



Marketable, unique and experiential IT-skills education for business students

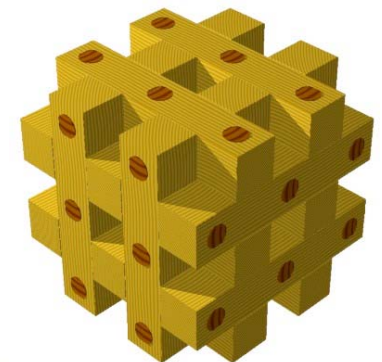
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Problematic

- **80% of the employees are information workers** (Haag, 2007)
- **Employers rightfully expect graduates to be competent in *usage* of contemporary IT tools**
Q: What do they need to know?
- **Compulsory IT-skills module = less than 4% of the whole business education programme**
Q: How to give them the required competences?
- The approach evolved from 1995 performing both seminars and consulting in the industry as well as lab lectures in the business school

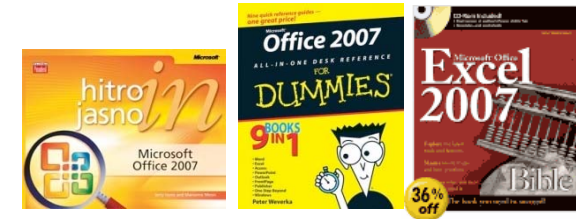


“What does not work?”

Traditional IT-skills education



- *everything about the tool*
- follows the literature?
- WFA, SFA, DFA discussion
- *applicability* of knowledge? ☹️



Challenge

- **transfer applicable knowledge of utilizing IT in real life business environment**
- **time constraints**



“How to improve it?”

Content: what?



*What do businesses expect of our graduates?
What kind of skills does he need to bring to the practice?
What are the core competences of our student?*

Skills:

- **Marketable**... What applications?
- **Capability**... Applying IT within processes

Solving business problems requires using different types of knowledge: business, methodological and IT knowledge, and combination of all three types.

We do not teach IT tools; rather, we teach how to solve business problems using contemporary IT tools.



Delivery: How?



- Cognitive learning – preaching ex-desk? ☹️
- **Experiential learning** through direct experience, action and reflection 😊

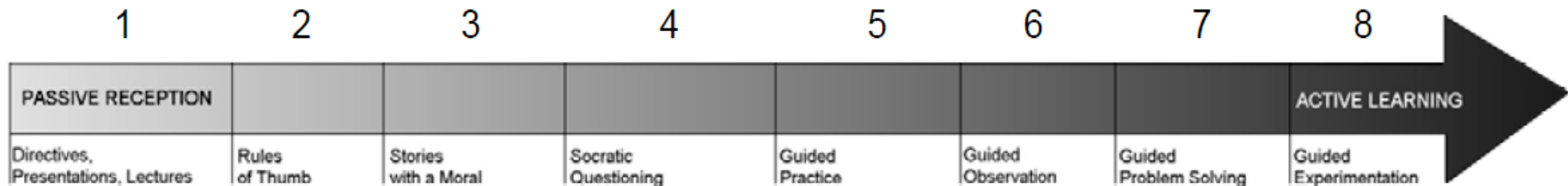
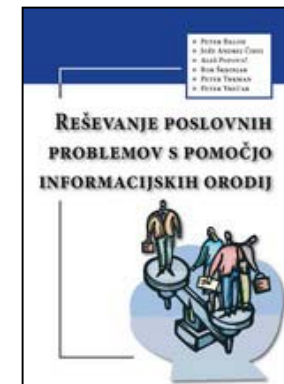


Fig: Leonard, Swap (2005): Deep smarts. Harvard Business School Press.



1. Experience-gathering
2. Experience-reflection
3. Synthesizing conclusions
4. Applying experience to *similar* problem

Instructor
+
Book



The programme

»Practical case-examples! What doesn't happen in real life, it doesn't exist.«
Examples solved by students, in particular task/process context!

1) OFFICE AUTOMATION SYSTEMS

- file and workspace management
- creating simple and complex business documents
- manipulating data, tabular and graphical representation of data
- e-communication, time and task management, organizing calendar, contacts
- mass mailing
- creation and delivery of e-supported presentations.

