**Master Thesis** 

# The Development of a Caribbean Island as Education Hub

The Case of Curacao

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# **General Information**

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# Preface

In some way, a thesis about a small island in the Caribbean seems to be unusual in connection with the studies of Business Administration but it fits perfectly to my studies content and my desire to learn more about the internationalized world, bringing me one step closer towards goal to work in an international environment. I wanted to gain further knowledge regarding the world's economy and its interconnected relations. During the last six years, I had the chance of traveling a lot and studying abroad, leaving me with many different impressions and experiences that developed my own character. After all this time, I had to find out how to complete my studies while connecting the current content of Business Administration with my interests. The solution was found after contacting the chair of Innovation & Entrepreneurship, who currently has a high interest in collaboration with students, representatives and experts concerning the economy of the Caribbean Islands.

The topic given to me was initially looking at Curacao as a logistic hub for Latin America and Europe and had its focus on trade barriers and trade agreements. However, after 4 month of research I found out that Curacao was trying to become a logistic hub since decades without any noticeable success. These findings lead to the thought of changing the focus of my research towards education hubs even though 90 % of my previously done research would then be useless. But still, after receiving the approval from my supervisors, I started again almost from scratch. Overall, I am proud that I have finished the thesis despite of the big complication and time-consuming problem.

First, I would like to thank Mr. Stienstra for his support during the writing process and for his efforts to find the right answers to my (sometimes not so easy) questions. Furthermore, I would like to thank my second supervisor Mr. Boorsma for his support, contacts and knowledge, which helped me a lot. I would like to thank Mr. Zuiderent for his support and the interview, Mr. van Tilburg and Mr. van Barneveld for setting up useful contacts for me and giving me the chance of participating in meetings with representatives of the Netherlands and Curacao. In addition, I would like to thank all participants of the interview for their time and the given information. Many thanks to Mr. Ziekenoppasser, Mr. Pieke, Mr. Oostindie, Mr. Jansen, Mr. Goede, Mr. Oleana, Mr. Martina, Mr. Halman, Mr. van Beetz, Mr. Bakhuis, Mr. Simons, Mr. van der Veer and Mr. Steegen. Finally, I would like to thank all my friends who supported me, were there when help was needed and accepted my (at times surely disconcerting) behaviour during the long and complicated time. I hope can give something back sometime. Lastly, it has to be said that the last months have not been easy due to different negative and unexpected circumstances concerning the topic and financial support, but I gained a lot of life experience from this. The last months have shown that not everything is always as expected but it is our choice to make the best out of it.

# **Executive Summary**

The study was focusing on the economic development of the small Caribbean island Curacao raising the idea of becoming a hub, more specific an education hub. An education hub can consist of slightly diverse hubs: (1) student hub (attracting students), (2) talent hub (attracting skilled workforces) and (3) knowledge hub (attracting international organizations). Countries, which can be seen as strategic pioneers in the idea of creating education hubs, are Singapore and Malaysia. The development of education hubs is linked to the rising student mobility and better cross-border higher education possibilities. Student mobility depends on "push" and "pull" criteria given at home and offered abroad. A "push" is a criteria or event in the home country like missing quality of studies, missing facilities, advice from friends and family or just personal subjective feelings. The "pull" means that a student is attracted by a foreign country due to the country itself, the given facilities, job prospects or the quality of studies. This thesis combined theoretical backgrounds and models with existing practical reports, a survey sent to Curacao experts and interviews conducted with Curacao and Dutch Antilles experts of different sectors with different backgrounds and working fields. This methodical approach aims at creating a detailed view on the island from different perspectives.

The empirical analysis has shown that Curacao at this stage does meet many criteria for becoming an education hub. It has a well-developed infrastructure, good proximity to other countries and a high level of cultural diversity including four different languages and a strong tourism and marine sector. However, Curacao also faces various bigger problems concerning the development of an education hub, one of them being the current political situation and its complications preventing a short-term implementation. Due to missing sustainability in the governmental sector, long-term planning is almost impossible but much needed to become a successful hub. In addition, the general attitude of the people on the island towards this idea can be complicated as inhabitants are afraid that foreign students or workers could take their jobs. Furthermore, a labour market protection law is in place and combined with the high level of bureaucracy, it is difficult for foreigners to receive a visa and to work in Curacao. Another problem is that, due to the small size of the country, there are only limited resources available to create an education sector, which would meet all needs of international students. The last issue is concerning education quality and education infrastructure. The universities in Curacao are small and do not provide the latest standard in research facilities. In addition, no overall high level of language is given and there is a missing diversity of international programmes. Thus, the overall conclusion is that Curacao will not be able to become an education hub in the short-term. They first need changes in policies, in attitude and a long-term strategy. Afterwards, they might be able to slowly develop a specialized education hub in the marine and tourism sector, by combining the student hub, the talent hub and the knowledge hub idea.

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# List of abbreviations

ABC	Aruba, Bonaire and Curacao
AUSOM	Avalon University School of Medicine
CARMABI	Caribbean Research and Management of Biodiversity
CIU	Caribbean International University
CMU	Caribbean Medical University
CURISES	Curacao institute for Social and Economic studies
FDI	Foreign Direct Investments
FID	Foundation for Innovation in Education
GDP	Gross Domestic Product
HAVO	Hoger Algemeen Voortgezet Onderwijs
НВО	Hoger Beroepsonderwijs
IAO	International Accreditation Organization
ICUC	The Intercontinental University of the Caribbean
MEO	Ministry of Economic Development of Curacao
MNC	Multi National Cooperation
MOHE	Ministry of Higher Education
NVAO	Nederlands-Vlaamse Accreditatieorganisatie
OBHE	Observatory on Borderless Higher Education
OECD	Organization for Economic Cooperation and Development
QNRF	Qatar National Research Fund
QSTP	Qatar Science and Technology Park
SBO	Special Basisonderwijs
SEP	Strategic Economic Plan
SPOC	Spin off Curacao
UDC	The University of Dutch Caribbean
UNESCO	United Nations Educational, Scientific and Cultural Organization
UoC	The University of Curacao
VO	Voortgezet Onderwijs
WHO	World Health Organization

## 1. Introduction

#### 1.1. Research context and -motive

In the last couple of years, the worldwide globalization and internationalization has increased more and more. Companies and states are more interconnected with each other. Mok & Yu (2011) stress that *"in an age of global economy, competition for human talents is less confined by territorial borders than it was in the past"* (p. 240). As a result of those global developments, countries, cities, as well as companies need to find their own way to become competitive or to create unique characteristics (Lee & Hobday, 2003). One major occurrence was the financial and economic crisis in Europe in 2008. In the Latin American, the economic development was quite negative, too, but those countries did not undergo such negative developments like what the European countries experienced (Powell, 2014). As a result, the region became more attractive for foreign companies and institutions.

Especially by talking about Curacao, two specific stakeholders are interested in research about future economic development possibilities. One stakeholder is the Ministry of Economic Development of Curacao (MEO), which has the aim to improve and develop the national economy by attracting foreign companies and institutions. Another stakeholder is the University of Twente, which proposed collaboration with members of the Spin off Curacao (SPOC) project, -an institution interested in Curacao-, to elaborate a practical guideline on the possibility to use Caribbean Islands (e.g. Curacao) as a hub.

Curacao is a South Caribbean island 55 km north of the Venezuelan coast and former part of the Netherland Antilles, nowadays called the Dutch Caribbean (Schwanecke, 2013; CIA World Factbook, 2015). Geographically, Curacao belongs to the Caribbean but since 2010 as a political entity, it is a fully autonomous country with internal affairs. However, Curacao is still part of the Kingdom of the Netherlands *(Government of the Netherlands, 2013; Nuffic, 2011)* and continues to have constitutional arrangements with the Netherlands *(CIA World Factbook, 2015; Ministry of General Affairs 2013)*. These arrangements contain the responsibility of the Dutch Government to manage defence and foreign affairs. Furthermore, 80-90 % of the regulatory system (laws and regulations) is equal to the Dutch one (Goede, 2008; CIA Worldfactbook, 2015) and the higher court located in the Hague can intervene if no appropriate solution can be found by the court of Curacao.

In connection with current global developments, countries are highly interested in becoming a specific hub but they need to decide what kind of hub they want to be. A hub (see Appendices Figure 1) in general can be defined as a central facility designed to function as turnstile for logistics, flow of information or systems with many origins and destinations, including influences on economic efficiencies (Campbell, 1994, O'Kelly, 1987; Lew & Mc Kercher; 2002). According to Lew & Mc Kercher (2002), the hub concept is linked to sectors of transportation, whereas the general function of a hub remains the same (Marianov, Serra

& DeVelle, 1999). The literature distinguishes different types and actors of international business hubs. One possibility might be the logistic hub, which fulfils functions like warehousing, transportation or distribution (Lee & Hobday, 2003; Lee, Huang & Teng, 2009). This hub type is linked to the intermediate hub, which is mostly located at major shipping routes and is beneficial to improvement of connectivity of maritime shipping (Rodrigue & Netteboom, 2010). Another hub type is the inland hub also called regional hub, which has an important role concerning efficiency influence on freight distributions. Through this type, the economy of an entire region can be improved (Bowen, 2000; Long & Grasman, 2012). A fourth hub type is the travel gateway, which gives access to a destination place or region and is concentrating on the touristic branch and itinerary (Lew & Mc Kercher, 2002). Finally, the education hub should be introduced, which is aiming for a critical interaction between local and international parties. Furthermore, it creates critical interaction between institutions on different levels "[...] in education, training, knowledge production and innovation initiatives" (Knight, 2011, p. 233). All variations and parties depend on rationales behind, or functions of the hub type (O'Kelly 1987) and are thus not specified in a general term because they first have to be linked to a specific hub type (Knight, 2011).

