

**COMPREHENSIVE ANALYSIS OF EXISTING LEARNING  
MANAGEMENT SYSTEMS (LMSs)**

Name of institution:..Cork Institute of Technology (Faculty of  
Mathematics)....

Type of institution:.....Further and higher  
education.....

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Name of training manager:(Optional) Pat Ahearne

LMS used:.....Top Class.....

URL of LMS:.....http://157.190.240.35/top class

Language of LMS:.....English.....

Number of years in use:.....since 1995.....

Other LMSs used:.....Migrating to WebCT.....

Number of students in the system

Number of courses available:.....Typical duration:.....

Number of tutors in the system:.....

*This analysis is divided into six parts.*

**1 Course development tools**

**2 Student support tools**

**3 Tutor support tools**

**4 Administration (student database and records)**

**5 Technology (quality of software)**

**6 Price**

**1 Course development tools**

**1.1 Course creation. How satisfactory was the LMS for course creation?**

Medium level difficulty for course creation. At times it is counter intuitive, even when one uses the Top Class Publisher tool.

*1.2 Structure and didactic flexibility - openness. In the creation of course materials did the LMS permit didactic flexibility? Was the structure open to differing didactic possibilities?*

To an extent it is open but my original intention was to create a full course but it was too structured and templated for that.

*1.3 Teacher userfriendliness. How easy was the LMS to use by teachers and course developers?*

It was my intention to learn it on my own but it was a long learning curve - it took several months.

*1.4 Support for graphics, audio and video, moving image. Did the LMS support the provision of graphical materials, moving images, audio and video in the course content?*

Yes, but not in the way required. Its a html package. If you have 20 mathematical equations it has no way of dealing with these on a global basis.

*1.5 Questioning, assessment, assignments. What provision was made by the LMS for student questioning and assessment and the design of student assignments?*

There is plenty of multiple choice/Boolean/true or false questioning techniques but these are not suitable for our mathematics students. The multiple choice could be autocorrected but this is not usable for in depth questioning.

## **2 Student support tools**

### *2.1 Interactivity possibilities. What provision does the LMS make for student interaction?*

There is quite comprehensive provision. There is tutor to student and student to student and individual and class communication. This makes gook back up for standard lectures to give them new possibilities when the lecturer is not available. Quite useful.

### *2.2 Online student to student communication (synchronous and asynchronous). What facilities does the LMS provide for student communication to other students and how successful is it? Is both synchronous and asynchronous communication between students supported?*

This is perfectly possible within the class group. It is all asynchronous communication as there is no chat room or board facilities.

### *2.3 Online student to tutor/institution communication (synchronous and asynchronous). What facilities does the LMS provide for student communication to the tutor ion to the institution's administration and how successful is it? Is both synchronous and asynchronous communication supported? Are these support services available 24 hours a day?*

This is provided for and perfectly adequate.

### *2.4 Resources, library, references. What facilities does the LMS provide for student acquisition of resources required by the course, especially library resources and references to required readings?*

This is available only in the sense that you can insert links in the materials to other resources.

### *2.5 Feedback on work and assignments. What is the quality of provision of feedback to students on their work and assignments?*

The autocorrection facility gives results to the students immediately. If the level of response is, say, less than 60% the student gets extra work to do. Actual feedback from the tutor is at his discretion.

### **3 Tutor Support tools**

*3.1 Tracking students - database questions. How user friendly is the LMS for tutors wishing to track their group(s) of students and retrieve data from the student database?*

This is a good feature. The data is easily accessible and you can collect different sets of information according to your needs.

*3.2 Group management tools. What facilities are provided by the LMS to the tutors for managing their group(s) of students?*

The facilities are good and you can create classes or courses and easily modify them.

*3.3 Preparation of questions and assignments by tutor. How successful is the LMS in providing tutors with user friendly and didactically successful tools for the design of student questions and assignments?*

Limited facility. Creating question pools is lengthy and awkward. This is added to the limited nature of the question types in the system.

