

SKILL ACQUISITION

Typically within the realms of the conventional “Sports Scientist” skill acquisition is a critical component in the development of performance over a long period of time. This article will challenge the more traditional views of skill development and maintenance, providing an alternative methodology for learning.

This model utilises the “Kinaesthetic Sensory Channel” whilst understanding the organization of movement linked to a function in the field of gravity through time. The “Kinaesthetic Sensory Channel” as a general term refers to our feelings, in this case the term refers to our feelings in relation to movement. My intention is to make you aware of your feelings during movement, visualize perfect movement and use a process of “Self Modelling” to “Associate” yourself to this movement.

Self Modelling is an effective tool for the development and understanding of new skills and activities. In this instance self modeling becomes highly effective as we utilize references in real time from elite athletes. Imagine having the tools to see an elite sportsman complete an activity, and then be able to model the outcome action for action.

It is anticipated the reader has an understanding of the terminology used in this article from past reading in this series. If this is the first you have read you will need to familiarise yourself the previous three articles.

Follow the framework set out below, when you have completed the process for the desired skill simply repeat with each new skill you are wishing to learn.

Understanding your skill

1. Access an effortless skill that can be performed 100% of the time to an extraordinarily high level of consistency. E.g.

Bike

- A complete revolution of the peddle stroke on your bike

Swim

- A single arm stroke including; all phases of the pull and recovery

Run

- Five to ten steps at run speed but with a focus on one particular stride

2. Continue the action until such time as you are fully associated (understand) to the Kinaesthetic (feelings) sensations of the movement.

- This entails repetition with awareness. Practice the skill time and time again with an awareness of the feelings
- Complete the action then remember the Kinaesthetic sensations, repeat this process until you are satisfied with your level of understanding

Note: the association you will have to the movement will be sensory specific: tightness, warmth, tingling etc.

3. While maintaining the Kinaesthetic sensations access the Visual Sensory Channel. That is, see yourself completing the skill; visualize not as if you were watching but participating. For example visualize being on the bike riding.
 - It is important to maintain your association to the feelings
 - Do not be discouraged if you are unable to hold a clear picture. The purpose is not to create a perfect visual experience rather, to elicit a neuromuscular communication
4. A. Using the techniques above visualize yourself completing the action
 - Visualise the action associated to any feelings
 B. Actually complete the action
 - After each action is completed, re-visualise such that it is exactly the same as the actual result. I.e. if you felt stronger throughout the entire peddle stroke adjust your visualization to reflect this change.
5. Continue the process of visualizing, followed by the action, until there is a consistent exact result.
6. Reinforce or test this process by visualising other skills, followed by the action.
 - Ensure that you are fully associated to the Visual and Kinaesthetic sub-modalities. That is, do not complete the movement mindlessly. Concentrate on the visual picture and the feelings of the movement.
 - Re-visit the original skill on a regular basis

Understanding the optimal skill

1. Choose a person with optimal performance such as Ian Thorpe, Lance Armstrong or even Luke Bell. Gather footage of the specific skill you wish to learn and utilise the sub-modalities discovered earlier to model their performance.
 - Each time you view the footage become associated at a visual and kinaesthetic level.
 - Continue this until you are familiar with the action.
2. Repeat numbers 2, 3, 4 and 5 in the “Understanding your skill” section of this article using the optimal skill as your reference.
 - Continue to follow this process until the number of times required to facilitate change and acquire new skill has decreased significantly.
3. Integration of new skill
 - To assist in the integration of these skills you should use the visual sub-modality and be fully associated. E.g. As a trigger choose a few scenarios similar to things that may occur in real time. Visualise someone running or swimming beside you, visualise riding behind someone
 - Use the integration tool to trick your subconscious into believing you are completing the skill in real time in an actual event
4. Enhancing the acquisition strategy by utilising flexibility drills in each sub modality

- 3 –dimensional visualising from different perspectives using different colures
- Slow refined movement to enhance balance etc
- Listen for any sounds associated to these types of activities
- After each of the flexibility drill go back to the original skill until you are able to repeat it effortlessly and consistently

Note: The idea behind the drills is not to focus on the new skill but to develop your ability to communicate with your nervous system. Keep the drills and your skill specific activities separate.

The material in these articles has been compiled over multiple years of study and draws its content from a number of modalities. The practical segment of each article has been developed in conjunction with Peter Dawson and reflects the experiences of a number of high level athletes.