2) DECISION SUPPORT

- creating decision models, what-if analyses, special section on financial modeling
- data → information using spreadsheets and database-queries + Business Intelligence
- finding decision-relevant information on the internet

3) BUSINESS PROCESS INFORMATIZATION

- systems analysis (interviewing, observation)
- process modelling using visio
- creating databases to support business processes

4) IT-SUPPORTED PROJECT MANAGEMENT

- planning and controlling

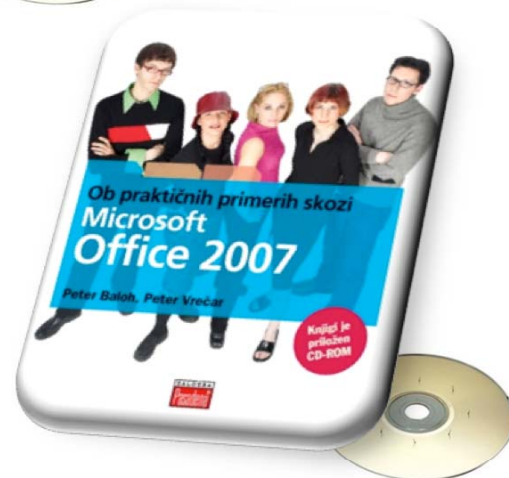
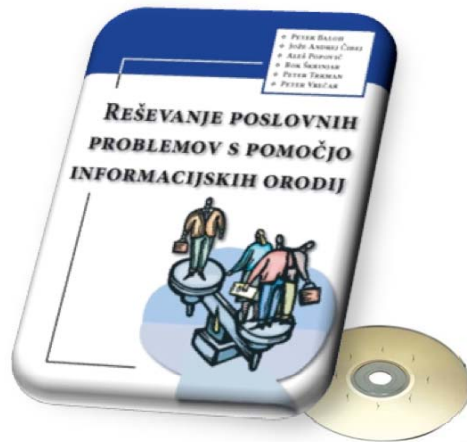


The programme

- Much more time efficient
 - No need to teach *all* functionalities one by one
- Much more effective
 - Learning *in context*



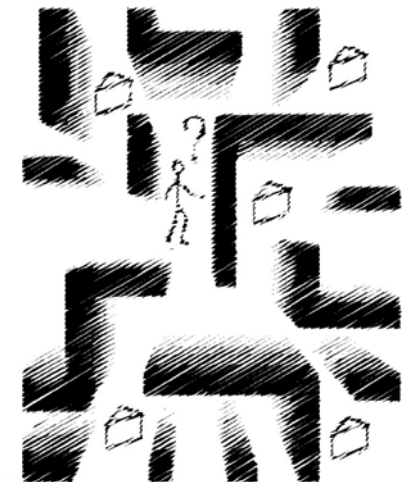
The programme



Results

Survey

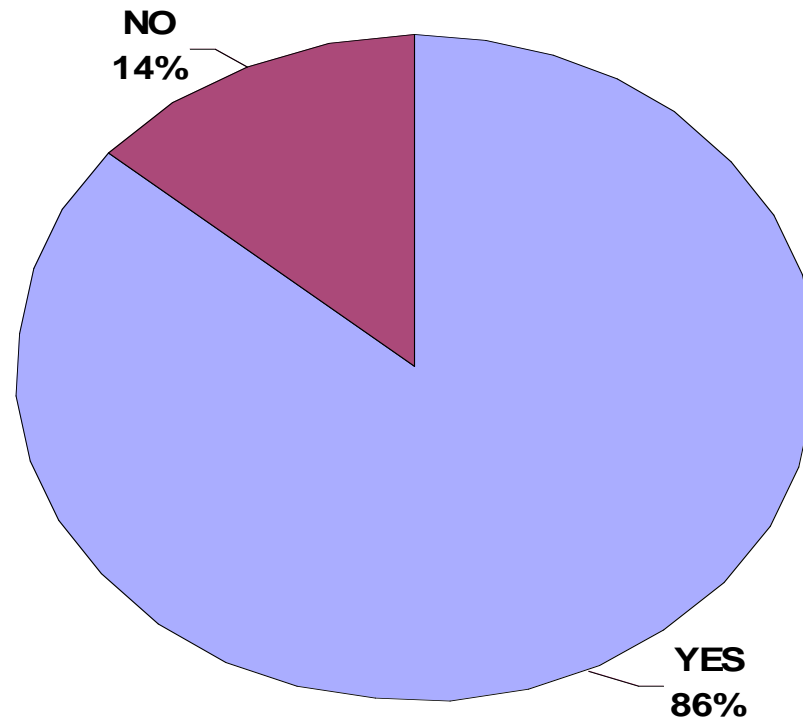
- 2006/07, on-line questionnaire for 420 1st year Business school students (183 answers)
- last lab lecture
- free choice of participation, anonymous



