Venlo, innovative student city

About attracting and retaining students and improving their contribution to regional innovation

- Master thesis Economic Geography -

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Preface

In front of you lies the master thesis that I wrote as part of the master’s program ‘Economic Geography’ at the Radboud University in Nijmegen. After acquiring my bachelor degree last year, this should be the final road to my master degree. ‘Master of Science’, that sounds pretty good if you ask me. Within this final thesis I conducted a research regarding ‘Venlo, innovative student city’. The choice for this topic was not a hard one, given the fact that I am born and raised in Venlo. Therefore I knew that Venlo is trying to become a student city and I thought I might just deliver my contribution to this goal.

Conducting this research and writing this thesis, I could not have fulfilled without the help of others. First of all, special thanks goes out to my two supervisors, Arnoud Lagendijk, professor in Economic Geography at the Radboud University Nijmegen and Nicole Ottenheim from the municipality of Venlo. Their feedback and moments of evaluation were of great benefit for my research. Thank you both very much for that. Secondly, I would like to thank Gert-Jan Hospers for making time for being the second reader of my thesis. Thirdly, I would like to thank all the respondents. Without them, I could not have gathered all the necessary information. Despite their busy schedules they all found some time to help me with this research. Fourthly, I would like to thank Freek Kusters who gave me a personal tour through the city center of Venlo. Even though I have lived in Venlo for almost 26 years, he was still able to show me places I have never seen before. Last but not least, I would like to thank all the colleagues from the department ‘Ruimte & Economie’ at the municipality of Venlo, who all contributed in their own way. From simple jokes to cheer things up to letting me participate in working groups. I had a great time with all of you and I hope this feeling is mutual.

For now, I hope you all enjoy reading this thesis and decide for yourselves whether specific information might be valuable.

Frank Simons,

Venlo, July 2015
Abstract

Nowadays within the knowledge economy, emphasis on knowledge and innovation is increasingly evident. Many cities want to be part of this knowledge economy and are therefore occupied with attracting and retaining knowledge for their city. Whereas students are important carriers of knowledge, attracting and retaining these students has become very important in this respect. City marketing is used because students are an important target group within this field. This process of attracting and retaining students is an important goal for the municipality of Venlo, so within this research is has been tried to investigate how this process could be improved. Furthermore it has been investigated how these students and their knowledge when retained for the city can contribute to regional innovation. Both are multi-stakeholder processes with emphasis on the ‘triple helix’. These two processes combined formed the main objective within this research, namely to figure out and formulate recommendations about how students could be attracted and retained for the city of Venlo and how these students could then contribute to regional innovation, by using city marketing and a ‘triple helix’ perspective.

Several questions have been formulated that contribute to the main objective, with the main question, “which city marketing strategies could be used by Venlo to attract and retain students and how could these students contribute to regional innovation, making use of a ‘triple helix’ perspective”? To find adequate answers, a case study research has been conducted in Venlo. All he necessary information has been gathered by conducting 27 semi-structured in-depth interviews and focus groups, by doing an observational walk within the city centre and by studying several policy documents. The whole research is based on four theoretical concepts, namely ‘triple helix’ theories, city marketing theories, theories about factors to attract and retain students and regional innovation theories.

The most important results regarding student attraction have been that adequate focus on students as a target group is lacking, too little attention is paid to actual student demands, general focus among stakeholders is lacking and it is neglected to create a unique and attractive brand for the whole region. For student retention, career opportunities and connection between education and business are important. Factors that are also important for enabling student contribution to regional innovation. The results turned out that student awareness about career opportunities within the region is too marginal and there is still a gap between education and business. Conclusions and recommendations directly correspond with these results. Focus on students should be increased, students’ demands should be increasingly heard, general focus among stakeholder on students as a target group should be improved and Venlo should more actively brand the whole region by using the strong regional aspects: logistics, agro/food, manufacturing and cradle2cradle. Even the small
scale of Venlo could be implemented within a ‘crossover brand’. Regarding career opportunities, business organizations should more actively present themselves and in this respect the ‘Venlo Partners’ business website could also be improved. The gap between education and business could be reduced by improved and increased interaction between teachers and business people, in order to become increasingly aware of each other’s demands. This way, education and business could become more complementary towards each other and that could be beneficial for students. Especially regarding their choice whether or not to stay within the Venlo region after graduation and regarding enabling their contribution to regional innovation.
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References
1. Introduction

The importance of knowledge has been recognized for a long time (Conclin, 1996; Glazer, 1991; Teece, 1998) and also nowadays knowledge still is a very important economic asset. Knowledge itself is regarded as highly valuable and the importance of knowledge as an intangible asset has increased. It is because of the rapid expansion of tangible assets, that intangible assets have become the main source of competitive advantage (Teece, 1998). There is even a broad consensus now that the modern economies are becoming increasingly knowledge intensive (Adler, 2001). The importance of the knowledge economy can be found throughout, given all the ranking lists, indexes and reports regarding this topic (Cursor, 2014; World Economic Forum, 2014). Different aspects are important when it comes to the knowledge economy, like higher education, infrastructure, open markets, scientific research institutes and innovation (Cursor, 2014).

There is a widespread agreement that not only knowledge, but also learning and innovation are important for economic development and competitiveness for firms, regions and nations. Innovation even ranks on the top of the policy agendas in regional policy. (Tödtling & Tripl, 2005). The process of innovation has become very important at a regional scale, given the growing attention on regional innovation systems (Cooke, Gomez Uranga & Etxebarría, 1997; Doloreux, 2002; Doloreux & Parto, 2005; Tödtling & Tripl, 2005). Doloreux & Parto (2005) state that the popularity of the concept of regional innovation systems has been driven among other things by the emergence of successful clusters of firms and industries in many regions around the world. They also state that it has been a rediscovery of the regional scale and specific regional assets to stimulate innovation capacity of regions. Cooke et al. (1997) and Doloreux & Parto (2005) state that there is an important role for institutions and interactions between them within regional innovation systems. Innovative regional clusters are likely to have knowledge institutes, business organizations in a specific sector, government departments and a specific governance structure between them.

As mentioned above, also knowledge and learning are important attributes of economic development. These are also key attributes of innovation. Adequate embeddedness of knowledge, skills and capabilities are very important for regional innovation (Cooke, 2001). This again emphasizes the important role of knowledge institutes within certain regions. Fritsch & Schwirten (1999) state that universities and other publicly funded research institutions could be important sources of input within region innovation systems. Also Charles (2006) emphasizes the important role of universities as key knowledge infrastructures in regional innovation systems. He states that the creation of human capital through education of students is a very important element. This shows that well-educated students could make an important contribution to regional innovation systems.

The importance of attracting and retaining students has become an important issue for many
municipalities. Students have even become a specific target group within city marketing (Hospers, Verheul & Boekema, 2011). Hospers (2009) states that students are important contributors of knowledge for a city and that they are important for a city to further develop. Students are also important because many cities are dealing with an ageing population and young people that leave for other places. To retain an adequate well-educated working force it is therefore necessary for cities to attract and retain young well-educated people, in order for cities to develop further and keep up with the knowledge-intensive economy. Important regarding city marketing is that it concerns a multi-stakeholder process. Hospers et al. (2011) state that it is very important to cooperate in a ‘triple helix’ model. This means that not only municipalities should be occupied with this subject, but also other actors like knowledge institutions and business organizations.

The wish to attract and retain well-educated people for the city, is explicitly stated by the municipality of Venlo. Venlo is a city in the Southeast of the Netherlands and an important logistical hotspot in Northeast Europe (Krupe, Quak & Verweij, 2009). Regarding knowledge, the city is part of a provincial knowledge development programme ‘Kennis-As Limburg’ (Gemeente Venlo, n.d.), which is a cooperation project between different actors and sectors within Limburg, with the goal to improve innovation and knowledge infrastructure on the provincial scale. On a local scale, three main goals are set for the city of Venlo (Provincie Limburg, 2014). First goal is to create an attractive and recruiting landscape through the further development of Tradeport Venlo, which is a large regional business area. Second goal is to realise a central campus ‘Brightland Campus Greenport Venlo’, where there is plenty of room for research and innovation. The knowledge institutions University College and Has (Higher Agricultural School) are already located in the city centre, but another knowledge institution Fontys is located at a few kilometres distance. Ideas have been raised to move certain parts of Fontys to the city centre also (Lücker, 2014). The third goal is to create an optimal infrastructure for students and diligence in order to create a better-suited city for students to reside. These three goals should lead to new diligence and a stronger position of Venlo within the next ten years. Within this thesis, the emphasis will be on the creation of a better infrastructure for students and diligence and therefore the third goal is most important.

As mentioned above, city marketing is a concept that can be applied to attract students. To be more specific, it can be applied to investigate what kind of facilities and aspects are important for students and to find out why students would even consider to settle in a certain city. If students decide to settle somewhere, it should also be investigated how their presence could be beneficial for the whole region. As regional innovation is important for regional development, the next step is thus to figure out how these students could then contribute to regional innovation. Students are important carriers of tacit knowledge and they have the know-what and know why. For students to contribute by using their knowledge, they have to be linked to regional businesses who have the
know-how and know-who (Charles, 2006). The shaping of this whole process asks for the involvement of knowledge institutions, business and government, also known as the ‘triple helix’ (Etzkowitz & Leydesdorff, 2000; Leydesdorff & Etzkowitz, 1996). Granovetter (1992) strengthens the notion of involvement of the ‘triple helix’ by stating that economic activity has to be coordinated by groups, rather than by individuals. To summarize, this research will focus on how city marketing could be applied to attract students and retain their knowledge within the region and furthermore how these students and their knowledge could then contribute to and become a part of the regional innovation system. This will be investigated by using a ‘triple helix’ perspective.

### 1.1 Scientific relevance

The research that has been conducted clearly has an scientific relevance. The findings at the end contribute to the scientific knowledge and/or literature that is already existing. Within this research firstly focus will be on aspects of city marketing aimed at attracting students. At first, city marketing aimed at three main target groups, namely residents, companies and visitors. Students are a relatively new target group (Hospers, Verheul & Boekema, 2011). They are also the main target group within this thesis. What is also important is that the municipality of Venlo has stated that Venlo should become a student city. Yet, whereas most student cities in the Netherlands are large cities (Studieinfo, n.d.), Venlo is only a medium-sized city. Different factors could be important whether it concerns a large or medium-sized cities wish to attract students. So by conducting this research, a contribution will be made to the relationship between students and medium-sized places, what factors are important for students to settle in such places and how these cities could deal with attracting and retaining students. Furthermore, the research also focuses on how these students could contribute to innovation and how this process of innovation is shaped by the ‘triple helix’. As stated in the introduction, cooperation between knowledge institutes, business organizations and government is very important regarding the shaping of regional innovation processes (Doloreux & Parto, 2005). So by conducting this research a contribution will be made to the idea that the ‘triple helix’ constituents are important actors within regional innovation systems and how this ‘triple helix’ could actually shape and lead the innovation process. By focusing on attracting students who should contribute to innovation, a link emerges between city marketing and innovation. After figuring out what factors are important to attract and retain students, how could city marketing then be applied, in order to attract and retain these students, who could then contribute to innovation processes. The idea is to contribute to this flow model that starts with figuring out factors to attract and retain students and ends with students contributing to innovation. How does this model look like in practice? And how should the ‘triple helix’ effectively shape the processes within this flow model?
1.2 Societal relevance

Regarding the societal relevance, it is important to consider who is the audience that benefits from this research. The main audience is the municipality of Venlo, who wants to attract well-educated students for the city by upgrading the knowledge infrastructure (Provincie Limburg, 2014). For the municipality of Venlo, student facilities are an important aspect of the knowledge infrastructure. It will be investigated which factors are important to attract and retain students, based on which city marketing could be applied to create facilities and other aspects that are seen as important by students. At the end of this research, the municipality should receive some concrete recommendations about how to upgrade their knowledge infrastructure, in order to attract well-educated students. Therefore this research is clearly relevant for the municipality of Venlo. As stated above, it will also be investigated in what way these well-educated students could contribute to regional innovation. So the attraction and retention of students is one aspect, but being able to use this talent is the other aspect. Regional innovation requires cooperation between knowledge institutions, business and government (Charles, 2006; Etzkowitz & Leydesdorff, 2000). When it becomes clear how student contribution to regional innovation could be improved, then regional innovation as a whole could benefit. Business organizations could then profit from knowledge institutions and students on the one hand and knowledge institutions and students could profit from business organizations that require their knowledge on the other hand. So by investigating how student knowledge could contribute to regional innovation, business organizations, knowledge institutions and students could also benefit from this research. Therefore, this research is not only relevant for the municipality of Venlo, but clearly also for business organizations, knowledge institutions and students in Venlo. This is very important, because the regional innovation process requires ‘triple helix’ involvement (Doloreux & Parto, 2005), so it becomes very essential that this research is relevant for all stakeholders. This thesis focuses on Venlo and its surrounding region, so that will also be the case study. After this research, it should be clear how a medium-sized city like Venlo could become attractive for students to settle and how students contribution to innovation could be enhanced. Maybe Venlo could become like a ‘best practice’ for other medium-sized cities that have sort like goals. Therefore, indirect the research could also be relevant on a larger scale.

1.3 Research objective

The introduction clearly states what is going on in Venlo. The municipality has the wish to attract and retain well-educated students, but has not yet figured out what would drive these students to settle in Venlo. By figuring out what kind of factors could drive students to settle in a medium-sized city and how these factors precisely work, city marketing could then be applied to create incentives that are necessary to attract this target group. This is one part of the objective. The
other part is to figure out how these students, when settled, could contribute to innovation and become a part of the regional innovation system. This whole process should be shaped by the ‘triple helix’ stakeholders. It becomes a flow model: which factors are important to attract and retain students, how could city marketing then be applied based on these factors, how could students when settled contribute to innovation and how should this whole process be shaped by the ‘triple helix’?

Verschuren & Doorewaard (2007) state that an objective is twofold. The first part makes clear what to expect at the end of the research and the second part makes clear what information and insights should be acquired to reach the first part of the objective. Framed in one sentence, the research objective is as follows:

“the goal of this research is to figure out and formulate recommendations about how students could be attracted and retained for the city of Venlo and how these students could then contribute to regional innovation, by using city marketing and a ‘triple helix’ perspective”.

The first part of the research objective clearly states that at the end of the research it should be able to formulate recommendations for Venlo about how to attract and retain students and how these students could then contribute to innovation. The second part of the objective states how the first part can be achieved. City marketing has to be applied based on important factors to attract and retain students and the whole innovation process should be shaped by cooperation between the ‘triple helix’ constituents, knowledge institutions, business organizations and the municipality of Venlo.

1.4 Research Questions

Given the abovementioned research objective, some research questions could be formulated. Research questions have to be efficient and steering. Efficient means that a the answer on a question and knowledge that is gained must clearly contribute to the research objective. Steering means that the question must be clear about what has to happen further on in the research (Verschuren & Doorewaard, 2007). The following is the main question within this research:

“which city marketing strategies could be used by Venlo to attract and retain students and how could these students contribute to regional innovation, making use of a ‘triple helix’ perspective”?

This question is efficient, because the answer to this question will clearly contribute to the goal of attracting and retaining students for Venlo and figuring out how these students could make a contribution to innovation. The question is also steering, because it is clear that is has to be figured out how city marketing could be used and that the whole process has to be shaped by the ‘triple
The main question is actually twofold. One part concerns attracting and retaining students and the other part concerns how these students could then contribute to regional innovation. As stated above, it should be seen as a flow model.

To answer the main question, first five sub questions are formulated. The following are the sub questions that will be used within this research:

1. “*To what extend are important factors to attract and retain students present and developed in Venlo*”? An answer to this question should clarify what factors could be used or should deserve attention to attract and retain students. Factors that could be used within the general city marketing strategy.

2. “*What kind of infrastructural facilities and aspects are seen as important by students to settle in Venlo*”? An answer to this question would clarify why students would even consider to settle in Venlo. City marketing has to do with supply and demand. If you are able to figure out what the demands of your target group are, you can adapt and link your supplies to these demands.

3. “*What contribution could the three ‘triple helix’ constituents, housing corporations and students themselves make regarding city marketing to attract and retain students*”? As stated, city marketing is a multi-stakeholder process. The municipality, knowledge institutions and business organizations are important stakeholders within this case. However, also housing corporations and students themselves are important stakeholders within the whole process. Therefore it is important to investigate what contribution these actors could make to the city marketing process.

4. “*How could the contribution of students to regional innovation be improved*”? It is important to consider how these students, when retained, could contribute to regional innovation and how this whole process could be improved.

5. “*How could the ‘triple helix’ shape the whole innovation process*”? It is important to investigate how the ‘triple helix’ could shape regional innovation and enabling student contribution, by looking at both cooperation between the ‘triple helix’ constituents and their separate roles.
2. Theoretical framework

2.1 Literature review

Before starting the research it is important to have clear theoretical insights. Within this research four theories are especially important, namely ‘triple helix’ theories, city marketing theories, theories about important factors to attract and retain students and regional innovation theories. These theories will be discussed below, starting with the ‘triple helix’.

