

# Providing Feedback, Orientation and Opportunities for Reflection as Key Elements for Successful Mentoring Programs: Reviewing a Program for Future Business Education Teachers

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## **Abstract**

The introduction to teaching is critical for novice teachers. Near the end of their master's program, students of Business Education and Development in Austria spend one semester at an assigned school. They are introduced to teaching, while being assisted by peer students, mentoring teachers, and a companion course. Mentors receive special training and preparation in advance, thus contributing to a high quality mentoring program. The program is organized threefold: (1) providing feedback, (2) opportunities for reflection and (3) career orientation.

The purpose of this paper is to assess key elements of successful mentoring programs and to question which competences of mentors contribute most to the success of those programs. Between 2012 and 2015, 188 persons (student teachers and their mentors) responded to an online survey at the end of their mentoring program. Additionally, data from a study (1,245 questionnaires) regarding the student teachers' perception of their own competence was utilized, allowing for a comparison of student teacher confidence in their abilities before and after the mentoring program.

The present results provide insight into the key elements of successful mentoring programs; both from a student teacher's and mentor's perspective. During the semester, students showed an increase regarding their self-perception of their professional competences. It was found that students and mentoring teachers valued feedback after each lesson more than feedback in regular meetings. Opportunities for reflection (e.g. exchange with peer students, learning diaries) were considered helpful. The mentoring program helped students to decide whether to become a teacher or not.

## **Keywords**

Key elements of mentoring, student teaching, competence development, reflection, Business Education and Development

## **Introduction**

Mentoring activities and opportunities for collaboration with peers are important for the career orientation of novice teachers (Smith &

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Ingersoll, 2004). This paper assesses the key elements of a mentoring program as implemented for students of the master's program, Business Education and Development, during their semester of student teaching.

Business Education and Development (BED) is a university program with polyvalent purposes in Austria. At the universities of Graz, Innsbruck and Vienna<sup>1</sup>, it is implemented as a master's program which takes five semesters and provides professional preparation (1) for the teaching profession at higher and medium level secondary vocational colleges as well as (2) for other professions related to the field of Business Administration (Slepcevic & Stock, 2009). However, although students of BED may become business teachers, there are differences to other programs of teacher education: First, students of BED need at least two years of professional practice in a field other than teaching (e.g., accounting, management, human resources) after they have completed their degree and before they are admitted to a teaching position at school. Second, the teaching practice – a form of school internship – is integrated towards the end of the BED master's program, with a higher number of lessons spent in the classroom (180 lessons in total) and a more densely structured mentoring and accompanying program – which results in a master's program of five semesters instead of four semesters.

In accordance with an edict of the Austrian Ministry of Education, the teaching practice takes one semester at a higher and medium level secondary vocational college. The ministry defines the following objectives: Students of Business Education and Development are supposed

- to use their knowledge, abilities and skills with regard to educational science, business didactics, teaching methodology and business administration in real school life situations,
- to internalize confident and competent behavior with regard to classroom management,

- to meet the organizational challenges of everyday school life in compliance with legal requirements,
- to independently design and execute competence oriented lesson plans and
- to gain comprehensive insight into various not-directly-teaching-related activities of teachers (Austrian Ministry of Education, 2011).

BED students at the University of Graz go through their teaching practice with a peer student. They start with about two weeks of observing and analyzing the lessons of their mentors, the classroom dynamics and the school reality. The training is planned to provide teaching experiences where students gain confidence and develop competent behavior by planning and executing teaching sequences or isolated lessons. The main part of the practice consists of stand-alone teaching, in which students plan their own lessons independently over a longer period of time, conduct them alone, or in the presence of their mentors, and evaluate their own progress (Riebenbauer & Stock, 2012). The mentors are experienced teachers who are chosen by their school principals and the supervising authority. They participate in a three semester training course including self-reflection, coaching, peer review and supervisory activities. After the initial training, they engage in further annual training.

The aim of accompanying the students during their semester of teaching practice is to optimally mentor and prepare students for their future occupational field. The mentoring program as newly implemented within the BED master's program in 2011, focuses on feedback, reflection and professional orientation – with all three aspects being provided by mentoring teachers at school and in a companion course at the university. The focus of the university course is on scientific mentoring, group reflection of individual experiences, and linking of theory and practice. As pedagogical expertise and professional competence cannot be gained without profound reflection (Arnold, 2005), adequate instruments to support competence

development and reflection have been embedded such as learning diary, evaluation grid for competence development and ePortfolio. Due to the multiple purposes of BED, the mentoring program also provides orientation for the students to help them to decide whether to take up the teaching profession at all.

This paper aims to identify key elements of a successful mentoring process by analyzing the theoretical background, the process, and the perceptions of student teachers as well as of mentoring teachers. For this purpose, results from an accompanying study of student teaching and from an accompanying study of the ePortfolio implementation in the BED master's program at the University of Graz are presented and discussed.

## Literature Review

Caine and Caine (1997) identified four core qualities that enable future teachers to cope with arising challenges of learning and teaching: (1) self-efficacy based on authenticity, (2) the ability to build and maintain relationships to support self-organization, (3) the ability to connect subjects, discipline and life and (4) the capacity to engage in self-reflection to grow and adjust. Korthagen and Vasalos (2005, p. 47) noted, "Reflection is currently a key concept in teacher education." As a consequence, the willingness and capacity to reflect should be fostered early and sustainably within the professionalization process of teachers (Stock, Riebenbauer, & Neuböck, 2015). Korthagen introduced the cyclical model ALACT to support student teachers' reflection on practical situations at school as well as their behavior, skills and beliefs during these situations. ALACT is named after the first letters of its five phases of reflection: *action, looking back on the action, awareness of essential aspects, creating alternative methods of action and trial*. The purpose of the ALACT model is to structure the reflection process of the novice teacher and enable systematic guidance by an expert

(Korthagen & Kessels, 1999; Korthagen & Vasalos, 2005).

