

Vince Davis

Work Experience

Program Manager, Accounting, Operations & Information Systems (AOIS), University of Alberta School of Business, Edmonton, Alberta, Canada (2000 – present)

-Researched, designed, developed and delivered courses in the following areas:

- **Introduction to MIS**, including: Managerial Use of Information, Competitive Strategy, Databases, System Development, Technology, E-commerce, Ethics (using MS-Access, MS-Visual Studio Express, MS-Project)
- **Database Methods**, including: Data Modelling, Database Design, SQL programming and Database Administration (using Oracle)
- **E-commerce**: (Using Microsoft Visual Studio with Visual Basic.NET)
- **System Development using advanced software tools**: (Using Rational Unified Process and Microsoft Visual Studio with C#.NET) object oriented system engineering principles
- **Decision Support**: decision modeling, Warehousing, Business Intelligence and Analytics, Enterprise Systems (Using Oracle Discoverer OLAP, and Oracle Data Miner)
- **Strategic Management of Information Technology**: Socio-Technical and Organizational Impact of IT, Economic and Network Effects of Information, Governance and IT Alignment for Competitive Advantage, Strategic IS Planning, Creation and Appropriation and Protection of IT-enabled Value

-Designed and delivered a greatly improved technical infrastructure to support computer-based laboratory learning and exercises for at least five MIS senior-level courses: Specifically:

- Conceived, researched and obtained an “**Academic Alliance**” agreement with the vendor **Microsoft**. After discussions with Microsoft alliance representatives, in the role of Program Manager for the MIS program, specifically sought and acquired the software, documentation and methods for:
 1. Microsoft **Visual Studio for “C#.net” professional (C#)** development language and environment (which, for example, de-emphasizes dataset-based webpage routines and enables gridview and dataview-based webpage techniques).
 - Learned the 2005-2010 **C# development** protocols (self-study) and language principles from Microsoft and other training documentation. Incorporated these into MIS lab-based teaching.
 - Learned the 2008+ connectivity protocols (self-study) from Microsoft and Oracle training materials for **connecting Microsoft C#.net webpages to Oracle** databases. Included these into teaching materials.
 - Learned 2005+ **web-services** protocols from Microsoft training documentation and developed web-services products for inclusion into MIS courses.
 2. Microsoft **Visual Studio for “Visual Basic.net” (VB)** development environment and language.
 - Learned the 2005-2010 **VB development** protocols (self-study) and language principles from Microsoft training documentation, including master-frame embedding, security authentication subsystems and database-connectivity (to MS-SQLServer databases). Developed and included materials into the MIS “ecommerce” course.
 3. Microsoft **Project Professional** project planning and management software.
 - Learned the 2007-2010 Project Planning and Resource allocation protocols (self-study) from Microsoft training documentation, including Microsoft Project 2010

approaches to task organization, duration assessment, resource registration and allocation, task dependency registration, critical path control, resource levelling and Gantt and Pert chart configuration. Developed and include training in MS-Project into the “Introduction to MIS” course.

