

## Sustainable Management in the craft-based Food Production – Additional qualification for apprentices in bakery and confectionery sector

The project aim is the development, testing, evaluation and establishment of a additional qualification *Sustainable Management in the craft-based Food Production*, focusing apprentices as bakers, confectioners and food salespersons. They will be empowered to assess the value chain, work and business processes of bakeries and confectioneries with regard to their sustainability. Additionally they will be enabled to develop proposals for change and optimization in a sustainable way and to develop ideas for innovative products that contribute to the social, environmental and economic sustainability of the company and society.

The project is a collaboration with the University of Applied Science Münster, funded by the German Federal Environmental Foundation.

### Motivation

The bakery and confectionery trade faces great challenges in the course of developments in vocational training and changes in food and consumer behavior, combined with new supplier structures (e.g. low-priced products in the supermarkets, discounters and bakery shops). These challenges result in the need to change demands on employees and to adopt to changing market structures as well as nutritional and consumer behavior in order to secure the existence of the company in a sustainable way.

### Objective

One of the central characteristic is (1) the consideration of the individual work and business processes of the participating companies into the design of the additional qualification and (2) the reflection and evaluation of the contents in the respective company. This interrelation ends up in a project work which represents the final exam for the certification by the Chamber of Crafts. This project work enables changes in the company in a sustainable way by making an economic use out of social and environmentally activity.

### Realization

The five competence-oriented modules on

- M1 sustainable management
- M2 work in craft-based food production
- M3 consumption & nutrition
- M4 food losses
- M4 developing innovative products

will be closely coordinated in the *conception and development phase* by the participating companies and other external experts in terms of content and methodology. The participating companies attend the phase of conceptual design and competence development by articulating respective needs and interests. The additional qualification is tested in the second phase *Testing of the additional qualification* by three iterations consisting out of 10-15 apprentice each.

The participating companies act as trial partners, among others, by letting their apprentices participate in the additional qualification. Making use of a design-based research approach, the additional qualification can be *evaluated quantitatively and qualitatively* in the third phase. The fourth phase *Transfer and continuation* includes the development and implementation of a train-the-trainer concept involving the participating companies, as well as the associated continuation. The intended Advisory Board advises and provides feedback regarding the modules developed; It provides competences and networks for trans-regional transfer/consolidation.



#### Prof. Dr. Karin Rebmann

Gürbet Akman, PD Dr. Florian Berding, Regina Frerichs, Dr. Maike Irmscher, Dr. Heike Jahncke, Verena Kehl, Meike Panschar, Dr. Andreas Slopinski, Dr. Christian Steib

#### Research Areas

- Epistemic beliefs and learning styles
- Vocational training and education for sustainable development
- Learning task, competence diagnostic

#### Regular courses

- **Bachelor:** pb023, pb024, pb025, pb026, pb027, pb029, prx105, prx104, wir170, wir181, wir182, bam
- **Master:** prx550, wir731, prx555, biw111, mam

### Literatur

- Beckmann, M. & Schaltegger, S. (2014). Unternehmerische Nachhaltigkeit. In H. Heinrichs & G. Michelsen (Hrsg.), Nachhaltigkeitswissenschaften (S. 321–367). Berlin.
- Kettschau, I. & Mattausch, N. (Hrsg.). (2014). Nachhaltigkeit im Berufsfeld Ernährung und Hauswirtschaft am Beispiel der Gemeinschaftsverpflegung. Hamburg.
- Vollmer, T. & Kuhlmeier, W. (2014). Strukturelle und curriculare Verankerung der Beruflichen Bildung für eine nachhaltige Entwicklung. In W. Kuhlmeier, A. Mohoric & T Vollmer (Hrsg.). *Berufsbildung für nachhaltige Entwicklung* (S. 197-223). Bielefeld.
- Rebmann, K.; Tenfelde, W. & Schlömer, T. (2011). Berufs- und Wirtschaftspädagogik (4. Aufl.). Wiesbaden.