The general aim of this dissertation was to provide insight in how beginning teachers can be better equipped for teaching in urban environments. Increased knowledge/insight could lead to a more effective organisation of support practices for beginning urban teachers, which - in turn - could lead to an improvement of the quality and retention of beginning urban teachers.

In order to achieve the aim of this dissertation, four studies were conducted. Chapter 2 started with an exploration of the specific problems of beginning urban teachers. Thereafter, chapter 3 examined the effects of a professional development programme (‘Mastery’) that aimed to improve the quality and retention of beginning teachers in an urban environment. Chapter 4 investigated the long-term effects of the ‘Mastery’ programme and the school characteristics and activities that were undertaken in school organisations where teachers reported positive long term effects of the programme. Finally, the study in chapter 5 focused on induction at the workplace itself, in particular on the elements of induction that are of importance for beginning urban teachers.

In this final chapter, the main findings and conclusions of the studies are presented. Thereafter, the findings and contributions of the studies are discussed. Furthermore, limitations as well as implications for educational practice are considered.

Summary of the main findings and conclusions

In chapter 2, a study on the problems of beginning teachers in urban primary schools was presented. The central question was formulated as follows: What are the problems that beginning teachers encounter in urban primary schools?

To answer this question, an exploratory study was conducted using in-depth semi-structured topic interviews with 15 beginning teachers from primary schools in Amsterdam (the capital of the Netherlands) and Utrecht (one of the four major cities of
the Netherlands). Newly qualified teachers from urban primary schools were included in the study: beginning teachers from ‘disadvantaged’ schools where students come from low socio-economic and sometimes also culturally diverse backgrounds, as well as novices from ‘more advantaged’ schools where most students are of native heritage and have highly educated parents, and beginners from ‘mixed’ schools where the student population is a mix of both native students and students from culturally diverse backgrounds and of students with different SES backgrounds.

The most prominent problems that the novice teachers identified were a high workload, significant stress and inadequate guidance and support. Other frequently mentioned problems were contact with parents (both highly educated and critical parents and non-native parents) and dealing with their personal insecurity. With regards to the problems identified in the literature as ‘urban school problems’, two issues were primarily recognised by the teachers as being problematic: 1) Too little time and capacity to pay sufficient attention to students ‘at risk of academic failure’, 2) Adapting to the differences in cognitive development and language development of children. The problems appeared to be different for the different types of urban schools; teachers at disadvantaged schools primarily perceive problems related to the diverse student population, whereas teachers at advantaged and mixed schools experience problems such as dealing with highly educated parents and applying differentiation to adequately teach both the gifted and the lower performing students.

The teachers believed that several of the problems discussed in this study were related to teaching in an urban school. The results also showed that some of the teachers did not perceive the challenges of urban schools as problems but instead as challenges through which they could further develop themselves. These were the teachers who also reported receiving good preparation and support.

In the following study, described in chapter 3, the effects of a professional development programme (‘Mastery’) that aimed to improve the quality and retention of beginning teachers in an urban environment were examined. The content of the ‘Mastery’ programme was focused on the acquisition of skills necessary to meet the challenges of teaching in a complex urban environment - such as communicating with parents of different cultural backgrounds - and on developing an extended professional orientation. The programme lasted one year and consisted of the following three components: group
meetings (these involved theoretical input from experts regarding the four urban themes, opportunities for sharing experiences and group assignments), classroom application (participants apply new insights to their teaching practice) and lectures (in which experts explored substantive themes). Additionally, supervision was organised, offering a context for beginning teachers to share experiences and expertise.

The central research question of this study was: What is the contribution of participation in the ‘Mastery’ programme to the quality (in terms of competences, professional orientation and self-efficacy) and retention (in terms of job motivation and career choices) of teachers?

The core of this study was formed by a quasi-experimental design, with an experimental (N=66) and control group (N=67). The contribution of participation in the professional development programme to the different dependent variables (competences, professional orientation, self-efficacy, job motivation and career choices) was measured using a knowledge test and questionnaires (pre- and post-measures). The competences (in terms of knowledge of teaching in an urban environment) were measured through the knowledge test, the other variables (professional orientation, self-efficacy, job motivation and career choices) by using the questionnaires. To gather complementary information regarding teachers’ evaluation of the programme and to obtain a detailed understanding of the active elements of the programme, interviews were conducted with participants of the ‘Mastery’ programme and with their principals (N=42). These interviews were analysed qualitatively.

