useful tool. By emptying my mind on paper my ideas began to take shape and make sense. ...I will use the Mind Manager tool to brainstorm other ideas and projects ... it was all there and it was all in my head... I like the idea of the visual map building in front of you, that's something that I interact well with...and makes sense to me." (Sophie, interview, 62, 100)

Caviglioni et al (2002) suggest that the benefit of using these kinds of approaches in learning is that it enables thoughts, which are usually invisible, to become visible. The mind-map approach had advantages for the coach-mentor because the exposure of the learner's thoughts in the exercise

helped them to better understand what the learner was thinking. The earlier examples of swimming and the theatre metaphor gave the learners the opportunity to use space to express themselves and help to represent their thoughts in tangible, spatial forms (Gardner, 2004a).

Naturalist Intelligence
For some of the coach-mentors the naturalist intelligence was the most difficult to emphasise in their contexts. In fact two did not use this intelligence. The naturalist intelligence helps people to recognise flora and fauna (Gardner, 1999a) and the contexts in the study did not lend themselves to these activities.   Kornhaber et al (2004) say that solving problems by using the natural world also emphasises the naturalist intelligence.   Some of us therefore aimed to make some connections between the natural world and the goals of our learners.

Whilst coaching her learner in PowerPoint, Sally encouraged him to design a PowerPoint presentation about the natural world. Paul chose to design a presentation that he could use with his students on turtles. During the interview I asked Paul about the relationship between this choice of subject and the achievement of his goal of creating an effective PowerPoint presentation. His response was:

> *"[Another subject] would not have been nearly as exciting and interesting [as turtles]. I don't think as a result it would have captured my imagination as much as what I did produce has done and therefore I don't think I would have put the time and effort in between the sessions."* (Paul, interview, 32)

Some of the coach-mentors encouraged their learners to use metaphors from the natural world, in anticipation that this would provide a new perspective on the learning experience. For example, one of the learners was encouraged to use a natural metaphor to think creatively about the structure of a presentation. She chose the seaside as her metaphor and identified a number of words that were associated with the sea. She then applied those words to the structure of the presentation to ascertain if there were any changes that she could make. Whilst initially sceptical, this encouraged her to think creatively about their goal:

> *"I was sceptical to begin with – but exploring the words threw up some interesting ideas that I am going to apply to my presentation…By opening my mind to new techniques I become more creative…I will use the naturalist technique in the future for other situations [as] it really helped me recognise ideas I wouldn't have thought of before."* (Rachel, reflective diary, 14, 15, 16)

A Multiple Intelligence Toolbox for Coaching and Mentoring

During this study we aimed to use MI interventions to help our learners to achieve their goals. The learners and coach-mentors believed it was important to create the right environment in which to work and location and music helped to create an appropriate atmosphere.   Some of the interventions that we used were typical of our previous experiences as coach-mentors.   However, some of the MI interventions were new to us and encouraged us to introduce more experiential activities that helped to integrate engage mind, body and emotion in the learning experience. Some of the most significant interventions that were used are now presented in a Multiple Intelligence Toolbox for Coaching and Mentoring (Table 5). The structure of the Toolbox follows the stages of the model used for the study. The Toolbox also indicates which MI are emphasised through each intervention, as in reality it was difficult to emphasise an individual intelligence in isolation.

Toolbox of MI Interventions for Coaching and Mentoring

The Toolbox has been constructed from the experiences and ideas of the coach-mentors and learners involved in this study. The tools and exercises proved to be appropriate for the contexts in which we were working. It sets some options for activities within each of the model stages and identifies which MI are likely to be emphasised through each option. The options listed under 'Establish cultural context' do not specifically emphasise the MI. However, these options make the most of creative ideas promoted through thinking about the MI to create an atmosphere that, for some, may be 'different' from other experiences of coaching and mentoring, setting the session in a context that helps the learner to recognise that the session may contain some new and novel approaches

Toolbox options for each stage based on the data/findings from this study *(For details of references see References section)*	Lingu	Logic	Bodil	Music	Spati	Inter	Intra	Natur
Establish cultural context								
Identify appropriate locations away from usual working environments. Some coaching-mentoring sessions can be conducted during a walk in the countryside, woods or beside the sea. Use natural metaphors for working through goals, issues and problems								●
Consider using music to set the atmosphere for the session, to relax the learner and to make the session 'feel' different from everyday business interactions. Encourage the learner to select the music. Use the music for timing and pacing the session				●				
Establish rapport								
A feature of successful coaching and mentoring is the establishment of rapport between coach-mentor and learner. We would recommend that more 'traditional' and familiar approaches are used for this stage to help the learner to settle comfortably into the coaching-mentoring session	●					●		
Encourage the learner to tell their story								
Encourage the learner to talk and ask questions to prompt reflection and evaluation. (See also Lee (2003) on story-making between coach-mentor and learner to identify systemic, cognitive, history, personality and relationship stories)	●					●	●	

