

From Pen and Paper to IT Based Business

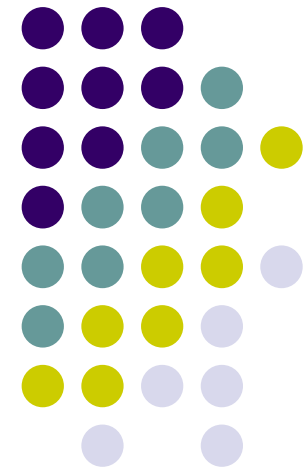
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Agenda



- Abstract
- Introduction
- Implementation
- Tracing employees learning progress in an e- learning program- a time perspective
- Presentation of the empirical data
- Analysis of the data Material
- Perspective and discussion

Abstract



- We are looking at 3000 employees participating in an e-learning program
- The employees are working in a pen and paper based office with personal contact to costumers
- The company they work in has been taken over by a foreign owner where work is it-based
- The e-learning program is an in-house program
- We are interested in the e-learning program and the learning progress



Introduction

- The Large Danish Company (LDC) is a leading institution in Denmark and one of the world's biggest companies in its branch.
- LDC buys two new companies in same branch in another European country.
- LDC wants to bring up the new bought companies to the same IT standard as the mother company. (From Pen and Paper to IT)



Introduction

- E-learning was chosen because of the great flexibility.
- The employee could study the e-courses at home or at work.
- The challenge was to make the learning material, so it could be used easily by everyone (different leaning style)

Special learning concept for the Large Danish Company in their new marked



- The learning element was invented in many ways.
with focus on different learning styles
- All course was build on the same template
 - Introduction
 - Case
 - Guided exercise module
 - Test module



Data collection

- The data are from 3.059 employees participating in the LDC's e-course program
- All employees came from the newly brought companies
- Some courses were obligatory others were elective courses
- The courses were: hands-on technology, general business and special courses

Presentation of the empirical data



- Employees were grouped in three groups (Long Time, Medium Time, Short Time) according to the time used on the first course
- In this paper we look at course no. 7878 the first course which is a hands-on technology course and business course
- We also look at course 7992, the first of the general business courses
- Focus is the migrations in-between the three groups from course 7878 to course 7992