Beginning teaching experiences are very challenging and the experience is crucial for novice and student teachers. They often have high expectations concerning the benefit of teaching practice phases especially with regard to their professional socialization and further competence development. In contrast, some experts doubt positive effects of these school internships or claim necessary criteria for a sustainable learning process during student teaching phases. Such criteria to ensure sustainable student teaching might be compulsory learning objectives, cooperation between universities and schools, competent support and guidance of the students through mentoring teachers, integration into school routines and staff, professional discourse between experts and novices and the connection of different internships and accompanying seminars (Hascher, 2006). The implementation of support through mentoring teachers is also requested in the Austrian national education report. Experienced mentors are generally role models who can assist beginners experiencing difficulties and foster experiential learning through reflection phases (Mayr & Neuweg, 2009).

## Mentoring Model

Mentoring has the potential to generate several benefits for mentees, mentors and schools; however, it may also have the potential to harm, if a systematic mentoring program and adequate framework conditions are missing (Hobson, Ashby, Malderez, & Tomlinson, 2009). Awaya et al. (2003) suggest understanding mentoring "as a relationship rather than a role with a set of preconceived duties" (p. 45). They stress the unique relationship between mentor and student teacher based on trust, respect, sharing expertise and moral support. The general aim of mentoring is to provide professional support while entering the teaching profession. The theoretical concept behind the BED mentoring program in Graz is based on the *Three-Level-Mentoring* of Niggli

combining relevant action levels with corresponding forms of communication (2001; 2003).

1. The first level is the level of practical action respectively, the visible teaching performance in class. The mentoring for this level focuses on the knowing-how to teach in order to optimize teaching skills and behavior in classroom. The core of the mentor-mentee-communication is *feedback*, which is provided immediately after the lesson held and in weekly mentoring sessions.
2. The second level is the level of communication. The knowing-that, meaning the background knowledge behind visible actions including scientific and educational theories, is kept in view. The dialogues between mentees and mentors concentrate on *reflection* in the form of reflective meta-communication to differentiate planning ideas, to integrate educational theories and to analyze the students' competence development.
3. The third level of mentoring is the level of personal development which is approached by person-oriented coaching. The potential, strengths and weaknesses of the mentee are at the center of the mentoring process with a focus on *orientation* for career choices by clarifying knowledge about the professional self of the novice teacher.

Niggis' *Three-Level-Mentoring* provides appropriate incentives via feedback, reflection and coaching for the further development of the students' professional, social and personal competences. The several forms of communication in this model enable novice teachers to link their individual teaching experiences with their theoretical knowledge and their innate beliefs (Winkelbauer, 2013).

### **Mentoring Tools**

Additional corresponding mentoring tools or instruments were developed for the implementation of this mentoring approach in

the BED teaching practice in Graz. The objective was to foster intensive reflection of one's own learning and acting – an inner dialogue to analyze one's own learning progress and performance during student teaching, supplemented by the external view of experts. Three instruments – evaluation grid for competence development, learning diary, and ePortfolio – were used in the mentoring sessions at school and in the companion course at university.

### **Evaluation Grid for Competence Development**

This tool enables documentation and analysis of development of the student's competence over the teaching semester by comparing internal and external assessment. The grid covers a comprehensive list of essential topics and competence areas related to teaching such as lesson observation, preparation, classroom work, learner's assessment, contribution to everyday school life and teacher personality. Strengths, weaknesses and potentials are discussed by comparing the self-image (student) and the external perception (mentor) during and at the end of the semester (Riebenbauer & Stock, 2012, 2013).

### **Learning Diary**

Students maintain a learning diary via the learning platform Moodle over the entire duration of the student teaching. The entries are initiated by pre-formulated sentences and cover expectations, personal learning objectives, first impressions at school, individual teaching methodology, experiences with performance assessment, teacher personality and professional orientation. The students received twofold support with the diary: an external coach gives personal feedback on their reflections by asking additional questions, and the lecturer of the companion seminar at the university analyzes the results anonymously for a group reflection in the seminar (Riebenbauer & Stock, 2012, 2013).

### **ePortfolioBED**

Students in Graz create an electronic reflection and development portfolio over the entire course of studies. The purpose is to help students to become aware of their own learning processes and results by visualizing and reflecting on their progress to acquire competence throughout their studies. This ePortfolio (or ePF) is embedded in the curriculum with three seminars at the beginning, middle and end of the studies. These seminars are organized by an external coach from the *Academy for New Media and Knowledge Transfer* who supports portfolio work and reflection processes by individual and group feedback. Additional aims are to prepare and follow up the teaching experiences in order to bridge the theory-practice-gap as well as to facilitate the transfer from university to professional life and to promote lifelong learning (Riebenbauer & Stock, 2012, 2013).

### **Reflection as Key Component for Career Guidance**

The semester of student teaching plays a crucial role in the professionalization process of future business educators – regarding their competence development as well as regarding the decision whether they want to choose the teaching profession. One aim of the semester of student teaching is to provide career guidance to the students of the BED master's program whether to enter the teaching profession, or not.