Results (1)



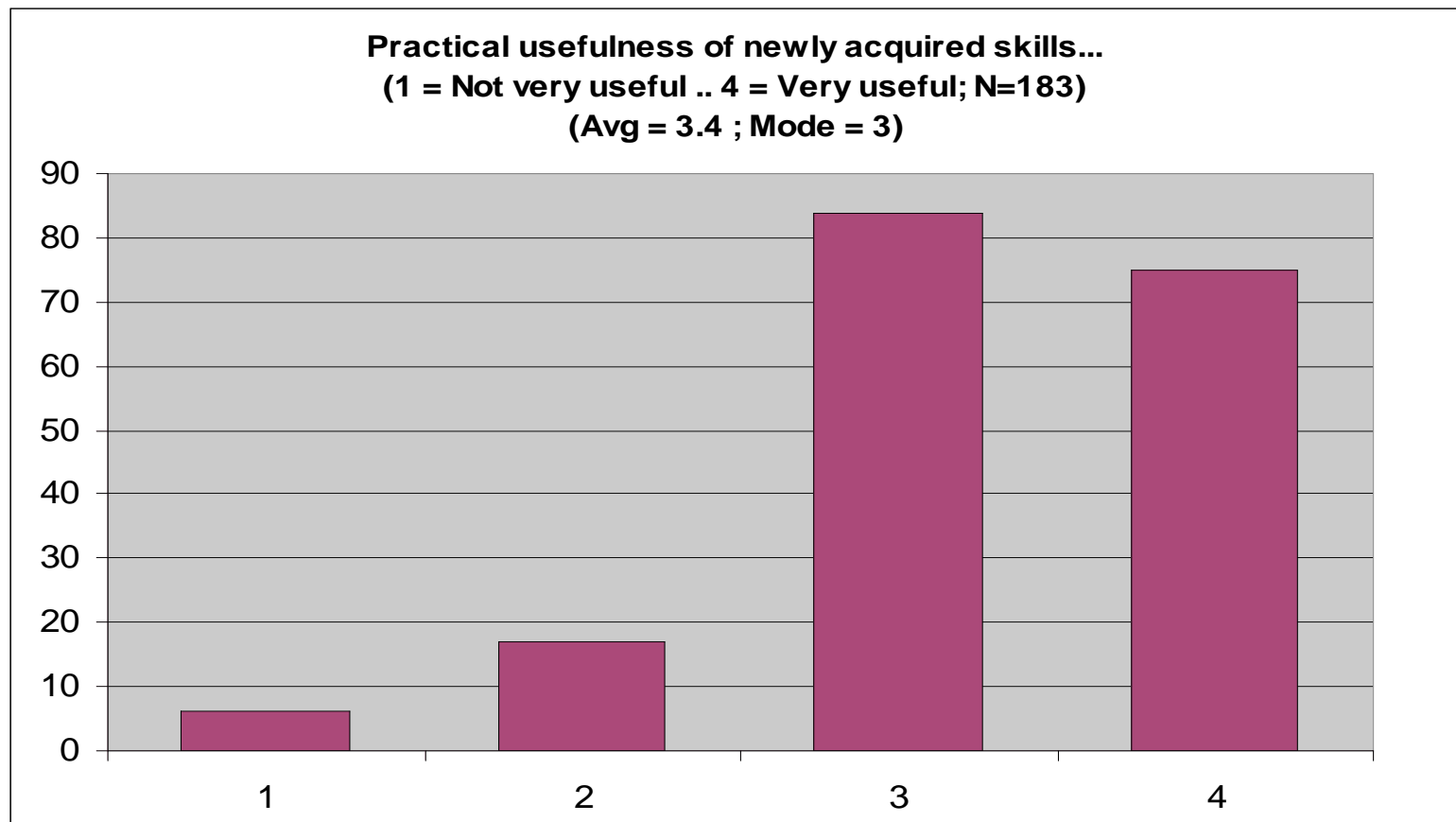
Do you think you have learned more practice-relevant skills as you did at other courses this year?



