



ARIES TECHNICAL BULLETIN # 6
BOOKS, MANUALS, & LEARNING DIFFICULTIES

At the dawn of Mankind, survival was based on seeing, hearing, and the synchronous association and interpretation of the two inputs. No caveman had a written survival manual. Learning was passed down through a show and tell process. Over time, the human brain became optimized for *visual learning*.

On an evolutionary scale, the ability of the masses to read and write has just happened. Even today a significant proportion of the world population has difficulty understanding what they have read. Make the text technical in nature and understanding decreases significantly.

Certain aspects of the learning process can sometimes be quite subtle. Since we used books and manuals in school, we assume that this is still the best process to impart understanding. Load the book or manual with pictures, diagrams, and the associated text and understanding must inevitably follow. This is just not so!

In a technical manual, a given concept or procedure is described by means of diagrams, pictures, and text. Arrows may even link the text to the pictures. Because the eye can only look at one thing at a time, the eye must alternate between the text and the picture. It cannot deal with both at the same time. When reading the text, no picture is seen. When looking at the picture, no text can be read. This may seem subtle as the eye flashes between the two but this process does create barriers to understanding. This process is what we call *unsynchronized associative learning*. The brain must associate the text and the picture in an offline process. There is a great diversity in peoples' ability to do this effectively and efficiently so as to maximize understanding.

In the ARIES UOVRS™ process, we have a real time video component that the eye can focus on continuously. The text is converted into an audio component. The brain has been designed to associate hearing and seeing together. It is called *synchronized associative learning*. What is being continuously seen is being synchronously clarified by the audio component in our UOVRS™ Library Module. We further enhance the learning experience by directing focus with special visual effects such as arrows, text, and colouration. Other than actually doing it, there is not a more effective process for providing learning input to the brain. This process matches our real world experiences where we see and hear synchronously. The learning "overhead" is substantially reduced when you design the information transfer process to match the learning style of the recipient and this is important when more than 70% of technical people are *visual learners*. A UOVRS™ Library Module can be reviewed 24/7, as many times as required to achieve complete procedural understanding.