Taking into account the existing hub types and the geographical location of Curacao, its strong links to the Netherlands and, thus, other European countries and markets, the MEO had the impression that Curacao can create the opportunity to act as hub for (neighbouring) countries, in Europe as well as in Latin America. An idea was the development of a logistic hub in Curacao. However, this opportunity has already been investigated several times, last by the "SEO Economisch Onderzoek" in 2015, which found out that it would be unrealistic due to several reasons. The most important reason is the strong competition of Panama, with its internationally connected Panama Canal, and therefore comparatively stronger logistical conditions. Besides this, the small size of Curacao and the missing infrastructure is problematic ("Is Curacaos Harbour", 2015). Furthermore, the idea of using other countries as intermediate stop over for trading has become less important over the last couple of years because there are direct trading routes and possibilities existing (Van der Voort & Van Buiren, 2015). Concerning the travel gateway, it can be concluded that there is already some small hub existing because air and cruise tourism have already their impact on Curacao's economy.

As a result of this information, the search for additional alternatives, which could be realizable and beneficial for the economic development of Curacao, continues. In this context, the possibility of becoming a hub for education has been investigated as being potentially realistic (Van der Voort & Van Buiren, 2015). From literature, it is known that several countries like Singapore, Malaysia and Qatar are already trying to evolve into an education hub. These three countries are different to Curacao but can deliver useful information on requirements and criteria, which should be implemented in Curacao, too.

#### **1.2. Problem Statement**

A main problem of small Caribbean Islands like the Dutch Antilles is their limited potential for economic development. The growth rate estimated for the next ten years will only be around 1.7 percent if no changes will be made (Ministry of General Affairs, *2013)*. The growth rate of Curacao was 0.1 percentage points in 2012 (van der Molen, 2012). According to certain theories, state intervention in combination with steps and investments implemented by companies, institutions and entrepreneurs are necessary for a positive economic development. Thus, investigation is needed on what can be done to boost the economy of Curacao beside the already existing tourism impact. The idea in this thesis was an investigation of the general hub function of Curacao, which has already been narrowed down to the possibility of becoming and international education, which can have a positive influence on the economy by attracting students and organizations.

#### **1.3.** Previous theoretical research

Globalization and internationalization were major developments in the last decades and are often mixed up in literature (Altbach, 2004). Globalization can describe a development towards stronger interaction between people from different cultures and the global exchange of goods and ideas in different types of sectors e.g. education or finance (Chui and Duit, 2011). It further created the current forms and dimensions of internationalization of higher education (Huang, 2007). Main developments in the international higher education are made in information technologies, the shift towards a knowledge economy and the increased flow of people, knowledge and technologies (Knight, 2013). Internationalization of education leads to changes in the mobility of students and institutions (Naidoo, 2006, Teichler, 2009). The student mobility depends on push and pull factors, which are connected, to the home and also to the hosting country (Mazzarol & Soutar, 2002). Another term that has been named in this context, is cross-border education, which includes the development towards collaboration between institutes and countries regarding their education offers and policies (Knight, 2013; Lee, 2014)

The current developments in international education have created the term education hub. Depending on its development and objectives, an education hub can attract students, institutions but also knowledge institutes and skilled workforces (Knight, 2013) who can have a positive influence on the development of a city or country by improvement of expertise and thereby attracting foreign capital. It will be important to check which requirements and criteria are needed to become an education hub in general and, if necessary, to determine which sub-type could be realizable. The current literature on international education, education hubs and student attraction shows that there are already a lot of investigations and practical examples existing but without specific focus on the Caribbean.

# 1.4. Research Goal and Central Research Question

The goal of this study will be to investigate and develop recommendations for political changes, changes in the education sector and its infrastructure to improve the economic development in Curacao. It will be based on practical information and knowledge underpinned by existing theoretical literature and reports.

#### 1.4.1. Central Research Question and sub-questions

After the research goal, the central research question will be presented to show the overall focus:

# To what extent is it realistic and possible for Curacao to become an education hub, which boosts the national economy?

#### 1.4.2. Sub-questions

- How can education hubs and its sub-types be characterized in terms of potential, benefits and difficulties?
- To what extent are there already existing types of education and knowledge collaborations and institutions in Curacao?
- What conditions are necessary to realize an education hub and to what extent are those conditions already fulfilled by Curacao?
- What conditions are necessary to attract students and companies and to what extent are those conditions already fulfilled by Curacao?

# 1.5. Methodology

The research design is an explorative qualitative study. This study will developed by using Curacao as a case study with the aim to get an overview on existing challenges and opportunities, which can be tested for other Caribbean Islands like Aruba or Bonaire, too. The data collection process will be based on multilevel data collection, which includes quantitative and qualitative data. In the first part, data is collected using scientific literature (already existing articles), reports and data collected by different institutions e.g. ABC Advies (an institution focussing on the Dutch Antilles), the MEO or governmental and research institutes. The empirical part will be based on primary data (data that are especially collected for the research topic) (*Burns & Bush, 2008*). In this case, the semi-structured qualitative expert interview approach is adopted combined with a short survey. Both will be conducted with different experts of Curacao and the Dutch Antilles. The sampling method used is called "non-probability sampling". Afterwards, the data analysis will be done by using the method of open coding where each piece of data gets a code to make it analysable afterwards. The data will be categorized so that the interviews will be analysed on the same basis (Kaiser, 2014).

# **1.6.** Outline of chapters

Chapter 1 describes the current situation, context and goal. Furthermore, it includes the central research question, the problem definition and a short view on the planned methodology. The second chapter *"the theoretical framework"* focusses on the literature review. It investigates the globalization and internationalization of education and the term education hub, including its sub-types. Furthermore, the focus will be on the attraction of companies and students and it provides insight into specific characteristics needed to become a successful hub. Chapter 3 provides background information on Curacao including financial, political, educational and cultural factors. Afterwards, chapter 4 includes the methodology part, which will give an overview about the described data collection, the way of sampling and the way of analysis. Chapter 5 provides an overview of the results of the empirical research. It presents, interprets and summarizes the findings and analyses the collected data. The last chapter connects the empirical results with the theoretical research and finally, has a closer look on possible future research and limitations of the current study.

## 2. Theoretical Framework

#### 2.1. Internationalization of higher education

From the literature, it is known that a rising number of higher education services are used in the new globalized world because of the more open and integrated global economy (Daquila, 2013; Leung & Waters, 2013; Knight, 2013). According to Mazzarol (1998), education can be seen as highy intangible product. This theory can be supported by taking into account the nature of education which is a combination of establishments and provision of services which is often understood as an intangible process (Bebko, 2000). The tangible part belongs to the education facilities and the technical infrastructure provided to the students. Especially within the service sector, higher education became more focussed on international collaboration and became a new subject for universities and governments while being an important factor of modern industry (Frew, 2006). Influencing organizations in the context of internationalization of higher education are the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD) who provide guidelines on international higher education (Daniel, Kanwar & Uvalić-Trumbić, 2010). Furthermore, they provide statistics and reports about topics in education.

To explain the development of higher education, it should be distinguished between the internationalization and globalization in higher education both strongly related but still different (Kreber, 2009). Internationalization and globalization led to major changes in education and created a stronger interconnected world by offering opportunities but also bringing challenges (Knight, 2013). Globalization can be seen as process that influences educational policies on a global dimension (Jickling & Wals, 2008), having an impact on education in a financial way (financing education system), on labour markets (attraction of FDI and skilled workforce) and on national education needing be internationally competitive (Cornoy & Rhoten, 2002). Internationalization of higher education is recognized as a response of countries to globalization (Qiang, 2003; van der Wende, 2007; Tham & Kham, 2008). It can be defined as "the process of integrating an international dimension into the teaching, research and service functions of a higher education institution" (Knight & De Wit, 1995, p. 17) and includes the waves: (1) students move and (2) institutions move (Mazzarol, Soutar & Seng, 2003), whereas Marginson (2006) adds the terms global knowledge and networks between national higher education systems and individual institutions to the discussion. Outcomes of these internationalization processes are the expansion of activities on scope and complexity of universities and governments in the last years resulting in a growing amount of international students. Furthermore, critical factors like commercialization and competition lead to an overall improvement of the education quality (Altbach & Knight, 2007; Li & Bray, 2007; Knight, 2010; Wilkins & Huisman, 2012).