Since the BED master's program serves polyvalent purposes, students may work as a teacher or as a qualified worker in the field of business administration. Important factors for this decision are the student's beliefs whether he or she is suitable for the teaching profession, i.e., the person's own efficacy expectations. According to Bandura (1977) one's own efficacy expectations depend on one's own previous accomplishments, experiences from the observation of others (in this case: mentors, peers), verbal persuasion and an emotional linkage to the topic. Social Cognitive Theory (Bandura, 1986) states that

learning from the model of other persons (in this context professionals or peers) is crucial for developing one's own vocational choices. Getting the students to reflect upon their previous accomplishments and their experiences from observing other people therefore is considered a key component of the mentoring program as implemented into the BED master's program.

### **Research Methodology**

The current research utilizes data from two different studies: (1) A study of student teaching at the Department of BED which evaluates the mentoring program for young business educators at the end of their master's program, and (2) a study of students' self-perception regarding their competences before and after their semester of student teaching as documented by self-reflections in their ePortfolios.

#### **(1) Accompanying Study of Student Teaching**

The study of the student teaching semester includes two perspectives: (a) student teachers, i.e., the students within the BED master's program who are currently in their semester of teaching practice and (b) mentoring teachers, i.e., the teachers who supervise the students at their training schools. Bringing together both perspectives allows for a better evaluation of the mentoring process, since it takes into account that various actors and institutions are involved: While the student teaching itself takes place at selected schools outside the university, there is a companion course held at the Department of BED, where students have the opportunity to exchange and discuss their practical experiences in sessions guided by two proficient educators. All activities of the accompanying study are coordinated via this course.

### **Procedure**

At the end of their student teaching, students are asked to complete an online questionnaire about their personal perception of the

companion course at the university, the sequence of events during their student teaching semester (e.g., activities at their first day in school), their mentoring teachers at school, their teaching companion at school (i.e., their peer student in the BED master's program) and the instruments applied to assist their competence development (e.g., learning diaries). Mentoring teachers receive a modified version of the questionnaire, which is supplemented by questions regarding their mentored student teachers and their own need for advanced training.

The questionnaire is sent at the end of the semester to all students in their teaching practice semester and to all mentors who are supervising those students.<sup>2</sup> Students as well as mentoring teachers remain completely anonymous. Because it is not possible to identify individual students, the online study is neither an instrument for evaluation nor for surveillance of students' and mentoring teachers' activities; the purpose is to evaluate and to further develop the mentoring program.

## **Participants**

The online questionnaire was sent out to students and mentoring teachers in the winter term 2012/13, summer term 2013, winter term 2014/15, and summer term 2015. Ninety-seven students completed the questionnaires during this period. This represents a return rate of 97.98 percent. Ninety-one mentoring teachers responded, which represented a return rate of 57.24 percent. However, this does not imply that 91 different mentoring teachers contributed to the survey, since some mentoring teachers were active supervising students in more than one semester.<sup>3</sup>

## **Limitations**

Although the anonymity of the survey should result in a smaller number of socially acceptable answers, this approach brings a limitation concerning data analysis. To gather data both from students' and from mentoring

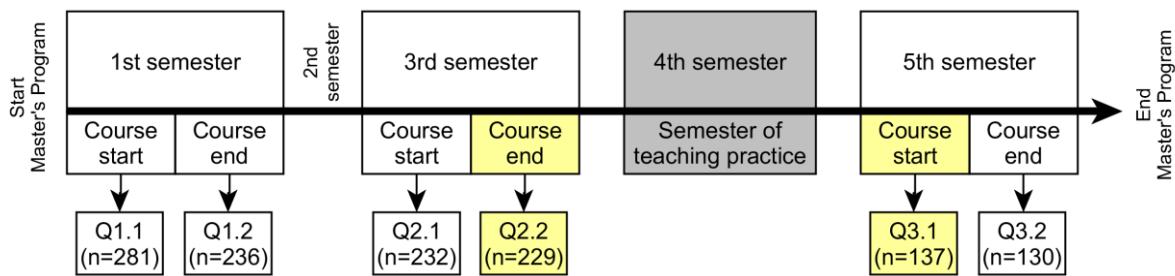
teachers' perspective would theoretically enable a comparison of both perspectives on an individual level. Due to the anonymity of the participants only a semester-wise comparison of the perspectives is possible. Another limitation is linked to the timeframe of the survey: The prime objective of the mentoring program was to assist students' competence development and reflection without spending too much time completing questionnaires, only a single survey was conducted at the end of each semester, leading to the disadvantage that students might not have detailed memory about important aspects during the beginning of their practice phase.

## **(2) Accompanying Study of the ePortfolio-Implementation**

Within their ePortfolio, students reflect upon their competences and record their most distinctive competences in written form. The ePF-work is closely integrated into the curriculum for the BED master's program and is mandatory for all students. Therefore data from the accompanying study of the ePF-implementation allows for close insight into students' self-perception of their competence development.

## **Procedure**

Within their first, third, and fifth semester, students visit designated courses at the Department of BED where they reflect upon their competences under the guidance of a professional ePF-coach (Dreisiebner, Riebenbauer & Stock, 2017). At the beginning and at the end of each of these three courses, the students complete questionnaires in order to evaluate the implementation process of the ePF and to reflect upon their recent competence development (see Figure 1). Each student creates a code to be used for all six questionnaires to enable tracking of the competence development of each student while granting anonymity to the participants.



*Figure 1: Research design and sample size of the ePF-accompanying study. Adapted from Stock and Winkelbauer (2012, p. 52).*

## Participants

Starting in 2011 (Stock & Winkelbauer, 2012), the study includes all students in the BED master's program. Up to the summer term 2016, 1,245 questionnaires were completed by the students. Due to the research design, students complete questionnaires before beginning student teaching (i.e. at the end of the third semester) and after they have finished student teaching (i.e. at the beginning of the fifth semester). These questionnaires Q 2.2 (n = 229 students) and Q 3.1 (n = 137 students) are the focus of this paper, since they enable a direct comparison of students' self-perception of their own competences before and after the teaching practice.