2.1.1 Triple helix theories

As stated above already, the ‘triple helix’ institutionalizes the cooperation between knowledge, business organisations and government (Leydesdorff & Etzkowitz, 1996). It models the transformation processes between the constituents (Leydesdorff & Etzkowitz, 1998). Especially the role of knowledge institutions has changed over the years. From being higher-education institutes, they have increasingly changed to also having social functions in research and teaching. This differentiation of functions is part of a changing knowledge infrastructure (Leydesdorff, 1995). Etzkowitz & Leydesdorff (2000) distinguish between three types of ‘triple helix’ cooperation. The first type is a model where the nation state encompasses academics and industry and the nation state directs relations between the two others. The second model consists of separate institutional spheres that are divided by strong borders. Relations in this model are highly circumscribed. The third model consists of overlapping institutional spheres. These overlapping spheres create tri-lateral networks and hybrid organisations, that are highly associated with generating knowledge infrastructure.

The first model is largely seen as a failed developmental model, because there is too little attention for bottom-up initiatives. In other words, the nation state is very much in control of all the relations between knowledge and business. The second model entails a laissez-faire policy, nowadays mainly used as a shock therapy to reduce the role of the state in model one. Most countries nowadays try to attain the third model. Countries have the objective to create an innovative environment and this innovativeness emerges when there is overlap between the three spheres (Etzkowitz & Leydesdorff, 2000). Leydesdorff & Etzkowitz (1998) also emphasize the local emergence of ‘triple helixes’. Local case studies show new combinations and institutional structures. These new structures reflect and adapt to the knowledge-intensive developments. The ‘triple helix’ concept gets coupled to the regional policy agenda and regional development. This makes clear that ‘triple helix’ is not only used at a national scale, but also at regional or local scales. This reflects the importance of knowledge on every scale, as mentioned earlier in the introduction.
2.1.2 City marketing theories

City marketing is a relatively new occupation. It is a reaction to growing competition between cities (Hospers, Verheul & Boekema, 2011). It aims at four target groups, namely residents, companies, visitors and well-educated people (students). The last one is a relatively new target group. The emergence of this group as a target could be linked with the growing attention for the knowledge economy and competitiveness, especially on a regional and local scale (Braun, 2008; Van den Berg & Braun, 1999). City marketing is complex, because it is a mix of three disciplines: marketing, geography and administration (Buursink, 1991). It tries to convince target groups to choose for a certain city. Cities however are more complex than products, so more difficult to promote. The whole process requires adequate governance by municipalities. It also requires a high degree of organizing capacity, which is the ability to involve all stakeholders and together generate new ideas and develop policies, in order to create conditions for sustainable development (Warnaby, 2009).

An important basic assumption within city marketing is to be client orientated (Ashworth & Voogd, 1987). Hospers (2014) states that it is important to conduct market research, in order to gain information about demands of target groups. If it is clear what target group demands are, city stakeholders can try to adapt and link their supplies to these demands. These adaptations are spatial-functional measures and these are part of the geographical marketing mix, which encompasses also promotional measures, organizational measures and financial measures (Ashworth & Voogd, 1987). Promotional measures encompass all the activities to promote a city for a certain target group. Spatial-functional measures are the material interventions in space that are important for the target group. Organizational measures have to do with the organization of the whole marketing strategy. Financial measures lastly, have to do with the costs of the city marketing plan. They encompass all the actors that will have to make a financial contribution to realize the whole marketing plan. When city marketing is used to attract a certain target group, attention has to be paid to all the aspects of the marketing mix.

Another very important aspect within city marketing is to choose and position yourself. If not, you will be confronted with, as Hospers (2013) calls it, ‘the law of the strawberry marmalade’ ('de wet van de aardbeienjam'). The more you spread it, the thinner it gets. In regular language this means that it is difficult to take care of all target groups and therefore it is important to choose and focus on one target groups specifically. Choosing also means daring to invest. Hospers et al. (2011) state that city marketing requires an adequate budget. This budget would mainly be important for the realization of the ‘city product’, especially material interventions in physical space as mentioned above. A last important aspect has to do with branding. Hospers et al. (2011) state that it should not be neglected to charge a brand within the region. A brand must be connected with the regional
sentiments. Braun (2012) and Zenker & Beckmann (2013) add to this that it is essential that all important stakeholders need to accept the brand and that collective understanding is present. Stakeholder management is therefore very important. Important regarding a brand is that it corresponds with what the region has to offer and that the important stakeholders accept it (Braun, 2012). Furthermore is has to be unique, because it should be used to distinguish the region compared to other regions (Braun, 2012; Hospers et al., 2011; Kavaratzis & Ashworth, 2005). To successfully implement such a brand would first of all ask for persistency. Second, the brand should be included in political priorities and long term visions. Third, adequate stakeholder management is necessary, because they too need to express the brand. A last important point is that the brand needs to return in daily businesses of companies, institutions, events and people (Braun, 2012). Two last notes, it should always be taken into account that city and region marketing is a long term process, so the wish to succeed in the short term should definitely be avoided (Hospers et al., 2011) and always make sure that the brand corresponds adequately with how people perceive the city or region. Otherwise you would brand something that you are not perceived to be by the target group and that would be all wrong (Braun, 2012; Hospers et al, 2011). As Hospers et al. (2011) state, “You must not say you are attractive, be attractive”.

2.1.3 Factors to attract and retain students

Considering students as a target group, it should be investigated whether specific factors are important to attract and retain these students. There are different academic writings that discuss factors to attract and retain students for a city. Darchen & Tremblay (2010) conducted a research in two cities in Canada and made a distinction between attracting students and retaining them. To attract students, most important factors were the quality of the school/university and quality of life. To retain students, most important factors turned out to be career opportunities and social networks. With quality of schools/universities they refer to the quality of the university as an institution, as well as to the available educational programs. This aspect is also mentioned by Webb, Coccari & Allen (1997). They state that schools/universities have to figure out ways to emphasize their academic reputation as well as finding ways to emphasize the reputation of their alumni. Quality of life is also mentioned by more authors (Brandt & Pahud de Mortanges, 2011; Lawton, Murphy & Redmond, 2013; Van den Berg & Russo, 2003; Yigitcanlar, Baum & Horton, 2007). They especially focus on nightlife facilities, sporting facilities and cultural facilities. A student city should simply be very attractive for students to settle. Van den Berg & Russo (2003) state that the city should be seen as a student-friendly community and it should offer high quality services. Yigitcanlar et al. (2007) stress the importance of amenities. Brandt & Pahud de Mortanges (2011) name a few strengths in terms of activities and facilities. According to them cafés, history, markets, arts and a
large number of schools are imports within a student city. More specifically, important for students are cafés, nightlife, parties, meeting places and culture.

Some of these authors explicitly discuss a vibrant nightlife. Brandt & Pahud de Mortanges (2011) conducted a research in Liège (Belgium) as a student city using 25 aspects. ‘Cafés, nightlife, parties and meeting places’ ended up being most important. Lawton et al. (2013) investigated the residential preferences of the creative class, from which current well-educated students will be an important part. They concluded that amenities such as restaurants, bars and other consumption-based amenities are very important. Yigitcanlar et al. (2007) also conclude that the best way to attract this creative class is the creation of amenities including a rich variety of cafés and restaurants and a vibrant nightlife. Furthermore, adequate sport facilities are seen as important. From the earlier mentioned 25 aspects that were investigated in Liège (Belgium), sports ended in top 10 most important aspects (Brandt & Pahud de Mortanges, 2011). Peters & Pikkemaat (2003) investigated the students’ image of a university city, Innsbruck, and also came to the conclusion that sports is an important aspect within student cities. Cultural facilities are also mentioned specifically by some of these authors. Brandt & Pahud de Mortanges (2011) conducted the earlier mentioned research in Liège (Belgium) and found that ‘culture, arts, theatre, concerts, museum and cinema’ were in top 10 (out of 25) aspects regarding importance, however less important than nightlife and sporting facilities. Lawton et al. (2013) state that the younger population or creative class prefer central locations with social and cultural amenities. Yigitcanlar et al. (2007) also state that this young creative class desires cultural amenities such as museums and art galleries.

The importance of amenities and facilities within city marketing is also stressed by Ashworth & Voogd (1987). Amenities and facilities are an important part of the spatial-functional measures from the abovementioned geographical marketing mix. These should be well-adapted to the target group. After all, city marketing should always be client-orientated (Ashworth & Voogd, 1987). In addition, Hospers (2014) stresses the importance of market research. He refers to this aspect as ‘the secret of the angler’ (‘het geheim van de sportvisser’). This means that it is not important that the angler likes the bait, but all the more that the fishes appreciate it (Hospers, 2011). In regular terms, this again refers to the fact that a target group has to be central within city marketing policy. In this respect, Van den Berg & Russo (2003) mention that students should be involved to design optimal solutions, which again reflect that students voices have to be heard. They state that students could be granted a role in local policy regarding matters of interests for them. Another important factor to attract students is the availability of adequate housing, as stated by Webb et al. (1997). Of course, availability of housing is essential for students to settle within a city.

Where Darchen & Tremblay (2010) stress the importance of career opportunities to retain students, some authors also mention the connection between schools/universities and regional
business as an important factor (Fritsch & Schwirten, 1999; Van den Berg & Russo, 2003). The last factor that is mentioned by several authors concerns social networks (Darchen & Tremblay, 2010; Van den Berg, 2003; Yigitcanlar et al. (2007). Darchen & Tremblay found out that social networks were second most important (after work opportunities) regarding students retention after graduation. Van den Berg & Russo (2003) state that it is important to increase the contact between students and local stakeholders, because this process should eventually lead to integration of students within the local environment. Yigitcanlar et al. (2007) make a link to cities amenities and facilities. In creating amenities they stress the importance of a dimension of quality of place, ‘who’s there’. According to them, interaction between people is very important, which relates to social networks. Amenities like cafés, restaurants, a vibrant night life, parks, et cetera all contribute to creating social networks.

So in short, six factors are important to first attract and then retain students, namely academic reputation and alumni, quality of life, housing, career opportunities, cooperation between schools/universities and regional business organizations and social networks. One small aspect that is mentioned by Brandt & Pahud de Mortanges (2011) regards the importance of the presence of a lot of students.

2.1.4 Regional innovation theories

There is a widespread agreement that innovation has become an important source of competitive advantage (Andersson & Karlsson, 2006; Asheim, Smith & Oughton, 2011; Cooke et al., 1997; Mytelka & Smith, 2002; Tödtling & Trippl, 2005). Human capital, knowledge and learning are central parts of the regional innovation process (Asheim & Gertler, 2005). There is also general consensus that innovation-oriented regional innovation is a cooperative process between firms and research institutions (Sternberg, 2000). Etzkowitz & Leydesdorff (2000) speak about the importance of the ‘triple helix’ in regional innovation. They see an important role for knowledge institutions, business and government and their mutual relations to foster regional innovation.

There are three basic elements regarding the relationship between the ‘triple helix’ and innovation. Firstly, the ‘triple helix’ gives a more prominent role for knowledge institutions in regional development. Secondly, it emphasizes an increasing collaborative relationship between the three institutional spheres. And thirdly, each sphere additionally takes the role of the other. The core of an innovating region is an entrepreneurial university, taking some of the roles of business and government (Etzkowitz & Klofsten, 2005). Internal transformations of the ‘triple helix’ spheres are also evident. Knowledge institutions have changed from teaching institutions to institutions that combine teaching with research (Etzkowitz & Leydesdorff, 2000). Business organizations are increasingly realizing that knowledge is very important for their competitive advantage.
Organizational managers increasingly have to develop human intellect and skills, rather than deploying physical and capital assets (Johannessen, Olsen & Olaisen, 1999).

The process of innovation is most of the time stimulated by the governmental sphere (Etzkowitz & Leydesdorff, 2000). Although arrangement between knowledge, business and government are often encouraged by government, they are not controlled by government. In other words, government is often taking a facilitating role, yet a lot of involvement and initiative is expected from knowledge institutions and business organizations. An important aspect linked with regional innovation is spatial proximity (Boschma, 2005; Rallet & Torre, 1999). Spatial proximity refers to the spatial or physical distance between economic actors, in absolute or relative terms (Boschma, 2005). Spatial proximity is important for the transportation of tacit knowledge. Tacit knowledge is knowledge that is not easy to transfer, because it is not stated in explicit form (Polanyi, 1997). In order to share tacit knowledge, interactions between actors are necessary and therefore spatial proximity could be important. Spatial proximity per se is not a necessary nor a sufficient condition for learning, however, it could facilitate interactive learning (Boschma, 2005).

Important is to figure out how students could contribute to regional innovation. Several authors have written about the role of knowledge in European cities and the role of higher education institutions in relation to regional innovation (Caniëls & Van den Bosch, 2011; Charles, 2006; Hospers, 2003; Van Winden, 2010; Van Winden, Van den Berg & Pol, 2007). Charles (2006) states that knowledge has become an important commodity and that knowledge as human capital has become very important. Cities and educational institutions should even consider initiatives to retain graduates, in order to upgrade local and regional skills. Another important aspect is the idea of interactive learning (Lundvall & Johnson, 1994). This again reflects the idea that cooperation between schools/universities (students) and business is very important. As Charles (2006) states, schools and universities have the know-what and know-why, but know-how and know-who is only gained by interactive processes between different professional organizations. Van Winden (2010) states that knowledge has become increasingly important and economic success very much relates to the ability to attract the creative class. Van Winden et al. (2007) even state that an educated and skilled population is one of the four pillars of a knowledge city. Along with the importance of educated and skilled people also knowledge institutes are increasingly important (Caniëls & Van den Bosch, 2011; Van Winden, 2010). As students being part of knowledge institutes, they are dependent on the engagement of these institutes within the regional economy. Important for regional innovation is the creation of networks between educational institutes and companies, because interactions between schools/universities and business are an important source of innovate processes (Van Winden, 2010). Increased interactive processes between diverse actors, continuous learning and trust are essential for economic growth. ‘Triple helix’ processes are thus very important.
in this respect, where government should especially facilitate relations between educational institutes and business organizations (Caniëls & Van den Bosch, 2011; Van Winden, 2010; Van Winden et al., 2007). Important should be that each actor takes the role of the other (Caniëls & Van den Bosch, 2011). It is therefore important that educational institutes are very aware of processes in business organizations, but that companies should also be occupied with developing training and research. In practice this would for instance result in educational actors participating in business organizations and business organizations that co-create programs for students. Again, for municipalities it should be an important task to connect education and business and facilitate the whole process. Facilitating the process would for instance mean creating facilities where education and business are able to meet. In short, it is clearly important that regional economic development and innovation is a cooperative process between education, business and municipality.

Caniëls & Van den Bosch (2011) discuss three concrete domains where educational institutions could deliberately undertake action to contribute to regional innovation systems: research, education and active collaboration. Research refers to the fact that this research should be focused on the core regional sectors and that research should be an agreement between regional actors. Education refers to the fact that there should be training relationships with firms, for instance training of post-graduates, internships, temporary exchange of personnel or training of firm employees by schools/universities. It also refers to the fact that educational programs should be adapted to reach firms needs and that there should be a strong regional focus on student recruitment and graduation. Active collaboration refers to the earlier mentioned ‘triple helix’ cooperation. For instance, meeting and conferences sponsored by industry, the setting up of spin-off or start-up companies and the earlier mentioned creation of physical facilities or renting of facilities and equipment (Caniëls & Van den Bosch, 2011). The three domains all show the importance of adequate cooperation between educational institutes and business organizations. This aspect was also one of the six important factors regarding attracting and retaining students (Fritsch & Schwirten, 1999; Van den Berg & Russo, 2003).

2.1.5 Combining theories

The ‘triple helix’, city marketing, factors to attract and retain students and regional innovation are the four important theories within this research. These theories could be linked to each other, to create one general conceptual framework for this research. As stated above, regional innovation is very important for gaining competitive advantage. Human capital, knowledge and learning are important contributing factors to innovation, and therefore knowledge institutions are important for fostering regional innovation. These are after all creators of human capital and knowledge. They educate students, who become important carriers of knowledge. So if regions wish
to be innovative, it would be wise to attract and retain these students. This however is easier said than done, because different places compete with each other for the same students.