The results showed a significant effect of the programme on teacher knowledge and self-efficacy. Furthermore, teachers greatly appreciated the programme and they perceived a positive impact on their competences, self-efficacy and professional orientation. The teachers considered the modules, which offered a broader focus than just the direct classroom practice, and the network wherein teachers could share their experiences and expertise to be the most valuable elements of the programme.

Chapter 4 reports on the long-term effects of the ‘Mastery’ programme. We were also interested in the professional learning community (PLC) characteristics and activities that were undertaken in school organisations where teachers reported positive long term effects of the programme. The research questions of this study were:

1. What are the long-term effects of participation in the ‘Mastery’ programme to the
quality (competences, professional orientation and self efficacy) and retention (job motivation and career choices) of teachers?

2. Which characteristics and activities are typical of school organisations in which teachers showed positive long-term effects of the ‘Mastery’ programme?

The long-term effects were investigated in a quasi-experimental design (N=72), whereas the school characteristics and activities were examined through interviews (N=19). Ten teachers who reported positive long term effects of the ‘Mastery’ programme and their principals were interviewed.

The study showed a significant long term effect of the programme on teachers’ competences and professional orientation. Although the quantitative results showed no long-term effect of the programme on self-efficacy, job motivation and career choices of the teachers, the interviews suggested that, participants of the programme and principals experienced a longer-term contribution to the self-efficacy, job motivation and career choices of the teachers.

In schools where teachers reported positive long-term effects of the ‘Mastery’ programme, several school organisational characteristics were present and activities were undertaken that were perceived as valuable for the application, sharing and further development of what teachers had learned from the ‘Mastery’ programme. The teachers and their principals considered an open culture in the schools, in which the teachers could share their expertise with colleagues and teachers and principals seriously considered their expertise, as the most important factor for the sustainability of the programme’s effects.

Chapter 5 contains a report on a descriptive study of the induction of beginning teachers at urban primary schools. The study aimed to gain insight into the support structure and culture for beginning teachers at urban primary schools. The central research question was: What are the characteristics of the support structure and culture at primary schools where beginning teachers positively or negatively judge the support they receive?

Beginning teachers and principals from 11 primary schools in Amsterdam were interviewed about the support structure and culture at their school. The sample included schools where beginning teachers judged positively or negatively about the support they had received. Based on a comparison between the schools where teachers judged
positively or negatively about the support practice, valuable elements of the support structure and culture were identified.

The study revealed that all schools undertook support activities, such as offering beginning teachers a buddy or coach. However, at schools where teachers judged the support positively, these activities were performed more consistently and conscientiously than at the other schools. Furthermore, it can be concluded that cultural rather than structural characteristics distinguished the schools. A good support culture largely determined how teachers judged the support practice at their schools. Elements of the support culture that were of particular importance for beginning teachers were (spontaneous) collaboration between beginning and experienced colleagues, encouragement of beginning teachers’ development, and involved colleagues who were open to discussing experiences with beginning teachers.

Overall conclusion

This dissertation provided insight in how beginning urban teachers can be better equipped for teaching in urban environments. The study identified several prominent problems faced by beginning urban teachers and showed the value and effective elements of both a professional development programme teachers outside the workplace and guidance at the workplace itself.

From this study, it can be concluded that newly qualified urban teachers encounter several difficult and complex issues that are to a certain extent related to teaching in an urban environment, in particular to the student populations of the schools. Teachers at disadvantaged schools primarily perceive problems related to the diverse student population, whereas teachers at advantaged and mixed schools experience problems such as dealing with highly educated parents and applying differentiation to adequately teach both the gifted and the lower performing students. These problems can be perceived by novice teachers as interesting challenges rather than problems if teachers receive proper guidance regarding these issues.

Furthermore, this dissertation demonstrated the value of two different ways of supporting novice urban teachers. First, the contribution of a professional development programme (outside the workplace) that aimed to better equip beginning teachers for
teaching in an urban environment was evaluated. Positive effects of the programme on teacher competences, self-efficacy and professional orientation were found. Furthermore, teachers greatly appreciated the programme and considered the different modules, which offered a broader focus than just the direct classroom practice, and the network wherein teachers could share their experiences and expertise to be the most valuable elements of the programme.