#### 2.1.1. Developments in international higher education

Higher education has been developed as a relevant service sector and it has the strength to determine economic competitiveness also within international trade (Shin & Harman, 2009). Therefore, a rising number of governments, especially in developing countries, are increasingly interested in higher education because of its potential for international competition and economic growth as well as the potential development of an educated/ skilled workforce (Hatakenaka, 2004). International activities regarding education have changed (shift to a knowledge economy) because of both the changed demand and the new opportunities in the social, cultural, political and economic sectors in the last years (Knight, 2013). Main stakeholders in the higher education are the government sector, the private sector and the education sector. The government sector includes the education departments, culture, trade and economic development, all on national and international level. The education sector includes private and public institution types and finally, the private sector includes trade, service and manufacturing companies. All sectors have different rationales, ranging from the promotion of the national identity to the improvement of the overall competiveness and finally, the improvement of whole education system (Qiang, 2003).

Besides its increasing importance, the international higher education includes three major developments: (1) a growing attention to worldwide mobility, (2) internationalization of curricula and (3) a growing popularity of the concept of globalization (Teichler, 2009). In the current development the terms transnational, borderless and cross-border higher education are often used interchangeable. However, cross-border education can be seen as the best example of globalization of higher education (Varghese, 2008). It describes the movement (virtual and real) of students and knowledge from one country to another (Knight 2002). This includes physical mobility (students, teachers and programmes), academic cooperation, academic knowledge transfer and international education with a cross-national and intercultural curriculum (Qiang, 2003; Varghese, 2008; Teichler, 2009). It further means that students follow a course that has not been produced in their home country on private or public higher education institutions (Daniel et al., 2010).

According to Daquila (2013), countries and institutions reacted to these educational changes and developments on both national and local level. Especially on the national level, the reactions were different; some countries became more open to the developments, whereas others decided to shut themselves off the new developments. Altbach and Teichler (2001) stressed that universities play a central role in this knowledge-based economy due to their influence on research, innovation and the training of people. Improving the own education sector can be one incentive to attract international players, or to create exchange or collaboration with other universities and institutions. In this context, universities have expanded their international activities, which include study abroad programs and branch

campuses (Altenbach & Knight, 2007). Branch campuses are the establishment of foreign universities abroad, providing the same programs as in their home country (Li, Lui & Mendez, 2013). Countries and institutions establish these campuses to generate revenue (Wilkins & Huisman, 2012). In 2015, 279 branch campuses exist worldwide and are spread over all continents (C-BERT, 2015). A high amount of them is located in higher education hubs (Wilkins & Huisman, 2011).

#### 2.1.2. Mobility phases of international higher education

International higher education has shifted from student mobility, which has been seen as the most common mobility and key element of international higher education (Naidoo, 2006, Teichler, 2009), towards programme mobility (twinning, franchise and virtual programmes) (Knight, 2013). According to Naidoo (2006), academic mobility can be understood as an intermediate development step between student and programme mobility. Student mobility has doubled in the last decades and programme mobility developed new forms of cross-border higher education especially via long distance programmes like e-learning courses (Naidoo, 2006). Programme mobility then developed towards to provider mobility (branch campuses) (Knight, 2013), also called institution mobility (Naidoo, 2006). The last step of further development contained policy mobility, meaning quality assurance, qualification frameworks and credit systems (Knight, 2013). One important element of mobility in general is the growth of a global labour market for scholars and researchers (Altbach & Teichler, 2001).

The development processes of mobility described above, had four major approaches (Naidoo, 2006). The first approach was mutual understanding, using student mobility as a way to improve political, cultural and social connectivity. Second, the skilled migration (human resource) approach focussed on attracting highly skilled people to stay in the country. Third, the approach of creating capacity, aiming at increasing the amount of higher education institutions and finally, the approach to generating revenue via international students paying fees and investing into the country (Hatakenaka, 2004; Naidoo, 2006). These approaches are considered as significant factors for institutional and national income and economic development (Qiang, 2003).

In the context of mobility, it also needs to be taken into account that the dominant stream of students goes from less developed to higher developed countries (Altbach & Teichler, 2001; Li & Bray, 2007) having comparatively lower tuition fees and living expenses (Varghese, 2008). This trend mainly results from missing numbers of talented students and therefore missing governmental support for higher education in those less developed countries (Li & Bray, 2007). For further explanation figure 2.1 describes the flows in the worldwide environment of higher education.



Figure 2.1: Student flows in the worldwide environment of higher education (Source: Marginson, 2006)

In 2012, 1.8% of the around 222 million total tertiary enrolled students went abroad to study (UNESCO, 2014). In Aruba, as example of the region, 105 students went abroad and 13 international students came to use the university as international hosting institution (UNESCO, 2014). Total numbers for Curacao have not been published yet.

#### 2.1.3. Models of international higher education

Besides the increase of mobility or the development of branch campuses, supporting the development a country as knowledge industry can also be done by implementing different models for international higher education (see Figure 2.2). The implementation of these four model types depends on the aim pursued by the responsible governments.



*Figure 2.2: Model for the globalization of higher education (Source: De Meyer, Harker & Hawawini, 2004)* As the models present different approaches to potentially improve the educational system of a country (Olds, 2007). The import model (1), is the most common approach of western universities and important for Singapore's universities to improve their knowledge level. It is used to internationalize programs and projects to attract foreign students to the institution and country. This model is still limited regarding its ability to create a successful linkage between industries and universities for sure (Olds, 2007). Another model is the export model (2), which includes the requirement that the core faculty of a foreign university is based at a central campus to create knowledge by exporting its courses. Concluding, this model is the theoretical way for the realization of the twinning programs (Olds, 2007). Twinning programs are programs from a foreign university offered by overseas partners (Li, Lui & Mendez, 2013). One critical aspect of the export model for universities and countries is the possibility of distance learning via video conferences without showing physical presence in the course. The partnership model (3) is based on the idea to exchange students and faculties with the aim to operate together in teaching and research. It is a low risk model for both the local sponsor and the foreign university. Due to this, it has often been adopted by Singaporean Universities in cooperation with Australian or American Universities. Finally, the network model (4), is adopted by six foreign universities in Singapore, i.e. the University of Chicago and the INSEAD Business School. This approach is complex, risky and the least implemented due to its aim of developing branch campuses in other countries. This model however, helps to develop global networks by sharing materials and information, as well as having a flat hierarchy (Olds, 2007).

#### 2.1.4. Issues, challenges and uncertainties of international higher education

Besides the investigation on possibilities to improve the education system and the presented positive aspects of international higher education, it also faces several problems (Altbach & Knight, 2007). One issue is whether the institutions are reliable, meaning the existence of valid registrations and accreditation of their courses and programs (Altbach & Knight, 2007). It is implied that accredited programs offered in the home country do not count as accredited elsewhere, too. Another problem is the expected high quality standard of the offered courses and whether this standard can be ensured or not. This has to be controlled by the countries planning to attract foreign universities and courses (Altbach & Knight, 2007). The last mentioned issue says that institutions need to recognize the foreign gained qualification and knowledge because this recognition will be important for the later employment of the student (Altbach & Knight, 2007). Another problem faced in the past was investigated by Tham and Kham (2008) and is more linked to the education and country environment, which means the focus on legal policy issues and regulations. This further includes incentives and research grants by the government.

In addition to the issues presented above, the literature stresses possible uncertainties and challenges. Challenges in this context mean political realities, the national security, government policies, European Union policies and the cost of study that need to be taken into account (Tham & Kham, 2008). For attracting international students, countries need to adjust their policies and rules but also expand their capacity and invest money. Important is also the language and the internationalization of the curriculum. The common international education language is English, meaning that non-English speaking countries need to adjust their education languages (Cheng et al., 2013). A further uncertainty in the international education is the current and further development of e-learning possibilities. Changes, especially in the online connectivity, reduce the importance of geographical mobility of teachers and students (Cheng et al., 2013; Daquila, 2013) (see chapter 1.1.3).

#### 2.1.5. The development towards an education hub

Overall, the cross-border student phenomenon has economic, political, psychological and academic influences on both receiving and sending institutions and countries (Altbach, 1989). The impact and success of international higher education will depend on the country. In some markets, it will become a major economic sector whereas in other markets it will not grow larger than a niche economic sector (Altbach & Knight, 2007). In this context, one recent idea is the creation of a regional education hub (Knight, 2010) which will be described in more detail in chapter 2.2. Before the focus turned towards the idea of becoming an education hub as the third generation of cross-border education, the literature presented two preliminary phases, namely the first and second generation of education (Knight, 2014). These phases also contain the development of the different mobility phases presented above.