Toolbox options for each stage based on the data/findings from this study *(For details of references see References section)*	Lingu	Logic	Bodil	Music	Spati	Inter	Intra	Natur
Establish goals								
Use the 'Disney Strategy' (O'Connor & Seymour, 1994) to explore the goal from the three perspectives of dreamer, realist and critic. Play quiet music in the background for a relaxed atmosphere. Encourage the learner to move to three different parts of the room when considering the three different perspectives	●		●	●			●	
Explore goals and issues related to the achievement of the goal using the GROW (Goals, Reality, Options, Will/Way forward) model to prompt questions and discussions (Whitmore, 2003)	●	●				●	●	
Use questions to explore aspirations as well as barriers and blocks (Egan, 2002)	●					●	●	
Use a visual aid at each coaching-mentoring session that outlines the goal as a reminder/to help focus on the goal (see also Kornhaber et al, 2004, p. 48)	●				●			
Establish learner's perception of their current position								
Utilise the Measurement of Competency (Appendix 9) to encourage the learner to consider what knowledge and skills they need to develop to be successful in their goal. Ask them to rate their current position on the scale to identify areas of concern. Use the results to plan the milestones/design a flowchart to chart the journey to their goal	●	●			●	●	●	
Familiarise learner with MI theory								
Identify the learner's appreciation of learning theories. Share some models or theories and discuss	●				●	●		
Introduce the concept of MI. Recommend books and web-sites	●						●	
Encourage them to attend a workshop so that they can explore MI theory with others	●					●		
Experiment with some of the approaches to identify whether or not the learner is ready for MI approaches	●	●	●	●	●	●	●	●
Form a contract with the learner to agree contexts, challenges and boundaries and establish how receptive they are and how appropriate it will be to incorporate a range of MI interventions into the coaching-mentoring process	●					●	●	

Toolbox options for each stage based on the data/findings from this study *(For details of references see References section)*	Lingu	Logic	Bodil	Music	Spati	Inter	Intra	Natur
Use MI interventions to clarify/challenge/stimulate/build confidence NB The following are some examples of the MI interventions used during this study and were appropriate for the contexts in which the learners and coach-mentors were working								
Context: Sport **Goal: Increasing confidence in swimming**								
Use rhythmical patterns or music to emphasise timing of the stroke		●	●	●				
Identify metaphors to assist appreciation of body positions and impact. Encourage the learner to use their body in the water to match the metaphor, for example fish, spring, dolphin, tunnel	●		●		●			●
Encourage visualisation of how the body and muscles will move and interact with the stroke before entering the water			●		●		●	
Observe and critique other swimmers in the water	●				●	●	●	
Use logical descriptions of body position in relation to flotation and propulsion		●	●					
Manipulate the learner's limbs and then ask the learner to 'talk' to their muscles once they are in the water	●		●				●	
Context: Business and Sport **Goals: Increasing confidence in public speaking: meetings/presentations/sports coaching and exercise classes**								
Ask the learner to write down all the things that may go wrong in a presentation. Ask them to think of solutions or ways of avoiding the mistakes	●					●	●	
Tape record the learner giving a practice presentation, play back and encourage the learner to critique their pitch, pace pause, pronunciation (the 4p's). Give feedback. Tape record the learner reading poetry to improve the 4p's. Play back and repeat	●		●			●	●	
Tape record the learner giving a practice presentation in time with different pieces of music. Play back and encourage them to critique the pitch, pace, pause and pronunciation. Give feedback. Repeat the exercise to enhance the performance	●		●	●		●	●	

Toolbox options for each stage based on the data/findings from this study *(For details of references see References section)*	Lingu	Logic	Bodil	Music	Spati	Inter	Intra	Natur
Rehearse the practice presentation in front of a mirror to observe body language and to recognise how changing posture can affect vocal projection	●		●		●	●	●	
Use a theatre metaphor for the learner to visualise the location for the presentation and identify appropriate use of space. Encourage them to rearrange the furniture to reflect the ideal set up and to help them to feel they 'own' the space			●		●			
Ask the learner to close their eyes whilst the coach-mentor gives a verbal visualisation of a successful presentation. The learner then visualises their own successful presentation	●				●	●	●	
Use the video camera to record the learner giving a practice presentation in a variety of ways, for example: with notes, without notes, before visualisation, after visualisation, or in the style of someone talking to a friend. Play back the different versions and discuss the differences	●		●		●	●	●	
Use creative thinking techniques to enhance the structure and visual interest of the presentation. For example, use a natural metaphor	●					●	●	●
Context: Learning technologies **Goal: Increasing confidence in enhancing pedagogic knowledge and using learning technologies**								
Explore ideas and map concepts using Mind Manager software to give a visual representation of thoughts and ideas	●	●			●	●	●	
Use different types of music in the background for different activities, for example: thinking, reading, working on a problem				●				
Visit the library, explore electronic catalogues, make use of library technologies to increase confidence in locating literature	●	●	●					
Experiment with PowerPoint software to explore visual possibilities			●		●		●	
Use of a topic of interest to the learner for learning how to use the software - in this case learning about PowerPoint by creating a presentation about turtles	●		●		●			●

