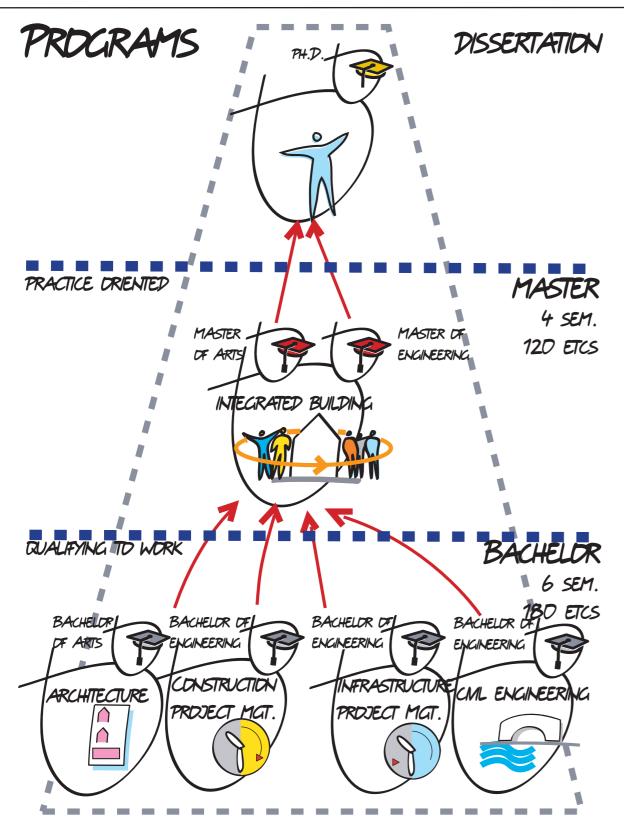


### International Building Performance Evaluation (IBPE) Symposium

# **Teaching Building Performance Evaluation (BPE): Challenges for Traditional or New Professions?**

by Ulrich Schramm, Ph.D. **University of Applied Sciences** FH Bielefeld/Germany

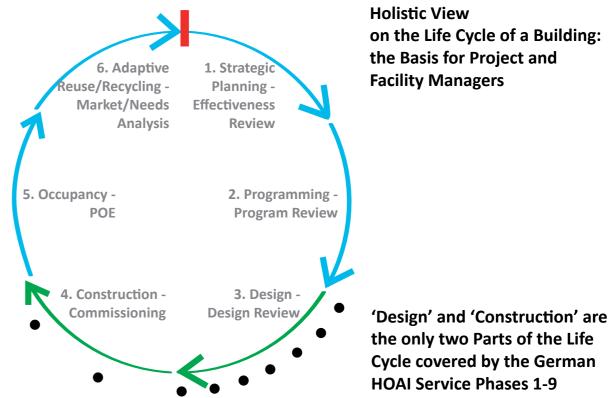


## How are the programs lined up?

- 4 Bachelor programs feed the Master's program
- personal involvement as architect, in 4 programs, with FM.
- introduction of Construction Project Management as reaction to the building market and the current education of architects



Architect's Traditional Project Understanding according to the German HOAI Service Phases 1-9 (Official Scale of Fees for Services by Architects and Engineers)



What is the professional project understanding?

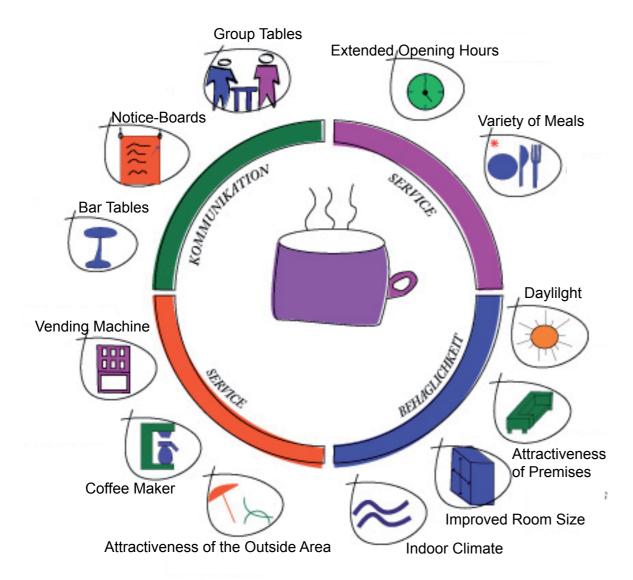
- architects still think in a linear planning and building process
- · consider primarily services covered by the German HOAI (scale of fees for services by architects and engineers)
- but: holistic view is basis for project and facility managers

Ulrich Schramm. Ph.D.