4. Microsoft **SQL Server 2005/2008/2012** Database Development Software.
 - Learned Microsoft’s SQL Server approach and software tools for database and userID creation and installation, as well as table and relationship definition, data loading and query-object management (through self-study from Microsoft-supplied documentation). Developed and included materials in these areas into both the “ecommerce” and “capstone system development” MIS courses.
5. Microsoft **Access 2007/2010** Database Development Software.
 - Learned the newest Access 2007 software interface and recommended practices (self study through Microsoft supplied documentation).
 - Incorporated the newest Access 2010 menus, approaches and techniques into teachable standards and practices for the “Introduction to MIS” course, specifically in the areas of table, relationship and lookup definition, data loading, as well as design, construction and operation of forms, queries, reports and switchboards.
6. Microsoft **SharePoint Designer (2007-2010)** Website Development Environment.
 - Learned Microsoft’s newest 2010 SharePoint Designer approaches and standard practices for website development as a replacement for the older “FrontPage” suite of products (self study through Microsoft supplied documentation), including the development of teaching materials and exercises for web-page and web-site creation, hypertext-link creation, image and table management, as well as “extension” objects such as hit-counters, animation-buttons and marquis-displays.
 - Learned the newest 2010 SharePoint Designer protocols for incorporating “Active Server Page” (aspx) technologies in SharePoint Designer working with Microsoft’s Internet Information Server (IIS). Developed and delivered “pre-written” template aspx programs for incorporating and exposing Microsoft Access database tables through web-pages (both in read-only and updatable modes), and delivered these products for lab sessions in the “Introduction to MIS” course.
7. Microsoft **Visual Studio Express (2013)** Website Development Environment.
 - Learned Microsoft’s newest Visual Studio Express (2013) approaches and standard practices for website development as a replacement for the older “SharePoint” suite of products (self study through Microsoft supplied documentation), including the development of teaching materials and exercises for web-page and web-site creation, hypertext-link creation, image and table management, as well style-sheet approaches for hit-counters, animation-buttons and marquis-displays.
 - Learned the newest Visual Studio Express (2013) protocols for incorporating “Active Server Page” (aspx) technologies in SharePoint Designer working with Microsoft’s Internet Information Server (IIS). Developed and delivered “pre-written” template aspx programs for incorporating and exposing Microsoft Access database tables through web-pages (both in read-only and updatable modes), and delivered these products for lab sessions in the “Introduction to MIS” course.
8. Microsoft **Robotics Development Studio (RDS) Release4 (R4) (2008-2012)** Robotics Development Workbench and Real-time Simulation Environment.

implement the software toolset due to incompatibilities with the lab environment: used MS Visual Studio instead.

- used IBM-supplied documentation about **Portal Development toolsets** as assignment materials for the portals section of the MIS “management support systems” course.

- Working through existing software licenses with the vendor **ORACLE**, specifically sought and acquired the software and documentation and methods for:
 1. Oracle’s **Developer Suite 10g** system development platform (2005-2010):
 - Based upon consultation with OTN and prior consulting experience, **researched, designed and delivered teaching materials** for the newest *Oracle 10g-specific database administration* utilities, including standards, practices and toolsets for:
 - i. Oracle 10g **database installation**, configuration and security, as well as LAN and web-based connectivity.
 - ii. Oracle 10g **database administration**, including startup, shutdown, security privileges, userID maintenance and storage management.
 - iii. Provision to the user community of Oracle 10g **SQL command-windows through Oracle internet web-service**.
 - Based upon consultation with OTN, researched selected and delivered teaching materials for **Oracle Online Application Programming (OLAP)** (read-only optimized access to large n-dimensional data warehouses) through **“Oracle Discoverer” for Developer Suite 10g** (both “administrator” and “desktop” end-user versions).
 - i. Used Discoverer to teach about **designing and constructing optimized “data stars”** for large (100,000 rows+) data warehouse implementations, using Oracle-supplied sample data warehouse datasets.
 - ii. Used Discoverer to teach about orienting, navigating, selecting, summarizing, pivoting and drilling-down **large-warehouse data**.
 - Created and delivered teaching materials, exercises and assignments for the use of simple **SQL-submission and database-access windows** (both client-server and web-based), including both “windows” and “command-line” driven **SQLPlus**, as well as 3rd party “graphic window” tools.
 - i. Delivered with this was a large body of standard materials on the beginner and advanced-level uses of the **SQL database language**.
 - ii. Delivered with this was material on the uses of “procedural” Oracle-proprietary **PL/SQL programming language for Oracle 10g**, including the design, creation and execution of PL/SQL-based **Functions, Procedures, Packages and Triggers** (both for the database server and for client-oriented forms and reports).
 - Based upon consultation with OTN and prior consulting experience, researched, designed and delivered teaching materials regarding **“application performance tuning”** for Oracle SQL-based programs, including the design and creation of indexes, along with toolsets and practices for monitoring database execution plans for evidence of index existence and automatic use.
 - Created and delivered teaching materials, exercises and assignments for designing, building and operating **Oracle Forms 10g** (window-based applications that enable relatively untrained operators to gain more sophisticated access to database data, including, search, display, insert, update and delete).
 - Created and delivered teaching materials, exercises and assignments for designing, building and operating **Oracle Reports 10g** (window-based applications that enable users to format, layout, sort, group and control-total the data found in tables or views).