Toolbox options for each stage based on the data/findings from this study *(For details of references see References section)*	Lingu	Logic	Bodil	Music	Spati	Inter	Intra	Natur
Observe and discuss impact of intervention								
Discuss and evaluate an experiential intervention with the learner	●					●	●	
Agree options for future agenda/actions by coach-mentor and learner								
Reflection and discussion	●					●	●	
Coach-mentor and learner complete reflections								
Complete a written account of what had been learned at each coaching-mentoring session in a reflective diary (Appendix 11)	●						●	
Write a poem to reflect on each coaching-mentoring session	●			●			●	
Draw a picture to reflect on a critical learning incident					●		●	
This is an area for further research (see also Moon, 2002)								
Coach-mentor explores and extends Toolbox in preparation for next session								
Reflection of coach-mentor and design of interventions	●	●	●	●	●	●	●	●
Coach-mentor collaborates formally and informally with other coach-mentors, whilst maintaining confidentiality								
Meet with other coach-mentors in an action learning set to reflect on experiences and to learn from each other (McGill & Beaty, 2002; Revans, 1998)	●					●		

Table 5: Toolbox of MI Interventions for Coaching and Mentoring

Conclusion

Emphasising a range of MI provided interesting learning moments for some learners, but involved the coach-mentors taking risks and moving outside of their comfort zones. Some of the interventions that we used were typical of our previous experiences as coach-mentors. However, some of the MI interventions were new to us and encouraged us to introduce more experiential activities that helped to integrate engage mind, body and emotion in the learning experience. Whilst we were reminded of the need for the coach-mentor to retain control of an experiential learning session and that care should be taken when choosing music for learning, on the whole the learners said that they benefited from the creative approaches to their learning. The measurement of competency exercise completed by the learners at the end of the study indicated that in 63% of the competencies the learners perceived that their performance had improved and that in the other competencies their performance had stayed the same.

The data indicated that it was possible to use MI as a learning intervention within the model that we used for the study which was an adapted version of The Mentoring Meeting model (Clutterbuck, 2004; 1998). Comparisons were drawn between our adapted model and the Entry Points and Compass Points frameworks used in education (Gardner, 1999a; Kornhaber et al, 2004) and resulted in a new Multiple Intelligence Model for Coaching and Mentoring.   The most significant MI interventions that we used during the study were collated into a Multiple Intelligence Toolbox for Coaching and Mentoring.   The structure of the Toolbox follows the stages of the recommended model and also indicates which MI are emphasised through each intervention.

References

Armstrong, T. (2003), *The Multiple Intelligences of Reading and Writing*, Alexandria Virginia: Association for Supervision and Curriculum Development.
Brydon-Miller, M., Greenwood, D. & Maguire, P. (2003), 'Why action research?', *Action Research*, 1, 1, 9-28.
Caviglioli, O., Harris, I. & Tindall, B. (2002), *Thinking Skills & Eye Cue: Visual Tools for Raising Intelligence*, Stafford: Network Educational Press Ltd.
Clutterbuck, D. (1998), *Learning Alliances*, London: Institute of Personnel and Development.
Clutterbuck, D. (2004), *Everyone Needs a Mentor*, London: Chartered Institute of Personnel and Development.
Clutterbuck, D. & Lane, G. (eds.) (2004), *The Situational Mentor*, Aldershot: Gower.
Cockerill, I. M. (1995), 'Self-esteem development through participation in physical activity', *The Journal of Workplace learning*, 7, 7, 14-17.
Cox, E. (2003), The Contextual Imperative: Implications for coaching and mentoring, *International Journal of Evidence Based Coaching and Mentoring*, 1,1, 9-22.
Cranwell-Ward, J., Bossons, P. & Gover, S. (2004), *Mentoring: a Henley Review of Best Practice*, Basingstoke: Palgrave Macmillan.
Daines, J., Daines, C. & Graham, B. (2002), *Adult Learning Adult Teaching*, Cardiff: Welsh Academic Press.
Denscombe, M. (2003), *The Good Research Guide,* Maidenhead: Open University Press.
Flaherty, J. (1999), *Coaching: Evoking Excellence in Others,* USA: Butterworth Heinemann.
Gardner, H. (1983), *Frames of Mind: The Theory of Multiple Intelligences,* London: William Heinemann Ltd.