## Limitations

The study relies on data voluntarily provided by the students via answering questionnaires, instead of relying on the content of the students' individual portfolios. Students' portfolios remained anonymous although they would allow for a deeper insight into students' self-perception of their competence development. In addition, the ePF does not represent a formal (self-)assessment of students' competences. The ePFs as well as the questionnaires of the accompanying study rather contain students' self-perception of their competences than measuring their actual competences.

## Findings

The aim of the research presented within this paper is to assess key elements of successful mentoring programs and to analyze which competences of mentors are critical to the success of mentoring programs. After a semester of teaching, students of BED have a higher perception of their professional competences, indicating the success of the mentoring program. Students as well as mentoring teachers identify fast and informal feedback and opportunities for reflection provided to them as valuable for their competence development.

### (1) Assessing the impact of the mentoring program.

Measuring the impact of a mentoring program with respect of the competences of an individual student is a complex task, since competences as defined by Weinert (1999) cannot be measured directly. According to Weinert (1999) competences are learnable cognitive skills, which include the ability to solve specific problems, but also the motivational, social and volitional readiness to do so. Therefore, observations can only provide information about the students' performance, but not about their competence level. However, data from the accompanying study of the ePF-implementation allows for an observation of students' self-perception of their competence development. In particular, new competences attained during the semester of student teaching, and shifts in

students' self-perception of their most distinctive competences are considered. The findings reported in the accompanying study only represent an excerpt of the total findings of the ePF-implementation (Slepcevic-Zach, Riebenbauer, Fernandez, & Stock, 2015; Stock, 2010; Stock & Winkelbauer, 2012).

### New Competences Obtained During Student Teaching

The questionnaires completed at the end of each of the three ePF-courses asked students to name their newly discovered competences during their recent ePF-work. These competences were later classified into the four competence dimensions according to Peterssen (2009): social competence, self-competence, methodological competence and professional competence.<sup>4</sup> Figure 1 shows the proportions of newly found competences according to the four competence dimensions from Q 2.2 (i.e., the semester before the teaching practice) and Q 3.2 (i.e. the

semester after the teaching practice). The absolute number within the bars represents the average number of competences specified by each student claiming to have obtained new competences since the last ePF-session. The length of each bar represents the share of the specific competence dimension among the whole competence spectrum of newly obtained competences.

An average student<sup>5</sup> discovered 0.58 new competences at Q 2.2 and 0.52 new competences at Q 3.2. At Q 2.2 students reported the largest share of newly obtained competences within the dimension of professional competences (0.26 new competences per student), whereas they discovered a relatively smaller number of competences in the dimension of methodological, social and self-competence. Two semesters later at Q 3.2 this proportion changed: Students reported more social competences and less professional competences than at Q 3.1.

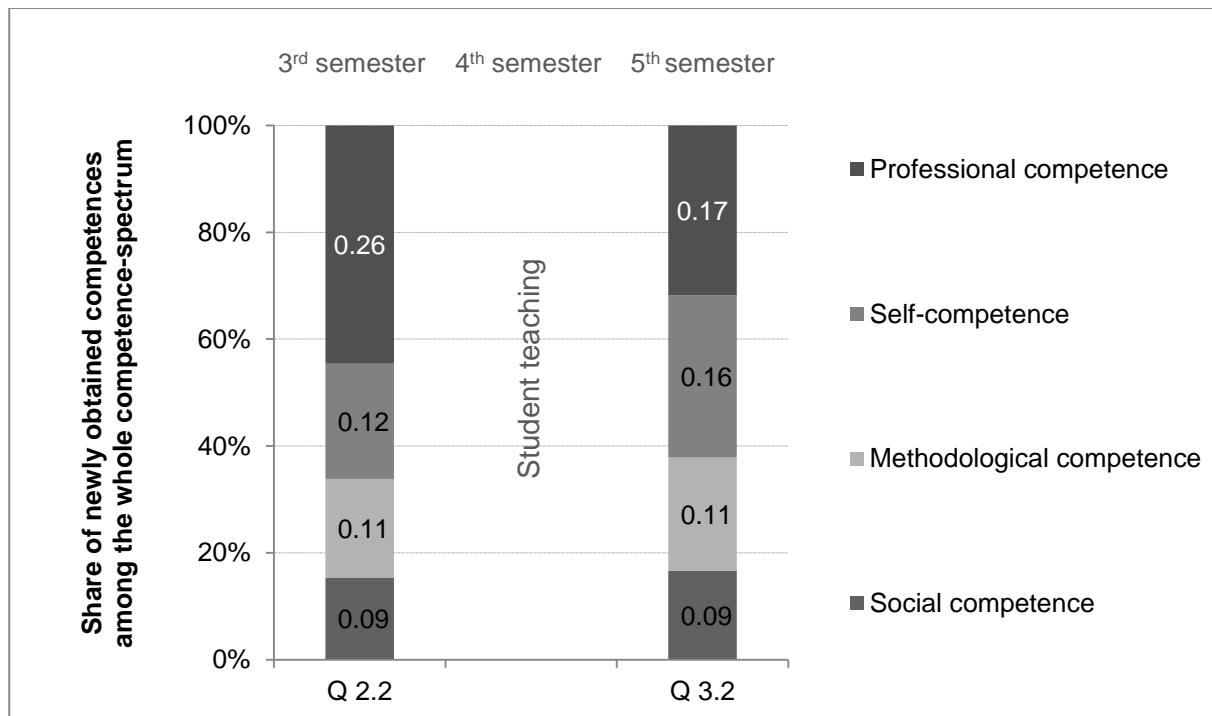


Figure 1: Number of newly found competences for an average student.