This is why city marketing is important. City marketing aimed at students as a target group could be a solution for attracting and retaining these students. Because city marketing is able to focus on students specifically, it is a very effective tool. Before implementing city marketing, it is important to figure out which factors are important to attract and retain students. Based on academic literature six important factors were found: academic reputation and alumni, quality of life, housing, career opportunities, cooperation between schools/universities and regional business organizations and social networks, that will be investigated further on in this research. When figured out, city marketing could be implemented effectively based on these factors and mechanisms. It could then lead to students settling in and staying at a certain place. More important, it would then lead to the retention of knowledge for the ‘promoted place’. As mentioned above, this is the know-what and know-why created at schools/universities. This knowledge could then contribute to regional innovation, if coupled effectively to the know-how and know-who. To achieve this coupling, the ‘triple helix’ has an important role. As stated above, knowledge institutions, business organizations and government are important actors regarding the innovation process, especially regarding enabling students contribution to regional innovation. The spatial proximity and cooperation of the three ‘triple helix’ spheres could contribute to regional innovation, because it enables the transfer and coupling between the four abovementioned types of knowledge. Again, the know-what and know-why should especially come from knowledge institutions and their students, so therefore it is important to attract and retain these students.

To summarize the theoretical assumptions within this research. For regions to be competitive, they have to be innovative. Students and their knowledge (know-what and know-why) could be important contributors for regional innovation, if they would be effectively coupled to industry and business organizations (enabling know-how and know-who). This coupling of knowledge to the innovation structure is very important to improve and keep innovation going. Given the importance of students, it should be necessary for cities to attract and retain these students. City marketing could be an effective tool to achieve this. The whole process of attracting and retaining students and coupling them to the innovation infrastructure should be shaped by the three most important stakeholders: knowledge institutions, business organizations and government. In other words, the ‘triple helix’.

2.2 Conceptual model

The abovementioned theoretical assumptions lead to the general conceptual framework within this research. It should be seen as a flow model, where the ‘triple helix’ should be occupied
with attracting and retaining students, considering specific factors and mechanisms to achieve this, using proven city marketing tactics and when successfully implemented enabling students’ and their knowledge to contribute to regional innovation. The following conceptual model clarifies the conceptual framework within this research.

Figure 1: Conceptual model

The conceptual model contains many relations, that deserve some elaboration. First of all the municipality, knowledge institutions and business organizations are all mutual connected and this reflect the ‘triple helix’ cooperation. The ‘triple helix’ is connected to ‘attracting and retaining students’, which reflects that the whole ‘triple helix’ should be occupied with this process. This process could be strengthened by considering six specific factors. These factors, listed within the square, could thus influence student attraction and retention. This would in its turn influence the student population, that is able to participate at knowledge institutions. The abovementioned relations clarify the upper half of the model, regarding student attraction and retention. The lower half of the model regards regional innovation. There is a connection between the ‘triple helix’ and the coupling of know-what and know-why to know-how and know-who. This reflects the idea that the whole ‘triple helix’ should be occupied with this process that should eventually influence regional innovation. This last relation is reflected by the connection between the coupling process and
regional innovation. In short, two relations are especially important within this research. The first concerns the relation between the ‘triple helix’, attracting and retaining students and the six factors. The second concerns the relation between the ‘triple helix’, the coupling of know-what and know-why to know-how and know-who and regional innovation. Further on within the operationalization part these relations will be elaborated.

3. Methodological framework

It is important to have an adequate research strategy. Verschuren & Doorewaard (2007) state that a research strategy is the whole of interdependent decisions about how the research will be conducted. It is also important to think about how to collect all the information and research material that is needed (Verschuren & Doorewaard, 2007). At the end, all the collected information has to be processed and analysed adequately. Within this chapter it is also stated why this research fitted within the internship organization and last but not least, important relations within this research are operationalized.

3.1 Research design

This research involved the study of a case within a real-life context and therefore a logic research methodology would be a case study research (Creswell, 2013). A case study is conducted within a bounded system, through time as well as through space (Creswell, 2013; Verschuren & Doorewaard, 2007). The conducted research took place within a clearly defined space, namely the region of Venlo. It was also bounded by time, because the main dilemma Venlo is facing is happening at the moment. The dilemma of not being able to attract and retain an adequate amount of well-educated people for Venlo. There was less emphasis on the dilemma a few years ago and a solution should be found in the near future. In short, it is definitely bounded by space and time. Verschuren & Doorewaard (2007) give some important aspects of a case study research. It is a very intensive approach, it is an in-depth research, the respondents will be chosen strategically and the data that will be collected is purely qualitative. All these aspects are taken into account within this research. It resulted in in-depth understandings about how to use city marketing to attract and retain students for Venlo and how these students could then be coupled to the innovation structure. To reach this understandings it was necessary to conduct intensive research, using different kind of methods, like in-depth interviewing, document analysis and observations. Using different kinds of methods is called methods triangulation. To get a clear understanding also different sources have been used, to get different perspectives on the same case. This is called source triangulation (Verschuren & Doorewaard, 2007).

Of course there are many other research methodologies, like grounded theory, discourse
analysis, ethnography and narrative approach. So why choose for a case study? In other words, what are the strength of the case study compared with the other approaches? A first strength of the case study research is that at the end you have an integral image of the specific research object. A second positive aspect of this methodology is that it is more adaptable, which means that it is easier to change track if necessary. This is an important aspect if you are dealing with an ongoing changing situation. This could be possible within the region of Venlo when it comes to city marketing and coupling students to the innovation structure. For instance, maybe new policies would be implemented during this research that influenced students and their contributions to the regional innovation system. A third strength is that the results of the research will be recognised and accepted much easier. The reason for this is that the researcher works in close proximity with the respondents and that the results are most of the time more ordinary (Verschuren & Doorewaard, 2007). A critical aspect of the case study approach is that the external validity could be too weak. Because of the limited (but in-depth) data collection, it becomes very hard to generalize the research findings. In other words, at the end of a case study research, the researcher cannot apply the findings on other analogue cases. On the other hand, the internal validity is most of the times very strong. This is due to the in-depth investigation, the intensity of the research and the fact that it is very adaptable (Verschuren & Doorewaard, 2007).

3.2 Research material

Different methods are used to acquire all the necessary research material. First of all, a critical literature study has been conducted, using all kinds of academic literature, policy documents and media sources regarding the central topic of this thesis. To gain a more in-depth understanding regarding the topic, 27 in-depth interviews/focus groups have been conducted with important stakeholders (table 1). These stakeholders were found within the municipality, knowledge institutions, business organisations, city marketing organizations and housing corporations in Venlo. Given the fact that this research involved regional innovation, business organizations were also selected outside municipality borders, so in the larger Venlo region. Specific stakeholders were selected in consultation with Nicole Ottenheim, internship supervisor and policy advisor knowledge infrastructure at the municipality of Venlo. Business organizations were selected from the three main economic sectors within the Venlo region, namely logistics, manufacturing and agro/food business. Respondents from knowledge institutions were selected from the three main institutions, namely Fontys university of applied sciences, Has high school (agro food) and University College. Respondents from the municipality were selected regarding their specific knowledge important for the development of ‘Venlo, student city’ as a whole, namely knowledge infrastructure, housing, town-planning, diligence, city centre and culture. Given the importance of housing for students, two
housing corporations were selected. Specific city marketing respondents were found at Venlo Partners and STIP (Student information point). Given the importance of city marketing aimed at students within this thesis it was also important to speak with this target group, in order to gain information about their demands about infrastructural facilities and other aspects seen as important. Therefore also two focus groups with ten students are conducted, to gain information about what they think is important to settle in Venlo. Considering possible different interest, the interviewed students were both male and female.

Table 1: Interview respondents

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Organization</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frans van Leijden</td>
<td>Has Venlo</td>
<td>Director</td>
</tr>
<tr>
<td>Erwin Martens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leon Weijs</td>
<td>Fontys</td>
<td>External relations</td>
</tr>
<tr>
<td>Iris Burks</td>
<td>University College</td>
<td>Educational development</td>
</tr>
<tr>
<td>Pascal Swinkels</td>
<td>Fontys</td>
<td>Coordinator ‘KennisDC Logistik’</td>
</tr>
<tr>
<td>Chantal Tjeeuw, Stephan Peeters &amp;</td>
<td>Fontys</td>
<td>Marketing and international relations, Marketing consultant/Account manager &amp; Marketing manager</td>
</tr>
<tr>
<td>Paul Stevens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wim Timmermans</td>
<td>College Den Hulster</td>
<td>Sector director Havo Vwo</td>
</tr>
<tr>
<td>Jan Kessels</td>
<td>Antares</td>
<td>Manager</td>
</tr>
<tr>
<td>Nina Bellen</td>
<td>STIP</td>
<td>Manager STIP</td>
</tr>
<tr>
<td>Suzanne Basting &amp; Jeroen van de</td>
<td>Municipality of Venlo</td>
<td>Policy advisor Housing &amp; Policy advisor Town-planning</td>
</tr>
<tr>
<td>Ven</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loek Voncken</td>
<td>Woonwenz</td>
<td>Manager housing</td>
</tr>
<tr>
<td>Serge van Dellen</td>
<td>Municipality of Venlo</td>
<td>Account manager R&amp;E (City centre)</td>
</tr>
<tr>
<td>Iris Kieij</td>
<td>Blariacum College</td>
<td>Team leader Havo/Vwo</td>
</tr>
<tr>
<td>Nicole Ottenheim</td>
<td>Municipality of Venlo</td>
<td>Policy advisor Knowledge infrastructure</td>
</tr>
<tr>
<td>Bernard Ellenbroek</td>
<td>Municipality of Venlo</td>
<td>Policy advisor Culture</td>
</tr>
<tr>
<td>Tom Orval</td>
<td>Municipality of Venlo</td>
<td>Account manager R&amp;E (Economy and knowledge infrastructure)</td>
</tr>
<tr>
<td>Geert Vergeldt</td>
<td>Vostermans (manufacturing)</td>
<td>HR-manager</td>
</tr>
<tr>
<td>Hugo Kamps</td>
<td>Sormac (manufacturing)</td>
<td>HR-manager</td>
</tr>
<tr>
<td>Paul Geurten</td>
<td>ZON business (agro/food)</td>
<td>HR-manager</td>
</tr>
<tr>
<td>Lian Achten</td>
<td>Hotraco (agro/food)</td>
<td>HR-functionary</td>
</tr>
<tr>
<td>Ruud Timmermans</td>
<td>Verhoex (logistics)</td>
<td>Director</td>
</tr>
<tr>
<td>Students (female)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students (male)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matthijs Hanssen</td>
<td>CAROZ (logistics)</td>
<td>HR-manager</td>
</tr>
<tr>
<td>Koen Rem</td>
<td>Ewals (logistics)</td>
<td>HR Business Partner</td>
</tr>
<tr>
<td>Aggie van Baal &amp; René van Rijn</td>
<td>WP Haton (manufacturing)</td>
<td>HR-manager &amp; Financial director</td>
</tr>
<tr>
<td>Paul Terpstra</td>
<td>Venlo Partners (City marketing)</td>
<td>Director</td>
</tr>
</tbody>
</table>

Furthermore, an observational walk has been made within the city centre with Freek Kusters, case manager city centre at the municipality. During this walk within the city centre it became clear how
the city centre has developed within the last couple of years. It also became clear what interesting facilities were available for students, but also what facilities were missing.

3.3 Analysis

At the end of the research, a lot of information has been gathered from literature, documents, interviews, focus groups and observations. All this information has been organized, in order to get a better overview. All the interviews have been transcribed entirely, in order to be analysed with computer software. The software that has been used is Atlas.ti, which is a program to analyse and code qualitative data. Important policy documents have been read thoroughly. After analysing and combining all the obtained information, interesting results were found which lead to well-founded conclusions and recommendations regarding the implementation of city marketing to attract and retain students and regarding the way in which these students could then contribute to the regional innovation system.

3.4 Internship organization

It has to be indicated why this research fitted the internship organization. The internship organization has been the municipality of Venlo. Important goal of this research has been to figure out how city marketing could be applied to attract and retain students for Venlo. This fitted the third main goal of the municipality (mentioned in the introduction), to create a optimal infrastructure for students and diligence in order to create a better-suited city for students to reside. The kind of infrastructural facilities and aspects that are important for students were found and these findings could now be implemented within city marketing strategies. This research has therefore contributed to the goal of the municipality of Venlo. The second aspect that has been figured out within this research was how these students, when attracted and retained, could contribute to regional innovation. As stated above, regional innovation has to be shaped by cooperation between the three constituents of the ‘triple helix’, knowledge institutions, business organizations and local government. Government, knowledge institutions and business organisations are all important in shaping regional innovation, as stated in the theoretical part above. Figuring out how student could contribute to regional innovation should thus be important for all three constituents of the ‘triple helix’. Combined with the fact that the municipality is the important initiator of city marketing, the municipality has been a perfect internship organisation to conduct this research.

3.5 Operationalization

By now, the conceptual framework and the methods are clear. It is important to operationalize the important theoretical constructs, to specify how findings will logically follow from the theory and the methods. The theory is schematically shown within the conceptual framework
(figure 1). As mentioned above, within this conceptual model two relations are most important. The first one concerns the relation between the ‘triple helix’, attracting and retaining students and the six factors contributing factors. The second one concerns the relation between the ‘triple helix’, the coupling aspect and regional innovation. The question that remains is how these relations will be investigated further on in this research. Both relations will be dealt with subsequently below.

The first relation will be investigated by first considering the six factors for Venlo and asking students about how they assess these six factors, then by asking different actors from each ‘triple helix’ constituent how they contribute to student attraction and retention by considering the six factors and last but not least how the ‘triple helix’ constituents think about each other’s contribution. Furthermore, the observational walk has been important to get a clear view about facilities and amenities within the city center. Lastly, important policy documents regarding the six factors have been reviewed. This way, an integral image about students attraction and retention is formed, viewed from different stakeholder perspectives. With this information the first three sub question can be answered.

The second important relation will be investigated by asking the three ‘triple helix’ constituents about their contribution regarding enabling students participation to regional innovation and how they think about each other’s contribution. This contribution concerns the coupling of know-what and know-why with know-how and know-who. In other terms this refers to the connection between knowledge/knowledge institutes and business people/organizations. Contribution of these two ‘triple helix’ constituents is most important here, whereas contribution of the municipality should especially be facilitating. Furthermore, also regarding regional innovation, important policy documents have been reviewed. This way, an integral image can also be formed about the regional innovation aspect. With this information, the last two sub questions can also be answered. Answering the six sub questions will lead to an answer to the main question and to further conclusions and recommendations.

4. Results

Within this chapter, the results of the research will be discussed according to the five sub questions. The first part will discuss the factors that are important to attract and retain students and how these are present within the Venlo region. The second part will discuss what kind of infrastructural facilities and aspects that are seen as important by students to settle in Venlo. How do students assess Venlo? Why would students even choose to study and live in Venlo? And most importantly, which developments would really add value to Venlo if it wants to be an attractive city for students? The third part will discuss contribution to city marketing by the municipality, knowledge institutions and
business organizations. How are they contributing to city marketing at the moment? And should they contribute differently? Beside the ‘triple helix’, also contribution of housing corporations and students will be discussed. The fourth part discusses how contribution of students to regional innovation could be improved. How are students linked to business organizations? How could interaction between knowledge institutions and student on the one hand and business organizations on the other hand be improved. The fifth part discusses how the ‘triple helix’ shapes the whole innovation process. How do the municipality, knowledge institutions and business organizations contribute to regional innovation? How could this contribution be improved? Answering these sub questions should lead to an answer to the main question about attracting and retaining students for the city of Venlo and how to improve their contribution to regional innovation.

4.1 Factors to attract and retain students in Venlo

The theoretical chapter made clear that there are six factors that are important to attract and retain student, namely academic reputation and alumni, quality of life, housing, career opportunities, cooperation between schools/universities and regional business organizations and social networks. Looking at the conceptual model, these are the six factors mentioned within the square. This part will clarify how these factors are present in Venlo and how different actors contribute to them. They will be discussed in abovementioned order, so to start with factors regarding attraction and then regarding retention.

4.1.1 Academic reputation and alumni

A first important factor that has been mentioned to attract students concerns the academic reputation and alumni. Academic reputation refers to the quality of the university as an institution but also to the available educational programs. The importance of this factor is something that was also mentioned by the student respondents. They stated that they all came to Venlo for specific educational purposes (Students, personal communication, April 20, 2015). As one student said, “I chose for Venlo because the education had the best reputation” and another student noticed that, “it is nice that the first year is together with mechanical engineering, because I study industrial product design. That is a big plus” (Students, personal communication, April 20, 2015). As mentioned, reputations of alumni could also be emphasized to attract students. During an interview with a respondent from Fontys Venlo, some prominent alumni where mentioned that all studied at Fontys Venlo. Pieter Elbers, President & CEO at KLM studied at Fontys Venlo, Thijs Rutten, CEO at Emons studied at Fontys Venlo and Corné Geerts, CEO at Seocon Logistics studied at Fontys Venlo (Swinkels, personal communication, March 5, 2015). For students these alumni can be ambassadors and show the potentials of a specific school/university and their story could enthuse students to choose for a certain school/university.
4.1.2 Quality of life

As stated in the theoretical part, also quality of life is a very important aspect to attract students. A student city should be very attractive for students to settle and it should be a student friendly community with high quality services. Amenities and facilities are very important in this respect. Cafés, history, markets, arts and a large number of schools are imports within a student city. More specifically, important for students are cafés, nightlife, parties, meeting places and culture. Furthermore, adequate sport facilities are seen as important. The students interviewed within this research mentioned nightlife and sporting facilities quite a lot (Students, personal communication, April 20, 2015).