Gardner, H. (1993a), *Frames of Mind: The Theory of Multiple Intelligences*, London: Fontana Press.

Gardner, H. (1993b), *Multiple Intelligences: The Theory in Practice,* New York: Basic Books Inc.

Gardner, H. (1999a), *Intelligence Reframed: Multiple Intelligences for the 21st Century*, New York: Basic Books.

Gardner, H. (1999b), *The Disciplined Mind*, New York: Simon & Schuster.

Gardner, H. (2004a), *Changing Minds: the art and science of changing our own and other people's minds*, Boston: Harvard Business School Press.

Gardner, H. (2004b), Audiences for the Theory of Multiple Intelligences, *Teachers College Record*, 106, 1, 212-220.

Gillen, T. (2000), *Coaching*, Ely: Fenman Ltd.

Gray, D.E. (2004), *Doing Research in the Real World*, London: Sage Publications Ltd.

Harding, C. M. (2004), *Using Multiple Intelligences in Coaching and Mentoring*, unpublished Oxford Brookes University assignment.

Haley, M. H. (2004), 'Learner-centred instruction and the theory of Multiple Intelligences with second language learners', *Teachers College Record*, 106, 1, 163-180.

Hay, J. (1999), *Transformational Mentoring,* Watford: Sherwood Publishing.

Hoerr, T. (2004), 'How MI informs teaching at New City School', *Teachers College Record*, 106, 1, 49-57.

Honey, P. & Mumford, A. (1982), *The Manual of Learning Styles*, Berkshire: Peter Honey.

Honey, P. & Mumford, A. (1986), *Using Your Learning Styles*, Berkshire: Peter Honey.

Hussey, J. & Hussey, R. (1997), *Business Research*, London: MacMillan Business.

Kline, N. (2003), *Time to Think*, London: Cassell Illustrated.

Kolb, D. A. (1984), *Experiential Learning: Experience as the Source of Learning and Development,* New Jersey, Prentice Hall P T R.

Kornhaber, M. L. (2004), 'Multiple Intelligences: from the ivory tower to the dusty classroom – but why?' *Teachers College Record*, 106, 1, 67-76.

Kornhaber M. L., Fierros, E. G. & Veenema, S. A. (2004), *Multiple Intelligences: best ideas from research and practice*, Boston: Pearson Education Inc.

Landsberg, M. (1996), *The Tao of Coaching*, London: Harper Collins Publishers.

Lyddon, W. J., Clay, A.l. & Sparks, C.L. (2001), 'Metaphor and change in counselling.', *Journal of Counselling and Development,* 79, 3, 269.

Marsh, G. (1990) *Role Analysis: how to run drama workshops designed to raise self-awareness*, Standing Conference on Educational Development Paper 62.

Megginson, D. & Boydell, T. (1979,) *A Manager's Guide to Coaching*, London: British Association for Commercial and Industrial Education

Meier, D. (2000), *The Accelerated Learning Handbook*, London: McGraw Hill.

Moon, J. (2002), *Learning Journals*, London: Kogan Page.

Moon, J. (2004), *Handbook of Reflective and Experiential Learning: theory and practice*, London: Routledge Farmer.

Noble, T. (2004), 'Integrating the revised Bloom's Taxonomy with Multiple Intelligences: a planning tool for curriculum differentiation', *Teachers College Record*, 106, 1, 193-211.

O'Connor, J. & Seymour, J. (1994) *Training with NLP*, London: Thorsons.

Parsloe, E. & Wray, M. (2001), *Coaching and Mentoring,* London: Kogan Page.

Peltier, B. (2001), *The Psychology of Executive Coaching*, New York: Brunner-Routledge.

Rogers, J. (2004), *Coaching Skills*, Maidenhead: Open University Press.

Rose, C. & Nicholl, M. J. (2004), *Test yourself – How are you smart?*, http://www.accelerated-learning.net/learning_test.html [Accessed 26/07/04]

Shearer, C. B. (2004), 'Using a multiple intelligences assessment to promote teacher development and student achievement', *Teachers College Record*, 106, 1, 147-162

Shore, J. R. (2004), Teacher education and Multiple Intelligences: a case study of Multiple Intelligences and teacher efficacy in two teacher preparation courses, *Teachers College Record*, 106, 1, 112-139.

Skiffington, S. & Zeus, P. (2003), *Behavioral Coaching*, North Ride: McGraw-Hill Australia Pty Ltd.

Stringer, E.T. (1996), *Action Research*, London: Sage Publications.

Viens, J. & Kallenbach, S. (2004,) Multiple Intelligences and Adult Literacy: a sourcebook for practitioners, New York: Teachers College Press.

West, L. & Milan, M. (2001*), The Reflecting Glass: professional coaching for leadership development*, Basingstoke: Palgrave.

Whitmore, J. (2003), *Coaching for Performance,* London: Nicholas Brealey.