Second, this study showed the importance of guidance at the workplace itself and identified several elements of induction that are valuable for beginning urban teachers. The results showed that not only support activities, such as the guidance of a coach or buddy, but also a good support culture is of great importance for beginning urban teachers. In schools where teachers reported positive long-term effects of the ‘Mastery’ programme an open learning culture in the schools had been established: this was considered as the most important factor for the further development of what the teachers had learned from the ‘Mastery’ programme.

**Discussion of the main results**

Above, the main findings and conclusions of the four studies that constitute this dissertation have been summarised and integrated. In this section, the contributions of this dissertation, directions for further research and implications for educational science and for practice are discussed.

As was concluded, this study provided insight in how beginning urban teachers can be better equipped for teaching in urban environments. Previous research showed that it is important for professional development and induction programmes to focus on the problems that teachers experience in the specific context in which they operate (Siwatu, 2011; Tamir, 2010). This study identified several urban themes/problems that are important to address in support programmes for novice urban teachers. In contrast to previous studies (e.g., Castro, Kelly & Shih, 2010; Halvorsen, Lee & Andrade, 2009), in this study a broad conceptualisation of ‘urban teaching’ was used, in which we focused not only on ‘disadvantaged’ schools (where students come from culturally diverse and low socio-economic backgrounds), but also on more ‘advantaged’ schools (where most
students are of native heritage and have highly educated parents), and ‘mixed’ schools (where the student population is a mix of both native students and students from culturally diverse backgrounds). These different kinds of urban schools are characteristic for global cities and teachers must be prepared and equipped for teaching in these different types of schools. The inclusion of both disadvantaged, advantaged and mixed schools in this study made it possible to obtain a good overview of the diverse problems that urban teachers might experience. The results show that urban teachers experience different types of complex problems depending on the student population of their schools. Since the problems of novice urban teachers are so complex and diverse, teacher training cannot fully prepare teachers for teaching in an urban environment. Novices also need adequate guidance and support once they are working at a particular urban school. The results of this research gave insight in how this guidance and support may be organised.

**Theoretical contributions**

The study provided theoretical insights by identifying several elements of professional development and induction programmes that are valuable for beginning urban teachers. The research revealed elements of professional development programmes, and the support structure and –culture of schools (including professional learning communities) that are important for beginning urban teachers. An important finding of this study is that a network of novice teachers, in which teachers from different schools can exchange experiences and expertise, is highly valued by beginning urban teachers. This result confirms the conclusion of Hofman and Dijkstra (2010) that networks of teachers that allow teachers from different schools to exchange experiences are promising ways for professional development and enhancing job motivation of teachers. In fact, meeting teachers from other schools and exchanging experiences was such an important element in the success of the Mastery programme that it mitigates the conclusions from previous studies that concluded that professionalisation activities for teachers are best situated in the workplace. This study showed that professional development programmes outside the workplace have a value of their own. Through such programmes, beginners have the opportunity to meet other novices which is not always possible at their own school. The teachers in this study highly appreciated the contact with peers, because it enabled them
to reflect on their performance and experiences and to exchange substantive expertise. The contact with peers from other schools made it possible to transcend the situation in the own workplace; novices received information about the situation in other schools and also learned from the way of working in the schools of their peers. Network learning was thus found in this study as a valuable element of teacher professionalisation and should therefore be encouraged both inside and outside the workplace.

Another important finding of this study was that the broad focus of the different modules of the ‘Mastery’ programme was perceived as a very valuable element of the programme by the teachers. These modules were not only focused on the direct classroom, but also on topics as the school organisation, the language policy of schools and parents of different backgrounds. Accordingly, the teachers were inspired to look beyond their own classroom and developed as an extended professional. Therefore, the study underlines the value of a professional development programme with a broader focus than only classroom practice. In previous research on effective professionalisation it is often suggested that professional development programmes that focus on daily teaching practice (and in particular on subject content, teaching methods and/or the learning of pupils in a particular subject) are more effective than programmes with a more general focus. This study showed that the importance of a broad focus in professional development programmes. However, the link of the programmes with the daily practice should not be lost.

