



UPPSALA  
UNIVERSITET

**Teknisk- naturvetenskaplig fakultet  
UTH-enheten**

Besöksadress:  
Ångströmlaboratoriet  
Lägerhyddsvägen 1  
Hus 4, Plan 0

Postadress:  
Box 536  
751 21 Uppsala

Telefon:  
018 – 471 30 03

Telefax:  
018 – 471 30 00

Hemsida:  
<http://www.teknat.uu.se/student>

## Abstract

### Using IT to Improve Learning Methods

---

*Magnus Jonsson*

As the use of the Internet grows the number of web based services grows with it. Shopping online is increasingly common and in some countries you can even manage your taxes online. The universities are also seeing the possibilities with the Internet. Courses are managed online and assignments and articles are automatically checked for plagiarism by comparing them to huge shared databases.

The EC funded project ROLE was launched in 2009 to investigate how web-based systems for learning can be made more personal. Such a change might also change the way students learn. ROLE introduces a psycho-pedagogical integration model (PPIM) in which students are meant to create their own goals, find their own tools to achieve the set goals and finally reflect on the way the goals were achieved, or why they were not achieved.

This thesis investigates a new experimental system called PLESpaces, developed by Uppsala Learning Lab, and the usability aspects of incorporating ROLE technology such as the PPIM model into it. To investigate the problems which may arise this thesis will make use of personas and a user survey to get feedback from the students. The results of the thesis show that implementing PPIM in the way proposed by the ROLE-project may prove problematic. This is mainly because working in the way proposed by the PPIM could take time from the actual learning. Finally the thesis presents questions for future research that should be resolved within the ROLE-project in order to deliver a usable system.

Handledare: Matthias Palmer  
Ämnesgranskare: Åsa Cajander  
Examinator: Arnold Pears  
ISSN: 1401-5749, UPTec IT12 010  
Tryckt av: Reprocentralen ITC