The first generation of cross-border education was linked to student/people mobility. Students are more interested in full degree, short-term studies, exchange programmes and internships whereas the scholars want to strengthen international research collaboration and networks. In the second generation of cross-border education, the focus was more on programme and provider mobility (Knight, 2014). Overall, the demand for higher education has risen worldwide in the last decades because of technological changes and the related importance of the knowledge economy (Leung & Waters, 2013). Therefore, international higher education can be seen as one central element of the future economy (Altbach & Teichler, 2001)

## 2.2. The education hub: its aspects, challenges and sub-types

#### 2.2.1. An education hub

Further, to already given explanations on education, according to Knight (2013+2014), the term education hub has become present since 2010 as a result of a higher amount of hub announcements and can be understood as an *"important new [recent] development"* (Knight, 2013, p. 374). This statement can be underlined by taking into account Wilkins and Huisman (2011) who stated that an education hub could be seen as a new development of the global higher education in the 21st century. An education hub aims at creating a critical interaction between local (domestic) and international (foreign) actors on different levels *"[...] in education, training, knowledge production and innovation initiatives"* (Knight, 2011, p. 233), and is often located at a large research university (Turpin et al, 2002). Furthermore, an education hub includes a planned investment in services of the knowledge economy to

attract a foreign population and foreign direct investments (FDIs). Creating those hubs is a way to import education services and quality brands from systems that are more qualified and thus setting up a new market to attract students to another region (Richards & Abd Aziz, 2011 via Cheng, 2010). The first ideas on education hubs have been developed in 1990 in Singapore and Malaysia. One reason was that Malaysia had to fight against a large exodus of local students, whereas Singapore had problems with the currency crisis and wanted to promote its own industry by exploring a new sector (Knight, 2014). The newest figures show that in 2013, 15 already existing education hubs were spread all over the world, mainly in Asia and the Aribian states (C-BERT, 2013).

An education hub can create talent in a country in three different ways: (1) development of local talent, (2) attraction of foreign talent and (3) repatriation of diasporic talent (Lee, 2014). The focus of an education hub is mainly on the education sector, complemented with industry sectors (i.e. R&D) (Knight, 2014). Furthermore, it focusses on cooperation's or partnerships between various foreign and domestic actors (e.g. governments, higher education institutes and foundations) (Lane & Kinser, 2011; Lee, 2015). In literature, distinctions between education centres, focussed on the more traditional teaching task, and education hubs, as a more specialized knowledge creating alternative, can be found (Lai & Maclean, 2011; Lee, 2014). Looking at it from another point of view, todays education hubs are more focussed on emphasising the possible process of knowledge production and innovation (Knight, 2014). Therefore, they are not only economic tools, but also able to function as powerful strategic, rhetoric or communication tools used by media, governments and policymakers to make the host country more attractive for (foreign) organizations and students. The term education hub is further used to underline initiatives taken by countries, especially in the Asia region, to position themselves as centres for higher education (Kinser & Lane, 2010). It forms part of an evolution process in the higher education and can be used to improve the global competitiveness of cities or states (Kinser & Lane, 2010).

#### 2.2.2. Underlying aspects and challenges of an education hub

According to Knight (2011, 2013), an education hub can be investigated by distinguishing three aspects, namely (1) "scale", (2) "level of engagement" and (3) "intended range, spread or impact". The "scale" refers to the level or magnitude of the (education) hub; hence, it has to be decided whether the aim is to create a hub-zone or a hub-city; both are linked to a specific geographical area, or a hub-country, where the focus is on the interconnection between actors and initiatives, instead of geographical proximity (Knight, 2011). According to Short, Breitbach, Buckman & Essex (2000), all cities and countries can act as a hub to support the globalization in the field of economy, politics and culture. In the context of scale, the strategies investigated by Kinser and Lane (2011) can be clarifying. They stress that the implementation of an education hub can be done by using two different strategies. First, (1) a nation will be developed as an education hub where international

education institutions will be spread across the whole area without being in close proximity, called *archipelago hub*. Second, (2) using the *acropolis hub*, the education hub will be designed by having all institutions located very close to each other in one area of the country. One idea of such a close location can be science parks where knowledge exchange takes place in a facilitating environment for companies, potentially leading to possibilities of regional economic development (Chan, Oerlemans & Pretorius, 2010). Bringing the scale of an education hub into the context of this research, all three possibilities are potentially imaginable: (1) Curacao as an education hub (country), (2) Willemstad, the capital, as an education hub (city) or (3) a specific area in Curacao or Willemstad (zone).

The second aspect is the *"level of engagement"*. It focusses on the ability to create a beneficial surrounding close to the hub. According to Knight (2010), a sustainable and successful hub for education should fulfil different requirements and criteria for substantial planning, which includes supporting policies, physical, technological and human infrastructure, supplemented by investments of several participants.

The last aspect is the "the intended range spread or impact", which focusses on the size and the final influence of the hub (Knight, 2011), i.e. whether the hub is able to develop or generate the supply of education, skilled workers or new knowledge/ innovation. Sklibeck & Connell (2006) present two aspects, which are important to become an education hub. First, as stated in paragraph 1.1.4, the curriculum has to be changed to English as the teaching language, to improve flexibility and strengthen the competitive position in the international context. The second strategy is the improvement of the facilities and its processes. This includes more schools and easier enrolment, better quality assurance and national support for international students. This information indicates that the development of such a hub depends on many criteria and factors like decisions, and strategies and polices which cannot be standardized for sure success (Knight, 2010). In addition, there are currently more speculations and questions concerning the term education hub than clear practical answers or conclusions (Knight, 2014). To circumvent those problems one proposal was adequate and sufficient social and academic support (Richards & Aziz, 2011). In general, governments need to provide support to maintain satisfaction of students like in Asia (see Chapter 2.5 (Richards & Aziz, 2011)). During the creation of an education hub, policymakers (i.e. government ministry directors) and institutional leaders (i.e. university presidents) are concerned about meeting the needs of local students when the focus is too strong on the recruitment of foreign students (Lee, 2014). One underlying reason of an education hub is the development of (local) talent (Lee, 2014) by developing a profitable education industry as well as preparing for local students for a globalized world (Lai & Maclean, 2011). Summarizing the given information, it can be concluded that an education hub is a planned region (city, country and area), which has to be sensitive towards other cultures and needs of international students but should not forget about the requirements of its local students.

#### 2.2.3. Possible sub-types of education hubs

The differentiation of the term education hub has mainly been investigated and proposed by Knight but other authors have also explored the three sub-types (student hub, skilled workforce hub and knowledge hub), too. Knight can be seen as the pioneer in the investigation of the term "education hub" as many authors writing about hubs and education stated her as reference. According to Knight (2014), three education hub models exist with a focus on different actors, who have access to the institutions of higher education. First, she "the student hub", followed by "the talent hub" and finally, "the mentions innovation/knowledge hub". The separation is based on rationales driving their development. However, the rationales of these three types are strongly connected in terms of decisions made by their key actors and key policy sectors. Therefore, the sub-types of an education hub cannot be completely separated (Knight & Lee, 2014). Another factor pointing towards the separation of the sub types is that they are not necessarily building on each other; hence, the innovation hub should not be understood as the final stage aspired to achieve. All types have their own advantages and disadvantages, which have to be evaluated by taking the specific needs of a city/ country into account (Knight & Lee, 2014). In general, it has to be considered that the term education hub and the sub-types are used in a broad context. Thus, countries or cities need to decide in what field they would like to become excellent locations (see Qatar Chapter 2.5.3.). Potential fields for Curacao will be examined later in this thesis.

#### 2.2.3.1. The student hub

The student hub is "the most focussed and probably the most prevalent type of education hub" (Knight & Morshidi, 2011, p. 600). One possible way to explain the student hub has been described by Buultjens & Robinson (2011), as an area where students find everything needed for their study and university life. Connecting it to the underlying aspects of an education hub described above would mean that Buultjens and Robinson (2011) define the scale of a student hub as a zone.

The basis of the student hub is built on different objectives. Besides its aim of student attraction, revenue generation, teaching and learning, it aims at strengthening and modernizing its own educational infrastructure, creating competitiveness in the regional education sector and provides access to international higher education for local students (Knight, 2013; Lee, 2014). An additional objective is the modernization, the already presented internationalization and the quality improvement of the domestic higher education sector. This can be realized by local universities in cooperation with internationally renowned institutions (Knight & Lee, 2014). For a successful realization, those institutions must guarantee a high amount of quality, especially in management practices, academic programs and in teaching/learning methods (Knight 2014). Another key activity of a student hub is the education and training of students, regardless whether local, expatriate or international (Knight, 2013). Main policy sectors forming the development of the student hub are (1) the

higher education sector with its education facilities and international connection as the primary sector, followed by the secondary influencing sectors (2) trade, (3) foreign affairs and (4) tourism. These secondary sectors build the business bridge between the education sector and the professionals and students (Knight & Lee, 2014). Besides these sectors, a student hub includes key players like higher education institutions both local and foreign.

#### 2.2.3.2. The skilled workforce/ talent hub

The skilled workforce/ talent hub, which focusses on student education and training while having a different "main" goal, namely the human resource development towards a skilled overall workforce (Knight, 2014) which stays within the hubs country (Knight & Lee, 2014). Educational institutions have to develop programmes for international, expatriate and national students but also for local employees. In addition to the overarching goal the skilled workforce/ talent hub also aims at an expansion of the talent pool of skilled workers, the creation of a knowledge- and service-based economy and the improvement of the competitiveness by strengthening the quality of labour (Knight & Lee, 2014). In a skilled workforce/ talent hub, some regulations are adjusted to create this useful pool of talents. One special rule is the existence of liberalised employment and immigration regulations for foreigners. Another supporting idea is the privileged treatment of students compared to non-students, e.g., receiving work visa or permanent residency easier (Knight & Lee, 2014).