Furthermore, this study emphasised the importance of a good support culture for beginning urban teachers. Much of the literature on effective support for beginning teachers focuses on the support structure, or the support activities that schools perform to support their teachers (Davis & Higdon, 2008; Howe, 2006; Smith & Ingersoll, 2004; Wang & Odell, 2002). This study also underlines the value of a good support culture. A support culture that was characterised by spontaneous collaborations between novice and experienced teachers, encouragement of beginning teachers’ development, and involved colleagues who were open to discussing experiences with beginning teachers, appeared to contribute to a positive judgment by teachers of the support practice at their school.

To summarise, this study identified several elements of valuable support for beginning urban teachers. We do not know whether these elements are in particular important for this specific group of teachers. It seems reasonable to assume that these
elements are also valuable for non-urban teachers. However, we do know from this research and from previous studies (e.g., Hooge, 2008; Severiens, Wolff & Van Herpen, 2013; Smith & Smith, 2006; Van Tartwijk, Den Brok, Veldman & Wubbels, 2009) that teaching in urban contexts is challenging for teachers, as they are confronted with specific urban problems, such as dealing with unsafe atmospheres in and around the school and dealing with students and parents from culturally diverse backgrounds. We added to these problems specific challenges associated with global cities, such as dealing with highly educated parents and applying differentiation to adequately teach both the gifted and the lower performing students. These are complex issues that extend beyond the walls of the classroom. Therefore, we assume that for urban teachers it is of particular importance to receive guidance and support with a broader focus than classroom practice only, to have the opportunity to share experiences and expertise in a network of teachers who are confronted with similar challenges and to experience an open culture in schools in which novices can easily approach colleagues for support regarding their questions.

Methodological considerations

In the studies on the ‘Mastery’ programme, teachers and principals were interviewed as couples. In this way, information regarding the effects of the programme was obtained from two different perspectives. This turned out to be an interesting approach, because the responses from the teachers and principals together enabled us to build up a fuller picture of the effects of the ‘Mastery’ programme than if only the teacher responses had been included. For example, by taking both perspectives into account, it became clear that the teachers who participated in the ‘Mastery’ programme not only acquired expertise for themselves, but also expertise that was valuable for the school organisation, an effect that may not have been revealed if only the teachers’ perspectives had been taken into account. We therefore recommend to include not only the teacher’s but also other perspectives, and in particular the principal’s perspective, in studies into the experienced effects of professional development programmes.

Furthermore, we used both qualitative and quantitative approaches in this study. We found several differences between the quantitative and qualitative results. For instance, the quantitative results showed no significant short-term effect on professional orientation and no significant long-term effect on job motivation, whereas the teachers
and their principals mentioned during the interviews that they did perceive a positive contribution of the programme to teachers’ professional orientation and job motivation. The reason for the differences between the quantitative and qualitative results may be found in a ceiling effect in the quantitative analysis, as both conditions had high scores on the professional orientation and motivation scales for the pre- and the post-tests. The broader focus of the interviews compared to the questionnaires could be another reason for these differences. For instance, the quantitative analyses regarding professional orientation only focused on the beliefs of the teachers, while the qualitative analyses also focused on their actions. For instance, teachers without changes in scores from pre-test to post-test on items regarding their professional orientation in the questionnaire (e.g. ‘Cooperating with other teachers is necessary for the adequate completion of teaching tasks’ and ‘School policy is not only a task for school management’) sometimes mentioned a change in concrete actions regarding their professional orientation during their interviews. They mentioned, for instance, that they collaborated more with colleagues in team groups as a result of the ‘Mastery’ programme or that they developed a language policy for their school. Thus, it could be that the ‘Mastery’ programme especially influenced the actions of the teachers themselves in the short term, whereas it did not influence their general opinions on teachers’ roles. Thus, this study showed that it is important to perform both qualitative and quantitative measurements, as the qualitative results can deepen the quantitative results and vice versa.

