

**eLearning @ the Faculty of
Business, Economics and Statistics**

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Change



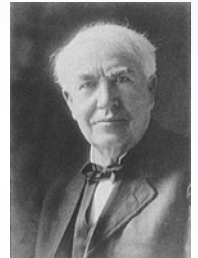
**As consequence of e-learning it
come to the end of the
traditional, localbound
university education within the
next 30 years.**

Peter Drucker



I believe that the motion picture is destined to revolutionize our education system and that in a few years it will supplant largely, if not entirely, the use of textbooks.

Thomas Edison, 1922



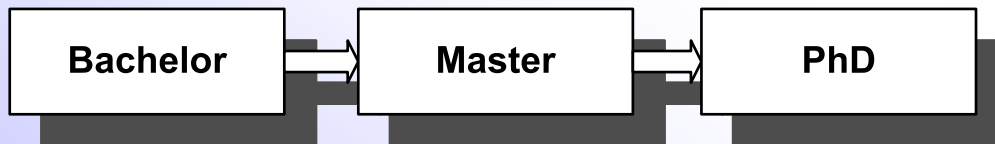
Quelle: <http://www.sysprog.net/quothist.html>, Zugriff am 21.3.2006

Faculty of Business, Economics and Statistics

- competence in business studies
(research oriented teaching)
- international and competitive orientation
(intense, high quality research)
- development and use of practical methods
(cooperation with business)
- service orientation towards our students and staff

Curricula

- Business Administration
- International Business Administration
- Statistics
- Economics



Strategy based on

- Homogeneity
- Sustainability
- Incentives



(Planned) Actions:

- Providing information and skills for teachers and students (“Information policy”)
 - Research & best practice
 - Training (Lecturer, Students)
 - Website (“eLearning@wiwi”) & Handbook
 - eLearning Jour fixe
- Supply of personal and technical infrastructure
- Mix of university-wide, centrally provided services (ZID) and faculty specified services

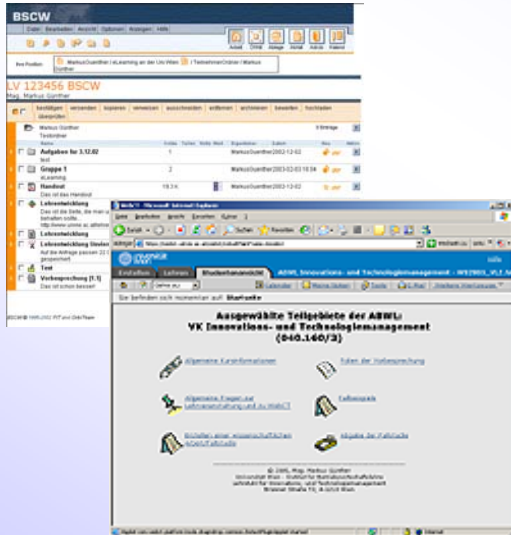


Main parts

- eLearning as an integrative part in our curricula
- Cooperative and collaborative eLearning
- eTesting
- Content
- Game based (e)Learning



Example for used tools:



❖ **BSCW** (Basic Support for Cooperative Work')

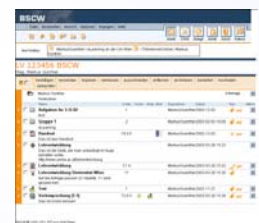
- Individually hosted
- Sharing resources
- Master courses (Seminar etc.)

❖ **WebCT Vista**

- Centrally hosted
- Discussion, Assignments etc.
- Bachelor Courses (Seminar etc.)

BSCW – Basic Support for Cooperative Work

- Platform for cooperative and collaborative work
- Infrastructure
 - Shared workspace for groups
 - Asynchronous environment
 - Symmetric working environment concerning rights
 - Hierarchical structure of folders
 - Central collection of files
 - Additional tools like calendar, version-control etc.