As stated, amenities and facilities are also an important aspect within proven city marketing theories. The geographical marketing mix exists of promotional measures, spatial-physical measures, organizational measures and financial measures. Amenities are part of the spatial-physical measures and should be well-adapted to the target group. After all, city marketing should always be client-orientated. Summarized, one should know what amenities and facilities are important for students and upgrade the quality of life for these students. When quality of life within a city is especially aimed at students, it should be easier to attract them. This is also an important aspect for the municipality of Venlo. The municipality wants to figure out how to facilitate Venlo as a student city, so what facilities and amenities are valued as highly important by students.

One aspect is very interesting within the Venlo case. The presence of a lot of students is also mentioned sometimes as an important aspect. ‘Venlo, student city’ however is still in a very early stage, with an estimated amount of only 400 students that are living in Venlo (Bastings & Van de Ven, personal communication, March 16, 2015). Venlo does not have the amount of students like well-known student cities as Nijmegen, Eindhoven or Maastricht. These are cities where the positive aspect of having lots of student is present. This could be the case for Venlo also, but then it would first be important to attract these students by emphasizing other factors. The next section further elaborates on how students think about quality of life in Venlo and how they think about important amenities and facilities.

4.1.3 Student housing

Student housing is another very important aspect regarding student cities. Venlo acknowledges the importance of student housing, which is elaborated in the report ‘Op kamers in Venlo’ (Gemeente Venlo, 2014). Within this report it is stated that it is important that students have a positive living experience during their study period, in order to create a bond with the city. One of the most important visions is to offer student housing within (A) and near the city centre (B) (figure 2). However, student housing in the city centre is relatively expensive, especially when compared to
other ‘well-known’ student cities. There are two main housing corporations dealing with student housing, ‘Woonwenz’ and ‘Antares’. ‘Woonwenz’ offers 79 relatively small rooms at one location with prices varying from 270 – 420 euro (Woonwenz, n.d.). Antares offers 121 rooms at two locations, however especially for exchange students. There is also a lot of private housing in Venlo, however this is not mapped completely yet. Prices on the website of ‘Venlo Partners’ are hardly under 300 euro (Venlo Partners, 2014). The municipality of Venlo at the moment is very busy mapping the student housing supply, in order to have more insight regarding student housing.

![Figure 2: preferred location of student housing (source: Gemeente Venlo, 2014)](image)

It has been recognized by many actors that prices in Venlo are relatively high. First of all by the target group, students. From the interviewed students, only one lives in the city centre, the rest of them lives just outside the city centre and some of them even in Tegelen, which is a village at a few kilometres distance from Venlo. An important reason for them not living in the city centre are the housing prices. One on the students stated, “I think, in relation to things that could be done here, then the prices are actually ridiculously high”. Another student mentioned that, “well, in the city centre was not much, affordable also” (Students, personal communication, April 20, 2015). This price aspect is also important regarding German students living just across the border. Especially Fontys Venlo ‘international business school’ has a large amount of German students, but most of them are living across the border in Germany, instead of in the city centre of Venlo. A German student from Fontys Venlo conducted a research among German students about why they were not living in Venlo. Practical issues like telephone contracts and internet play a role. Yet among other things, especially
student housing prices were perceived as relatively high, especially compared with German prices (Müllers, 2013). Of course, it is difficult to compare German prices with Dutch prices, but still it is an indication that prices in Venlo are relatively high.

The high prices of student housing are also acknowledged by actors from knowledge institutions and the municipality. It is also interesting that a respondent from the housing corporation ‘Woonwenz’ stated that, “about the price, again, I think that indeed something could be done about that” (Voncken, personal communication, March 18, 2015). Table 2 shows average prices in well-known student cities in the Netherlands.

Table 2: average housing prices in well-known student cities (Source: Delta, 2013)

<table>
<thead>
<tr>
<th>Student city</th>
<th>Average housing prices</th>
<th>Student city</th>
<th>Average housing prices/m2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>€ 440</td>
<td>Amsterdam</td>
<td>€ 30</td>
</tr>
<tr>
<td>Rotterdam</td>
<td>€ 406</td>
<td>Leiden</td>
<td>€ 25</td>
</tr>
<tr>
<td>Utrecht</td>
<td>€ 380</td>
<td>Delft</td>
<td>€ 25</td>
</tr>
<tr>
<td>Maastricht</td>
<td>€ 365</td>
<td>Utrecht</td>
<td>€ 23</td>
</tr>
<tr>
<td>Groningen</td>
<td>€ 362</td>
<td>Wageningen</td>
<td>€ 22</td>
</tr>
<tr>
<td>Leiden</td>
<td>€ 358</td>
<td>Nijmegen</td>
<td>€ 21</td>
</tr>
<tr>
<td>Nijmegen</td>
<td>€ 346</td>
<td>Eindhoven</td>
<td>€ 21</td>
</tr>
<tr>
<td>Delft</td>
<td>€ 345</td>
<td>Enschede</td>
<td>€ 21</td>
</tr>
<tr>
<td>Eindhoven</td>
<td>€ 337</td>
<td>Groningen</td>
<td>€ 20</td>
</tr>
<tr>
<td>Tilburg</td>
<td>€ 319</td>
<td>Rotterdam</td>
<td>€ 19</td>
</tr>
<tr>
<td>Wageningen</td>
<td>€ 299</td>
<td>Maastricht</td>
<td>€ 19</td>
</tr>
<tr>
<td>Enschede</td>
<td>€ 276</td>
<td>Tilburg</td>
<td>€ 18</td>
</tr>
</tbody>
</table>

Venlo is not in this list, because student housing has not been mapped formally. ‘Venlo Partners’ has a data bank regarding student housing. Here the average housing price in Venlo is 333 euro and the average housing price/m2 is 18,5 euro (Venlo Partners, n.d.). According to table 2, Venlo would be among the less expensive cities regarding housing prices, as well as housing prices/m2. However, the concerning data bank is far from complete, so very little can be said about prices and square metres. This reflects the importance of adequate mapping of student housing. Yet, this does not alter the fact that many actors admit that student housing prices in Venlo are relatively high.
4.1.4 Career opportunities

As stated in the theoretical part, career opportunities are important to retain students after graduation. This is also an aspect that was mentioned very often during interviews with different respondents from the municipality, knowledge institutes as well as business organizations. Yet most important, it was mentioned by students who are the most important target group within in this respect. It seems logical that career opportunities are seen as very important, especially in economic times where one should be happy to have a job. In other words, cities might have the wish to retain students, but when there are no career opportunities available, students have no incentive to stay. Considering career opportunities in Venlo, one should first look at ‘Ondernemend Venlo’ to find out that approximately a thousand companies are affiliated to this umbrella committee (Ondernemend Venlo, 2015). This clearly shows that there are plenty of businesses within the region that might offer a large amount of career opportunities for students. For students this could be very interesting to stay in Venlo after graduation. Yet, students should at least be familiar with these companies and the internships and vacancies they offer.

The students that have been interviewed chose for Venlo especially for educational possibilities (Students, personal communication, April 20, 2015). Education in Venlo especially focuses on logistics, technique, agro/food and international business, education that seems perfectly complementary to the main economic sectors within the region, logistics, manufacturing and agro/food. Given these facts it would make one think that there would be no problems regarding career opportunities. However, interesting here was that one student, handling external relations within a student union, mentioned that students often are not even aware of all the nice companies and career opportunities within the Venlo region (Martens, personal communication, February 27, 2015). If career opportunities are an important factor to retain students after graduation, than it should not be the case that lots of students are not even aware of all the companies and possibilities within the Venlo region.

For one part, students might not be aware of all the possibilities within the region, but for another part it might be the question if possibilities are well adapted to educational programs. This could be the case for the educational program ‘industrial product design’ at logistics and technique at Fontys University of applied sciences. The students that were interviewed stated that most students from logistics and technique are studying ‘industrial product design’, whereas there are none or only a few internship and career opportunities complementary to this sector. Most internships and career opportunities, as they say, are for ‘mechanical engineering’ or ‘mechatronics’ (Students, personal communication, April 20, 2015). Taking abovementioned into account, this would mean that there are plenty of businesses and career opportunities within the region for studies like ‘mechanical engineering’ and ‘mechatronics’, which is of course a strong aspect. Yet, regarding
relatively large studies like ‘industrial product design’ this aspect might be more problematic. The interviewed students often mentioned this aspect, that the connection between specific studies and business industry within the region is lacking (Students, personal communication, April 20, 2015). As one of them stated, “all companies are focused on mechatronics or focused on mechanical engineering, while the technique department at Fontys for 60 percent exists of industrial product design” (Students, personal communication, April 20, 2015). Another student stated that, “so probably, we industrial product designers will leave Venlo when we finished our study” (Students, personal communication, April 20, 2015). One student also mentioned, “in theory, if there would be employment, for me as a designer, I would not mind staying in Venlo” (Students, personal communication, April 20, 2015). One student stated that as an industrial product designer, you could also work as a mechatronic, but as another student mentioned, “as industrial product designer you do not want to continue as a mechatronic, because then you would have studied mechatronics in the first place” (Students, personal communication, April 20, 2015).

4.1.5 Connection between education and business

It should be clear that career opportunities are very important to retain students after graduation. The second important aspect for students retention, related to career opportunities and also mentioned within the theoretical part, is the importance of adequate cooperation between schools/universities and regional business organizations. Adequate cooperation would be important to show students possibilities within the region, to excite students by letting them work on real business projects and that way create incentives for students to choose for Venlo as city to study and stay in Venlo after graduation. This process should start at secondary school. This is also stated in policy documents. The strategic plan of Venlo Partners, city marketing institution of Venlo clearly states that students at secondary school are also an important target group (Venlo Partners, 2014). The idea is that students at secondary schools should also be aware of all the possibilities within the Venlo region, in order for them to include Venlo within their study selection. As the director of Venlo Partners states, “to many secondary students leave the city without knowing what the city itself has to offer” (Terpstra, personal communication, April 30, 2015). So it should be important to at least raise awareness among secondary students about educational and career opportunities within the Venlo region.

Two secondary school in Venlo have been contacted, namely ‘College Den Hulster’ and ‘Blariacum College’. They both stated that it is very important that their students get in touch with the daily business practice in Venlo. The sector director Havo/Vwo from ‘College Den Hulster’ admitted that there is to less attention for career possibilities in Venlo and that that business organizations should take more initiative to present themselves to secondary students (Timmermans,
personal communication, March 11, 2015). However, especially one business company in Venlo, ‘Vostermans’, could be seen as a leader in the field of connection between education and business. This is also the case regarding the connection with secondary schools. ‘College Den Hulster’ actively cooperates with ‘Vostermans’ regarding trying to bond students within Venlo (Timmermans, personal communication, March 11, 2015). During an interview with the HR-manager from ‘Vostermans’, he stated that there is a gap between technical education and businesses and this gap should be reduced by actively participate and reach students, even at secondary schools (Vergeldt, personal communication, April 8, 2015). There is some cooperation, but this cooperation however happens on a very low scale and should be enhanced, with more business organizations taking initiatives to present themselves. This is also what the respondent from ‘Blariaicum College’ admits. She stated that the connection between secondary schools and business organizations within the region could be enhanced. As she said, “I think it is very important to collaborate with practice, because then students would know why they are on school”. She also mentioned that, “we don’t do this at Havo/Vwo, no, we don’t. And that should really be something to think about” (Keij, personal communication, March 19, 2015).

The connection between higher educational institutes (Fontys, Has & University College) and business organizations is also very important. They all acknowledge the importance of cooperation between business and knowledge institutes. Students at Fontys, Has and University college all have the possibility to participate in projects from business organizations. However, all of them also state that the cooperation between business and knowledge institutes should be enhanced a lot (Teeuwen, Peters & Stevens, personal communication, March 5, 2015; Van Leijden, personal communication, February 23, 2015; Burks, personal communication, March 2, 2015). Teeuwen et al. (Personal communication, March 5, 2015) stated that companies should present themselves a lot more than is the case now. This is also something acknowledged by the account manager at Fontys Venlo. According to him “business eventually profits from cooperation, so one should expect them to take some more initiative” (Weijs, personal communication, March 2, 2015). The coordinator at ‘Kennis DC Logistiek’ states that, “businesses are particularly occupied with their own core business” (Swinkels, personal communication, March 5, 2015). The idea would be that all stakeholders increasingly collaborate under one umbrella, with one regional objective instead of all following their own goals. This is also what was stated by the account manager at Fontys, “let us first work on the common cause and the rest will happen in its wake” (Weijs, personal communication, March 2, 2015).
4.1.6 Social networks

The last important factor as mentioned in the theoretical part concerns social networks, especially regarding the retention of students after graduation. As stated, this concerned increasing contact between students and other stakeholders that would eventually lead to integration of students within the local environment. A link could also be made to city amenities and facilities. In creating amenities, it was stated that interaction between people was very important. Amenities like cafés, restaurants, a vibrant nightlife, parks, et cetera all contribute to creating social networks. The importance of this social aspect also becomes clear when looking at the student interviews. One should only have a look at the frequency of them saying things as ‘together’, importance of ‘meeting places’ or ‘bringing together students’ (Students, personal communication, April 20, 2015). This clearly shows the importance of social networks, also within case of Venlo wishing to be a student city.

4.1.7 Conclusion

This paragraph aimed to answer the first sub question, “To what extend are important factors to attract and retain students present and developed in Venlo”? Six factors that are important were already stated in the theoretical part: academic reputation and alumni, quality of life, housing, career opportunities, cooperation between schools/universities and regional business organizations and social networks. Academic reputation is already quite developed in Venlo, especially at Fontys University of applied sciences. The importance of quality of life is evident and will be discussed thoroughly within the next section. Housing should deserve a lot of attention, given that this factor is still underdeveloped within Venlo. Also career opportunities and cooperation between schools/universities and regional business organization should be improved. Social networks are seen as very important by students in Venlo. All these aspects are intertwined within the next sections, where these will be further discussed and elaborated.

4.2 Quality of life: how do students think about Venlo?

Given the fact that students are the most important target group for Venlo if it wants to become a student city, it is necessary to know how this specific group of people thinks about Venlo and what their specific demands are regarding amenities and facilities, in order to compare this with what is already available. This is important, because as stated within the theoretical section, it is essential to be client orientated within city marketing. The importance of market research has also been discussed. The ‘secret of the angler’, as mentioned within the theoretical section, is very important in this respect. Four important amenities/facilities within student cities will be discussed within this paragraph, namely nightlife facilities, sporting facilities, cultural facilities and student housing. Furthermore Venlo Partners has introduced a special student card that provides special
discounts for students at several amenities. This student card will also be discussed from a student point of view. Considering the importance of the target group, it has to be said that earlier survey researches have been conducted among German students about making Venlo attractive for them (Müllers, 2013) and among secondary students in Venlo about how to retain them (Peeters, 2014). Within this research, ten students living in Venlo have been interviewed in-depth about their experiences and demands regarding ‘Venlo, Student city’. It is important to mention that this population is far from representative for the whole student population within Venlo. Yet, it gives a first important indication about how thing could be done otherwise.

4.2.1 Nightlife facilities

The theoretical framework made clear that nightlife facilities are seen as very important by students. They attach value to amenities such as restaurants, bars and other consumption based amenities. Important to attract students would thus be the creation of amenities including a rich variety of cafés, restaurants and a vibrant nightlife. This was also reflected by the interviewed students. When they were asked about facilities in general in Venlo, they immediately started talking about nightlife facilities (Students, personal communication, April 20, 2015).

According to the account manager city center at the municipality of Venlo, the city has one of the highest bar densities in the Netherlands (Van Dellen, personal communication, March 19, 2015). However, a high bar density does not automatically lead to a city being attractive for students. More important is that the available bars have to be attractive to students. Therefore it is necessary to ask students themselves what they think about nightlife in Venlo in general and about bars more specifically. The things that the interviewed students mentioned about nightlife and bars in Venlo were very clear. Things as “if you want to go out, you go to Germany”, “you can sit in a café, but you cannot really go out” and “what I am missing is a real student bar” are clear statements. (Students, personal communication, April 20, 2015). According to them there are of course some cozy cafés, yet real student bars are missing. This absence of a real student bar is seen as very crucial by the interviewed students, given the fact it was mentioned over fifteen times. (Students, personal communication, April 20, 2015).