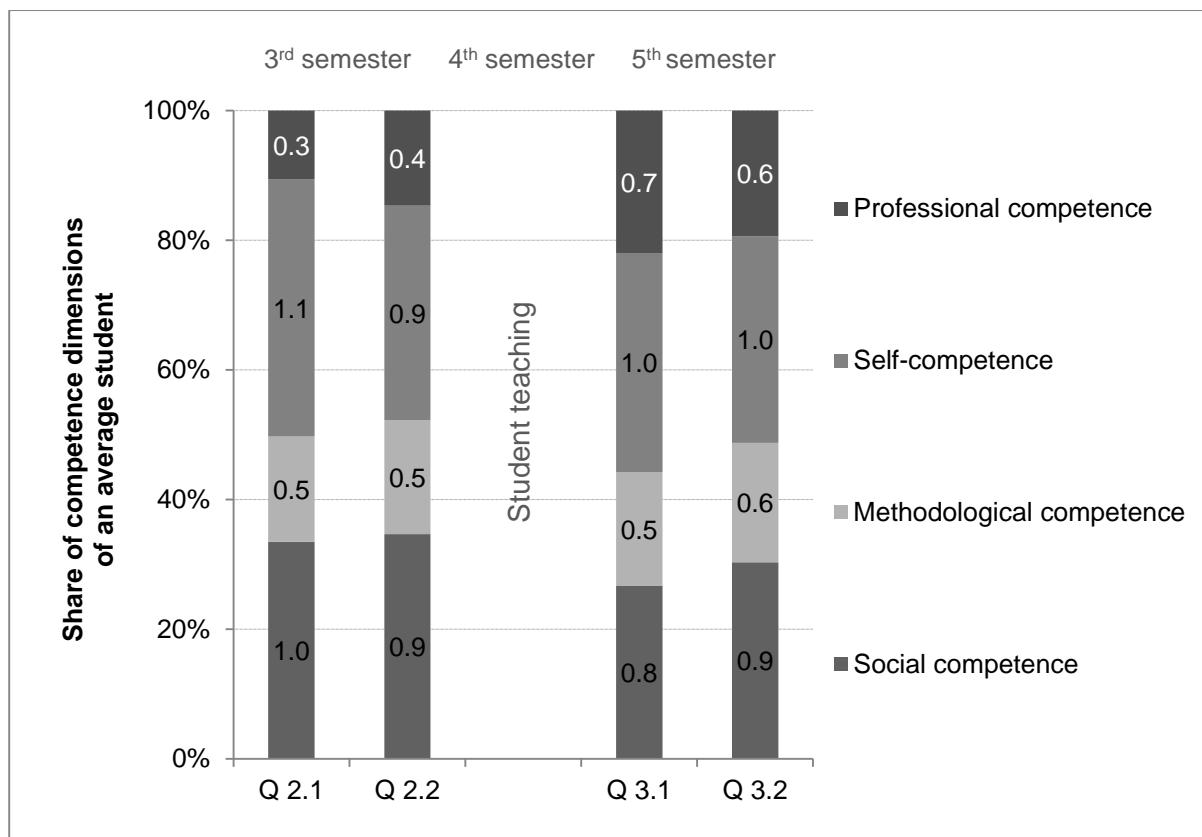
At Q 2.2, 45 out of 229 students reported newly found professional competences. Most of these competences are competences in the field of pedagogic or didactic. At Q 3.2, 19 students reported to have found new competences since Q 2.2 within the dimension of professional competences. All of these newly found competences were competences regarding pedagogic or (subject) didactic. The newly found methodological competences were also linked to the semester of teaching practice: Most students reported an increase in the ability to present content.

During their third semester, students intensively work on their professional competence (e.g. accounting and business administration or planning lessons for business subjects). Therefore, they achieve relatively more professional competences at Q 2.2. By the fifth semester, students have reached the end of the master's program and therefore discover fewer new professional competences. This suggests that students are well prepared with

respect to professional competences when they enter into their semester of student teaching, and that this semester, rather, helps students to acquire new self-competences such as learning readiness, stress-resistance, endurance and tolerance.

### **Students' Most Distinctive Competences**

Within every questionnaire of the ePF-study, students were asked to identify their most distinctive competences. In general, students identified three competences as their most distinctive ones. The average number of the students' self-perceived most distinctive competences during the third semester (Q 2.1, Q 2.2) and the fifth semester (Q 3.1, Q 3.2) is reported in Figure 2. The numbers in the bars represent the average number of competences reported by the students for a specific competence dimension. The length of a bar represents the share of this competence dimension among the other competence dimensions.



*Figure 2: Number of competences of an average student from Q 2.1 to Q 3.2 (aggregated to the four competence dimensions)*

During the semester of student teaching, students' perception of their professional competence and self-competence increased. The largest increase from 0.4 competences per student to 0.7 competences can be found in the dimension of professional competence. The self-perception of students' social competence remained almost constant in the period between the third and the fifth semester.

Due to the structure of the curriculum of the BED master's program, all students completed their semester of student teaching between Q 2.2 and Q 3.1. However, extracurricular activities (such as starting to work at a tax consultancy agency alongside their studies) could affect the self-perception of one's competences. Since no further seminars were scheduled within the curriculum of BED during the semester of student teaching, the increase in professional and self-competences may have originated from the semester of student teaching or from extracurricular activities.