Assumption

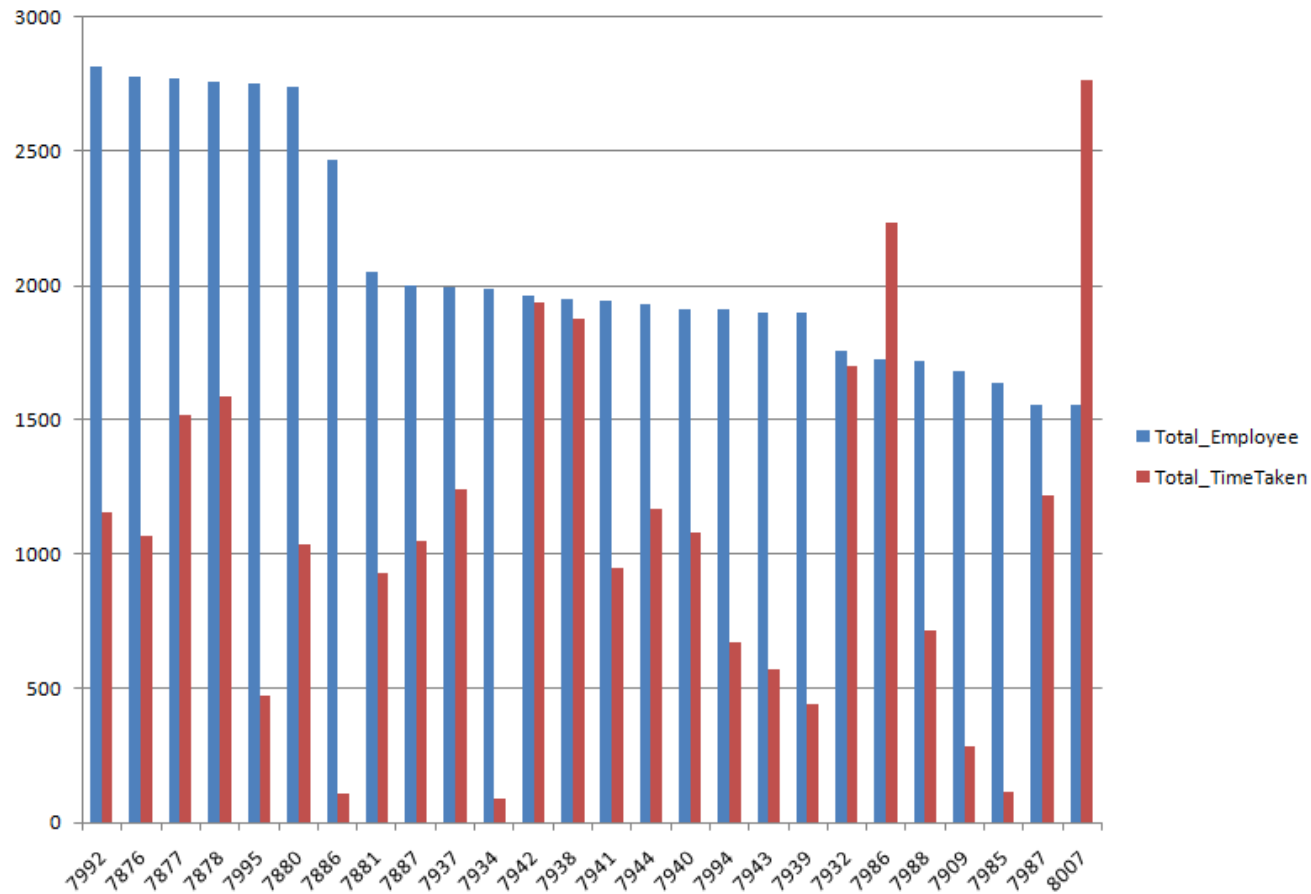


- Based on experience from Odense Tekniske Skole FlexLearn program - founded on Kolb's theory on learning styles and blended learning - we put forward the assumption:
- Long Time and Short Time groups will show significant gains in terms of learning progress and learning outcome as opposed to the Medium Time groups that will progress at a more steady pace

Presentation of the empirical data



- All courses and time spent



Analysis of the data Material



- How do employees move from the base-line hands-on course 7878 to the first general business course 7992?

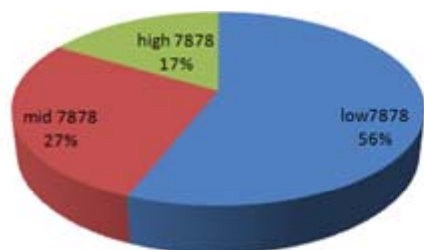
	low7878	mid 7878	high 7878
low 7992	515	252	152
mid 7992	285	382	253
high 7992	119	285	510