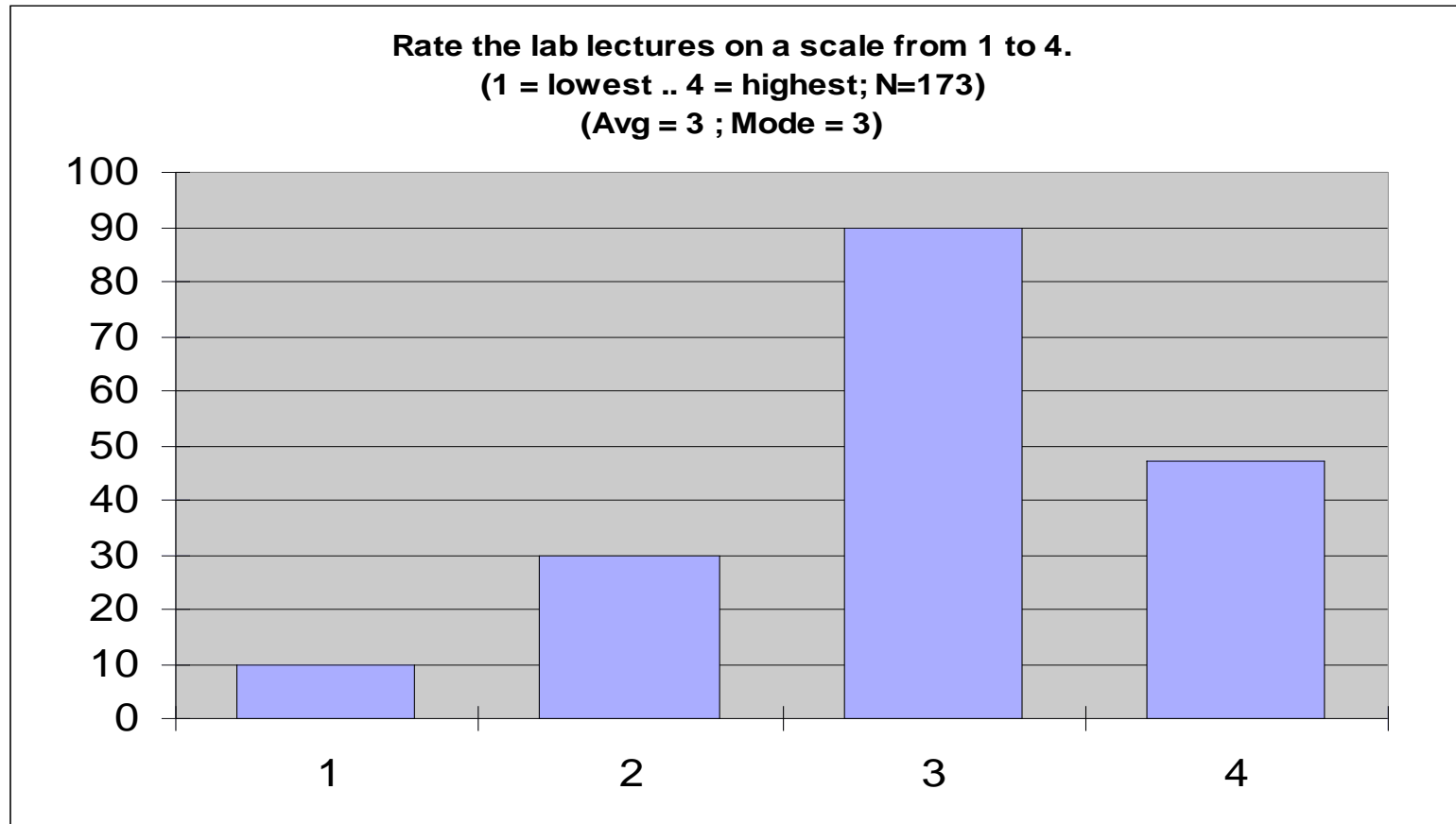
N=181



Results (2)



Results (3)



Concluding remarks

Change of educational programmes

- **Business schools:**

Knowledge on *applicable* IT topics:

What are the functionalities and capabilities of IT to support particular tasks?

- **IT/IS/IM schools:**

Knowledge on business processes to see *opportunities to support and enable these processes.*

- **Secondary schools:**

Primary focus on problem/goal/task and only secondary focus on usage of IT.

