Teaching and Learning of Databases: The Impact on Industry
Extended Abstract

Nicholas Fortune
One Point Systems Ltd
Industrial Road
Hertburn Industrial Estate
Washington, UK, NE37 2SA
Nick@onepointsystems.com

Abstract

As part of the Workshop on Teaching, Learning and Assessment in Databases, there will be a discussion centred on the challenges of introducing cutting edge technology into industry, and the impact of database teaching on a real world project. The discussion will be led by a short presentation. This extended abstract outlines the focus of the presentation.

1. Outline

Datastreams, considered in terms of database theory, are a very recent development, and one that is only beginning to make an impression on industry [1, 2]. One of the places this technology is being applied is through a Knowledge Transfer Partnership (KTP) Project with One Point Systems in Washington, Tyne And Wear, where it forms the basis of an industrial data capture and analysis system.

This presentation introduces some of the issues arising from this project; integration with conventional databases, and the use of related technologies such as XML, networked applications and web interfaces. Also covered are some of the challenges encountered in the course of the project, especially in communicating the benefits of datastream technology, and the benefits they would bring to the company.

The main part of this presentation looks at the impact on the project of learning gained at the University of Sunderland. The KTP associate is a project developer of almost twenty years experience working on database applications in industry, but until very recently, had no formal grounding in the underlying theory. The discussion will look at the ways database teaching changed the way the system was designed and implemented, as well as the impact of other modules from Sunderland’s MSc course in Software Engineering which the associate had previously studied.

Finally, the need for teaching in this area will be highlighted; both for would be developers, and for potential managers, who need to have an understanding of the benefits to be gained from the approach. It will discuss how further interaction with the university, and research skills gained while at the university, have enabled state of the art systems development in an industrial context.

The talk will lead into a general discussion of the impact of database teaching and learning on real world application development.

References