Related to this they also mentioned that specific meeting places for students are very important. This could also be related to the importance of social networks, as elaborated in the previous section. The former ‘The Hub’ was a real student bar and meeting place for students, but it broke down a few years after its start. As one student stated, “at The Hub is was quite nice, but sadly it failed” (Students, personal communication, April 20, 2015). ‘The Hub’ was at first started by students, but after a few years this did not work anymore. In an interview with three respondents from Fontys Venlo, they stated that ‘The Hub’ did not work, because it was for a large part in hands
of students. Such a student club should really be facilitated, in order to guarantee continuity. “It should not be left to students, because students should be able to focus on their study” (Teeuwen et al., personal communication, March 5, 2015). This is important, because it was also mentioned quite a lot by the interviewed students that student life in Venlo was something they really had to make themselves (Students, personal communication, April 20, 2015). Of course, at the end students themselves decide whether or not to participate in a city’s student life, but the thing is in Venlo that the city is at the moment not really inviting to participate. Facilitating nightlife amenities that are seen as important by students themselves could contribute to improving this.

Real student evenings are also quite scarce in Venlo. Thursday night has always been an important night for students in many student cities. Moreover, Tuesday nights are also very important for students, something that was pointed out by one of the business respondents (Timmermans, personal communication, April 20, 2015) and endorsed by the interviewed students (Students, personal communication, April 20, 2015). According to these same students, on Tuesday nights there is “nothing to do” and “even on Thursday nights there is hardly anything to do” (Students, personal communication, April 20, 2015). Also the respondent from STIP stated that, “if you walk through the city on a Tuesday night, it is like a deserted village” (Bellen, personal communication, March 12, 2015). Of course, this is also due to the fact that the student population in Venlo is still quite small and this causes a difficult dilemma. More about this will be in the concluding part of this section.

4.2.2 Sporting facilities

For students, the opportunity to sport is also very important. The importance of sporting facilities within student cities was also mentioned within the theoretical framework. Most student cities in the Netherlands even have their own sporting centers. This aspect was also mentioned by the students, “in other cities there is an university sporting center”. One of the students made a link to the earlier mentioned importance of meeting places, “you should think of a central sporting center, then you start with a meeting spot in the first place” (Students, personal communication, April 20, 2015).

Something interesting mentioned by the students was that costs for sport were not student worthy. They stated, “if you want to sport over here, then it will cost you at least 25 euro per month. At least, if you want to do it well” (Students, personal communication, April 20, 2015). Indeed, if students wish to combine fitness with student sports, it will cost them 25 euro per month or 120 euro per year (Student sports Venlo, 2014). With this combo, they can practice six student sports and fitness. To compare, in Nijmegen students pay 15 euro per month or 100 per year for over 70 sports (Radboud Universiteit, 2015). In Eindhoven, student pay approximately 90 euro per year for
lots of sport, courses and competitions (Technische Universiteit Eindhoven, n.d.). The fact Nijmegen and Eindhoven are mentioned here, does not mean that Venlo has to compete with them, yet it does show examples of student cities where there are way more sporting possibilities for less money. And obviously, money is an important aspect for student, given the average student is not the most wealthy person (Nibud, n.d.). One student also referred to this aspect with, “you do not have the opportunity to practice sports. Well at least in a cheap way. Because it is not cheap to live in lodgings” (Students, personal communication, April 20, 2015).

A last thing the students mentioned was that there should be more organized sport events. They stated that one time in a year there is a ‘blackminton’ tournament, which is badminton in dark with black lights. Next to this there are some small activities, but “furthermore nothing else is organized” (Students, personal communication, April 20, 2015). One student mentioned the fact that this event was organized in ‘Blerick’, which is across the river ‘De Maas’. This is only a tiny aspect which however could be related to the absence of a central sports facility mentioned above. As the student noted, “it would be nicer if something would be feasible over here” (Students, personal communication, April 20, 2015). The still relatively small size of the student population in Venlo is again important. More about this in the concluding part.

4.2.3 Cultural facilities

A third type of amenities mentioned within the theoretical framework concerned cultural facilities. Students are perceived to be part of the creative class that attaches value to amenities like museums, galleries, theatre and cinema. Yet, it was also stated that cultural amenities were perceived as less important than nightlife facilities and sporting facilities.

In general, culture seems more important for older students and the creative class worker. This was also mentioned by policy advisor culture at the municipality of Venlo, when he said, “when I worked in Nijmegen, at LUX, we noticed that it was very difficult to reach first grade students” (Ellenbroek, personal communication, March 25, 2015). The research in Liège, mentioned within the theoretical section, also confirms that culture is less important than for instance nightlife and sports. Also among the interviewed students, only one of them really emphasized the importance of cultural aspects (Students, personal communication, April 20, 2015). Abovementioned would lead to the idea that too much emphasis on culture is not very necessary if there is the wish to attract students. However, given the fact that culture nonetheless does play a role, a certain basic level of cultural amenities should be present. Regarding cultural facilities, the students mentioned ‘Grenswerk’, which is a new pop podium in Venlo, they mentioned ‘De Maaspoort’, which a theatre, they mentioned a cinema and they mentioned a small cultural cinema (Students, personal communication, April 20, 2015). Furthermore there are two museums, ‘Het Limburgs Museum’ and
'Museum Van Bommel Van Dam', from which only the latter sees students as a potential target group (Ellenbroek, personal communication, March 25, 2015). This seems like a basic level of culture, that however is not used very frequently by the interviewed students. According to one of them and confirmed by the others, “I have the feeling that it is not very well promoted” (Students, personal communication, April 20, 2015). What also plays a role is the fact that visiting cultural amenities is not very cheap and money aspects are simply very important when dealing with students. Students are able to get discounts on cultural amenities with the student card from ‘Venlo Partners’, but more about this student card further on in this section.

4.2.4 Housing

As mentioned in the previous section, housing is an very important aspect for students. As stated earlier, students mentioned that housing prices especially in the city centre are quite high (Students, personal communication, April 20, 2015). This is very problematic, especially given the idea that the municipality wishes to centralize student housing in and near the city centre (Gemeente Venlo, 2014). The fact that student housing is currently very dispersed was also mentioned as a negative aspect by students. As one student stated, “it is all dispersed, so before people come together, that they see each other, that takes a lot of effort” (Students, personal communication, April 20, 2015). This however brings along a difficult dilemma. On the one hand, centralized student housing within and near the city centre is perceived positively. On the other hand, housing prices within the city centre are perceived negatively.

The students also noted that the supply of student housing should be enhanced. They encountered problems like not being able to find student housing with shared living rooms. One student stated, “then on a certain moment I just started reacting on all rooms under 300 euro” (Students, personal communication, April 20, 2015). A last tiny, yet essential aspect for students is the importance of being up-to-date about student housing. A few students mentioned that they reacted on rooms that were presented on the website of ‘Venlo Partners’, that turned out to be taken for a few month. This happened a few times and as one student noted, “this will eventually downturn people” (Students, personal communication, April 20, 2015). Of course, student housing is a relatively new occupation for Venlo, but nonetheless very important to redress.

4.2.5 ‘Venlo Partners’ student card

As mentioned earlier financial aspects are very important for students. This is something municipalities have to be aware of when attracting and retaining students. ‘Venlo Partners’ has introduced a student card, that every student studying in Venlo can acquire (Venlo Partners, 2014). With this card students get discounts at several amenities, listed on the website of Venlo Partners (Venlo Partners, 2014). The amenities regard ‘culture and theatre’, ‘shopping, food and drinks’,
‘sports’ and ‘services’. This seems like an interesting addition for students studying in Venlo, but again it is important to figure out how students themselves think about the card.

The interviewed students were very explicit about the student card. In its current form it is of no addition for them. They mentioned things like, “I have it in my wallet, but for the rest I do not use it” and “I have not used it this year” (Students, personal communication, April 20, 2015). Another interesting thing they mentioned was that several shops that are affiliated, do not always accept the student card. So it seems that there is a lot of obscurity about the card, even among affiliated shops. In addition, students mentioned that communication about the card in general could be improved. They are not familiar with all the card possibilities, because it can only be found on a specific place on the ‘Venlo Partners’ website. They suggested it would be nice to receive mails about interesting discounts and that the promotion of the card in general could be improved (Students, personal communication, April 20, 2015). Of course, also this student card is relatively new. It could be improved on several aspects, but therefore it should be wise to listen to students complaints about the card.

4.2.6 Conclusion

This paragraph aimed to answer the second sub question, “What kind of infrastructural facilities and aspects are seen as important for students to settle in Venlo”? To answer this question students were asked about nightlife facilities, sporting facilities, cultural facilities and housing facilities. Furthermore, they were asked about the ‘Venlo Partners’ student card, because this card should be an addition for them regarding different facilities. The most important facilities that were mentioned as missing by students were real student bars, student meeting places, central sporting facilities and central housing. Furthermore they mentioned that real student evenings are very rare, that cultural facilities should be promoted increasingly targeted on students and that financial thresholds should be reduced.

Mentioned earlier in this section was the fact that the student population is still relatively small in Venlo. A large student population itself is sometimes perceived as an important aspect to attract students. More students give a student city more body and it tends to cause more dynamics within a city, something that is acknowledged by the director of ‘Venlo Partners’ (Terpstra, personal communication, April 30, 2015). This leads to a problematic dilemma, as it is difficult to invest in a student city, from which it is still unknown how it will develop in the near future. On the other hand, you cannot wait for the students to settle first and then start doing investments. If Venlo really wants to become a student city, it has to choose and focus on this target group and some investments have to be made in physical space, in order for Venlo to become more attractive for students.

Important here is to listen well to these students. The earlier mentioned quote, ‘the secret of
the angler’, is very important in this respect. It has been mentioned within the theoretical section that student involvement should be considered, especially regarding matters of interest for them. This aspect was also mentioned by the interviewed students when they stated that it would be nice if they could be in contact with ‘Venlo Partners’ more frequently (Students, personal communication, April 20, 2015).

4.3 ‘Triple helix’ and other stakeholders contribution to city marketing

As stated in the theoretical section, city marketing is a multi-stakeholder process. To be more specific, it has also been stated that cooperation within a ‘triple helix’ model is essential. The municipality, knowledge institutes and local government should have the ambition to complement each other, considering a common cause. Within this section the contribution of the municipality, the knowledge institutions and business organizations will be discussed. On several aspects, the results will be linked to scientific findings about city marketing and branding, that are mentioned within the theoretical section. First, contribution of the three constituents of the ‘triple helix’ will be discussed separately. For all three constituents will also be discussed whether they should contribute differently. Second, contribution of other stakeholders like housing corporations and students themselves will be addressed. Third, it will be discussed what the most important improvements should be. Findings would lead to an answer on the sub question regarding contribution of the different important stakeholders. This section refers to the relation between the ‘triple helix’ and attraction and retention of students, which is part of the first important relation as described within the conceptual framework.

4.3.1 Contribution of the municipality

A first important contribution of the municipality is to facilitate Venlo as a student city. First, the municipality has to consider facilities that are seen as important by students. After all, city marketing should put the target group central. Previous section already gave an indication about what students think is important. Of course, the municipality and ‘Venlo Partners’ created some important facilities the past years. First of all, they facilitated that knowledge infrastructure like HAS and University college established within the city center. Furthermore, they started facilitating student housing, they created a meeting place ‘The Hub’, and they created a student information point (STIP). However, previous paragraph clearly showed some limitations regarding student facilities. Student housing is very dispersed and should be more central. This is a point that is also acknowledged by the municipality and something that has their attention already (Gemeente Venlo, 2014). The meeting place they created does not exist anymore and students noted that this is an important limitation for a student city. They really miss a place where they can meet other students, like ‘The Hub’ was previously. The students also noted that sporting facilities are quite dispersed. Like
central student housing, central sporting facilities could also be though about by the municipality.

Facilitating physical infrastructure is only one aspect. As mentioned within the theoretical section, the marketing mix also encompasses promotional measures, organization measures and financial measures. Regarding organizational measures there is also an important role for the municipality of Venlo. The municipality formulated a clear vision in the ‘strategic vision 2030’ (Gemeente Venlo, 2010). Within this document, the municipality clearly emphasizes the ambition of attracting and retaining students/young well-educated people. Given that this is an cooperative process, the municipality has an important role in stimulating, triggering and enthuse other stakeholders to share this same ambition. Collective understanding and appreciation among stakeholders is crucial. However, several stakeholders that were interviewed stated that the municipality should take a more prominent role regarding this aspect. They mentioned things like, “if noses do not point the same direction, you may want many things, but nothing will happen” (Rem, personal communication, April 22, 2015), the municipality should “strengthen a piece of unity in there” (Vergeldt, personal communication, April 8, 2015) and “a lot of initiatives have been taken within the region, but it pulls out every time” (Teeuwen et al., personal communication, March 5, 2015). Other stakeholders mentioned sort like aspects. Even the interviewed students mentioned that, “I know that they have been shouting for the last two years that they are very enthusiastic, but we do not notice it” (Students, personal communication, April 20, 2015). The municipalities vision is clear and the ambition is present also, however, more emphasis could be given to enthuse and trigger all other important stakeholders to comply with the common goal. According to some stakeholders this common goal is missing. As the account manager at Fontys Venlo mentioned, “let us put aside our personal targets and make common targets our first priority” (Weijs, personal communication, March 2, 2015).

The two most important stakeholders that have to be reached are the knowledge institutes and the business organizations. City marketing after all should be a ‘triple helix’ process (Hospers et al., 2011). The municipality has an important role in binding knowledge and business. A role that is acknowledged by the municipality. According to the account manager economy and knowledge infrastructure, “we make the connection, we try to bring together knowledge demand and knowledge supply, but also entrepreneurs and researchers” (Orval, personal communication, April 8, 2015). It is also acknowledged that this aspect could be increased significantly, as the policy advisor knowledge infrastructure of the municipality stated, “we should focus more on that aspect, but companies must be willing also” (Ottenheim, personal communication, March 25, 2015). Indeed as she says, there is also an important role for companies themselves. More about the role of companies later on. As stated within the theoretical section, the connection between school/universities and business organizations is an important factor within a student city. This reflects the importance of binding
these two ‘triple helix’ constituents. ‘Venlo Partners’ has initiated a platform on their website where companies are able to present themselves and where students could look for information about for instance internships or vacancies (Venlo Partners, 2014). The impact of this platform is still very marginal. As mentioned earlier, there are over 1000 companies within the Venlo region, yet only 26 companies are affiliated to this platform. The interviewed students thought this would be a perfect initiative to further develop. As one student said, “it would be much better than the current system” (Students, personal communication, April 20, 2015). According to them such a central platform would be nice, because then they would not have to bother companies that have no internships available. Most companies that were interviewed were also very positive about this platform. They mentioned things like, “we would gladly like to be on it as a company” (Achten, personal communication, April 15, 2015) and “the initiative is very good” (Hanssen, personal communication, April 22, 2015). Some companies however also had their doubts about such a platform, especially because there are several different similar platforms. One company mentioned ‘Smart Logistics’ as a platform (Timmermans, personal communication, April 20, 2015). Another company mentioned that they already had several similar platforms (Rem, personal communication, April 22, 2015). The existence of several platforms makes it very obscure for students and therefore one central platform could be an interesting idea. Especially for students, who should after all be the central target group for Venlo. This aspect was also mentioned by one company. It was stated that many different initiatives will only lead to disintegration and much of the same (Vergeldt, personal communication, April 8, 2015). This central platform could thus be achieved by improving the ‘Venlo Partners’ business website.

Within city marketing it is important to choose and position yourself. If not, you will be confronted with the, ‘law of the strawberry marmalade’, as mentioned within the theoretical section. The more you spread it, the thinner it gets. It is clear that students should be the most important target group for Venlo if it want to become a student city. Of course this is a difficult dilemma, because municipalities want to take care of all their target groups. Still, students as a target group should be the most important at the moment. The municipality is an important financer and should dare to focus and invest regarding students as a target group. As stated within the theoretical section, city marketing asks for an adequate budget to realize the ‘city product’, to realize specific facilities that are seen as important by students. This focusing on students was also mentioned by the director of ‘Venlo Partners. As he stated, “I think we must choose for the student” (Terpstra, personal communication, April 30, 2015). This aspect of focusing on students more specifically would be something the municipality should really consider.

A last important aspect has to do with branding. It should not be neglected to charge a brand within the region. A brand must be connected with the regional sentiments, it is essential that all
important stakeholders need to accept the brand and that collective understanding is present. Stakeholder management is therefore very important. Most interviewed stakeholder noted that the Venlo Region has no real brand. Some stated that Venlo should tell its story much better, because “Venlo has never been able to tell me” (Teeuwen et al., personal communication, March 5, 2015), or “yes, I also read that Venlo is occupied with this branding. But then I laugh. I think, a lot still has to happen, because I see other things” (Rem, personal communication, April 22, 2015) and “we have to learn to tell the story of Venlo and the region much better” (Ottenheim, personal communication, March 25, 2015). It should be an important task for the municipality and ‘Venlo Partners’ to improve their storytelling and be distinctive. More about this branding aspect later on in this section.