After one semester of student teaching, the students of the BED master's program reported an increase in self-perception of their professional and self-competences (as shown in Figure 2). However, students reported at Q 3.2 to have discovered primary social and self-competences as new competences since Q 2.2 (as shown in Figure 1) – although these competence dimensions showed little increase as seen in Figure 2. Based on mentor observations in the accompanying course, the following explanation is offered: Students begin their semester of student teaching well prepared in professional competence, and the student teaching helps them to recognize their existing professional competences. Therefore after their semester of successful teaching, when asked about their most distinctive competences, students have a higher perception of their professional competence than before. In addition, the students might have discovered new competences (e.g., within the dimension social competence) since Q 2.2, but they might not necessarily count them among their most distinctive competences.

## (2) Key Elements of Successful Mentoring Programs

To identify key elements of successful mentoring programs, students and mentoring teachers were asked to respond to an online survey. Both the companion course at the university as well as the mentoring activities at school were assessed. Figure 3 illustrates which elements of their mentoring teachers' supervision were considered as helpful by the student teachers.

### Feedback as Critical Component

During their semester of student teaching, students received feedback on their lesson planning, their in-classroom work, as well as on their contribution to general school-activities and their teaching-personality. The student teachers valued most feedback provided immediately after their teaching lesson. Seventy-seven percent of the students agreed that direct feedback proved helpful; 73 % agreed that the fact that their mentors always took time for their requests was helpful. These items [1] and [2] – reported in Figure 3 – represent situations in which the mentor interacted with the student on a personal level, in which students received feedback on their teaching performance or in which the mentor discussed their concerns *directly* after the lesson. Items regarding the role of the mentoring teacher as a role model concerning his specific competences were considered as less helpful by the student teachers. Students considered their mentors' professional and social competence to greater impact than their mentors' didactical competences. The *Evaluation grid for competence development* represents a tool to provide structured feedback during two designated meetings of the students with their mentoring teachers. In comparison to the feedback *directly* after the lesson (which was evaluated most helpful), this mentoring element received lower ratings by the students.

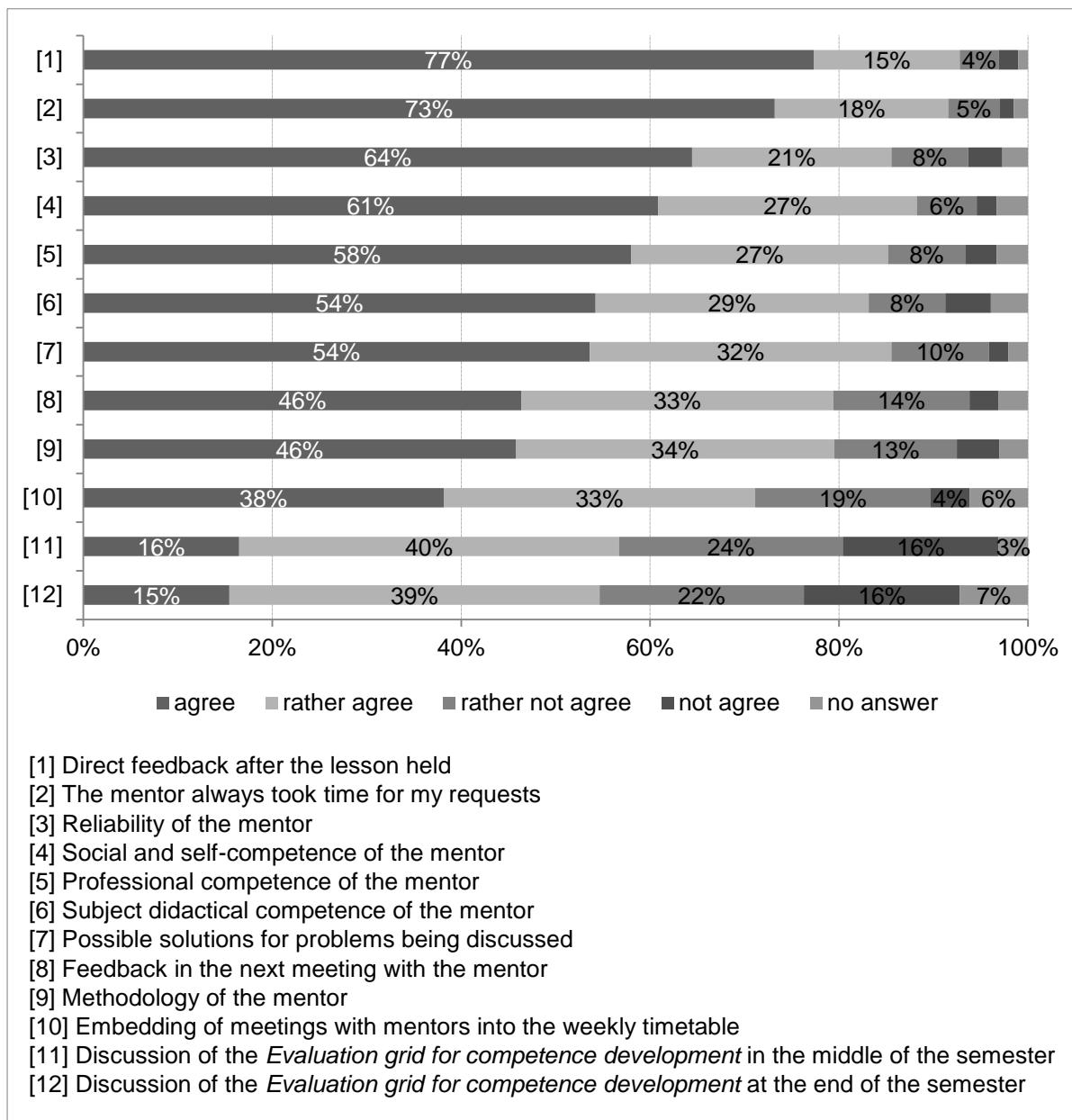


Figure 3: Helpful mentoring elements – Student teachers' perspective.

