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Generating Engagement for Relational Database Management Course Content through Industry Collaborations

Dominique Welt
McGill University, dominique.welt@mail.mcgill.ca

Islem Saidani
LGS, an IBM company, islem.saidani@ibm.com

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TREO Talk Paper

Dominique Welt
McGill University
dominique.welt@mail.mcgill.ca

Islem Saidani
LGS, an IBM company
Islem.saidani@ibm.com

Abstract

Due to the presence of newer technologies currently receiving more hype, some Information Systems (IS) students perceive relational database management systems (RDBMS) as a technology with limited appeal. Such perceptions can decrease their engagement in course content focusing on this topic. However, RDMS have been and still are integral to organizational IT environments (Statista 2023). RDBMS-related skills remain in high demand across the industry, and SQL is a highly demanded knowledge worker skill. Hence, students need to be informed about the significance of RDBMS-related skills and knowledge.

One approach to changing students' perception regarding the significance of class content is collaborating with industry guest speakers (Riebe et al. 2013). This strategy was applied at McGill University for a database management class during the Winter 2023 semester, for which a collaboration was formed with LGS, an IBM company. This collaboration materialized through two activities focusing on the relevance and applicability of RDBMS knowledge and skills in the current workplace.

The first activity was for one senior data management architect to perform a lecture and dialogue with students. This activity showcased the relevance of having RDBMS skills and knowledge for IT professionals. This was done by exposing real-world cases where such skills and knowledge allowed solving concrete problems and bringing business value to prestigious clients. Students' feedback indicated that interacting with this guest speaker gave them a better perspective regarding the real-world relevance of the RDBMS knowledge and skills learned in class.

The second activity was a demonstration led by a data engineer. This demonstration showcased the applicability of RDBMS knowledge and skills using modern tools. This speaker's demonstration exposed how conceptual knowledge of RDBMS allows for solving real-world problems using powerful automation tools like Erwin. Such tools can be used to optimize the process leading to the effective implementation of relational databases. Students' feedback indicated this demonstration allowed them to picture better how the knowledge and skills they acquired in class could be applied effectively using modern tools in the real world.

To conclude, collaborating with an organization that values RDBMS knowledge and skills concretely showcased to students the relevance and applicability of the course's learning objectives for their future careers. Engaging in these active learning activities allowed increasing the students' engagement with the course's content.

References

Riebe, L., Sibson, R., Roepen, D., and Meakins, K. 2013. "Impact of Industry Guest Speakers on Business Students' Perceptions of Employability Skills Development," *Industry and Higher Education* (27:1), pp. 55-66.

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