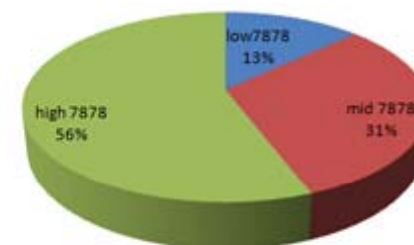
Analysis of the data Material

- Migrations in-between the different groups

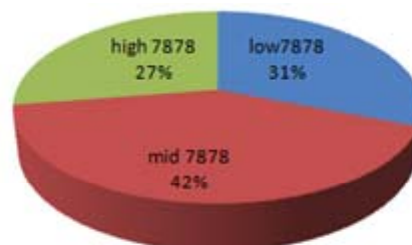
Starting Low 7992 Course → 7878



Starting high7992 → 7878



Starting Mid7992 → 7878





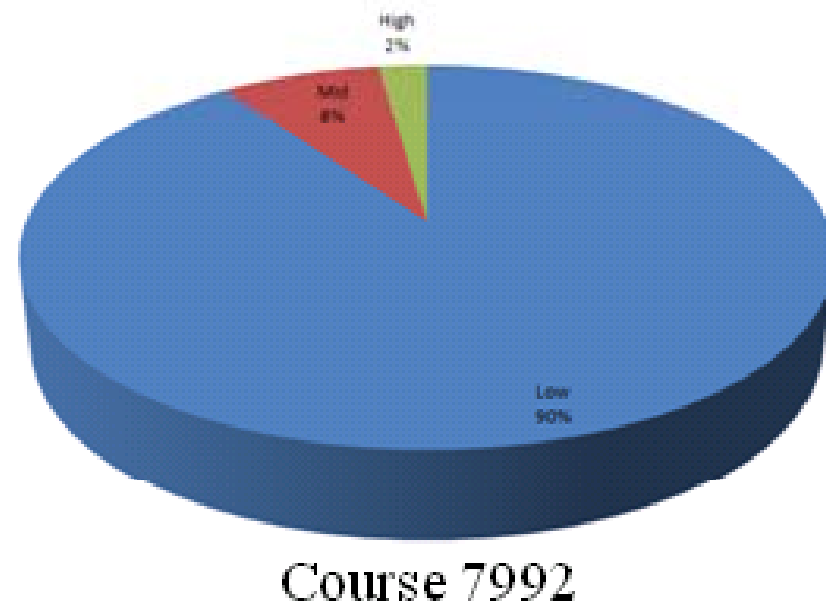
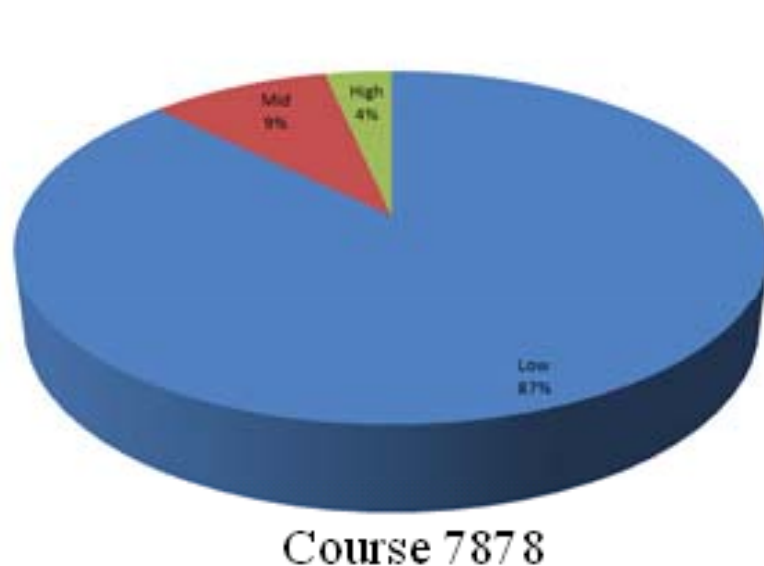
Analysis

- Assumption: “*The Long and Short Time groups in LDC ´s flexible learning environments improve their result significantly, while the Medium Time Group only shows little improvement.*”
- The analysis showing time spent and migration inbetween groups reject this assumption.



Analysis

- However, the analysis of the data also surprised us:
- The Long Time group used 90% of all time spent by all employees on all the courses



Discussion and Perspectives



- The analysis rejected our assumption
- The analysis showed that Long Time group used 90% of all the time spent by all employees on all courses
- BUT we do not know what problems the Long Time group encountered