From the student teachers' perspective, direct feedback and individual supervision are important aspects to ensure their own competence development. Mentoring teachers and student teachers largely agreed about the key elements of successful mentoring programs. Mentoring teachers received the same items, but were only allowed to respond to the four items their assigned student teacher profited most from. Table 1 shows which elements were considered most helpful by the mentoring teachers and contrasts these results with the student teachers' perspective. For the student

teachers' perspective in Table 1, only the answers for *agree* were compared. Mentoring teachers likewise stated, that the most helpful elements within their mentoring were direct feedback to the student teachers after each lesson and their high involvement regarding students' requests. Fifty-two percent of the mentoring teachers considered weekly meetings at scheduled times as helpful. However, since students valued the direct and individual feedback more, students placed less importance on meetings at fixed times than their mentoring teachers.

**Table 1**

*Helpful mentoring elements – Mentoring teachers' and student teachers' perspective.*

	Mentoring teachers	Student teachers
Direct feedback after the lesson held	80%	77%
The mentor always took time for my requests	75%	73%
Possible solutions for problems being discussed	58%	54%
Social and self-competence of the mentor	56%	61%
Professional competence of the mentor	53%	58%
Embedding of meetings with mentors into the weekly timetable	52%	38%
Reliability of the mentor	52%	64%
Subject didactical competence of the mentor	48%	54%
Methodology of the mentor	44%	46%
Feedback in the next meeting with the mentor	40%	46%
Discussion of the <i>Evaluation grid for competence development</i> in the middle of the semester	23%	16%
Discussion of the <i>Evaluation grid for competence development</i> at the end of the semester	19%	15%

The item *Discussion of the Evaluation grid for competence development* is not as accepted as other mentoring activities as shown in figure 3 and table 1. The discussion of the grid aims to enable a comprehensive reflection of the competence development over the teaching semester by comparing the self-image of the student with the perception of the mentor. The suggestions for improvement range from shorten or simplify the grid, to demand a compulsory application of the grid and a better introduction into the use of the grid for mentors and students.

### **Providing Opportunities For Reflection as Key Component**

In addition to the mentoring program at their assigned school, students are provided with opportunities for reflection during the companion course at the university. Figure 4 shows which elements of the companion course were considered as helpful by the student

teachers. The perception of the mentoring teachers is not reported here since they do not regularly attend the companion course.

Seventy-nine percent of the students considered the exchange of experiences with colleagues to be helpful for their professional development and career orientation. Among the components of the companion course which were considered as helpful by the students were legal and organizational information regarding student teaching, guest lectures by skilled educators, and reflection in their learning diaries. Additional items underscored the importance of providing opportunities for reflection: Regarding individual self-reflection, 87.63 % of the students considered the learning diary with its coaching as supportive (answers: agree, rather agree). Reflection during student teaching was deemed very important with 88.64 % of the students responding "agree" or "rather agree" to questions about the importance of reflection.