Finally, in this study, we performed both a short-term and a long-term measurement. This appeared to be an interesting approach, because the long-term measurement revealed other effects of the ‘Mastery’ programme than the short-term measurement. We only measured a significant positive, long-term effect of the programme on the professional orientation of the teachers, and teachers only reported a positive effect of the programme on their communication competences and job motivation in the long-term. These effects would not have been observed if only a short-term measurement had been conducted. Immediate effects of the programme on these broader competences and on job motivation may probably not be expected, as also experience comes into play. Therefore, this study emphasises the importance of not only measuring short-term effects but also the long-term effects of professional development interventions. Several studies on professional development interventions only include
Conclusions & Discussion

Pre- and post-measurements and no long-term measurements (see for instance, Vogt & Rogalla, 2009; Wilson, 2008). Therefore, the effects of professional development interventions on competences that require more time to develop may not have been measured in these studies. This may also be the reason why research seems to suggest that professional development programmes that focus on daily teaching practice are more effective than programmes with a more general focus; increase of competences related to the daily teaching practice is measurable after a relatively shorter period than broader competences.

Limitations and future research

The present study has some limitations. First, the interview studies in this dissertation were small-scale. The small-scale design made it possible to obtain in-depth information about the problems experienced by beginning urban teachers and the valuable elements of support programmes; however, it is necessary to verify the outcomes of these studies in a larger (quantitative) study.

Second, many of the problems of teachers in urban primary schools that were identified in the first study were general problems that could also be experienced by non-urban teachers. Nevertheless, the teachers who participated in this study experienced these problems as being related to the specific urban context in which they worked. For instance, the problem of parental contact is a problem that is also experienced by non-urban teachers (Veenman, 1987; Schuck et al., 2012). However, in this study, the problem specifically referred to the extreme involvement, demands and expectations of parents (at the advantaged schools) and to the diverse backgrounds of parents (at the disadvantaged schools). Thus, urban teachers seem to experience specific ‘urban’ problems. However, there were no teachers from outside of the city in our sample, so we cannot make a proper comparison.

Furthermore, the quantitative results of the studies on the ‘Mastery’ programme showed that participation in the ‘Mastery’ programme had no impact on the teachers’ job motivation or career choices. The lack of an impact of the programme on these measures may have occurred because the teachers who participated in the study were all motivated teachers before they started the programme, as evidenced by the fact that the teachers had very high scores on the motivation scale according to the pre-test (ceiling
effect). This was also the case with the teachers from the control condition who followed other professional development programmes than the ‘Mastery’ programme. In the studies on the ‘Mastery’ programme we thus focused only on the professionalisation and retention of highly motivated teachers. It would, however, also be interesting to investigate the contribution of such a programme to the quality and retention of less motivated teachers.

Although the quantitative results showed no influence of the ‘Mastery’ programme on the job motivation and career choices of the teachers, several respondents in the interviews mentioned that the programme positively affected the motivation and career choices of the teachers in the long term. These respondents explained that the programme provided teachers with (new) inspiration or energy for teaching and/or insights into the attractive aspects of the education profession. Furthermore, the programme stimulated the teachers to think about their professional development and encouraged them to develop themselves in a certain direction (for instance, using follow-up courses). The qualitative findings are an indication that the participants and their principals experienced a positive contribution of the programme to teacher retention. As this finding cannot be generalised, further research on the actual number of teachers who stayed in the teaching profession several years after completion the ‘Mastery’ programme would be interesting.

Another limitation of this study is that we only focused on the effects of the Mastery programme on the quality and retention of teachers, not on the effects on student performance. Teaching in urban environment is very complex and requires high quality teachers who are motivated to stay as a teacher. Our initial interest was to investigate whether the ‘Mastery’ programme could contribute to urban teachers’ quality and job motivation. Now we have found positive effects, it is interesting – as a second step - to investigate the impact of the programme on student outcomes.

The study showed that an open learning culture in schools is very important for the (long term) success of professional development interventions. Further research on how learning cultures can be created in schools is important. The results of this study indicated that school leaders play an important role: several teachers mentioned that expertise from the ‘Mastery’ programme could have been developed, applied and shared in the schools if the principals had adapted a more stimulating role. Geijssel, Sleegers,
Stoel and Krüger (2009) also concluded that school leaders play an important role in the professional development of teachers. The results of their research showed that school leaders with a transformative leadership style who provided teachers with the security required to experiment, make mistakes and exchange tips appeared to positively affect professional development (Geijsel, Sleegers, Stoel & Krüger, 2009). Further research on how school leaders can be best professionalised in this respect is important.