### Stimulating Seminars: Programming



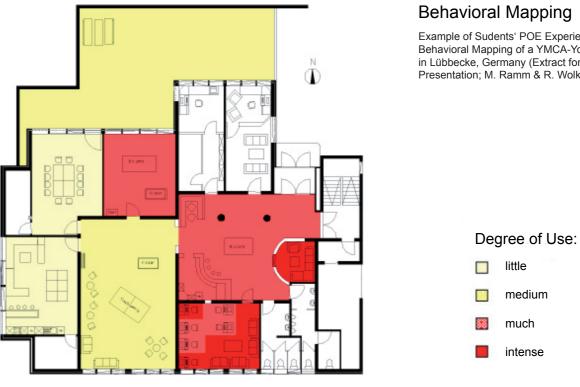
Example of Sudents' Programming Experience: Qualitative Requirements for the Cafeteria of the Case Study (A. Wölker)



## What does the seminar on programming look like?

- focus on phase 2: programming program review
- to apply the method in a familiar context: campus expansion
- to understand the interrelations of programming-phase with other phases of the building life cycle, eg. occupancy/POE

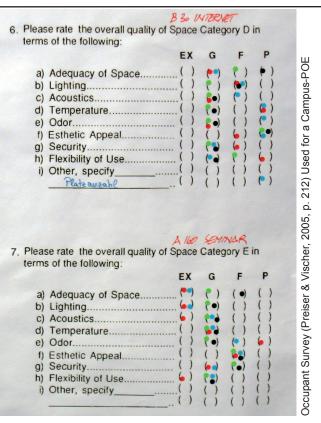
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ternie er tile lenetting.	EX	G	F	P
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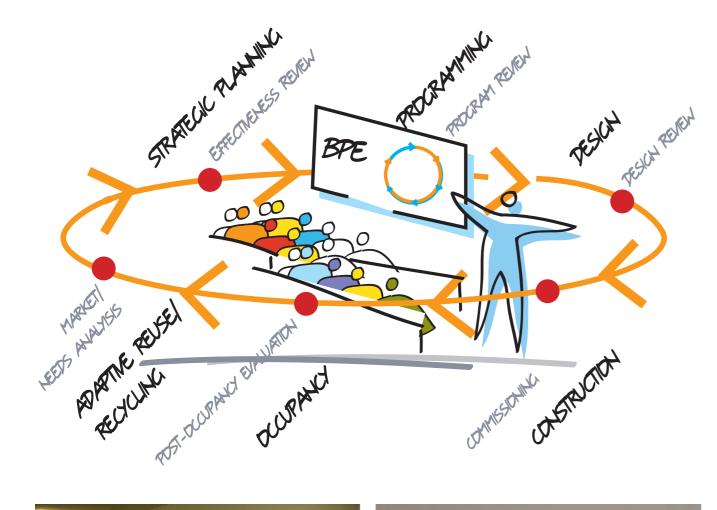
What does the seminar on POE look like?

- focus on phase 5: occupancy POE
- to understand POE as one of the 6 review loops
- to choose case studies in teams of 2 3 students (Master)
- to train written reports and oral presentations

### **Stimulating Seminars: POE case studies**



Example of Sudents' POE Experience: Behavioral Mapping of a YMCA-Youth Center in Lübbecke, Germany (Extract form the Oral Presentation; M. Ramm & R. Wolke)





# What are the benefits of teaching BPE in the Construction **Project Management Curriculum?**

- our graduates: think in a life-cycle oriented way
- as professionals: they enhance building performance
- their clients: get cost-effective buildings of better quality

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References:

• Preiser, W.F.E.; Schramm, U.: "A Process Model for Building Performance Evaluation" in: Mallory-Hill, S.; Preiser, W.; Watson, C. (eds.): Enhancing Building Performance, Wiley-Blackwell (forthcoming)

 Schramm, U.: Building Performance Evaluation in the Construction Project Management Curriculum" in: Mallory-Hill, S.; Preiser, W.; Watson, C. (eds.): Enhancing Building Performance, Wiley-Blackwell (forthcoming)

• Hodulak, M.; Schramm, U.: "Nutzerorientierte Bedarfsplanung: Prozessgualität für nachhaltige Gebäude", Springer, Berlin, 2011

 Schramm, U.: "Phase 1: Strategic Planning" - Effectiveness Review" in: Preiser, W.F.E., Vischer, J. (eds.): Assessing Building Performance, Elsevier, Oxford, 2005

 Preiser, W.F.E.; Schramm, U.: "A Conceptual Framework for Building Performance Evaluation" in: Preiser, W., Vischer, J. (eds.): Assessing Building Performance, Elsevier, Oxford, 2005

• Preiser, W.F.E.; Schramm, U.: "Intelligent Office Building Performance Evaluation" in: Facilities, Vol. 20, No. 7/8, 2002, p.279-287

 Schramm, U.: "Learning from Building-User" Feedback: The Post-Occupancy Evaluation Process Model in the Cross-Cultural Context" in: Dunin-Woyseth, H., Noschis, K. (eds.): Architecture and Teaching: Epistemological Foundations, Chabloz, Lausanne, 1998

 Preiser, W.F.E.; Schramm, U.: 'Building Performance Evaluation' in: Watson, D. et al. (eds.): Time Saver Standards (7th edition), McGraw-Hill, New York, 1997