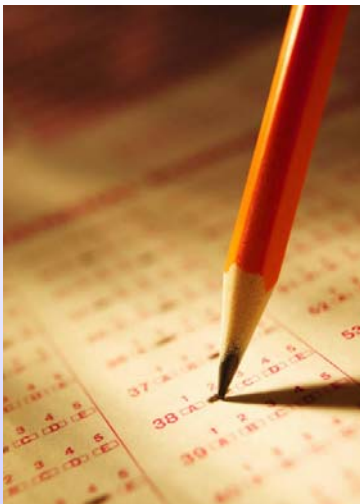
Example Content: Accounting



- Problem:
 - Different skills in accounting due to different school-types
 - High failure in rate

- Idea:
 - (Supportive) online-material
 - Project currently planed

Two (main) eTesting projects:



- ***“Principles of Law” – Online-exams:***
 - currently first results
 - continuation planed

- ***Project eTesting in Finance:***
 - ongoing project
 - exemplary project for the whole faculty

Self developed Business Games:



- ***“MERLIN III – Online”***
 - Currently used

- ***New (still unnamed) Business Game:***
 - New Simulation-Model
 - New Software-Logic/-System
(can be used on- and offline)
 - Currently implemented

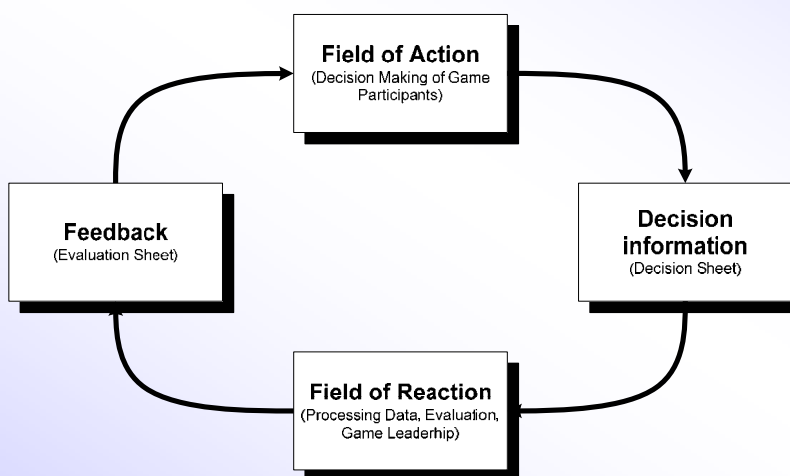
- ***Internet-based hospital management game***
 - Currently implemented



**Game based learning:
MERLIN III**

Merlin III – Business game

- Simulation of business processes
- Simulation of complex causal relations
- Covers the lifecycle of a product technology from technology research to market launch until degeneration
- Decisions about:
 - Investment in R&D and technologies
 - Price
 - Advertisement
 - Output
 - etc.



MERLIN 3 – Unternehmerentscheidung

MARKT:	_____	(A, B, C, ...)
UNTERNEHMEN:	_____	(1, 2, 3, ...)
PERIODE:	_____	(1, 2, 3, ...)

Entscheidungen zu F&E-Investitionen, Marketingausgaben, Preis und Produktionsmenge:

	Technologie 1	Technologie 2	Technologie 3	Technologie 4
Funktionalität (in 1.000€)				
Qualität (in 1.000€)				
Herstellungsprozess (in 1.000€)				
Werbeaufwand (in 1.000€)				
Verkaufspreis (in €)				

IG: Investitionen + Werbeaufwand = Bankguthaben + FK
Entscheidungsraum: EK + G, Bankguthaben + G

Fremdkapital:	
Fremdkapitalaufnahme:	_____ (in 1.000 €)
Fremdkapitalrückzahlung:	_____ (in 1.000 €)

Neue Anlage:	
Ich möchte ab der nächsten Periode Produkte basierend auf einer neuen Technologie produzieren:	
	JA <input type="checkbox"/>
Anlagenschließung:	
Ich möchte folgende Anlage mit sofortiger Wirkung schließen:	
Anlage 1	<input type="checkbox"/>
Anlage 2	<input type="checkbox"/>
Anlage 3	<input type="checkbox"/>
Anlage 4	<input type="checkbox"/>

Feedback-Information:

Onlinespiel - Markt A 27.03.2006
Unternehmen 1 / Periode 1

Schlussbilanzkonto									
Aktiva			Passiva						
Bank	88.143		Eigenkapital	98.143					
Anlagen	10.000		Fremdkapital	0					
Einheit: 1000 EUR			98.143 / 98.143						
Gewinn- und Verlustkonto									
Aufwendungen			Erträge						
Herstellungsaufwendungen	25.847		Umsatzerlöse Inland	72.990					
Werbenaufwendungen	3.000		Umsatzerlöse Ausland	0					
Anlageninvestitionen	0		Anlagenverkaufserlöse	0					
Anlagenabschreibungen	0		Erträge aus Lizenzverkäufen	0					
Anlagenstilllegungsaufw.	0		Zinserträge aus Finanzanlagen	3.000					
Fremdkapitalzinsaufwendungen	0								
Aufw. Produktinnovation	34.000								
Aufw. Prozeßinnovation	15.000								
Gewinn	0		Verlust	1.857					
Einheit: 1000 EUR			77.847 / 77.847						
Finanzkennzahlen			Cash Flow						
Eigenkapitalquote:	100 %		Gewinn	-1.857					
Eigenkapitalrentabilität:	0 %		+ Anlagenabschreibung	0					
Umsatzrentabilität:	-3 %		+ Vermehrung Verbindl.	0					
Kapitalumschlagshäufigkeit:	73 %		- Verminderung Verbindl.	0					
Verschuldungskoeffizient:	0 %		= Cash Flow	-1.857					
Anlagenintensität:	10 %								
Anlagendeckung:	1.000 %								
Nettoinvestitionsdeckung:	NA %								
Sonstige Kennzahlen			Marktposition						
Marktzinssatz:	4,00 %		Marktanteil	4 %					
Fremdkapitalzinssatz:	7,55 %		Produktbezogenes Image (Punkte)	100					
Kreditfähig, nächste Periode:	39,257								
Einheit: 1000 EUR			(100 Punkte = mittleres Image)						
Produktinformationen									
Prod.	Funkt.	Qual.	Herst.aufw. fix	Herst.aufw. variabel	Preis	Stk.	Prod.wert	Umsatz	Ums.anteil
	(Pkt.)	(Pkt.)	(1000 EUR)	(1000 EUR)	(EUR)		(Punkte)	(%)	(%)
1	5,29	11,57	6.868,66	1,95	7.500,00	9.732	20,40	100,00	100,00

Onlinespiel - Markt A 27.03.2006
Periode 1 - Gesamtsituation

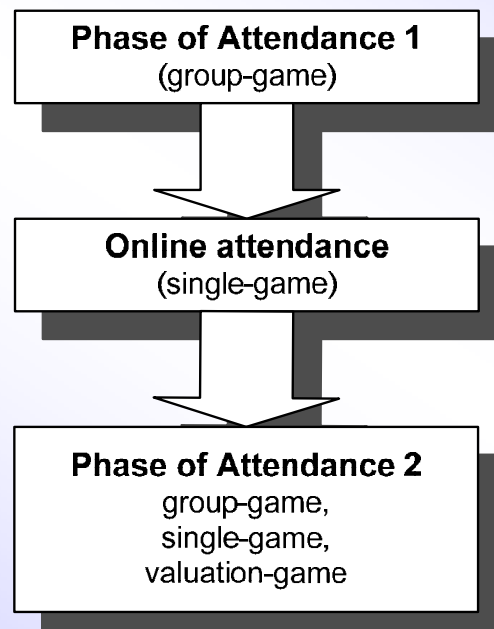
Produktpreise										
Unt.	Prod.1	Prod.2	Prod.3	Prod.4	Prod.5	Prod.6	Prod.7	Prod.8	Prod.9	Prod.10
1	7.500									
2	3.500									
3	4.900									
4	2.989									
5	3.100									
6	4.100									
7	6.700									
8	5.600									
9	5.000									
10	6.500									
11	3.700									

Schlussbilanzdaten					
Unternehmen	Bank	Anlagen	Eigenkapital	Fremdkapital	Gewinn
Unternehmen 1	88.143	10.000	98.143	0	-1857
Unternehmen 2	160.117	10.000	170.117	0	70117
Unternehmen 3	94.345	10.000	104.345	0	4345
Unternehmen 4	167.267	10.000	177.267	0	77267
Unternehmen 5	178.857	10.000	188.857	0	88857
Unternehmen 6	120.593	10.000	130.593	0	30593
Unternehmen 7	78.825	10.000	88.825	0	-11175
Unternehmen 8	107.243	10.000	117.243	0	17243
Unternehmen 9	93.450	10.000	103.450	0	3450
Unternehmen 10	117.283	10.000	127.283	0	27283
Unternehmen 11	150.335	10.000	160.335	0	60335

Einheit: 1000 EUR

Marktanteile	
U4	9%
U5	8%
U6	8%
U7	4%
U8	7%
U9	6%
U10	5%
U11	5%
U1	4%
U2	3%
U3	3%

Course-Outline:



Course-Outline of the online game:

- Start: October 19, 2006
- End: November 30, 2006
- Two decisions per week:
 1. Monday, 15:00 – Thursday, 12:00
 2. Thursday, 15:00 – Monday, 12:00



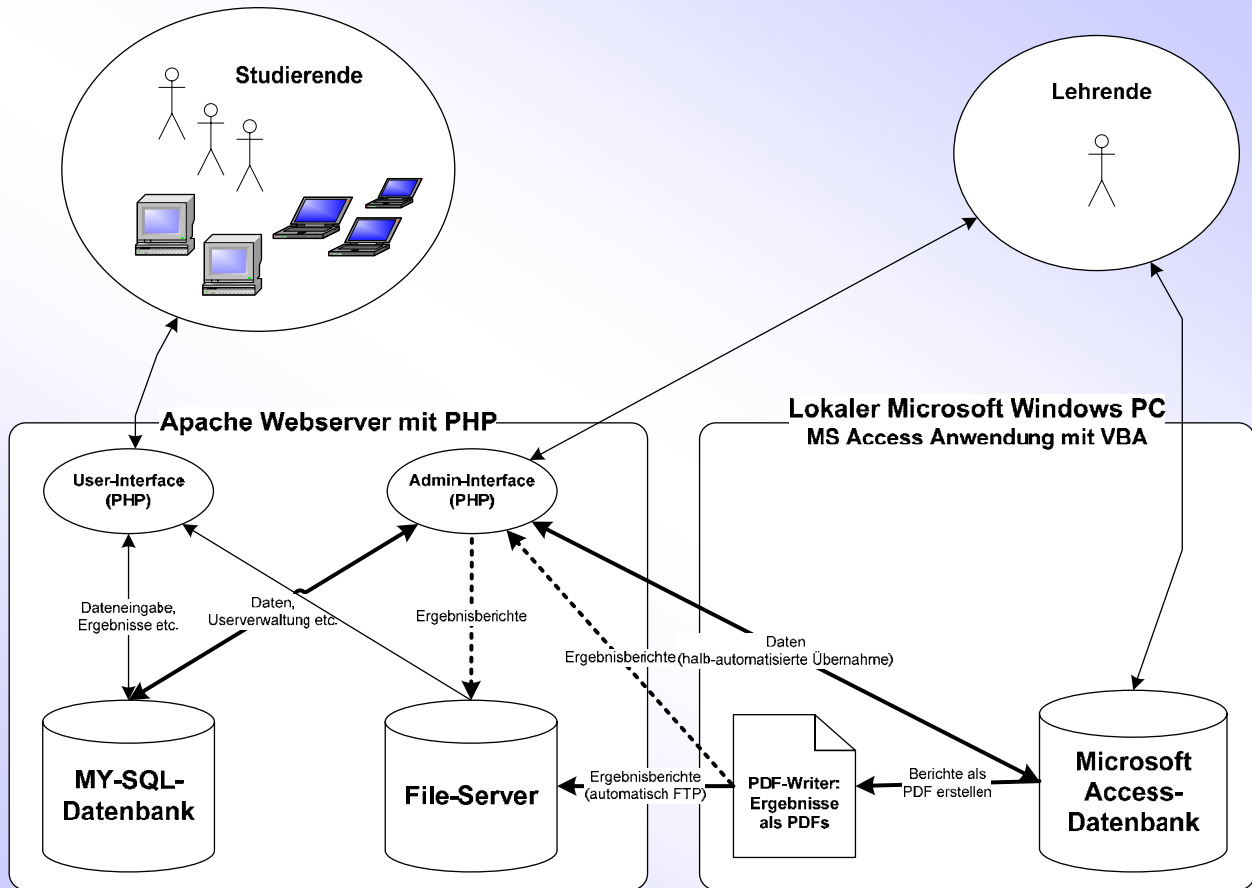
Online-MERLIN

- Data-input
- Results
- Calendar

LMS

- Discussion between students
- Feedback
- General information about the course





Advantages

- Possibility to play more turns
- No waiting time till results are calculated

Disadvantages

- Online-Version was set up very quickly → many problems
- Currently two systems
- Usability
- 2 systems for students:
 - Online-Merlin
 - LMS for discussion and feedback



Summary

- eLearning as an integrative part in our curricula
- Cooperative and collaborative eLearning
- eTesting
- Content
- Game based (e)Learning



Contact

Thank you for your attention!

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