2. Oracle's **Data Miner 10.2** database **data mining** environment (2005-2012):
 - Based upon consultation with OTN and using Oracle-supplied test data tables, **researched, designed and delivered teaching materials** for the *Oracle Data Miner 10.2* environment, including standards, practices and toolsets for:
 - i. Oracle Data Miner 10.2 connection, data exploration, data preparation, sample-set specification, model selection and building, model testing and diagnosis, model application and value prediction.
 3. Oracle's **Object-Oriented "Object-table"** commands for databases (2005-2012), including the design, creation and use of new Oracle-specific:
 - a. Types and sub-type nesting,
 - b. Object-tables,
 - c. Value "casting"
 - d. Selecting object-oriented meta-data from the Oracle 10g dictionary
- Researched, developed and delivered curriculum for the use of **Online Analytical Process** (OLAP) techniques on large datasets using MS-Excel **Pivot-Tables**, including:
 - Table layouts, summarizing data-slicing, drill-down and pivoting on large datasets.
 - Collaborated with School of Business Technical Support Group for **migration to and use of new Virtual Server and Virtual Machine (VMWare) environments**, specifically for:
 - Specification and replacement of physical servers with virtual servers
 - Ensuring connectivity to same through several independent layers of firewalls
 - Ensuring regular remote connectivity and communication established for maintenance
 - Identified and designed the ideal server-computer configuration and sets of Microsoft, IBM and Oracle three-tier software tools and methods to be installed in labs, to best support the new MIS Courses and Lab requirements. Participated in a process to acquire funds for new computer servers. Assisted in configuration and installation of all necessary software and connectivity.

-Cooperated collegially with other MIS professors to jointly deliver course materials. Delivered "guest" lectures and acted as "client" resources for other MIS courses. Met and spoke with MIS student organizations, alumni, professional groups and the public to demonstrate and promote MIS topics.

Director, Back on Course Training and Consulting Limited (1991-present)

Conceived and registered the above corporation as a training and technology development enterprise.

Alberta Teachers' Association [ATA] (1993-present)

Individually and as a project manager: **proposed, staffed and provided consulting, database design, programming and support services** for a large **teachers' association (ATA)** with over 35,000 members. Specifically:

- a. (2014 underway) Negotiated the data tables, business-rules, priorities and requirements for a **data-quality audit** of the ATA's flagship *Alinity* database of *Membership* data. Delivered specifications of key existing business-rules and data-protection-programs, along with investigative data-query commands used and reports of any contradictory data discovered and associated risks and issues.
- b. (2002-2009) Negotiated requirements for, designed, built, delivered, operated and maintained a modern, **mission-critical data warehouse "extract, transform and load" (ETL)** system (called "Pusher") that, using automated ETL processes, intelligently overwrote their production-grade, operational databases on an ongoing basis with superior data from a strategic partner – over 10 million sets of records were intelligently inspected, updated and supplemented by the "Pusher".
 1. This system primarily used Oracle 9g and 10g products for the database, data warehouse storage tables and ETL programs (which included functions, procedures, packages and triggers written in PL/SQL for Oracle 9g and 10g)
 2. In 2006, a large-scale error, affecting a significant proportion of records in the ATA client production-databases was discovered due to a misapplication of previous business policies during periods when I was not retained by ATA. I was consulted and asked to propose various production-database reconstruction approaches potentially involving (incomplete) backups and my ETL "Pusher" system. I proposed and was granted authority to proceed with a multi-step reconstruction and re-building process, which was ultimately successful.
 3. Support for this Oracle ETL system and other ATA Oracle applications would require me to communicate with Oracle Support personnel (telephone, online) to resolve technical or compatibility issues involving product use, features, support guarantees and compatibility concerns regarding interfaces with Microsoft and Unix technologies.
 4. Support for this Oracle ETL system and other ATA Oracle applications would require me to communicate with other Consulting Firm staff working at ATA, who would regularly coordinate with me regarding interfaces with other Oracle, Microsoft or Unix systems. Standards and best practices for developing and interfacing all these applications were regularly discussed, and my opinion was often sought.
- c. (1993-2009) Diagnosed and resolved enterprise-wide computer application performance problems, as well as backup, recovery and testing problems.
 1. As late as 2008-2009, was frequently consulted about client needs to:
 - i. redirect, override, circumvent or improve behaviours of the existing Oracle client databases, including establishing links between databases as well as recovering and establishing administrator-connections to crashed or abandoned database instances.
 - ii. explain, scope and confirm/deny the existence of certain patterns in actual corporate data that might be upholding or contravening established business rules or policies.
 - iii. repair or overwrite existing production data according to newly established policies.
- d. (1993-2009) Designed and delivered new applications as well as enhancements and new functionality for Oracle 10g Forms, Functions, Procedures, Packages and Triggers.
- e. (2000-2007) Trained client operators, consultants and executives in the use of new application systems.

Credit Institute of Canada (2010-2013)

Consulted for a large Ontario-based Credit Education Institute on their need for a current, data-model based approach to delivering Credit Education materials and services. Gathered requirements for, researched industry standards for and recommended approaches, models and content for representing and teaching Credit Management and associated MIS practices. Advised on strategic approaches for ensuring that well-integrated databases are available across Credit Management organizations for the support of transactional business as well as executive and strategic decision making.

Custom-developed and delivered training materials (on Management Information System design, scoring, data modeling, database construction (including recommended Credit applications for querying and reporting), spreadsheets (including recommended Credit applications for formulae, functions, arrays, macros and pivot tables), expert systems, ecommerce, business intelligence, information technology controls, governance and ethics) for a large Ontario-based Credit Education Institute. Consulted on delivery and re-deployment options for training materials.

ATCO Utilities (2005-2012 & 1995-2000)

As a member of a team: **designed, developed and trained** for a mission-critical customer billing 4GL-CASE application for a major integrated **utility company (ATCO)**, using client-server and Object-Oriented platforms. Specifically:

- a. (2005-2012) **Designed, developed and delivered custom-training programs** for ATCO staff in Oracle developer technologies (in both Edmonton and Calgary), including:
 - a. SQL best practices, including differences between Oracle and IBM database SQL practices.
 - b. Application Performance Tuning and the difference between Oracle and IBM in the area of design, implementation and monitoring of indexes.
 - c. PL/SQL programming for functions, procedures, packages and triggers, along with the conceptual connections between Oracle Packaging and Microsoft Object-Orientation.
 - d. Oracle Forms and Reports.
 - e. Step-at-a-time debugging technologies, comparing Oracle and IBM standard practices.
- b. (1995-2009) **Consulted regarding best development practices**, and then **developed and delivered training** in these practices and technologies for all development staff within a team of 100 analysts and programmers.
 - a. As recently as **2009**, was **consulted about the best-practices needed for newly hired developers** to apply SQL and database transaction-control technologies and remain within existing standards and constraints. Was then asked to **research and develop training content** about these best practices. This type of work occurred more than once between 2004 and 2009.
- c. (2008-2009) **Interest was expressed** for me to propose and possibly develop and deliver training for ATCO staff in IBM's RUP (Rational Unified Process) iterative development methodologies.
- d. (1995-2000) **Designed and developed programs** for a mission-critical customer billing 4GL-CASE application using client-server, legacy mainframe and Object-Oriented platforms.
- e. (1999-2000) **Re-designed and modularized a large, strategic customer-account transaction** that was subsequently used by all online staff for the creation of 200,000 new customer accounts, each with up to 40 associated data tables.
- f. Participated in all phases of testing and change-management as a facilitator for client system testers.