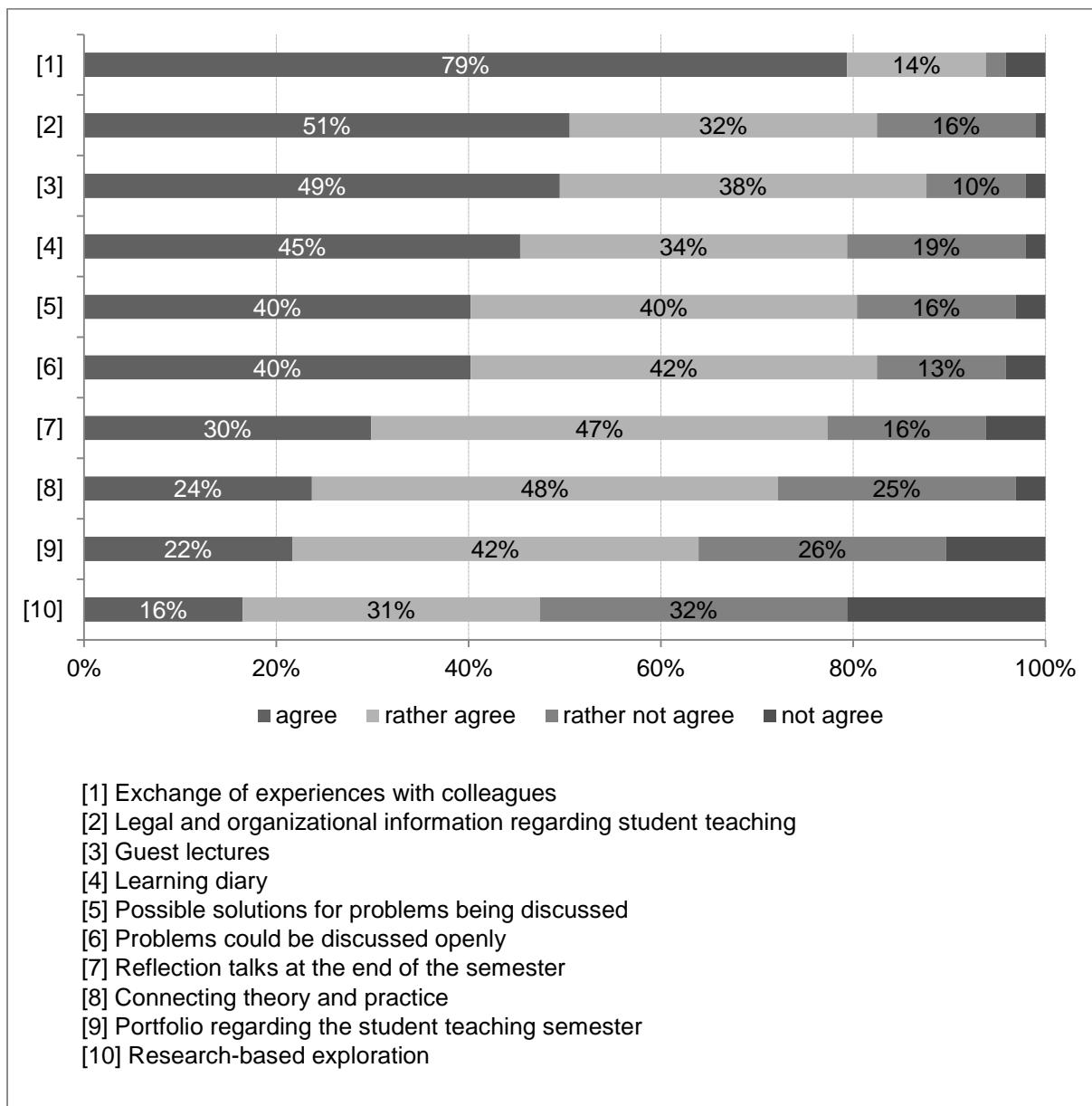


Figure 4: Helpful elements among the companion course.

## Implications for Teacher Education and Conclusion

The education and development of business teachers in Austria includes a required minimum of two years of business practice before entering the teaching profession and the integration of teaching practice into the BED master's (or diploma) program. Despite these differences, the mentoring program during the first teaching experiences is largely comparable to other mentoring programs in teacher education: Students observe lessons of experienced mentors, plan and perform their

own lessons, and receive feedback on their professional, methodological, social and self-competence, in addition to attending a companion course.

The results of the study of student teaching, conducted from 2012 to 2015, showed that students considered feedback as helpful, and that they preferred to receive it *immediately* after teaching a class. It was also found that students require informal exchange with their mentoring teachers and peers, but not within a regular schedule. The learning diary as an instrument to foster reflection during student

teaching was also considered as helpful by the majority of the students.

Based on the experiences with the teaching semester and on the results of the accompanying studies, the following implications for teacher education and mentoring programs can be derived:

1. Shared strategy and close *cooperation of all stakeholders* are central factors of a successful start into teaching. Even if novice teachers, mentors and their schools, universities and school authorities have different daily needs and problems, they follow the common goal of developing good new teachers (Riebenbauer & Stock, 2012).
2. *Mentoring teachers* constitute the core of a mentoring program. Mentors have to satisfy the above mentioned desires of the novice teachers; they have to be flexible to give feedback fast and constructively (as indicated in figure 3), should offer time and show reliability. As a consequence, a careful selection, an adequate mentoring education and continuous further development are essential for the success of mentoring (Hascher, 2006).
3. Instead of simply fulfilling a role, mentors can develop a valuable relationship with the mentee to support him/her “in their journey to confidence and competence” (Awaya et al., 2003, p. 56). In order to avoid uncontrolled and unconscious learning, a structured *mentoring program* is necessary. This can be complemented by *mentoring tools or instruments* which promote feedback, reflection and career orientation. Since daily pressures of work often provokes quick solutions, these tools should assist the mentor and mentee to maintain focus on comprehensive professional development by reflecting on situations that seem to require quick responses and reflecting on the underlying issues (Korthagen & Vasalos, 2005). However,

as the data from the discussed studies show, these tools have to be embedded well into the program, accepted by mentors and mentees and addressed both at school and in the accompanying university course.

4. Novices appreciate the exchange of teaching experiences with colleagues. *Informal networks* at schools or in companion courses, as well as the potential of a peer in the sense of a *critical friend* could be used more systematically in order to discuss problems and possibilities.
5. It is advantageous for a professional development program to continuously evaluate and improve the mentoring program and the companion courses and tools. *Evaluation studies* – as the ones presented within this paper – consider the novices’ and mentoring teachers’ perspectives. As the data are reported and discussed with the mentors at future training sessions, the results enable the initialization of a *cooperative quality development process* which can consequently contribute to a successful start into the teaching profession.

## Notes

1. At the University of Linz, Business Education is organized as a nine-semester diploma program.
2. An important aspect of the accompanying course therefore is to coordinate the cooperation between the schools, student teachers, mentoring teachers, the supervising authority and the Department of BED: e.g. students report *which* mentoring teacher (out of a pool of qualified mentoring teachers) they have been assigned to. This sharing of support activities enables to concentrate within the accompanying course on the mentoring process instead of administration.

3. The questionnaire for mentoring teachers contains a specific item to verify, whether a mentoring teacher has participated at the accompanying study in the previous semesters. However, answering this item would have theoretically allowed tracing back answers to an individual level. Therefore answering this item was not mandatory and most mentoring teachers chose not to answer this item.
4. Competences in (subject) didactics and teaching methodology are assigned to professional competence in this classification.
5. To obtain the competence-profile of an *average* student, the number of *newly found* competences for each competence dimension (as reported by all students) was divided by the number of students.

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