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18. abstract

1) The initial point of the project "part-time master program teacher-training course for vocational training schools / engineering pedagogy" ("LBSflex") consisted in higher education policy efforts to improve the transmissibility between academic and vocational education.

Traditionally universities are oriented towards students with a linear education biography that usually characterises by direct transition from secondary school ("Gymnasium") to university. Recently a higher education policy strategy was developed through the concept of "Open Universities" ("Offene Hochschule") that intends to open the university entrance for new target groups, especially since the decision of the Education Ministers' Conference on "university entrance for vocationally qualified applicants without educational university entrance qualification" ("Hochschulzugang für beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung") (KMK 2009) in 2009.

In October 2011 the competition of "Advancement through Education: Open Universities" ("Aufstieg durch Bildung: Offene Hochschule") as part of the qualification initiative of the Federal Ministry of Education and Research was founded. Alongside five further universities in Lower Saxony the Osnabrück University was participant of the first funding phase of the joint project mobility industry that was aiming at "creating new paths and transitions to universities and devolving innovative and scientific (continuing) education offers for the focal industry of mobility industry" (Verbundprojekt Mobilitätswirtschaft 2012, S.3). At the same time a specific problem occurs in another education policy context that increasingly comes into focus in higher education policy discourse: According to relevant demand forecasts, like for instance the model calculations in regard of the teachers recruitment needs and the teacher recruitment supply of the KMK (see KMK 2011; KMK 2013a), there exists a severe shortage of qualified teachers for vocational training schools in the fields of metal technology, electrical and automotive engineering the next two decades.

The present project of the Osnabrück University therefore expediently combines two relevant challenges of the education sector by focusing on not yet systematically considered groups of persons for the recruitment of corresponding students of teaching.

The vocationally qualified persons are in the focus of "Open Universities" ("Offene Hochschule") and the project "LBSflex" and are in diverse learn and life settings, they do not necessarily obtain a common educational university entrance qualification and "achieve the entrance to academic (continuing) education through the so called third educational pathway" (Bals/Hansen 2013, S.7). Hence an opening of universities can conflict "with the traditional self-perception of academic institutions. Reservations against new student types also express themselves in the fact that universities still have problems with taking responsibility for the production of the ability to study" (Minks/Netz/Völk 2011: 8f.).

In order to promote the academic abilities of non-traditional students the concept of mentoring can represent a strategy to produce equal opportunities. That is why a mentor is supporting the development of the less experienced mentee with regard to his or her professional and personal development by expanding the professional, social and self-competencies as well as the access to professional networks and by giving a supporting orientation in regard to future professional tasks. Condition for a successful mentoring is a long lasting, stable relationship as well as a foundation of trust between mentor and mentee (see Ziegler 2009, S.11).

A successful model is the so called "Peer-Mentoring". Here mentor and mentee share similarities in regard to their education biography, career and profession planning and current life situation, whereby the mentor is further ahead in regard to the education and profession paths. In this regard an overall survey about mentoring programs in universities found that the overall content of the mentees is strongly depended on the custom-fit conception for special target groups (see Leicht-Scholten/Wolf 2009, S. 312).

A target group orientated mentoring therefore is supposed to have the greatest potential to create transition between educational institutions and orientation in a new environment. Especially for the transfer from vocational education to universities this is an expedient approach, since the transition from vocational and academic education is a special challenge because of the traditional separation of the institutions as well as fundamental different learning cultures (see e.g. Jungmann/Fleck 2013, S.17 ff.). In order to facilitate a renewed entrance into a study program and a successful study process for the specific target group of the vocationally qualified, a target group specific multistage mentoring concept was developed in the framework of "LBSflex".

The special feature of the master program "LBSflex" consists in the development and delivery of a blended-learning concept that combines e-learning self-study phases and in-class sessions (see Wirth 2005, p. 45). Blended-learning can be an asset for the higher education landscape, because it facilitates a (renewed) study for target groups, who would not have studied through other circumstances, such as employed persons or persons with family duties. By outsourcing of knowledge content from in-class sessions to a learning platform the students can work for the subject matter self-organised and time independent (see Mayer/Kriz 2010, S.15). Especially with regard to the vocationally qualified students in "LBSflex", who are exposed to multiple duties like employment and family, blended-learning is a possibility for a custom-fit study concept.

- 2) In the framework of the project "part-time master program teacher-training course for vocational training schools / engineering pedagogy ("LBSflex")" the following tasks or research questions were carried out/answered:
  - 1. Collection and analysis of relevant study programs for vocationally qualified.
  - 2. Which professional and personal educational preconditions and study expectations do vocationally qualified prospective students show?
  - 3. How can the recent labour market and qualification demand of companies or businesses and of the employees in the local mobility industry be characterised?
  - 4. How great are the acceptance and the study success of vocationally qualified as study type from the perspective of the teachers at the Osnabrück University?
  - 5. Formative evaluation of the part-time master program ("LBSflex") through common accreditation standards/ -criteria (plausibility of the study concept, ability to study, reliable/binding regulation terms, appropriate resources, guarantee of employability, target group orientated teaching and assessment methods etc.) as part of the consistent intern quality management of the project
- 3) In regard to the conception and implementation of the part-time master program teacher-training course for vocational training schools / engineering pedagogy ("LBSflex") diverse research activities were necessary in the preliminary stage as well as during the development and optimisation process which consisted of documentary analysis, surveys of demand, expert interviews and a combinations of these research instruments. They were carried out qualitative as well as quantitative.
- 4) The benefit of the project and the scientific prospect of success arise from the implementation and evaluation of a study program that is unique in its concept and structure ("unique selling point"). The structure of the study program "LBSflex" not only allows an adaption of further job profiles, it can also be transferred to other university facilities.

Results were produced by the scientific consultancy of the project and they contribute profound scientific outcomes in regard to the fields of open universities, part-time study and the specific study type of vocationally qualified.

By establishing a network of competence, which was developed in the context of the joint project mobility industry, infrastructural framework settings were established that strengthen the university location Lower Saxony sustainably.

In the joint project as well as in conferences or meetings of the scientific consultancy of "Advancement through Education: Open Universities" ("Aufstieg durch Bildung: offene Hochschulen") important networks also on scientific level were created.

The project was positively evaluated by the German Centre for Research on Higher Education and Science Studies (DZHW) (Deutsche Zentrum für Hochschul- und Wissenschaftsforschung), former HIS-Institute for higher education.

As a consequence of the achieved results especially market and target group research and suitable support offerings and structures for a positive study progress became known to be especially important.

5) After the first founding phase two semester of the pilot project are terminated, four semesters are to come in the second founding phase.

Currently it is explored whether a second cohort can be accepted for the winter semester 2015/2016. The second founding phase aims at a further implementation of the concept and its systematic evaluation (e. g. in regard to the transfer) by extensive, the pilot project accompanying research. The core of this is the optimisation and consolidation of the part-time study program by arranging five superordinate development contexts:

- Systematic evaluation of the study program
- Further development and testing of the target group orientated mentoring concept
- Development of a systematic recruitment strategy for different target groups
- Conception and supply of certificates in order to achieve more flexibility and a broader offer
- Further development and evaluation of the e-learning element supply

An implementation of the project results in form of a consolidation of the part-time measure and the expansion of the supply in the field of "Open universities" ("Offene Hochschule") can be expected at the end of the second founding phase and the positive evaluation.

Recently an inclusion of the study program as regular offer into the study program offer agreement 2017/2018 between the Ministry of Science and Culture and the Osnabrück University is planned.

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