Finally, in this study, we did not focus on the professional identity of teachers, although this topic received more and more attention in research on teacher professionalisation in the last two decades (e.g., Beijaard, Meijer, & Verloop, 2004; Olsen, 2008, 2010; Pillen, 2013). We focused in this study on teacher quality in terms of competences, professional orientation and self-efficacy and on teacher retention in terms of job motivation and career choices. These variables were the main focus of the Mastery programme and are important criteria for teacher quality and retention. However, recent research shows that beginning teachers will experience professional identity tensions (Pillen, 2013). These tensions may have severe consequences for teachers’ learning and functioning and even cause teachers to leave the profession (Pillen, 2013). Therefore, it is of great importance to assist beginning teachers in the development of their professional identity. Previous research showed that ‘peer contact’ plays an important role in this process (Lankveld & Volman, 2011). Since contact with peers was such an important element of the ‘Mastery’ programme, it is interesting to further investigate whether such a programme could also support beginning urban teachers regarding their identity development.

Despite its limitations, this study identified some prominent problems of beginning urban teachers and demonstrated the value and effective elements of a professional development programme and induction for beginning urban teachers.

**Implications for practice**

In the Netherlands, much attention is currently being paid to the improvement of the support of beginning teachers (Ministerie van Onderwijs, Cultuur en Wetenschap, 2013; Arbeidsmarktplatform PO, 2014). All kinds of new induction arrangements are developed and implemented in schools. That support and induction are in need of improvement is evident as many newly qualified teachers in the Netherlands drop out.
from the teaching profession within the first five years of their careers as teachers. This is a problem in the Netherlands, because many teachers will reach the retirement age the coming years and there are not sufficient new teachers to fulfill the vacant positions (CAOP, 2012). A great shortage of primary school teachers is expected in 2020, especially in the largest cities of the Netherlands (Centerdata, 2013; Algemene Onderwijsbond, 2013; Arbeidsmarktplatform PO, 2014).

The general aim of this dissertation was to provide insight in how beginning urban teachers can be better equipped for teaching in urban environments. Increased insight could lead to a more effective organisation of support practices for beginning urban teachers, which - in turn - could lead to an improvement of the quality and retention of beginning urban teachers.

The study underlines the value of good guidance and support for beginning urban teachers. The results show that the complexity of teaching, in this case of urban teaching, can be reduced by providing adequate guidance and support. Several teachers in this study did not perceive the challenges of urban schools as problems but instead as interesting challenges through which they could further develop themselves as long as they received adequate preparation or support regarding these issues. Thus, adequate preparation and support through which teachers learn how to manage the issues of urban teaching can transform these issues from problems into interesting challenges for teachers.

The research also shows how adequate support for starters can be organised. A major finding of the study is that network learning is important for beginning urban teachers. A promising initiative in this regard is the “Association of Mastery”. This association was set up by some teachers who participated in the Mastery programme and aims to promote the professionalisation of primary education from the bottom up, using teachers' experiences and expertise to share knowledge and inspire teachers (see http://www.meesterschappers.nl). Based on this study, it can be recommended to continue to invest in such initiatives. Also, the study clearly shows that professional development programmes (such as ‘Mastery’) are relevant for starters. Professional development programmes can provide novices with a network in which they can exchange experiences and expertise with other beginners who are confronted with the same challenges and such programmes can better equip teachers for their complex
teaching task, for instance, by contributing to the development of relevant teaching competences, in this case competences for teaching in a large city. Furthermore, the study shows that adequate support in schools themselves is of great importance for starting teachers. Thereby, it is important not only to focus on support activities, such as offering guidance from a coach, but also to invest in a good support culture.

To conclude; this research provides theoretical and empirical knowledge about the organisation of valuable support practices for beginning urban teachers. The focus in the study was on the European urban educational context, in which little research has been done before on urban teaching. The results of the study can contribute to the knowledge of teacher educators, educational support services, schools, school boards and researchers about the organisation of valuable support practices for beginning urban teachers.