The influencing sectors of the skilled workforce/ talent hub are more industrially focussed instead of being just interested in the education infrastructure. Primary sectors are labour/industry, education, HRM and the immigration sector, complemented by foreign affairs. The education sector is forming the skilled workforce/ talent hub (see student hub) whereas the other three primary sectors aim at creating long-term human resource development by providing higher education and training (Knight & Lee, 2014). Home companies, the key players of the skilled workforce/ talent hub, assist these sectors. They can offer internships or other practical support. In a skilled workforce/ talent hub, the education institutions and providers are co-located to strengthen collaboration and enabling the shared use of facilities (Knight & Lee, 2014).

#### 2.2.3.3. The knowledge hub

The concept of the education hub is often used interchangeably, especially with the concepts of knowledge hub (See Appendices Figure 2) (Olds, 2007; Sidhu, Ho & Yeoh, 2011). A knowledge hub takes time and is strongly path-dependent, because it is based on earlier social and economic factors (Evers, 2008). Furthermore, it can be understood as a collective of knowledge-intensive organisations in both private and public sectors (Turpin, Marceau, Garrett-Jones, Appleyard & Marinova, 2002). This last category of an education hub mainly aims at attracting foreign universities, companies and research institutes to establish a department in the country. According to Lee (2014), the knowledge hub is not

defined as a physical or spatial term but rather as a network between different actors, both national and international and as a "platform to recruit foreign talent in the form of students and researchers (p. 819). This statement has to be seen critical because there are also physical possibilities like a research lab. According to Penco (2011) adds that a knowledge hub can be defined as an area where e.g. high-tech industries corporate headquarters of Multi National Corporation's (MNCs), higher education and research institutions and knowledge-intensive businesses (finance and consulting) are hosted (see Appendices Figure 3). Knowledge hubs further connect knowledge intense business with areas of higher education, research and development and other knowledge-intense business. Besides recruiting foreign talent, a knowledge hub includes the generation, transfer, application and transmission of knowledge in the community by using education and training via various institutions (Turpin et al., 2002).

Evers (2008) adds the term knowledge cluster to the discussion regarding the term knowledge hub and says that both terms are often used arbitrarily. A cluster is more linked to the agglomeration of organizations, while a hub rather refers to nodes in networks of knowledge sharing or knowledge spread in and beyond clusters (Evers, 2008). Key cities around the world intend to become knowledge hubs, containing clusters of education, training and research institutions, which are then strongly connected to the industry, especially technology parks and other private sector R&D facilities (Turpin et al., 2002).

A knowledge hub aims at implementing strategies to increase public funding (Knight, 2014). According to Knight (2013), an innovation hub has four further objectives: (1) The construction of a knowledge- and innovation-based economy, (2) the attraction of FDIs, (3) the creation of local research institutions and finally, (4) the improvement of soft power. The term soft power implies that one country creates demand for its policy and behaviour, resulting in other countries wanting what this country already has (Nye, 1990). Soft power is based on three resources being culture, political values and foreign policies (Nye, 2008). A city or country can be a knowledge hub due to its possibilities of hosting high tech industry, corporate headquarters, higher education and research institutions or knowledge intensive businesses like consulting or financial services (Penco, 2013)

An additional aspect that separated the knowledge hub even more from the other two is its broader focus not just on education and training but also on knowledge production and distribution of processes (Lee, 2014). This hub type is also led by some sectors: (1) science and technology, (2) trade, (3) labour/industry and (4) economic development (Knight & Lee, 2014). Besides these above mentioned primary sectors, the secondary sectors education and immigration facilitate the national and international networks (Knight & Lee, 2014). Key actors in this hub type are research agencies, local/ foreign higher education institutes and local/foreign R&D firms, added by business councils or trade boards as secondary actors (Knight & Lee, 2014).

#### 2.3. Hub Criteria: Specific characteristics for education hubs

The aim of investigating these characteristics is to find possible success factors for the implementation of a hub. According to Long and Grasman (2012), a hub has to meet criteria in terms infrastructure, proximity to the market, land availability of and governmental/industrial support, all having a different level of importance. It has to be considered that barriers in relation to the criterion infrastructure of a country or city can arise (Lee & Hodbay, 2003). This characteristic can be seen as a first level criterion, which has to be fulfilled to create a successful hub (Long & Grasman, 2012). It can be divided into soft and hard infrastructure. Hard infrastructure is rather linked to IT, transportation and logistics or educational and leisure facilities. Soft infrastructure is more linked to the spoken English, the role of government, social infrastructure, international culture, competitive financing and strong supply of skilled people (Lee & Hodbay, 2003).). Problems that can occur concerning the soft infrastructure are labour laws and perceptions, a lack of transparency or high costs of labour. Furthermore, there could be tax issues, bureaucracy, regulations or market protection that cannot be overcome and/or senior management prefer other locations (Lee & Hodbay, 2003). An education hub aims at creating knowledge and this is only realisable with enough institutions and a talented workforce. This can be supported by having infrastructural facilities like universities, campuses, specialized libraries, housing for students, skilled lecturers, research institutes and student jobs. Besides this educational infrastructure, a country needs infrastructure in terms of streets, harbour and airport with good connections in order to handle the flow of students and workers. Improvements in these areas can attract students and MNCs from around the world (Lee, Huang & Teng, 2009). The higher amount of students can attract more MNCs while more MNCs will again attract more students and workers.

With respect to competitiveness, the literature gives some examples of criteria, which should be given for hubs to have a chance of being successful. Scholvin and Draper (2012), mention that one beneficial point, which enables a country to be a hub, lies in its location and physical geography. This is only useful if the representatives of the country make the right decisions towards its possible beneficial position. The proximity to other hubs or markets can strengthen the success and position of cities or countries. The efficiency of such a network depends on the location of the hubs, thus the problem is to find the optimal hub locations as well as to allocate the remaining nodes to these hubs (Long & Grasman, 2012). Centrality can depend on the proximity to the market mentioned above. Good hinterland networks depend on land availability and geography, but also on infrastructure or distance between origin and destination (Rodrique & Notteboom (2010b). Furthermore, regional connectivity is a term that needs to be noted in this context because it means that hubs lead to region opening for external influences (Scholvin and Draper, 2012). This is beneficial for the local market, which again needs supportive conditions and business possibilities (Bowen, 2002).

Rodrique & Notteboom (2010b) argue that purposely generated hubs function as interfaces and can be impacted by several factors (e.g. policies), whereas a natural hub is mainly based on the level of accessibility and the economic activity of the hinterland. Furthermore, being a hub does not only lead to the ability of transporting goods. It is also the possibility to attract investments to the region and connect regional economic processes with the globalized world. In this relation, Lee, Song & Ducruet (2008) give examples of specific hubport cities, which have several individual beneficial characteristics like their location, their economy or the whole business environment.

#### 2.4. The growing and developing process of a hub

Besides the clarification of the term hub, it has to be defined whether it is a developing or growing process and whether the specific process leading to a hub is controllable or just steerable. These questions have been investigated by Lee & Hobday (2003) and afterwards by Lee (2015), presenting a clear vision by showing that it can be seen as a development process. According to Lee (2015), it is important to have a clear policy and strategy for claiming to be an education hub, otherwise it is only rhetoric and not testable. First, it has to be taken into account that each country has its own development approach, expectations and set of drivers and that there is no uniformed approach for the development of an international (education) hub. Only some countries self-identify as an education hub and adopt fix strategies or policies (see Chapter 2.5). Furthermore, it has to be considered that the government is building the education hub whereas the institutions are rather focussed on the implementation of specific policies like the idea of attracting students (Lee, 2015).

The first requirement for becoming a hub is a general demand on (business) development in a region (e.g. Curacao). Without this overall demand, the country is not forced to take any steps towards its development (Lee & Hobday, 2003). A problem that can occur is that interested companies/institutions face difficulties of unknown costs because of their unfamiliarity with local economy, cultural and political rules, regulations and business norms. MNCs or institutions can only be attracted if the city/ country has a strong business case and a positive brand image (Lee & Hobday, 2003). An additional challenge for a potential hub country is to bring new companies/institutions to the country but keep existing ones in the country at the same time. Summarizing the aim of hub development, the implementation of hubs can only be an intermediate stage in the developments of a connection between the region and the globalized world (Rodrique & Notteboom, 2010). Furthermore, it has to be considered that the development of one hub-type does not exclude the establishment of another type or the implementation of other strategies (Lee, 2015)

#### 2.4.1. Attracting international companies and institutions

As already underlined in previous chapters, globalization and internationalization have developed and changed in the last decades because of better communication, freer trade and increased mobility (Andreassen, 1995; David & Friske, 2013). On company level, these changes created the possibility to work on global markets and improved company's opportunities to a more global way of thinking. On country level, the literature presents four environmental factors with influence on the national policy (Austin, 1990): (1) political factors, focussing on stability, ideology, institutions and geopolitical links, (2) the demographical factors, focussing on aspects like population growth, age structure, urbanization, migration and health status, (3) cultural factors including aspects like religion, gender roles, language, human nature perspective and social structure, (4) the economic factors, which imply that natural resources, labour, capital, technology and infrastructure play a role for companies to decide whether they do business in a country or not. These environmental factors are further influencing the business environment, which depends on: (1) the international environment including interaction among countries, (2) the national environment meaning the policies and strategies adopted by the government, (3) the industry level focussing on the structure and dynamics and finally (4) the company level that is about the strategies and operations of companies (Austin, 2002). All these aspects have to be considered for answering the question whether Curacao can become an education hub or not. The political pillar influences the necessary steps in Curacao, whereas the demographical pillar can be linked to the possible amount of students and available workers on the island. The cultural aspect can be connected to the education language, the students feeling or the program setup and the economic pillar is more linked to the educational infrastructure.

