

## INTRODUCTION

This study develops an appropriate instructional design model for a humanistic multimedia Computer-Enhanced Language Learning (CELL) package for self-access second language learning through listening and viewing comprehension. The model is grounded in sociocultural theory, and set against a background of research into the complexities of listening and viewing, into learner individual differences and learning styles, into characteristics of self-directed and autonomous learning, and into user-friendly instructional software design. The work can be divided into two parts. The first (Chapters 1 - 4) covers earlier research into second language pedagogy, listening theory, and learner characteristics, and provides the background for the second part. The second (Chapters 5 - 7) then comprises the multimedia software instructional design proposed here as a model for the creation of learner-centred Computer-Enhanced Language Learning software employing multimedia. Being a cross-disciplinary study, each of chapters 1 - 5 of this work, of necessity, contains a review of the research literature pertinent to the discipline area introduced in that chapter.

Chapter 1 outlines the background to current approaches to language teaching and learning, and the uses of computers within these. Some of the terms used to refer to various models of computer use in the language learning process are discussed, including a recent survey of computer use in Australian secondary and tertiary institutions. The concept of Computer-Enhanced Language Learning (CELL) is then introduced, and from there, the direction of subsequent chapters is determined.

Chapter 2 provides a discussion of a taxonomy of listening comprehension tasks which allows tasks to be categorised according to difficulty pertaining to features of the task, the text, and the context. This taxonomy derives from the features identified in the literature as contributing to the perception of ease or difficulty of these tasks. In Chapter 3 the learning style literature and research is outlined. Included here is a discussion of the relationship between learning style and Computer Assisted (or Aided) Language Learning (CALL) in general, and Computer Enhanced Language Learning (CELL) in particular. Chapter 4 follows on from this and investigates the role of learning strategies in developing the learner autonomy necessary for an effective learner-centred CELL package.

Chapter 5 provides a structured background to the architecture of the CELL multimedia package designed by this author to allow the implementation of listening and viewing comprehension tasks in a learner- and learning-driven CELL environment. This discussion focuses on the design of a learner-centred interface and the approach to instructional design to show that, within a sociocultural paradigm, language learning using computers can be both humanistic and pedagogically sound. This chapter also outlines the feedback mechanisms built into the design of the package, the pedagogic rationale behind this design, and some historical background to this approach. Chapter 6 describes and illustrates some sample tasks and lesson sequences from the prototype of the multimedia listening and viewing comprehension package, together with a detailed description of the

mechanisms for learner control and navigation paths. Finally, Chapter 7 summarises the implementation of the software package, and suggests areas where further development and research are possible using the package as the vehicle for data collection.