Students as Catalyst of the Knowledge Economy: Evolution of Synergies between Companies and Universities

European Computer Science Summit | ECSS 2010 | 13.10.2010, Prague, Czech Republic
Technische Universität Dresden | Chair of Media Design
1. Motivation
2. Funding Issues
3. Workshop
4. Laboratory
5. Conclusion
Motivation

Business and research interests

Immediate cooperation

Precedent: Multi-touch technology

Universities

Research results

Novel Education Models

Companies

Business Demands and Support

Employability and Expertise

Students as Catalysts

Synergies between Companies and Universities

Broad Effect for the Knowledge Economy
Funding Issues

Problem:
- Innovative, novel education models
- Specific skills require additional education
- Additional educators, new technologies and hardware

Solution:
- Support of local companies
- Funding through European Social Fund (ESF)

Scenarios:
1. Workshop
2. Laboratory
Workshop

Setup:
- Two weeks, fast results
- Clearer guidance by business and academic counselors
- Five groups, two students each

Evaluation:
- Daily reports to evaluate progress
- Increased educational efforts with tutorials
- Interim presentation
- Final presentation with interested persons from cooperating companies

Example:
SurfaceReader
[Franke et al. 2010]
Laboratory

Setup:
- Four months
- Approx. 5 hours of work each week
- Intermediate time to reflect
- Less boundaries, necessary tools studied on their own

Evaluation:
- Less frequent intermediate consultations
- Questionnaire at the end of the four months
- Interim presentation and final presentation as well

Example: scoop
Comparison

_Screening tests specifically for the activity

_As opposed to „first come, first serve“ basis

_Consulting services from companies regarding participants

---

**Workshop**

| Time Span: | 2 weeks |

**Laboratory**

| Time Span: | 4 months |

Breaks (each week)

Net Teaching Time: 80 Hours
Conclusions

Pros and cons:
- Workshop beneficial to involved business partners
- Laboratory more suitable for research oriented problems

Results:
- Students served as catalyst in both education models
- Creative and innovative solutions for the knowledge economy
- Students: new expertise and employability
- Companies hired student trainees and interns

Outlook:
- Continuation of workshops and laboratories
- Combination of education models: boot camps
- Excellent business professionals are passing on knowledge
- Distributed, concentrated work in three boot camps (three days)