Discussion and Perspectives



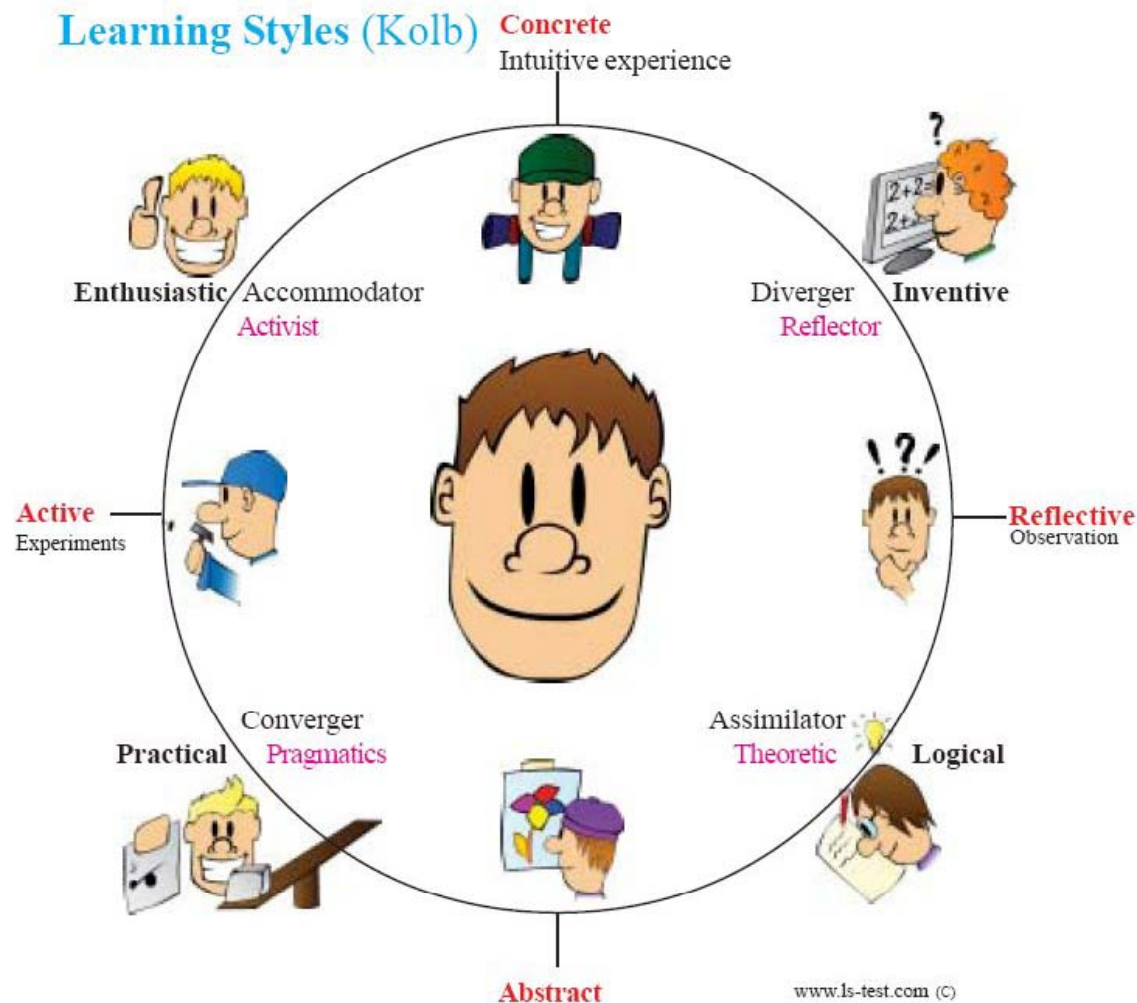
- Was it problems with the technology?
- Was it learning problems?
- Did they sit at home with a bad connection?
- Was there a problem with down-load time for the e-courses?
- Did they lack technical skills?
- What difference would the early learning style test had made
- What gain in learning would the employee have if they were aware of there learning style.

Questions and future work?



- Uncover the what lies behind the TIME issue
- Uncover the different learning styles among the employees
- Analyze the e-learning material to identify the learning styles addresses
- Carry out learning style tests with employees before starting the e-course program
- Create a dialogue between advisor/teacher and employee about her/his learning style to enhance the individual employees learning process
- Redesign the e-courses so they address different styles

OTS FlexLearn program founded on Kolb's theory on learning styles and blended learning



Source: www.ls-test.com



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