4.3.2 Contribution of knowledge institutes

Given the importance of the ‘triple helix’ within this thesis, it has also been investigated how knowledge institutions contribute and on what aspects this could be improved. The most important aspect regards the academic reputation, one of the important factors to attract students. Essential is an adequate supply of educational programs. This seems well-endowed at the knowledge institutes in Venlo. Most important, students themselves mentioned they chose for Venlo especially because of the educational programs, which are highly recommended (Students, personal communication, April 20, 2015). The municipality of Venlo has also acknowledged the importance of adequate education, given the effort that has been made to attract HAS and University College to Venlo. In general, education in Venlo is very interesting, because the educational programs are complementary with the regional economy with the important sectors: logistics, manufacturing and agro/food. Additional interesting educational programs deserve attention as well. For instance, Fontys recently started a minor ‘customs management’ (KennisDC Logistiek, 2015), which is very interesting given the location of Venlo near the border with Germany.

As discussed within the theoretical section, alumni could also contribute to academic reputation. Several knowledge institutes in Venlo endorsed this aspect. They mentioned, “when students can see what graduates are doing within the region, that would be one of the most important incentives to do a HAS-program” (Van Leijden, personal communication, February 23, 2015), or “if you keep them in your network, if you keep tracking them, than these are people who can set lines within their own organizations, who can make connections” (Weijs, personal communication, March 2, 2015) and “I am actually an advocate of the American system. If you look at the Ivy-league universities, who especially do things with alumni networks. I think we can learn a lot from that” (Swinkels, personal education, March 5, 2015). Alumni could be important ambassadors for Venlo. As mentioned earlier, especially Fontys has an interesting alumni network. Pieter Elbers, President & CEO at KLM studied at Fontys Venlo, Thijs Rutten, CEO at Emons studied at
Fontys Venlo and Corné Geerts, CEO at Seocon Logistics studied at Fontys Venlo (Swinkels, personal communication, March 5, 2015). HAS and University College are relatively new in Venlo, so their alumni network is still very marginal. In general, more focus on these alumni could improve academic reputation even more.

The importance of adequate connections between knowledge institutes and business organizations has also been mentioned in the theoretical part, especially to retain students after graduation. Apart from the earlier mentioned binding factor that the municipality should be, knowledge institutes themselves also have an important role regarding this aspect. The link between secondary schools and business should be improved, in order to raise awareness from secondary students about why they would even choose to study in Venlo. Furthermore, links between higher education and business should be redressed at some points. For instance, the fact that students mentioned that ‘industrial product design’ is a relatively large education program, with hardly any internships or career opportunities in Venlo seems very strange. On the one hand this could be the case because such companies simply are not present in Venlo. On the other hand this could be the case because companies do not present themselves adequately. This aspect is also further elaborated in the next section. In short, links between knowledge institutes and business organizations should be redressed to unravel these obscurities.

4.3.3 Contribution of business organizations

Business organizations should especially contribute to two important aspects to attract and retain students, namely career opportunities and the connection between knowledge institutes and business organizations. The interviewed companies all acknowledged the importance of presenting themselves to students, yet most of them also acknowledged that they were lagging behind on this aspect. They mentioned things like, “we should contact education more frequently” (Geurten, personal communication, April 15, 2015), “I think that we as company should also take more initiatives” (Kamps, personal communication, April 9, 2015) and “from our perspective I think that we should search for more engagement” (Achten, personal communication, April 15, 2015). Business organizations should promote themselves more to students, in order for students being aware of all the possibilities within the region. Moreover, some of the interviewed companies even stated that people have incorrect images about their company. For instance, one company stated, “we are especially known as an agrarian company, but we are actually more a technical company, an ICT company” (Achten, personal communication, April 15, 2015) and another mentioned, “they see us as a flat organization who is only occupied with driving trucks” (Rem, personal communication, April 22, 2015). It should be an important task for companies to present them more adequately to students, in order for students to be aware of companies exact occupations.
The earlier mentioned ‘Venlo Partners’ business platform could be very interesting regarding this aspect. Companies could present themselves and their exact occupations and at the same time inform about possible internships and vacancies. First of all, such a central platform would be very attractive for students, as mentioned by themselves (Students, personal communication, April 20, 2015). Second, it would prevent the earlier mentioned disintegration through the development of many initiatives. And third, this could be a very efficient way for companies because it would ask relatively little time, which is obviously a very important aspect for them. Companies are mainly occupied with their own core business, so it should be an important task for ‘Venlo Partners’ as city marketing organization to take initiative and actively contact these companies and convince them to contribute to the common cause, making Venlo attractive for students. This could take a lot of time, however as stated, it should be taken into account that city and region marketing is a long term process.

Next to the municipality and the knowledge institutes, also business organizations should contribute to the connection between knowledge institutes and business organizations. Several cooperation’s already exist between knowledge and companies within the region, but according to the interviewed companies this aspect deserves attention continually and should be improved on several aspects. As some companies state, “how could we improve cooperation with knowledge institutes, in order to close the gap between companies and education” (Hanssen, personal communication, April 22, 2015), “the gap between education and business has increased” (Van Rijn & Van Baal, personal communication, April 30, 2015) and “there is a distance between education and technique and business” (Vergeldt, personal communication, April 8, 2015). This gap refers to the idea that knowledge and business are especially focused on their own core business and they are not optimally aware of each other’s demands. It should be reduced through increased cooperation and contact between education and business. This should start with increased contact with secondary schools to make secondary students aware and interest them for the regional business. Furthermore, education and business should better attune their specific demands to each other, something that was stated by education as well as business. They mentioned things like, “the tight frameworks of education should be dealt with, to make sure that you are closer to demanding business and act from their perspective, rather than from an educational perspective” (Weijs, personal communication, March 2, 2015) and “I think that educational institutions could act more also. Maybe be more proactive and increasingly indicate what the possibilities are” (Geurten, personal communication, April 15, 2015). In short, there clearly is an important task to improve cooperation between knowledge and business, which is a task for all three constituents of the ‘triple helix’.
4.3.4 Contribution of other stakeholders

Two other stakeholders that will be discussed are the housing corporations and students themselves. As mentioned earlier on within the theoretical section, an important aspect to attract students is the availability of adequate housing. This is where the housing corporations could play an important role. The most important aspect regarding housing is the fact that it is experienced as being rather expensive, especially within the city center (Students, personal communication, April 20, 2015). This was also endorsed by most respondents. Interesting within the two interviews with housing corporations was that one of the corporations admitted that housing prices could be reconsidered (Voncken, personal communication, March 18, 2015), while the other corporation stated that rent was based on calculated costs and that student houses were already rented for an unprofitable price (Kessels, personal communication, March 11, 2015). This is an important difference that should be redressed, especially given the fact that both corporations are formalizing a cooperation regarding student housing (Voncken, personal communication, April 18, 2015). Regarding German students, there are also practical issues and Venlo is insufficiently promoted (Müllers, 2013), the latter aspect however was also mentioned by the interviewed Dutch students (Students, personal communication, April 20, 2015). Yet, this does not alter the fact that financial aspects are very important for students (Nibud, n.d.) and that housing prices should really be redressed.

Within the theoretical part the importance of student involvement is already mentioned. Student involvement seems not really developed within the whole process (Students, personal communication, April 20, 2015). Regarding quality of life aspects, students demands are not really asked for and therefore not taken into account sufficiently. Quality of housing aspects could also been asked for, to figure out what aspects regarding housing are seen as important by students. It cannot be repeated enough that within city marketing it is essential to know how the target group thinks about the city and what their specific demands are. An interesting point worth noting is that some respondents also mentioned that is it important that students themselves have to show some ambition. As one respondent mentioned, “I notice that students nowadays are rather lazy” (Bellen, personal communication, March 12, 2015). This might be the case for a certain group of students. Yet, this does not alter the fact that the municipality of Venlo has formulated the ambition to become a student city and therefore they should nonetheless create an optimal environment to let it prosper. Student involvement could contribute to this aspect and therefore this is something that should be considered.

4.3.5 Most important improvements

The previous pages have indicated how different stakeholders are contributing already and
on what aspects their contribution could be improved. Table 3 summarizes these improvements and the concerning responsible stakeholders. Several other aspects have been mentioned as well, for instance how students think about the ‘Venlo Partners’ student card. Of course, such things should also be taken into account, but the improvements listed within the table deserve special attention.

**Table 3: Important improvements regarding ‘Venlo, student city’**

<table>
<thead>
<tr>
<th>Improvements</th>
<th>Stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus, persistence and daring to invest</td>
<td>Municipality</td>
</tr>
<tr>
<td>Physical infrastructure</td>
<td>Municipality</td>
</tr>
<tr>
<td>Central housing and housing prices</td>
<td>Municipality and housing corporations</td>
</tr>
<tr>
<td>Creating general cause among stakeholders</td>
<td>Municipality and ‘Venlo Partners’</td>
</tr>
<tr>
<td>Improve link between knowledge and business</td>
<td>‘Triple helix’</td>
</tr>
<tr>
<td>Expand business platform</td>
<td>‘Venlo Partners’</td>
</tr>
<tr>
<td>Branding Venlo</td>
<td>Municipality and ‘Venlo Partners’</td>
</tr>
<tr>
<td>Focus on Alumni</td>
<td>Knowledge institutes</td>
</tr>
<tr>
<td>Enhance knowledge of business opportunities</td>
<td>Business organizations</td>
</tr>
<tr>
<td>Student involvement</td>
<td>‘Triple helix’</td>
</tr>
</tbody>
</table>

One of the improvements deserves some more elaboration, namely the branding of Venlo. Within the theoretical section it has already been stated that it should not be neglected to charge a brand within the region. Several regions could be mentioned that clearly benefit from having a brand. ‘Brainport’ Eindhoven might be the best practice within the Netherlands (Brainport Region Eindhoven, 2015). Some important aspects about branding have been mentioned earlier on in the theoretical section. It should correspond with what the region has to offer and the important stakeholders have to accept it. Furthermore is has to be unique, because it should be used to distinguish the region compared to other regions. To begin with the former aspect, all interviewed stakeholders have been asked about what they thought are the important aspect that the Venlo region should include in its brand. Table 4 shows the results. The important aspect that were mentioned are: logistics, agro/food, manufacturing, cradle2 cradle and the small-scale of Venlo. All these aspects separately correspond with the region, yet certainly are not unique. Unique however would be trying to create a brand on the crossovers of these aspects. Actually Eindhoven did the same with three pillars: technique, design and knowledge (Eindhoven 365, n.d.).

Within the theoretical section, four important aspects about successful brand implementation have been mentioned. To repeat, successfully implementing such a brand would first
of all ask for persistency. Second, the brand should be included in political priorities and long term visions. Third, adequate stakeholder management is necessary, because they too need to express the brand.

Table 4: Stakeholders vision about branding Venlo

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Branding aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frans van Leijden</td>
<td>Agro/food, logistics, manufacturing &amp; cradle2cradle</td>
</tr>
<tr>
<td>Erwin Martens</td>
<td>Small-scale</td>
</tr>
<tr>
<td>Leon Weijs</td>
<td>Logistics, manufacturing, agro/food</td>
</tr>
<tr>
<td>Iris Burks</td>
<td>Agro/food, logistics &amp; small-scale</td>
</tr>
<tr>
<td>Pascal Swinkels</td>
<td>Logistics</td>
</tr>
<tr>
<td>Chantal Teeuwen, Stephan Peeters &amp; Paul Stevens</td>
<td>Logistics, manufacturing, agro/food, small-scale and cradle2cradle</td>
</tr>
<tr>
<td>Wim Timmermans</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Jan Kessels</td>
<td>Logistics, agro/food, manufacturing, small-scale</td>
</tr>
<tr>
<td>Nina Bellen</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Suzanne Bastings &amp; Jeroen van de Ven</td>
<td>Logistics, manufacturing, logistics, agro/food</td>
</tr>
<tr>
<td>Loek Voncken</td>
<td>///</td>
</tr>
<tr>
<td>Serge van Dellen</td>
<td>Logistics, agro/food &amp; manufacturing</td>
</tr>
<tr>
<td>Iris Keij</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Nicole Ottenheim</td>
<td>Manufacturing, logistics, agro/food</td>
</tr>
<tr>
<td>Bernhard Ellenbroek</td>
<td>///</td>
</tr>
<tr>
<td>Tom Orval</td>
<td>Logistics, manufacturing &amp; agro/food</td>
</tr>
<tr>
<td>Geert Vergeldt</td>
<td>///</td>
</tr>
<tr>
<td>Hugo Kamps</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Paul Geurten</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Lian Achten</td>
<td>Logistics, manufacturing &amp; agro/food</td>
</tr>
<tr>
<td>Ruud Timmermans</td>
<td>Logistics</td>
</tr>
<tr>
<td>Students girls</td>
<td>///</td>
</tr>
<tr>
<td>Students boys</td>
<td>Small-scale</td>
</tr>
<tr>
<td>Matthijs Hanssen</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Koene Rem</td>
<td>Logistics &amp; agro/food</td>
</tr>
<tr>
<td>Aggie van Baal &amp; René van Rijn</td>
<td>Agro/food, logistics &amp; manufacturing</td>
</tr>
<tr>
<td>Paul Terpstra</td>
<td>Manufacturing, logistics, agro/food &amp; cradle2cradle</td>
</tr>
</tbody>
</table>
The last important aspect is that the brand needs to return in daily businesses of companies, institutions, events and people. According to the director of ‘Venlo Partners’ additional aspects within the brand should be: the historical inner city, with a nice quality of life (Terpstra, personal communication, April 30, 2015). However, this quality of life first needs to be improved by doing some investments in physical infrastructure (Students, personal communication, April 20, 2015). Otherwise you would brand something that you are not perceived to be by the target group and that would be all wrong. Always keep in mind the quote, “you must not say you are attractive, be attractive”.

4.3.6 Conclusion

This paragraph aimed to answer the third sub question, “What contribution could the three ‘triple helix’ constituents, housing corporations and students themselves make regarding city marketing to attract students”? Table 3 shows the most important contributions the different stakeholders should deliver. The most important improvement should be more focus on students as a target group, persistence to really achieve things and daring to invest. This corresponds with ‘the law of the strawberry marmalade’. All the other mentioned improvements make no sense if true focus, persistence and willingness to invest are lacking. Very important also is to be attractive for your target group, so be aware of what students are looking for. This corresponds with the ‘secret of the angler’. Previous section gave an indication about this aspect. Furthermore, all stakeholders need to realize the importance of attracting and retaining students, in order for them to actively participate on this common cause. This common cause is currently not sufficient, making it difficult to really achieve things. Within the ‘triple helix’, especially business organizations and to a lesser extend knowledge institutions should increasingly pay attention to the common cause. Improving the connection between these two stakeholders could contribute to this aspect. Last but not least, when the city itself is indeed attractive, it should be branded accordingly and in line with all stakeholders. Again, first be attractive, then say you are.

4.4 Student contribution to regional innovation

Of course it is very attractive to become a student city, because students add something special to a city. As is stated by one of the respondents, “the students within the city center are experienced as very welcome by tourists, because they add some dynamics, they cause amusement and activity” (Terpstra, personal communication, April 30, 2015). Other respondents could only endorse this. It is very clear, students are seen as a very welcome addition to the city. However, the municipality not only wants to attract students, it also wants to make an effort to retain them. As mentioned in the theoretical section, career opportunities and cooperation between educational institutes and business organizations are very important in this respect. The importance of these
aspects stands in line with the idea that students, when graduated and retained should contribute to the regional economy and regional innovation. As mentioned in the introduction, innovation is a very important aspect within the contemporary knowledge economy. Therefore, it should not only be investigated how students could be attracted and retained, but also how students could thereupon contribute to the regional economy and innovation.

This section further tries to elaborate on this aspect. Taking in mind the conceptual model, this section refers to the second important relation concerning regional innovation. First of all, it will be discussed how students could contribute to the regional economy and regional innovation in general. This process should not begin only when graduated, but also during their education. Second, it will be discussed how this student contribution is currently developed within the Venlo region. Third, important improvements will be discussed that might possibly improve student contribution. At the end of this section an answer will be given regarding the fourth sub question about student contribution to regional innovation.

4.4.1 General findings about student contribution

The role of knowledge in European cities and the role of higher education institutions in relation to regional innovation has been discussed within the theoretical part. Knowledge has become increasingly important, economic success very much relates to the ability to attract the creative class. It has even been stated that an educated and skilled population is one of the four pillars of a knowledge city. Along with the importance of educated and skilled people also knowledge institutes are increasingly important. As students being part of knowledge institutes, they are dependent on the engagement of these institutes within the regional economy. Important for regional innovation is the creation of networks between educational institutes and companies, because as mentioned, interaction between schools/universities and business is an important source of innovate processes. Increased interactive processes between diverse actors, continuous learning and trust are essential for economic growth. ‘Triple helix’ processes are also important in this respect, where government should especially facilitate relations between educational institutes and business organizations.