*3.4 Course planning for students (monitoring pace). What tools are provided by the LMS to tutors to enable them to monitor and plan student progress?*

Monitoring is available under the class management system. It is a flexible system and the students can be assigned different materials depending on their different level of responses.

*3.5 User-friendly administrative systems between tutor and institution. What provision does the LMS make for successful tutor to institution communication?*

I have not much experience of this as I was acting as both administrator of the system and tutor. Top Class 5 has an impressive system for this dimension.

#### **4 Administration (student database and records)**

*4.1 Enrolment procedures and fee paying. What facilities does the LMS provide for student enrolments, course allocations and payment of fees?*

Payment of fees is outside our system. There are two enrolment systems: the Batch system which assigns passwords to students as they enrol and The Apply to enrol and be enrolled system; both of which work well.

*4.2 Passwords and security. How successfully does the LMS handle student access to the system and the security of all student interactions with the system?*

Fairly watertight subject to the normal proviso of students not giving their passwords out to others.

*4.3 Student records database. How successful is the system's student database, especially for data storage and data retrieval.*

The system works well. No complaints.

*4.4 Examination and certification records. What structures are provided for recording of data and results leading to examination and certification?*

No real experience of this. I take the records from Top Class over into my own system.

*4.5 Course, class and tutors database. What facilities are provided for administration of courses, classes and tutors?*

This is a fairly simple and easy to use system and good for assigning tutors to groups and works well.

## **5 Technology (quality of software)**

*5.1 Server - hardware and software options. What is the quality of server hardware and software options? How is the system integrated with existing software?*

Top Class 5 which uses Oracle would be integrated but we haven't used it.

*5.2 Client - hardware and software options. What is the quality of client hardware and software options? Does the system permit metatagging?*

The system does allow metatagging.

*5.3 Flexibility of didactic structure; updating, adaptability. Is the didactic structure flexible or is it determined by the technology? How adaptable is the technology to updates and to new technology that becomes available to the market?*

It's relatively flexible but requires a knowledge of how html handles graphics and thus you need to know html.

*5.4 Limitation of size (number of students, courses, tutors..) How satisfactory is the LMS for handling varying numbers of students, courses, tutors? How does it cope with 100, 1000, or 10000 students and large course databases?*

We have had no difficulties with Top Class 3. It should be a function of the number of licenses rather than of the system itself.

*5.5 Speed of system. How is the speed of the system and student satisfaction? How does it cope with downloading courses and high bandwidth materials?*

Variable but this was partly due to our own housekeeping.

## **6 Price**

**6.1 Cost of the LMS (Learning Management System).** What is the cost of the LMS to the institution?

**6.2 Annual fee.** What fees have to be paid annually for the system by the institution?

**6.3 Student Enrolment fee (100 students, 1000 students, 10000 students.)**  
How do fees to use the LMS vary when the student base is 100 students, 1000 students, 10000 students? Is online invoicing available?

**6.4 Maintenance costs: staff involved in management, IT specialists, trainers, etc** What is the maintenance course to the institution of the LMS and what staff resources are need to maintain it and keep it functioning?

**6.5 Training of teachers and learners and system users.** What costs are involved in staff and student training to use the LMS system?

**Conclusion: Overall evaluation:**

**I have looked at Blackboard and WebCT. I would sum up the Top Class experience as initial excitement leading to eventual disillusionment. We wanted to support it because it was Irish and had been developed in Ireland and was an Irish world leader. But our contacts with the company were less than helpful. They are, unfortunately, more interested in corporate clients. We are going to move to WebCT.**

**What features would you like to see included in this LMS in the future?**

**In the Top Class system I would like to see a much shorter run up time for the tutors: something simpler - an easier path from beginners to improvers to advanced. Many of my colleagues were put off in the beginning. They were blocked from having their notes in Word to putting them into the Top Class system.**