

## MIRROR NEURONS, FISHBOWL ACTIVITIES AND IMITATION LEARNING

An article written by John Sautelle, Principal of performgroup.

In 1996 the Italian neuroscientist Giacomo Rizzolatti, discovered some special motor neurons in the front of the brain, which he called "Mirror Neurons". When a monkey picks up a peanut, specific motor neurons are involved. The breakthrough discovery that Rizzolatti made, is that a mirror neuron will also fire when the monkey observes another monkey performing the same action, even though there is no movement in the observing monkey!

One of our favourite learning methodologies, particularly for so called "soft skills", is using "fishbowl" activities. For example, when running high-level negotiation skills programs for clients we often develop a true to life scenario and bring in actors to role play the external parties. Participants are allocated to teams, typically with 2 to 3 members in each team.

The negotiation is progressive, with teams taking it in turns to engage with the actors. As each team negotiates, the others observe. At the end of each session feedback is given to the participating team by the other teams and the facilitator. When all teams have had their turn, the actors come out of role and give valuable individual feedback to the participants.

This is a very rich experience, enabling people to learn by "doing", and also by observing others "do". Until recently, however, we were not aware of the science behind this type of learning. And that is where mirror neurons and monkeys come in.

So, in essence, anytime you watch someone else doing something, the corresponding mirror neurons can fire in your brain, thereby setting up the pathways that enable you to do the same thing. It is this process that allows us to "read" and understand another's intentions, and thus to develop a sophisticated "theory of other minds."

Rizzolatti's work has been progressed by Professor V.S. Ramachandran. For an interesting overview of his work see "Big Brain, Big Bang" by Catherine Fox in June 2005 Boss Magazine.