It has already been stated within the theoretical part that it is important that each actor takes the role of the other. It is therefore essential that educational institutes are very aware of processes within business organizations, but that companies should also be occupied with developing training and research. In practice this would for instance result in educational actors participating in business organizations and business organizations that co-create programs for students. Again, for municipalities it should be an important task to connect education and business and facilitate the whole process. Facilitating the process would for instance mean creating facilities
where education and business are able to meet. In short, it is clearly important that regional economic development and innovation is a cooperative process between education, business and municipality.

Three concrete domains where educational institutions could deliberately undertake action to contribute to regional innovation systems have been discussed. To repeat: research, education and active collaboration. Research refers to the fact that it should be focused on the core regional sectors and that research should be an agreement between regional actors. Education refers to the fact that there should be training relationships with firms, for instance training of post-graduates, internships, temporary exchange of personnel or training of firm employees by schools/universities. It also refers to the fact that educational programs should be adapted to reach firm’s needs and that there should be a strong regional focus on student recruitment and graduation. Active collaboration refers to the earlier mentioned ‘triple helix’ cooperation. For instance, meeting and conferences sponsored by industry, the setting up of spin-off or start-up companies and the earlier mentioned creation of physical facilities or renting of facilities and equipment.

The three domains all show the importance of adequate cooperation between educational institutes and business organizations. This aspect was also one of the six important aspects regarding attracting and retaining students. Thus especially considering the importance of regional economic development and innovation, connection between educational institutes and business organizations deserves all the more attention. Optimal cooperation between schools/universities and business would be beneficial for students. For instance, educational research projects could have a regional focus through which student generate regional insights as well as delivering academic insights for regional business. Another example would be that students become attached to the region through internships, which could cause them to stay retained within the regional economy. A last example would be sponsored meetings and conferences where students are able to meet regional business organizations and could be persuaded to stay attached to the region after graduation.

4.4.2 Student contribution to regional innovation in Venlo

The next step is to discuss how students are enabled to contribute to regional innovation, taken into account the abovementioned. All companies mentioned that there are cooperation’s with business and vice versa. It is already mentioned that the link between educational institutes and business deserve continuous attention and that it should be further developed all the time. But still, how are students able to contribute at the moment? First of all, there are several alliances between educational institutes and business organizations through which students are able to participate and benefit. The interviewed respondents mentioned things like, “we ask companies to come up with entrepreneurial issues for our students. Those can be simple issues for first graders, but also
dissertation subjects” (Van Leijden, personal communication, February 23, 2015), or “for 25 years we are offering internships, graduation projects and research projects for academic graduates” (Vergeldt, personal communication, April 8, 2015) and “students are working on a case together. Such a case can be theoretical, but it can also be introduced by a company. That a company has a concrete problem and wants to know how students think about it” (Burks, personal communication, March 2, 2015). Through these projects and cases, research at Fontys, HAS and University College clearly has a regional focus, which is one of the important aspects mentioned within the theoretical section, regarding regional innovation. The abovementioned training relationships are evident with internships and graduations projects within the region.

Regarding these internships and graduation projects, some nuances could be made. One company stated that they were reserved regarding offering internships to students from specific educational institutes, due to the fact that they had several poor experiences with interns. During the interview things were mentioned like, “there is zero guidance. We are guiding the people and they do not” and “experiences with interns last years have been dramatically, regarding their educational level” (Van Rijn & Van Baal, personal communication, April 30, 2015). According to this company the main reason for this failure has been the increasing gap between educational institutes and business organizations. This seem very important, because this specific topic was mentioned by many of the interviewed respondents. To cite some of them, “how can we really take care of this cooperation with educational institutes. That we can close the gap between business and education” (Hanssen, personal communication, April 22,2015), “I also think it is important that teachers are up to date about business and that they should once in a while probably visit companies” (Achten, personal communication, April 15, 2015) and “we should find an adequate structure, where teachers along with business take care of certain topics” (Swinkels, personal communication, March 5, 2015). This gap between knowledge and business is a very critical aspect and deserves a lot of attention, because this link is important for regional innovation, as well as for attracting and retaining students.

To enable student contribution it can be stated that cooperation between knowledge institutes and business needs to be optimal. As mentioned, regarding this aspect there is also an important role for the municipality. The municipality should have a binding role between the two other ‘triple helix’ constituents and they should enable cooperation through facilitating the whole process. So how does the municipality contribute to this process? Perhaps the most important role would be to create facilities where knowledge and business are able to meet. Shared facilities would contribute to the idea of spatial proximity that is important for the transportation of tacit knowledge. And it would improve interactive learning between knowledge and business. As mentioned earlier on in the theoretical section, students, schools and universities have the know-what and know-why, but know-how and know-who is only gained by interactive processes between knowledge and business.
The most important development in this respect is the development of ‘Brightland Greenport Campus Venlo’ in cooperation with the province (Provincie Limburg, 2014). This campus should facilitate regional focused (applied) research and innovation. The municipality also facilitates innovation projects, like ‘Bright Box’ at the ‘Innovatoren’ (Orval, personal communication, April 8, 2015), where facilities are provided for knowledge institutes and business organizations to cooperate. Such projects are supposed to be highly innovative. New knowledge will be developed that should eventually lead to more employment (Orval, personal communication, April 8, 2015).

One connection between knowledge and business deserves special attention, namely the link between University College and regional business organizations. The Venlo region traditionally is a region that is in need of applied science and research. The establishing of University college is evidently interesting to attract students, because it contributes to the image of a real student city. However, regarding contribution to the regional economy it remains unclear. As some respondents mentioned, “in relation to business it still has to develop” (Orval, personal communication, April 8, 2015), “I see University College a bit separate from the development questions dependent from business organizations” (Weij, personal communication, March 2, 2015) and “I think that we are indeed more interested in applied research than in fundamental research. Of course, it is nice that many things are investigated, but it only becomes real interesting when you are able to actually use it within business” (Achten, personal communication, April 15, 2015). The report about ‘Kennisas Limburg’ however states that knowledge intensive work and the ongoing necessity for innovation ask for a higher level of education for future employees within the region. Moreover, they state that the current supply of scientific research is too little to meet regional demands (Maastricht UMC, Maastricht University & Hogeschool Zuyd, n.d.). Indeed, the supply of scientific research is still very underdeveloped within the region. Still, the interviewed respondents clearly stated that applied research is still more interesting for them at the moment. In short, it becomes an important task to figure out how regional business would profit from scientific research. Only then, academic students are able to optimally contribute to the regional economy.

Last but not least, for students to eventually contribute within the region, they should be able to find a job within the region. The earlier mentioned factor regarding career opportunities becomes very important in this respect. This aspect is thus not only important for retaining students, but also for letting them contribute to the regional economy and innovation. This makes it all the more important for companies to present themselves towards students, in order for them to be aware of all the possibilities within the region. Factors like career opportunities and connections between knowledge institutes and business organizations turn out to be important for student retention, as well as for regional innovation. Most important now is to figure out how these aspects could be improved.
4.4.3 Improvements regarding student contribution to innovation

In general, it can be stated that career opportunities and links between knowledge institutes are the two main factors that have to be considered and redressed in relation to student contribution to the regional economy and regional innovation. Optimizing these aspects should more easily enable student to become aware, participate and contribute. Again, optimizing these factors would be at the same time beneficial regarding student retention. Taking into account the interviewed respondents, policy documents and academic literature regarding contribution to the regional economy and innovation, table 5 shows the two factors and most important potential actions to improve these.

Table 5: Actions to improve student contribution to the regional economy and innovation

<table>
<thead>
<tr>
<th>Main factors</th>
<th>Potential actions</th>
</tr>
</thead>
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| Career opportunities | • Improved presentation by business  
 |  | • ‘Improving ‘Venlo Partners’ business website  |
| Links between schools/universities and regional business organizations | • Decreasing gap between education and business  
 |  | • Improving interaction between teachers and business people  
 |  | • Improving link between University College and regional business  
 |  | • Improving ‘Venlo Partners’ business website  
 |  | • Consider and redress internships aspects  |

Table 5 clearly shows that students contribution especially depends from optimal engagements between knowledge institutes and regional business organizations. In other words, students would be enabled to contribute more optimally to the regional economy and innovation if abovementioned improvements would be dealt with by knowledge institutes, regional business organizations and the municipality who facilitates the whole process. These concrete improvements and how the ‘triple helix’ could deal with them to shape the regional innovation process are discussed in more detail within the next section.
4.4.4 Conclusion

This paragraph aimed to answer the fourth sub question, “How could the contribution of students to regional innovation be improved”? It has been stated that in order for improved students contributions, they need to be enabled by knowledge institutions and regional business organizations. The earlier mentioned factors about career opportunities and connections between school/universities and regional business organizations are very important in this respect. For the municipality, the task remains to facilitate the whole process and thereby also having a binding role between education and business. If these two factors are dealt with adequately, conditions for students contribution could improve. Some concrete actions are mentioned which knowledge institutions, regional business organizations and the municipality along with ‘Venlo Partners’ should consider to improve the whole process. The next section further elaborated these actions.

4.5 ‘Triple helix’ improvements to regional innovation

The importance of developing the regional economy and regional innovation has been discussed above, just like the importance of knowledge to contribute to this development. Moreover, it has been stated that students are an important source of knowledge, so it remains all the more important to retain students in order for them to be beneficial for the regional economy and innovation. The previous section made clear that student contribution particularly depends from the engagement of knowledge institutes, regional business organizations and the municipality within the regional economy and in relation to each other. To be more specific, the aspect of career opportunities and the connections between schools/universities and regional business organizations require most attention. Regarding these aspects, an analysis was made for the Venlo region and six important point were found that could potentially be improved to better enable students to contribute within the region (table 5). Within this section, these potential improvements will be discussed subsequently. For all six potential improvements it will also be discussed how the ‘triple helix’ constituents, knowledge institutions, regional business organizations and the municipality along with ‘Venlo Partners’ could deliver their contribution. At the end of this paragraph it should be clear how the ‘triple helix’ constituents could shape the whole innovations process. So referring to the conceptual model, this section concerns the relation between the ‘triple helix’ and the regional innovation process. To be more specific, it refers to how the ‘triple helix’ could shape this process by coupling know-what and know-why to know-how and know-who.

4.5.1 Improving presentation by business

The first improvement that will be discussed would be important for students to be aware of all the career possibilities within the region and regards improved presentation by business. As stated within the theoretical section, Darchen & Tremblay (2010) also discuss this aspect regarding
attracting and retaining students. As mentioned, the interviewed companies almost anonymously endorsed the fact that they paid to little attention to present themselves adequately to students and thus student awareness about regional opportunities remains to poor. Again, to cite some of the regional companies, “what I see is that it are always the same companies. Often the same faces” (Vergeldt, personal communication, April 8, 2015) and “what you see especially is that the same companies return” (Hanssen, personal communication, April 22, 2015). It becomes clear that there is only a small proportion of companies that present themselves properly, so this aspects should really deserves attention.

As mentioned within the theoretical section, Caniëls & Van den Bosch (2011) specifically state that higher educational institutes as well as regional industry should have a strong focus on student recruitment and graduate retention. In this respect, regional businesses should take their responsibility and start presenting themselves more adequately, especially because this would also be appreciated by students. The interviewed students mentioned things like, “well in theory, if there would be employment opportunities for me as a designer, I would consider to stay in Venlo” and “well, I just look where I can find a nice job” (Students, personal communication, April 20, 2015). This proves that improved presentation by regional companies is all the more important. First of all, it is an important incentive to persuade students to stay in Venlo after graduation and second, it is the first requirement for students to end up within regional business and start contributing to regional innovation.

4.5.2 Improving ‘Venlo Partners’ business website

The second improvement strongly relates to improving presentation of regional business companies. It regards the further development of the ‘Venlo Partners’ business website which functions as a central platform for regional business to present themselves. The importance of this central platform is evident for three reasons. First of all, as mentioned, it is an opportunity for regional business companies to present themselves while they do not have to put in much effort. Secondly, such a central platform opposes disintegration through the establishing of many different initiatives. Disintegration was mentioned by some of the respondents as a negative aspect and the business website was therefore all the more appreciated. Things were mentioned like, “the only point lost, I think there should be bundling” (Vergeldt, personal communication, April 8, 2015) and “to use such a platform for internships and vacancies would only be a good thing” (Kamps, personal communication, April 9, 2015). Thirdly and most important in this respect, it would be very much appreciated by the target group, students. The interviewed students mentioned things like, “it would be much better than the current system” and “it would be a nice way to be up-to-date regarding actual vacancies, instead of bothering each company who might not have vacancies at all” (Students,
To improve this website more regional business companies should be affiliated to it and to achieve this should be an important task for ‘Venlo Partners’. Currently there are only 26 regional companies affiliated to this website (Venlo Partners, 2015), whereas there are over a thousand companies within the region (Ondernemen Venlo, 2015). To reach these companies, ‘Venlo Partners’ should more actively attend regional business companies and that way try to affiliate them. Considering the interviewed business respondents that should not be such a problem, given that seven of the eight companies thought that such a platform would be a good thing, whereas only one of these seven is actually affiliated currently. Only one company mentioned that this website would become yet another platform to offer internships and vacancies. It was mentioned that, “I already communicate at five different spots. And if I understand you well, there will be a sixth one. I do not have enough time for that at all” (Rem, personal communication, April 22, 2015). So the ‘Venlo Partners’ website was not perceived positive by definition, yet it also again reflects the earlier mentioned negative aspect of many initiatives and differentiation. So in short, improving and enhancing the ‘Venlo Partners’ business website would deserves attention by ‘Venlo Partners’, especially by more actively attending regional business companies. The website would enhance the opportunities for students to find adequate internships and vacancies, that could eventually result in retaining them within the region after graduating. The importance of training of postgraduates and interns at firm in relation to regional development has been stated within the theoretical section. Only when attained students could start contributing to regional innovation, therefore the improving the ‘Venlo Partners’ business website is (indirect) important regarding students contribution to region innovation.

4.5.3 Decreasing the gap between education and business

Whereas the first two improvements regarded the aspect of career opportunities, the next four improvements are related to the connections between schools/universities and regional business organizations. As mentioned earlier, the importance of cooperation between education and business regarding regional development and innovation is evident. Also mentioned was the fact that several respondents endorsed the existence of a gap between education and knowledge within the Venlo region. Some of the respondents explicitly mentioned this gap by saying, “there is a distance between education, technique and business and what the clients actually demand from education” (Vergeldt, personal communication, April 8, 2015) and “and then teachers are invited and what did you see, their first attitude was, to busy, it does not fit in our curriculum. Well, I do not know what all this is, but it indicates how large the distance is” (Van Rijn & Van Baal, personal communication, April 30, 2015). An important task would therefore be to decrease this gap.
In this respect there is definitely a task for all three ‘triple helix’ constituents. It should be evident that educational institutes and business organizations have important roles, especially concerning the content of relationships. Considering the aspects mentioned by Caniëls & Van den Bosch (2011) and Van Winden et al. (2007), educational research already has an regional focus, but other aspects should deserve increased attention. Research agreements between regional actors could be improved, training relationships between education and business could be improved and meetings and conferences between education and business could be redressed, because here there are also a lot of initiatives and thus differentiation (Vergeldt, personal communication, April 8, 2015). Adaptation of educational programs to meet firm’s need is addressed separately here, to emphasize the rather peculiar thing mentioned by students, that most students from ‘Fontys school of logistics & technique’ are enrolled in ‘industrial product design’, yet as they experience it there are hardly any internship and career opportunities for them within the region (Students, personal communication, April 20, 2015). Of course, it has been mentioned that this is less the case for other studies like ‘mechanical engineering’ of ‘mechatronics’, yet it could be seen as a chance to consider the state of ‘industrial product design’. The abovementioned aspect should be redressed by education and business to decrease the gap between them, which enables and moderates students contribution to regional development and innovation.

Beside content roles for education and business, there is also a process role for the municipality. The interviewed municipality respondents acknowledge their facilitating and binding role, however, this role is not always experienced adequately according to some of the other interviewed respondents. Regarding this facilitating and binding role of the municipality, things were mentioned like, “actually we think that it is still insufficient” (Timmermans, personal communication, April 20, 2015), “no, we as a company do not notice that” (Achten, personal communication, April 15, 2015) and “if I think about Fontys, the projects we are doing, I do not see the municipality of Venlo over there. Well, even if it would only be supportive, that they set things up. I Think that would be a real point of interest for the municipality” (Hanssen, personal communication, April 22, 2015). This shows that explicit involvement of the municipality is regarded as important by stakeholders, yet still experienced too marginal. More explicitly taking a leading position could lead to more trust and faith among stakeholders that eventually could be important for economic growth and innovation, as addressed by Caniëls & Van den Bosch (2011).

