

## **Chapter VI**

# **Library and Information Science**

### **Introduction**

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A key theme of Chapter III was the need to be able to seek out information and resources for oneself. Learners require this ability whether working in formal education (especially if engaged in project- or inquiry-based learning) or as autonomous learners outside any formal educational context. However, teachers and learning designers are themselves learners. They also need to be able to find information and resources to help them teach and design the learning resources, activities, and experiences of others.

Library/information science has always been linked with education in relation to:

- a. Supporting the organisation of, and access to, learning resources to support mediated learning—for example, via educational libraries, resource centres, and repositories of learning resources.
- b. Supporting relatively autonomous information seeking within the context of project-, problem-, and inquiry-based learning designs within formal education.
- c. Supporting the information seeking of autonomous self-directed learners working outside the context of formal education.

Indeed, the integration of key aspects of education and library/information science, with information and communication technology (ICT), is the central driving force behind the field of *educational informatics*.

This chapter begins by introducing some of the key techniques, approaches, and standards developed within library/information science to enable and facilitate information seeking and resource discovery. These focus on ways of describing information and learning resources in such a way as to enable their effective discovery. The chapter goes on to explore the psychological processes entailed in information seeking. These processes are interpreted in terms of the *integrating themes* model introduced in Chapter I and its incorporation within a *conversation theory* framework. These concepts are then integrated into the developing model introduced with increasing complexity in the three previous chapters.

## **Standards for Supporting Resource Discovery**

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Cataloguing, indexing, and classifying information sources is the stock-in-trade of library science. These processes entail generating descriptions of information sources (metadata) that can act as surrogates, enabling large, diverse, and remotely located collections of information sources such as libraries, databases, and repositories to be searched relatively quickly and easily. Traditional library catalogues are based on such descriptions, and a number of standards have been developed in the library world to facilitate consistency in producing them and to promote interoperability. Such standards relate to describing a resource—whether an information source, a learning package, artwork, music, and so forth—in terms of, for example, *bibliographic* aspects including the person intellectually or artistically responsible for its content (author, composer, etc.); title; details such as pagination for books, running

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