

Appendix A

References Relating to Database Skills

Edison, Betty. "Teaching Information Professionals About Database Design." *Database* 13, no. 1 (1990): 33–37.

Lee, Frances. M. "Data and Information Management." In *Health Information Management: Concepts, Principles and Practice*. Kathleen M. LaTour and Shirley Eichenwald (Editors). Chicago: American Health Information Management Association, 2002, pp. 83–98.

McLendon, Kelly and Carol Fetters. "Relational Databases—The Foundation of Today's Data Analysis." *Journal of AHIMA* 66, no. 9 (1995): 48–50.

Mon, Donald T. "Relational Database Management: What You Need to Know." *Journal of AHIMA* 74, no. 6 (2003): 40–45.

Willett, Delores A. and Min. F Teo. "Fundamentals of Relational Database System Design for Assessors." *Assessment Journal* 3, no. 3 (1996): 45–56.

References Relating to Definition and Analysis Skills

Alm, Irma. "Designing Interactive Interfaces: Theoretical Considerations of the Complexity of Standards and Guidelines." *Interacting With Computers* 15, no. 1 (2003): 109–119.

Ling, Liu, Calton Pu, and Duncan D. Ruiz. "A Systematic Approach to Flexible Specification, Composition, and Restructuring of Workflow Activities." *Journal of Database Management* 15, no. 1 (2004): 1–40.

Polson, Peter G. et al. "Cognitive Walkthroughs: A Method for Theory Based Evaluation of User Interfaces." *International Journal of Man-Machine Studies* 36 (1992): 741–773.

Shakir, Abdul-Malik. "Tools for Defining Data." *Journal of AHIMA* 70, no. 8 (1999): 48–53.

Shankaranarayan, Ganesa, Mostapha Ziad, and Richard Wang. "Managing Data Quality in Dynamic Decision Environments: An Information Product Approach." *Journal of Database Management* 14, no. 4 (2003): 14–32.

References Relating to Database Design Techniques

Artz, John. "The Database Designer Is a Person Too!" *Journal of Database Management* 5, no. 3 (1994): 31–34.

Batra, Dinesh and S. R. Antony. "Novice Errors in Conceptual Database Design." *European Journal of Information Systems* 3, no. 1 (1994): 57–70.

Batra, Dinesh and George Marakas. "Conceptual Data Modelling in Theory and Practice." *European Journal of Information Systems* 4, no. 3 (1995): 185–194.

Bock, Douglas B. "Entity-Relationship Modeling and Normalization Errors." *Journal of Database Management* 8, no. 1 (1997): 4–13.

Buelow, Robert. "The Folklore of Normalization." *Journal of Database Management* 11, no. 3 (2000): 37–42.

Weber, Ron. "Conceptual Modeling and Ontology: Possibilities and Pitfalls." *Journal of Database Management* 14, no. 3 (2003): 1–20.

AHIMA is the accrediting body for associate and baccalaureate degree programs in HIM. In 1996, AHIMA created a set of models that were designed to guide HIM programs in developing curricula to meet the demands that would be placed on HIM professionals in the 21st century. Each model consists of 11 knowledge clusters, with each cluster further subdivided by a set of knowledge units. Each unit is assigned a competency level indicating the level of knowledge and expertise a student should develop.

Competency levels range from one (awareness) to five (skilled use). Most relevant to the discussion is the knowledge cluster information technology. Within this cluster are the knowledge units data, information, file structures, data security, and data retrieval. Each unit has been assigned a competency level of 5 and is further subdivided into a set of smaller units. The knowledge cluster information technology and the aforementioned knowledge units are important because they represent AHIMA's attempt to define a set of competencies that closely resemble the set of skills HIM professionals must achieve to be considered competent in database design and management. However, they can be considered only guideposts or markers because they make no attempt to capture or reflect the skills that are most needed by HIM professionals in the area of database design.

Therefore, the design team felt that it was imperative to develop a list of skills that would make the HIM professional competent in database design and management. Furthermore, because these knowledge clusters are merely guides to what knowledge a student must acquire, what is taught in the classroom will be dictated by the idiosyncratic whims of educators who feel that what they present in class satisfies the competencies set forth in the knowledge clusters. With an accurate definition of the skills students must acquire in a database design course, educators will have a definitive list of skills that students need to acquire by the end of the course.