(1991-present) **Custom-developed and delivered training materials** in system design, data modeling and database construction for a variety of **corporate clients, public universities and technical colleges**. Delivered training courses designed by Oracle corporation for use in their certification programs.

(1991-2005) **Developed and taught corporate training courses** for a large technical college in database, programming and operating system technologies.

(2002-2003) Individually: **acted as consultant** to the database needs of a university-sponsored, dashboard-based, supply-chain management simulation and prototype.

(1993-1995) **Designed and developed data models** and mission-critical customer billing applications for a large telephone company.

(1992-1993) **Designed and developed corporate data models** and 4GL-CASE applications using client-server technologies for a large gas company.

Consultant, DMR Group Inc. (1986-1991)

Through DMR Group, a premier Canada-based international consulting firm, provided systems development, technology consulting, management consulting, project management, integrated management and education services to more than 30 corporate and government clients in Vancouver, Victoria, Edmonton and Calgary. Designed and built online transaction processing systems using client-server and mainframe-based computer platforms. Created enterprise-wide conceptual and logical data models. Lead joint application design sessions involving executive and government minister input. Provided advice, proposals and reports on technology and application architectures. Provided management consulting recommendations and reports on business process alignment with IT infrastructure, as well as data ownership and data sharing. Recruited and managed a development project with team-size of 15 members. Managed the database administration function in a medium-to-large private corporation.

Senior Programmer Analyst, Imperial Oil Limited. (1979-1986)

Provided PC-computer and voice-data telecommunications support to a province-wide network of oil refineries and gas plants. Designed and constructed work-order and inventory control applications for a major oil refinery. Enhanced and maintained large mainframe-based financial, accounting and marketing applications.

Education

1975-1979 University of Alberta
Bachelor of Science with Honours, Computer Science

ESI Certified training: ***Foundations of Business Analysis*** (incl ***IIBA*** stds) – taken in September 2014

Microsoft Certified training: package ***10264A – Developing Web Applications with Microsoft Visual Studio 2010*** – taken in July 2012

Back On Course Ltd (Oracle-supported NAIT-custom-training for corporations (self-study) 1995-2005)

- Oracle Forms in Developer Suite 9g
- Oracle Reports in Developer Suite 9g
- Oracle Application Tuning (Rule-Based and Cost-Based: for 2005)
- Oracle Functions, Procedures and Packages for PL/SQL 9g
- Oracle Database Administration Utilities for Oracle 9g client-server (Windows and Unix)

Back On Course Ltd (Through ATCO Utilities: 1992-2000)

- ATCO Corporate Data Model and On-Call Support Procedures
- ATCO Development Library Architecture, Testing Procedures and Change Control

DMR Group (1986-1991)

- DMR Productivity Plus Systems Development Methodology
- DMR Architecture Plus Business Process Re-engineering Methodology
- DMR Project Management Standards and Approach
- DMR Project Statement Standards
- DMR Consulting and Communication Skills
- DMR Proposal Preparation and RFP/RFQ Standards
- DMR Change Control Standards
- DMR System Development: Database Design specialization
- (outside firm) Quality Control, Standards Documentation and Product Review Procedures
- (outside firm) Interviewing Skills, Communication Skills and Social Styles
- (outside firm) Assertiveness Training

Imperial Oil Limited (1979-1986):

- IBM: Job Control Language for Mainframe MVS/360 Operating Systems
- IBM: PL/I programming language
- IBM: Database Design Concepts and applications in IBM DL/I and DB2
- IBM: CICS communication in SNA architecture
- IBM: Joint Application Design (JAD) development methodology
- IBM: Personal Computer Architecture and Operating System Memory Management
- Kepner Tregoe: Problem Analysis and Potential Problem Analysis
- Kepner Tregoe: Decision Analysis
- Miscellaneous Management Practices, including Time Management and Communication Skills