In this context, Andreassen (1995) presented a theoretical scheme that implies a possible approach for small countries to attract multinational companies. This scheme can be applied to other organizations as well, because they face the same processes and need the same requirements. On the one hand, the model of Andreassen (1995) includes the four pillars of Austin (1990) linked to the government and influencing the countries business policy and the competitiveness of companies. On the other hand, it shows the interconnection between decisions made in the country and their underlying results (see Figure 2.3).



Figure 2.3: The circulation of attracting companies (Source: Andreassen 1995)

First, the country has an influence on the company's reputation (H2) through its welfare policy (H2.2) and its business policy (H2.1). Furthermore, the business policy in a country influences clusters (H1) and those clusters have an interconnection with the reputation of a company (H3). The more companies in one industry, the higher the reputation for the country one the one hand, and the creation of clusters on the other hand (H3). In addition to this, the country's reputation has impact on attracting new companies (H3.1) or on recruiting a new workforce (H3.3.) which further influences the development of clusters (H3.2). These new recruits strengthen the workforce base (H3.4) in the country. This workface base is influenced by the government's welfare policy (education and health care) (H4) and is interconnected with the development of clusters and the recruitment of new companies (H4.1). The last factor influencing the welfare policy in this possible development "circle" is the existence of tax revenues. The more workforce and companies in the region, the higher the tax revenues which can be used to improve the welfare policy and thus, having a positive influence on new workforce afterwards. Overall, this "attracting circle" presents an opportunity for smaller countries to improve their own position under the aspect of governmental changes and implementations in several ways (Andreassen, 1995).

Additionally, Goede, Neuwirth & Lousia, (2011) introduce the *seed* and *harvest strategy*, which builds a linkage between attracting students and companies. The so-called *seed strategy* includes the attraction of young talents hoping that these talents will stay and work. Steps supporting this idea are the establishment of world-leading universities in combination with attractive and creative communities. A country adopting this strategy needs to offer a creative culture, reasonable immigration rules and the availability of low cost housing. The *harvest strategy* is more linked to the attraction of companies and people with money. Therefore, a country needs to offer requirements like economic and legal stability, education opportunities for children, low crime, low tax and additional financial services.

#### 2.4.2. Attracting international students: The push and pull model

In addition to the attraction of companies towards countries, the literature presents aspects being important to attract students. According to Chen (2007), the process of attracting students depends on three consecutive stages. First, the student has to decide if he wants to study abroad or not, which is called the (1) predisposition stage. The second stage is the (2) choice of the country to study and, finally, the third stage is the (3) selection of the institution in the preferred hosting country. However, sometimes students directly chose an institution after deciding to study abroad (Chen, 2007).

A theoretical idea about student attraction is the push-pull model proposed by Altbach (1989). This model investigates two influencing factors on an international students' decision. It suggests that the movement of students can depend on a "push", which implies that students choose to leave their home country due to missing or dissatisfying (education) conditions or as a result of other several reasons and forces in their home country (Mazzarol

& Soutar, 2002; Altbach, 2004). The opposite factor is a "pull", which implies that students will be attracted by especially foreign industrial countries to study there (Altbach, 1989). This pull effect mostly happens due to a better education quality abroad or because of the attractiveness of the foreign country itself.

The push factors can be divided into two types, the personal and the environmental factors, although there is not much known about personal factors because of the large diversity of international students and their individual influences and behaviour (Becker & Kolster, 2012). In this context, it has been considered that the push and pull model has its limitations. A student's choice does not only depend on measurable characteristics but also on personal characteristics and factors like e.g. age, gender or motivation (Mazzarol & Soutar, 2002; Li & Bray, 2007; Becker & Kolster, 2012). Additionally to the push factors, the pull factors can also exist on different levels, (1) on country level, (2) city level or (3) institutional level (Becker & Kolster, 2012), which can be connected to the three phases indicated by Chen (2007). According to Chen (2007), the student's choice concerning an institution is influenced by both academic and administrative pulling factors, like e.g. the reputation and quality of the institution or financial aspects and admission process. Table 2.1 shows some of the existing push and pull factors and connects them to its level of influence. *Table 2.1: Push and Pull factors influencing student mobility (Own elaboration, Sources: Altbach, 2004; Chen, 2007; Li & Bray, 2007; Mazzarol & Soutar, 2002; Varghese, 2008*)

Level
Environmental (home country)
Environmental (home country)
Environmental (nome country)
Environmental (home country)
Environmental (home country)
Environmental (nome country)
Environmental (home country)
Environmental (nome country)
Environmental (home country)
Environmental (home country)
Level
Country
Country, City, Institution
City, Institution
Institution
Institution
Institution
Institution
,

One necessary condition is that students are able to obtain and finance a better education elsewhere in the globalized world (Altbach, 2004; Mazzarol & Soutar, 2002). However, according to Takenaka and Tsuchida (2010), student movements cannot only be explained by income disparities or geographical and cultural proximity (from China to Singapore). They state that education serves an underlying aspect that determines who will

be able to move or rather has to move. Altbach (2004) adds that students leave their home country because of social or political forces or because their preferred study specialization is not available in their home country. According to Li & Bray (2007), the push and pull model can also be seen as a two-sided model, a two-way push-pull model, thus pull and push factors can influence the decision simultaneously.

#### 2.4.2.1. Supporting criteria for student attraction

The push and pull factors are strongly connected to further criteria, which are important for students. Leung & Waters (2013) as well as Altbach (2010) found out, that some students define a good infrastructure and education facilities as important for their decision, whereas others are attracted by financial issues. Supporting this statement, Lee, Jon and Byan (2013) stress that the program of the target institution, the possible financial and research opportunities or the whole academic environment may be reasons to choose a university (see chapter 2.5). The university has to offer a high service quality because it is seen as a critical factor for sustainability and competition (Chong & Ahmeda, 2013). Mosneaga & Agergaard (2012) found out, that universities have to use a combination of proactive and reactive steps to recruit students. Thus, it is important to offer the students the skills and facilities they need to become successful on the international and multicultural level (Frew, 2006; Varghese, 2008). However, they want to get values back for their costs and effort (Richards & Aziz, 2011). Additionally, it is relevant to get support from the government concerning policies, laws and culture. An opportunity by this governmental support is the potential to offer scholarships or financial grants to students using this national investment as an opportunity for economic development and revenue generation (Lee, 2015; Richards & Aziz, 2011). According to Qiang (2003), student recruitment can be understood as a factor for both institutional and national income. Governments from different countries all over the world use those wishes to attract students as a possible source of revenue (Altbach, 2004; Frew, 2006). In the Netherlands, e.g. the universities are trying to attract fee-paying students to their institutions to generate revenue (Altbach & Teichler, 2001).

All mentioned criteria depend on aspects like student characteristics (socio-economic background, personal characteristics and preferences), push-pull factors (positive and negative aspects from home and host country) and significant others (encouragements from family, professors and sponsors). In relation to the central research question, it has to be considered that Curacao could have an influence on both push and pull factors but it depending on the problem, which is supposed to be solved. If Curacao's wants to attract more students, the focus has to be on pull factors. If there is higher potential in keeping young people on the island, adjustments have to be taken on push factors. Overall, it can be said that the most influential factors are (1) the quality of the study, (2) the fact that the gained qualifications will be valid at home, (3) information available over the host country, (4) the reputation of the institutions and, (5) the knowledge level of the host country.

## 2.5. Practical education hub examples worldwide

Besides the theoretical aspects of education hubs, the literature investigates already existing education hubs, which are located in countries like Hong Kong, Singapore, Malaysia, Dubai and Qatar (Becker, 2009). Still developing hubs can be found in Bahrain, Sri Lank and South Korea (Knight, 2011; Lee, 2014). Some countries are more interested in becoming an international education hub, whereas others are more focussed on regional education hubs or are interested in both types (Lee, 2015). The following chapter introduces Malaysia, Singapore and Qatar aiming at connecting the theoretical background with real life examples. Furthermore, it is focussed to provide a practical insight, which can be used for the potential development of Curacao as an education hub. Malaysia and Singapore were the first states that developed their education hub 10-15 years ago (Lee, 2014). This development is strongly connected to the fact that the Asian region undergoes a rapid economic growth, facing demographic pressure and dramatic developments in higher education (Lee, 2014; Richards & Aziz, 2011). In the context of logistic hubs Panama has been often named, which would also be a possible example for a still developing education hub. The reason why this will not be included in the practical examples is linked to different aspects. First, Panama is more focussed on its logistical position and should be rather seen as competitor in this sector. The second reason is its cultural and geographical proximity. The aim was to create a completely different view on education hubs, from a different continent and culture without creating bias due to proximity influences. The third reason lies in the status of development. The other examples are already partly developed, existing hubs, which makes it more comparable to needed processes, criteria, key indicators and wishes of students and organizations.