### 4.5.4 Improving interaction between teachers and business people

Maybe the most important improvement to decrease the gap between education and business would be to improve interaction between teachers and business people. As mentioned earlier on in the theoretical section, improving this interaction would also be beneficial for students.
Two concrete mechanisms have been mentioned in this respect, namely temporary exchange of personnel and training of firm employees provided by the university. This way, ‘triple helix’ constituents take the role of each other, an important aspect that is also mentioned by Etzkowitz & Klofsten (2005) when they refer to the ‘entrepreneurial university’. Van Winden (2010) emphasizes the importance of network creation between university researchers and local companies. This could be related to the interaction between teachers and business people. Van Winden et al. (2007) state that in general the interaction between universities and business is far from optimal, so that this potential remains very much unused in many cities.

This is also the case within the Venlo region. Several of the interviewed respondents addressed this issue. They mentioned things like “I also think it is important that teachers are up to date about business and that they should once in a while probably visit companies” (Achten, personal communication, April 15, 2015), “it should actually be that teachers, according to my vision, should for a part stay working practice” (Van Rijn & Van Baal, personal communication, April 30, 2015) and “the real-time problems and innovation, if you stay involved with these, the knowledge that you gain, you convert it back to education. Then your net yield will be: better students, improved education and better teachers, because they are involved with the second pillar, research” (Weijs, personal communication, March 2, 2015). Improving this aspect could be beneficial for students and with that the whole region. Of course, temporarily exchange of personnel is a very drastic measure. To bring in some nuance, as a first step it should be considered by education and business to visit each other more frequently. So teachers should visit business companies more often and vice versa. It would contribute to having more feeling about each other’s daily occupations and how they could improve being complementary to each other to foster regional development and innovation, something that then could be passed to students.

This aspect should be picked up by all three ‘triple helix constituents’. Again, education and business should especially focus on and adjust content aspects towards each other. For instance, what does business demand from education? How could education contribute? What should be passed to students? What does education demand from business? How do things actually work in real-time business? All content aspects, that could be discussed more adequately by having more interaction. The role of the municipality in this respect again should be especially regarding the process. Facilitate interaction, bring actors together and bond between education and business.

4.5.5 Improving link between University College and regional business

The presence of University College in Venlo has been discussed earlier on in this thesis. By now, it still remains unclear how University College and the scientific knowledge that is created here can optimally contribute the regional economy and regional innovation. As stated, this is due to the
fact that business companies within the Venlo region are especially focused on applied science instead of fundamental science. Therefore, it also remains unclear how academic students from University College can optimally contribute to the regional economy in general and regional innovation more specific. So regarding improvement of student contribution to regional innovation, an important task would be to improve the link between University College and regional business.

Then what actions should be emphasized that could lead to this improvement? First of all, cooperation between the different knowledge institutes is important. To be more specific, students from different knowledge institutes meeting each other could be important. Therefore, it would be essential to optimize cooperation between fundamental science and applied science. Combining fundamental science and applied science focused on the region, could lead to better integration of fundamental science aspects. This cooperation should deserve more attention. As the respondent from University College mentioned in this respect, “I think in the Netherlands this is still very separate at all. I do not know for sure, but I do not see it that much” (Burks, personal communication, March 2, 2015). Another respondent also mentioned that the knowledge institutes are seeking more mutual cooperation. He stated, “we made arrangements that we are striving for a so-called ‘educational space Venlo’. This means that in a while, if you want to be a student in Venlo, it does not matter that much whether you sign-up at the HAS, Fontys or University” (Van Leijden, personal communication, February 23, 2015). This means that cooperation would be improved, as well as continuous learning tracks. In general, this could lead to stronger embeddedness of University College within the educational landscape. However, thoughts about this educational space is still in a very early stage, so not much can be said about this, except that it would be a very positive development.

The second action would them be to improve the embeddedness of University College within the regional business landscape. Students should be in contact with regional businesses and the best way to arrange this is through internships. Moreover, as the respondent from University College mentioned, “what you see often is that people stay at the last company, where they did their master thesis“ (Burks, personal communication, March 2, 2015). So again, in this respect the ‘Venlo Partners’ business website could be interesting, because then students and companies could be connected more easily regarding internships and vacancies. So in general, knowledge institutes have an important task to further optimize mutual cooperation and ‘Venlo Partners’ should further develop their business page to connect students and companies more easier.

4.5.6 Consider and redress internship aspects

Talking about internships, this aspect should also be addressed shortly. If internships are important to stay connected to a company, than it is very important that internships proceed well in order for companies to even consider to offer students a job. So when companies complain about
this aspect, these complains should be taken seriously. What is going wrong and how could it be improved? This is something that should be redressed by the knowledge institutes and business companies. As mentioned before, one complaining company stated that the increasing gap between the two constituents was the main reason. Improved communication and cooperation between the two ‘triple helix’ constituents could contribute this aspect. Of course, within this research only one of the eight interviewed companies complained about internship aspects, yet the gap between knowledge and business was mentioned by several of them. Taken into account the possible importance of internships for staying connected to a company and thus being able to contribute to regional innovation, these internship aspects should at least be considered. As internships are an important part of the connection between schools/universities and business organizations, these two ‘triple helix’ constituents should be occupied with redressing this aspect.

4.5.7 Conclusion

This paragraph aimed to answer the fifth sub question, “How could the ‘triple helix’ shape the whole innovation process”? It has been stated that students contribution to regional innovation should be enabled by the ‘triple helix’, thus there should be an important role for the ‘triple helix’ constituents to shape and improve this process. Whereas the previous paragraph mentioned six concrete actions to be taken, this paragraph elaborated these actions and it was stated how the ‘triple helix’ constituents could contribute to these actions. Table 6 shows the potential actions along with the ‘triple helix’ constituents that should contribute to the concerning action.

Table 6: Shaping regional innovation processes

<table>
<thead>
<tr>
<th>Main aspects</th>
<th>Potential actions</th>
<th>‘Triple helix’ contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career opportunities</td>
<td>• Improved presentation by business</td>
<td>• Business organizations</td>
</tr>
<tr>
<td></td>
<td>• ‘Improving ‘Venlo Partners’ business website</td>
<td>• ‘Venlo Partners’ &amp; municipality</td>
</tr>
<tr>
<td>Links between schools/universities and</td>
<td>• Decreasing gap between education and business</td>
<td>• Whole ‘Triple helix’</td>
</tr>
<tr>
<td>regional business organizations</td>
<td>• Improving interaction between teachers and business people</td>
<td>• Whole ‘Triple helix’</td>
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<td></td>
<td>• Improving link between University College and regional business</td>
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<td></td>
<td>• Improving ‘Venlo Partners’ business website</td>
<td>• ‘Venlo Partners’ &amp; municipality</td>
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<td></td>
<td>• Consider and redress internships aspects</td>
<td>• Knowledge institutions and Business organizations</td>
</tr>
</tbody>
</table>
5. Conclusions and recommendations

The goal of this research was to “figure out and formulate recommendations about how students could be attracted and retained for the city of Venlo and how these students could then contribute to regional innovation, by using city marketing and a ‘triple helix’ perspective”. To reach this goal several questions have been formulated. The main question within this research was as follows: “which city marketing strategies could be used by Venlo to attract and retain students and how could these students contribute to regional innovation, making use of a ‘triple helix’ perspective”? Five sub questions have been formulated that are helpful to consider before answering the main question. To be very clear, these sub question will be answered again shortly, before answering the main question.

The first sub question was: “to what extend are important factors to attract and retain students present and developed in Venlo”? Six factors have been addressed and an answer to this question has been found by interviewing the important stakeholders and asking them about the six factors found in literature. Regarding these six factors the following could be concluded. Academic reputation is already quite developed within Venlo, especially at Fontys University of applied sciences. Regarding quality of life, it is especially important that the target group appreciates it, as stated by the ‘secret of the angler’. The second sub question elaborated on this aspect. Housing should deserve a lot of attention, given that this factor is still underdeveloped within Venlo. Also career opportunities and cooperation between schools/universities and regional business organization should be improved. Last but not least, social networks are seen as very important by students in Venlo and should be taken into account.

The second sub question was as follows: “what kind of infrastructural facilities and aspects are seen as important for students to settle in Venlo”? As stated, here the ‘secret of the angler’ is very important. The answer to this question has been found by interviewing students about their interests. The interviewed students explicitly mentioned the following aspects. Things they are missing are proper students bars, real students nights, adequate central sporting facilities and central housing. An observational walk through the city center confirmed their missing’s. Although mentioned as important within several researches, cultural amenities were not mentioned a lot by the interviewed students. The ‘Venlo Partners’ student card seen as important by officials, was not valued very positively by the students. At least not in its current state.

The third sub question was: “what contribution could the three ‘triple helix’ constituents, housing corporations and students themselves make regarding city marketing to attract and retain students”? These improvements have been found by combining the previous two sub questions and by asking stakeholders how they thought about each other’s contributions. Furthermore, at some
points literature about the six aspects to attract and retain students addresses the role of different stakeholders in this whole process. Ten possible improvements have been mentioned that can be found within table 3. The most important improvement for the municipality would be focus, persistence and daring to invest regarding students as a focus group, corresponding with ‘the law of the strawberry marmalade’. All the other improvements make no sense if this first aspect is lacking. Second most important concerns ‘the secret of the angler’. Knowing students demands is essential, so student involvement within specific policies should be considered. Students demands are essential for adequate supply of facilities. Furthermore the municipality should increasingly create a general cause of attracting and retaining students among all important stakeholders. This general cause is important, because the other stakeholders should also contribute to student attraction and retention. Knowledge institutes should focus on alumni that could be ambassadors for the Venlo region. Business organizations should more adequately present themselves towards students. ‘Venlo Partners’ could contribute to this aspect by optimizing their business website. The whole ‘triple helix’ should be concerned with improving the link between knowledge and business. Last but not least, when all the aspects are adequate, the municipality and ‘Venlo Partners’ should not neglect to optimally brand the region. Important to remember: “you must not say you are attractive, be attractive”.

The fourth sub question was as follows: “how could the contribution of students to regional innovation be improved”? The answer to this question has been found by studying literature about regional innovation and by interviewing the ‘triple helix’ stakeholders about this aspect. In order for students contribution to improve, they need to be enabled by knowledge institutes and regional business organizations. The aspect of career opportunities and connections between schools/universities and regional business organizations are very important in this respect. The municipality has the important task to facilitate the whole process and act as a binding factor between education and business. If the two mentioned aspect are dealt with adequately, conditions for students contribution could improve. To contribute to the two aspects, six concrete actions have been mentioned that were further elaborated as part of the fifth sub question.

The fifth sub question was namely as follows: “how could the ‘triple helix’ shape the whole innovation process”? The answer to this question has been found by considering the improvements in the fourth result section, by asking the ‘triple helix’ stakeholders how they thought about each other’s contribution and by studying literature about the role of each ‘triple helix’ stakeholder in regional innovation processes. The six concrete actions, mentioned within the previous section, could contribute to shaping this process. These six actions were divided among career opportunities and the connection between education and business. Two concrete actions that could contribute to the aspect of career opportunities are improved presentation by business and improving the business
website by ‘Venlo Partners’. Four concrete actions that could contribute to the connection between education and business are decreasing the gap between education and business by the whole ‘triple helix’, improving interaction between education and business by the whole ‘triple helix’, improving the link between University College and regional business by the whole ‘triple helix’, again improving the business website by ‘Venlo Partners’ and considering and redressing internship aspects by knowledge institutions and regional business organizations.

This information could be used to answer the main question. Again, “which city marketing strategies could be used by Venlo to attract and retain students and how could these students contribute to regional innovation, making use of a ‘triple helix’ perspective”? Several improvements have been mentioned that should be considered, but this conclusion focuses on general strategies. First and most important strategy would be to improve focus on students as a target group. This is something that still is not experienced adequately by the interviewed actors. To speak in city marketing terms, optimally apply ‘the law of the strawberry marmalade’. It should not only be said that students are important for Venlo, but more importantly is has to be felt by students as well as other stakeholders. Second most important strategy is to listen very carefully to specific student demands. To speak in city marketing terms, apply ‘the secret of the angler’. Do not try to decide for students from a top-down perspective, but let them contribute from a bottom-up perspective. To retain students, adequate career opportunities and the connection between education and business is critical, factors that are also important for enabling students contribution to regional innovation. This makes these factors all the more important. At the moment, there is still a gap between education and business that should be decreased through improved cooperation and involvement of all three constituents of the ‘triple helix’. Increased involvement should be aimed at by improving the general cause of attracting and retaining students. A general cause that is still insufficient. Last but not least, it should not be neglected to create a unique brand that corresponds with the region and all involved stakeholders. Yet always keep in mind, first make sure that you are actually attractive, only then start saying it to the outside world. Table 7 summarizes the most important conclusions within this research.
Table 7: Most important conclusions

<table>
<thead>
<tr>
<th>City marketing strategies to attract and retain students</th>
<th>Students contribution to regional innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate focus on students as a target group is lacking (<em>the law of the strawberry marmalade</em>)</td>
<td>Awareness among students about career opportunities within the region is to weak.</td>
</tr>
<tr>
<td>Students are not listened to adequately (<em>the secret of the angler</em>)</td>
<td>The connection between education and regional business deserves attention</td>
</tr>
<tr>
<td>General cause among stakeholders regarding student attraction and retention is lacking</td>
<td>///</td>
</tr>
<tr>
<td>A unique and attractive brand for the region is missing</td>
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The recommendation that arise from this research for a large part correspond with the main conclusion, however more elaborated and for some conclusions made more concrete. Given that the main conclusion exists of six aspects, also six recommendation are formulated. They are as follows:

- **Improve focus on students as a target group**: it should not only be stated that Venlo wants to become a student city, it has to be perceived by all the important stakeholders. Therefore, adequate focus on students as a target group is essential. Of course, a municipality has to look after several target groups, yet this restrains to optimally focus on students. However, it could be achieved both. Take care of all target groups as municipality, but let ‘Venlo Partners’ more optimally focus on students. If ‘Venlo Partners’ can use its full capacity aimed at students, this would be beneficial for ‘Venlo, student city’ according to city marketing theories. Always keep in mind ‘*the law of the strawberry marmalade*’.

- **Listen very carefully to students demands**: students within this research already mentioned some aspects they thought would be important for a student city. Of course, it were only ten students, so it is difficult to generalize for the whole student population within Venlo. Still, it is an indication that students have specific demands and within city marketing it is very important to listen very carefully to your target group demands. Effective could be to involve students in the whole process, so their ideas and demands are more easily heard. Always keep in mind ‘*the secret of the angler*’.

- **Improve the general cause among stakeholders regarding student attraction and retention**: city marketing is a multi-stakeholder process. Therefore it is very important that all
important stakeholders are committed to the general cause of attraction and retention of students within the region. This general cause is lacking at the moment and therefore it has to be improved. Committing to this general cause would significantly improve policy aimed at students.

- **Improve awareness among students about career opportunities within the region:** for students to stay retained within the region after graduation, career opportunities are very important. This aspect could be improved if regional business companies would present themselves increasingly. Concrete action within this respect would be the improvement of the ‘Venlo Partners’ business website, by actively persuading businesses to become affiliated to the website. This would first of all be an opportunity for business companies to present themselves and second it would strengthen their commitment to the general cause.

- **Improve connection between education and regional business:** it has been stated that there is still a gap between education and business. This gap has to be decreased by improving the connection between education and regional business. Education and business should increasingly become aware of each other’s demands by improved cooperation. Examples would be increasing contact between teachers and business people and increasing cooperation between University College and regional business.

- **Create a unique brand for the region:** Important is to create an attractive brand for the whole region, based on what the region has to offer. This is still missing in Venlo. Important in this respect is that all stakeholders have to recognize themselves within the brand. Different stakeholders have been asked about their ideas about branding Venlo and five aspect were mentioned, namely logistics, agro/food, manufacturing, cradle2cradle and the small scale of Venlo. These were all mentioned as strong aspects of Venlo and could therefore be implemented within a unique ‘crossover brand’. These aspects represent the story of the Venlo region and this story should be told to the outside world.
6. Reflection

In general, the research has went very well. All the interview meetings and the information gathering have went according the preset research planning. Three concrete strong points are the following:

- A total of 27 interviews/focus groups have been conducted with a total of 39 stakeholders. This lead to an adequate amount of information that strengthened the final conclusions.
- Important within a research process are feedback moments. All the feedback has been processed adequately within the research, as a result of which the whole thesis has improved significantly.
- The gathered information (interviews, literature and policy documents) was very much. Adequate analyzing and information organizing was important to obtain and sort out the necessary information. This process in general went very well.

Of course, there are always aspects that could be improved within future research. Two important improvement points are the following:

- Given the fact that students are the general target group, more students could have been interviewed. Perhaps this should even be in the form of a quantitative research. An idea would be to combine qualitative and quantitative research. Within this research, student findings cannot be generalized, yet as stated it becomes clear that students have specific demands and these should not be neglected.
- Although the interviews went very well in general, at some points it stays difficult to adequately use probing questions. This is something to keep in mind and work on during further research.
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