

Evaluation of Software Product: MaxData for Ecomp5003 – Fall 2006

MaxData is a software product by Tom Snyder Productions, an educational software company that has an excellent selection of products. I received a 45-day trial of the product for review (November 2006) just after it came out. The product was delivered on CD and upon installation it brought up a screen that allowed access to the different areas of using the product - installation, documentation, website, etc.

Installation

You must have Microsoft Office installed for this MaxData product to work - you must have MExcel. (MSAccess -the Microsoft database product that doesn't generally come with standard Office installs - is NOT required). I received a warning message when I tried to install MaxData that my MSOffice installation needed upgrading. This was a pain. I needed the initial MSOffice install CD to do the upgrade, even though MaxData provided the upgrade. The MaxData product worked without the upgrade but every time I used it, it came up with a warning that it might not work properly. If used in a classroom/lab situation, this would need to be addressed before use. Other than that, the installation went fine and installed into my Windows machine.

Documentation

User Guides. These are documents provided in pdf format on the CD and a link is created from the menu upon installation. Being someone who likes to work from documentation and see what is offered, I immediately viewed and printed them. The documentation is excellent and provides tutorials, database instruction and guides teachers through using datasets in the Activities manual. A lot of thought went into producing these manuals and they make the program a better product. I prefer getting a book since I use documentation - I wish they'd send it with the product. I'm afraid some people may not realize what great resources are there and not utilize everything. I know it costs a lot more, but it might make a difference in how well the product is utilized.

The **Database Concepts Guide** is a 10 page summary of databases - it is EXCELLENT! There are many books written on this topic but their ability to succinctly summarize database concepts in a few pages makes this topic much more approachable by most teachers.

The **Features Guide** is a reference for use of the program. I think the manual is organized backwards - it immediately goes into designing and creating a database, a powerful feature of the program, but at the end it describes using MaxData Datasets. They should approach using the pre-programmed datasets first, a less daunting task for most teachers, and one of the best features of the program. If a teacher wasn't fluent in databases and accessed the Features Guide first, they may miss the opportunity to utilize a MaxData dataset and be overwhelmed with trying to build their own.

The Features Guide is an excellent reference for designing and creating a database and would provide guidance for working with higher grades.

The **Activities Guide** describes how to use an Activity dataset and then describes each one in detail. The documentation describes the category, a description of the dataset, a list of fields for that dataset, a list of questions that can be explored by students, and the source of data (which can provide further exploration). Each category (animals, climate, geology, population, history, geography, etc.) contains at least four datasets which provides a reasonable amount and variety of data to support activities. A lot of planning, thought, and work went into creating these datasets so they are well worth checking out.

The **Tutorial Guide** has three tutorials (paper-based) that lead you through learning three database concepts: Creating a Database based on a template, Creating a Flat-File Database, and Creating a Relational Database. I worked through the first tutorial myself and found it easy to use and informative. Most teachers would need this resource to learn and develop lesson plans based on MaxData beyond the initial and introductory activities. These tutorials are good enough to provide a Database 101 education for anyone.

My summary on documentation is that it is excellent but there should be an introduction that guides teachers through it. If a teacher picked up the Features Guide first, they could easily be overwhelmed. There should be an introduction that explains that some of the guides are technical (Configuration Guide, Administration Guide, Installation Guide - all fine documents that provide support for implementation of the product that I didn't expound on here and are not required reading by teachers), but as teachers learn the program, they should read the Database Guide first, then the Activities Guide, then the Tutorials Guide (at least for the first tutorial - others can be done later), then the Features Guide (more as a reference than required reading). It shouldn't take someone who knows databases technology to explain this. When a CD is delivered in a box, there should be some guidance - the Quick Start card that accompanied the CD should say more than "see the User's Guide files on the CD".

Interface

The MaxData product has its own interface that basically runs on top of Excel. The best part of this interface is that it has three User levels that alter the toolbar and capabilities of the program. This makes it variable for the age level you are working with and allows you to keep it simple when needed. At the simplest level (green) the program is very easy to use. At the highest level (blue) the program has quite sophisticated capabilities. The documentation lists the features of each level - I wished they'd put that information into a table so you could visually see what features came with what levels. The interface was easy to learn and easy to use and provides an ease of use for classroom use that makes the program an asset for beginners in a learning environment.

Program Features

Program Levels / Toolbars - The QuickStart guide states that this allows "differentiated instruction". That could be difficult in a single classroom, but it certainly provides appropriate lesson planning by grade level. I liked this feature tremendously and believe that the green level could be used in third grade with existing datasets, and progress to using the red and blue levels in fourth and fifth grade having students create their own datasets. The icons used on the toolbar are standard icons used in spreadsheet and database programs and standard database terminology is used so teachers and students learn the database terms.

Database Concepts - The program teaches all the skills needed to learn and understand using, creating, manipulating, reporting, and analyzing data at various levels. You can start with the basics and advance to high levels of joining relational tables. The standard terminology is used. I thought the process of learning database concepts as you work through the manuals, tutorials and program were excellent.

Activity Files - these are really valuable resources that aren't highlighted enough in the documentation and program. A tremendous amount of work went into researching and building these datasets. They have features such as pictures that most datasets do not have, but particularly for use with younger students, can really enhance the activities. I think the cost of the program is almost worth it for these alone. The sources of the data are stated in the Activity Manual so further online research may provide even more information.

Ready-Made Templates - These are templates that allow students to enter data - a step they would probably take between using existing datasets and creating their own database. They are a nice feature to have to advance the students to the next step, although I'd figure out a way to fit them into a project to use them once.

Reports - Initially I wondered why you'd want to have pre-programmed standard reports when it's such an important part of the learning process to creating those reports, but for the youngest and beginning students, I guess it's important to show them reports initially and then lead them through creating them later. The use of these reports as 'deliverables' is a valuable part of any data project. The user interface to creating the reports is very easy to use and intuitive and students would learn a lot about manipulating data by using this interface. It is very well designed.

Summary of Product Review

Overall I was very impressed by the quality and breadth of this program. I changed my opinion as I learned more about the product and worked through it.

Initially I thought I could glean a teaching/learning strategy and adopt them to a regular database program. Before I worked with MaxData, I wasn't fond of the idea of using Excel over Access. I use Access a lot and I believe the ability to create queries are a skill that everyone should have and it's totally missing from our current education. But MaxData provides the ability to teach the concepts of queries (filtering, sorting, joining) without requiring the additional installation of the Access product. I understand this approach if it was a marketing decision to not require schools to provide the expensive Access product. Now that I see how the MaxData product works, it provides the functionality I thought would be missing. Tricky and neat. Once students learn the basics in MaxData, they could easily progress to Access or another database tool in middle and high school and have the basic understanding of database tools. This makes more sense to me now.

I have a specific problem with MaxData in our schools. We have proceeded to replace using MSOffice with Open Office - a free, open source product that does not require license fees. Unfortunately, MaxData (and Scholastic Keys) are specifically married to working over Microsoft products only. Tom Snyder Productions may need to revisit this strategy as more and more schools follow this path of utilizing open source software. If it wasn't for that, I would definitely encourage schools to purchase enough programs for a class - a lab or laptop cart - and start with using existing datasets. This is a super program that has lots of capabilities and teacher support.