#### 2.5.1. Malaysia

Malaysia is the 11<sup>th</sup> largest exporter of education in the world (Cheng, Mahmood & Yeap, 2013). In the late 1980s, Malaysia determined financial support for the education sector and the development of universities and curriculum to improve the student enrolment (Morshidi, 2011; Cheng et al., 2013). The government of Malaysia made further step towards a hub with the liberalization of the education sector in the mid-1990s (Mok, 2011). They formulated, and implemented strategies to change the education sector by allowing more higher education institutions, both private and public (Cheng et al., 2013). The development of the Malaysian education sector is motivated by the acquisition of knowledge, the expansion of possible research capacity and improving the cross-cultural understanding and the countries competitiveness (Cheng et al., 2013). Their higher education sector can overall be divided into two major components: (1) government-funded higher education institutions (public universities, teacher-training institutions) and (2) private-funded higher education institutions (private universities, foreign branch campuses). Foreign institutions work together with local

alliances; local institutions deliver land, facilities and cash, whereas foreign institutions provide image, brand names and human capital (Aziz & Abdullah, 2014).

A major step towards the development of the education hub, and in particular, towards the student hub in Malaysia was the development of the Vision 2020 including political, cultural, scientific and economical dimensions to improve the countries status and the establishment of the Ministry of Higher Education (MOHE) (Aziz & Abdullah, 2014; Mok, 2011). One last point being influential in the developing of Malaysia was the Higher Education Strategic Plan 2020, implemented in 2007. It included seven major reform objectives: (1) widening access and enhancing quality; (2) improving the quality of teaching and learning; (3) enhancing research and innovation; (4) strengthening institutions of higher education; (5) intensifying internationalization; (6) enculturation of lifelong learning; and finally, (7) reinforcing the Ministry of Higher Education's delivery system (Aziz & Abdullah, 2014).

The Ministry of Higher Education (MOHE) sees *"a necessary step towards producing graduates who are marketable, attracting more international students as well as generating innovation through research and development"* (MOHE, 2007b, p. 116). However, not only the government changed its policy, also the institutions became more international for different reasons and with different intensity (Kham & Tham, 2008). For becoming a successful education hub, the government of Malaysia has worked together with multinational corporations (MNC) which results in the establishment of branch campuses, twinning programs and overseas campuses (Aziz & Abdullah, 2014). In 2015, Malaysia has 14 branch campuses cooperating with different UK and Australian universities but also hosts one university each from China, the US, Egypt and Singapore (C-BERT, 2015). Furthermore, 19 UK universities run 110 twinning programmes, 18 Australian universities offer 71 programmes and other universities from New Zeeland, the US or Egypt have their own twinning programmes (Mok & Yu, 2011).

#### 2.5.1.1. Aspects supporting the education position of Malaysia

First, Malaysia's position is advantageous due to its cultural diversity as result of the colonial time (Goh, 2008) and a relative stable socio-economic environment (Cheng et al., 2013). Furthermore, the availability of English as teaching language, the low language barriers, local lifestyle, the perceived quality of life, the employment opportunities, the possibility to get permanent residency and reasonable costs of living are beneficial aspects for Malaysia as education hub (Cheng et al., 2013; Aziz & Abdullah, 2014). From the institutional point of view, the offered programs, the entry requirements, the quality of academic staff and the whole reputation of the universities play an interesting role for Malaysia (Sidhu et al., 2011; Cheng et al., 2013).

More reasons for choosing institutions in Malaysia or the country itself are presented in table 2.2 and 2.3 on the beginning of the following page.

 Table 2.2: Reasons for choosing Malaysia as education country (Cheng et al., 2013)

Reasons for choosing Malaysia		
Social and cultural factors	%	
Diversity of student population	63,4%	
Easy adaptation to local lifestyle	57,9%	
Malaysia as an Islamic country	52,4%	
Rich cultural diversity	45,8%	
Family engagement in Malaysia	44,1%	
No language barrier	36,0%	
No discrimination	25,5%	
Location factors	%	
Malaysia is an ideal gateway in Asia	46,7%	
Malaysia is a stepping stone	45,5%	
Geographical proximity	32,1%	
Supporting services and security factors	%	
Easy to obtain visa	51,6%	
Good law and order and security	37,8%	
Financial and economic factors	%	
Lower tuition fees	50,2%	
Lower cost of living	48,8%	
Allowed to work part-time	26,1%	
High possibility for after-graduate settlement	24,4%	
Scholarship from home country to study in Malaysia	19,9%	
Informational and referral factors	%	
Rich information about Malaysia	61,9%	
Family and friend's recommendation	52,8%	

Table 2.3: Factors determining the selection
of a Malaysian HEI (Cheng et al., 2013)

Factors determining the selection of a		
Malaysian higher education institution		
Quality-related factors	%	
Recognition of the degree	56,6%	
Quality of the programme	54,4%	
Reputation of the institution	52,1%	
Quality of academics	49,6%	
Informational factors	%	
Easy to get information about the institution	68,2%	
Programme requirements	%	
Easy to gain credit transfer	49,5%	
Reasonable duration to complete the degree	61,2%	
Easy admission to the institution	45,3%	
Financial and economic factors	%	
Availability of scholarship from the institution	24,9%	
Availability of scholarship from home country to study in the institution	22,2%	

# 2.5.1.2. Challenges of Malaysia's Education Hub

Besides the mentioned positive aspects, the literature provides critical aspects regarding the general negative atmosphere on Malaysia's transnational higher education programs. This includes some dissatisfaction especially with the private higher education institutes where the total quantity of students seems more important than the quality of the program (Mok, 2012).

# 2.5.2. Singapore

The second example is Singapore, which tries to develop a *"regional hub of higher education"* (*Chan & Ng, 2008, p. 497*) by the influence of the internationalization of higher education and the financial support from the government (Chan & Ng, 2008, Knight, 2013). One reason why Singapore was able to invest in the educational system is their positive development in productivity, which led to financial savings. These financial savings have been invested later on in developments and education (Wong, 1986). This improves their ability to subsidize private investors via investments in high quality infrastructure provisions (establishing branch campuses, linking mass transit systems), in education and training or forcing the aim of having a highly skilled work force (Old, 2007; Siddiqui, 2010). In other words, the whole education system is business-oriented rather than being just a destination for meeting the demand of higher education (Mok, 2012). Thus, they connect the education market with the labour market to improve production, and economic growth (Olds, 2007). Singapore tries to establish all three-education hub models stressed by Knight (2011).

Furthermore, they are more focussed on research collaboration with foreign universities and skilled labours, instead of just training and teaching students (Olds, 2007).

In 1991 Singapore established the Strategic Economic Plan (SEP) including the idea of economic expansion through education (Siddiqui, 2010). Seven years later in 1998, they launched the world-class university programme, which focusses on the establishment of: campuses, centres, research laboratories, joint ventures with Singaporean universities (Olds, 2007). In 2002, the government launched the Global Schoolhouse initiative with the aim to work in the lucrative education market more aggressively, recruiting highly skilled migrants and international students. In their initiatives Singapore had three broad strategies, (1) invite a select group of elite universities to establish operations in Singapore as world-class universities, (2) attract large numbers of foreign students to choose education institutions located in Singapore, and (3) change the mind-sets of local institutions and citizen-subjects to become more entrepreneurial (Lai & Maclean, 2011).

Besides these visions and plans, the intention of Singapore to become an education hub is supported by changes in their tertiary education sector, immigration laws, legal frameworks and the underlying goal to build a platform for the international knowledge economy by developing the innovation, research and enterprise sectors (Olds, 2007; Sidhu et al. 2011). By investigating the education policy of Singapore, two directions became clear: (1) the expansion of the postgraduate education and research at the universities; and (2) the enhancement of undergraduate curricula (Mok, 2011). In this context, the government forces private education to meet the needs of local and foreign students (Olds, 2007; Kinser & Lane, 2010; Mok, 2011+2012). Singapore promotes English as working language because of its international importance but without losing the focus of the official languages like Malay or Mandarin (Sidhu et al., 2011).

Another strategy applied by Singapore is the binding of international students by offering a scholarship while forcing them to an obligation (agreement) to stay and work in Singapore for at least three years. The government supports international students financially (Cheng, Ng & Cheung, 2009; Sidhu et al., 2011) and has a proactive role supplemented with a systematic approach to promote its international higher education system (Mok, 2011). Besides the attraction of those talented international students, their aim is 150,000 students in 2015 (Ministry of Trade and Industry Singapore, 2012), Singapore attracts international workers and trained professionals such as scientists and business executives in technology and biomedical sciences (Sidhu et al, 2011; Knight, 2013). The creation of the education hub in Singapore has supported the re-development of the position of Singapore can be seen as different from other hubs due to the point that they have already established two excellent universities namely the National University of Singapore plays an important role
concerning the whole education system. They decide whether collaborates or institutions can launch programmes and participate in the education system and finally, they see the whole process under a strategic point of view (Mok, 2011).

### 2.5.2.1. Aspects supporting the education position of Singapore

In addition to the governmental adjustments, Singapore has several key performance indicators that influenced the student's decision. First, it benefits from the fact that it has a "[...] *historical legacy that results in a multiracial society consisting of 5.3 million people with diverse cultures and languages [...]" (Daquila, 2013, p. 631f).* Reasons to choose Singapore as learning destination are versatile. Those reasons can include the already named multi-cultural environment, the good political conditions of the city-state, the highly secure society and different financial aspects, especially the financial reserves of the country (Mok, 2012). Singapore provides a first-class infrastructure, a family friendly environment and bond-free scholarships to attract foreign knowledge (Sidhu et al, 2011). Furthermore, the country offers a high standard of living, low unemployment and the promise of social mobility (Sidhu et al. 2011). An additional aspect for Singapore's attractiveness is its location, the strategic geographical position in Southeast Asia, the large number of transnational cooperation, the political stability and the high quality of education with its high amount of foreign universities (Olds, 2007). Additional aspects can be found in table 2.4 and 2.5 below.

Table 2.	4: Reasc	ons for stud	dying in Singap	ore
/ <del>.</del>				

(Sidhu, Ho & Yeoh, 2011)	
Reasons given by National Unive	-
Singapore students for studying in	Singapore
Reason	%
Reputation of the university	72.4
University financial support	61.3
Offered me the programme I wanted	43.8
English education	42.7
Training provides good job prospects	35.7
Good campus facilities	26.4
International curriculum	25.8
Lower tuition fee	24.6
Do not get financial support from universities	23.8
Larger number of international students	15.5
Latest information and methods	15.3
University advertises and promotes itself	8.7
Course not available back home	5.0
Difficult to get better university back home	2.8

Table 2.5: Reasons for choosing Singapore (Sidhu, Ho & Yeoh, 2011)

Reason	%
Singapore has a safe environment	58.9
Easy and convenient to visit friends and family	39.9
Good job prospects in Singapore upon graduation	37.5
Singapore's cultural environment	32.1
Multi-ethic environment	29.8
Living expenses in Singapore are lower	23.8
Friends enrolled save time as me	19.0
Have relatives in Singapore	17.5
Good opportunity to learn about local customs	16.9
Singapore has good social and recreational facilities	15.5
Easy to find part time work	8.3

# 2.5.2.2. Challenges of Singapore's Education Hub

Contrary to benefits, Singapore faces the problem of limited space and land resources due to its size (Mok, 2011, Sidhu et al, 2011). This can be problematic for the further establishment of branch campuses. In 2015, Singapore had 14 campuses mainly in cooperation with American, Australian and French universities (C-BERT, 2015).

# 2.5.3. Qatar

Qatar was one of the first countries that tried to become an important player in the new knowledge economy by developing an education hub as backup for their oil industry. Thus,

Qatar rapidly developed the knowledge economy (less than 15 years) (Knight, 2014) and has already established over 10 foreign education institutions from e.g. the US, Canada or the Netherlands including research and science organisations and foreign academic institutes (C-BERT, 2015). This led to over 4,000 researchers and students from all over the world, currently living, working and studying in Qatar (Knight, 2013). The development of their education hub depends on different components, similar to the Malaysian hub. First, they established academic programmes through international branch campuses, which include the multi-branch campus model located in the Education City. The Education City is a specific area established for education institutions in Qatar, which focusses on the needs of the local population (Wilikins & Huisman, 2011). This model offers the possibility to easily attract foreign universities to established new science and medical institutions supporting the universities and offering internships and jobs. It becomes obvious that the development of an education hub has to be well planned and different factors need to interact to create a strong knowledge economy (Knight, 2014).

Strategic steps taken by Qatar are the change of the official study language to English in 2003, to become more international, research-oriented, to attract international students and improve study quality. Two steps towards the attraction of foreign companies were the establishment of the Qatar Science and Technology Park (QSTP) in 2004 and the foundation of the Qatar National Research Fund (QNRF) in 2006. The QSTP aims at (1) the speeding up research in Qatar, (2) supporting R&D, (3) attracting international research institutions, (4) supporting the establishment of start-up technology institutions, (5) improving the economy through innovation and knowledge-based industries, and (6) connecting the Education city with employment possibilities for graduated students (Ibnouf, Dou & Knight, 2014). The QRNF has the objective to improve collaboration with international research initiatives and institutions and to provide opportunities for various groups of participants in different sectors of the knowledge economy (students, docents and professionals) (Ibnouf, Dou & Knight, 2014). An overall step towards country development was the 2008 macro level decision to create a Qatar National Vision 2030 based on the four pillars: human, social, economic and environmental development (Ibnouf, Dou & Knight, 2014).

#### 2.5.3.1. Aspects supporting the education position of Qatar

The development of Qatar as an education hub was driven by the government, which saw the future possibilities of such a hub. The three major components of the Qatar education hub are: (1) the academic programs, (2) research initiatives and (3) science and research institutions. Qatar's aim to become an education hub is driven by objectives on national, regional and international levels. Especially on the national level, the focus is on training of humans. This rational shows that Qatar is searching for regional development but also for becoming an educational leader in the Arab region and in the world (Khodr 2011).

Supporting the education hub takes place via a planned student admission policy and financial support by the Qatar Foundation. Students who are not able to pay the tuition fee can demand an interest free loan or a scholarship. Using this policy has the aim to attract foreign students to stay in Qatar after their graduation and contribute to the country's development (Ibnouf, Dou & Knight, 2014). Besides this national policy, Qatar offers an exchange program resulting in students going abroad or foreign students to come to Qatar. The focus of these programmes is mainly on cross-cultural dialogue, interactions and combining different cultures and views of students (Ibnouf, Dou & Knight, 2014).

### 2.5.3.2. Challenges of Qatar's Education Hub

The final aspects in the specific case of Qatar are several issues and challenges of the country. Major issues were linked to the financial sustainability of the idea due to high costs for Qatar because of the plan to cover all costs. The second issue is linked to the accreditation and faculties because it was not sure that hosting institutions would be able to guarantee the same quality abroad compared to home countries. Furthermore, it can lead to problems over time to attract faculties to branch campuses after reducing the financial attractiveness of offers. Moreover, a third challenge is the cultural aspect with the gender segregation in Arab and the high influence of families on students (Ibnouf, Dou & Knight, 2014). Overall, the development of an education hub in Qatar was linked to implemented changes in the country's policies. One change has been made in the education economy through the establishment of different institutions linked to the education sector. One of these institutions was the QSTP. All these changes have attracted foreign institutions and students.

### 2.5.4. Comparison of examples

The presented existing examples of education hubs showed that there are similarities and differences concerning the policy and about the final focus of the hub. Table 2.6 below summarizes the major similarities and differences for each country separating the table into general information, strategies, benefits and challenges. Overall, the approaches and strategies adopted by Singapore and Malaysia were similar, because they established specific areas in their country, Singapore's Global Schoolhouse and Iskandar in Malaysia (C-BERT, 2013), to develop the new knowledge hub. Furthermore, their governments provided investments to support colleges, universities and research institutes or centres. The comparison of the planning approach made by the different countries indicates that Malaysia is more proactive (make steps to guarantee that the education hub can help to meet specific objectives), whereas Qatar and Singapore are more strategy oriented (more calculated and focussed on linking the hub with country's policies) (Knight, 2011). It can be concluded that all education hub example differ in their way of development but they combine the aim of getting leadership in international higher education with influence on politics.

Table 2.6: Comparison of the three practical hu	b examples (Own elaboration, Sources: Aziz & Abdullah, 2014;
Cheng et al., 2013; Ibnouf, Dou & Knight, 2014,	Knight, 2014, Mok, 2011+2012; Olds, 2007; Sidhu et al, 2011)

	Comparison of the three hub examples				
		Qatar	Malaysia	Singapore	
	Announcement 1995		2007	1998	
Implemented Progress		1995	2007	1998	
		High	Mod-High	High	
Contra	Current type of hub	Talent/ Student	Student	Knowledge	
	Aspiration type of hub	Talent/ Knowledge	Talent/ Knowledge	Student/ Skilled Workforce/ Knowledge	
·		Financial support	Collaboration with foreign	Investment of money in infrastructure and attraction of students	
		Collaboration with foreign partners	partitiers	Cross border education initiatives	
Hu	ıb Strategies	Establishment of a new science park	Financial support of the	Business oriented	
	-	Invite and bind international students and workers	education sector	English as working language	
		Long time strategy	Long time strategy	Invite and bind international students and workers	
				Financial support	
		Exchange programs	Cultural diversity a relative stable socio-economic environment	First class infrastructure	
		Science and research institutions	English as teaching language	High quality of education	
Benefits		The will Academic programs education the united the united states of the		Highly secure society	
		Research initiatives		High standard of living	
		Financial support	Culture	Political stability	
		Financial sustainability	Atmosphere problems within higher education problems		
(	Challenges	Faculty attraction		Limited space and land	
		Gender and family role		resources	
		Culture			

Connecting the practical examples to the case of Curacao there can be same similarities concerning potential difficulties. As presented above Singapore faces the problem of limited space and land resources due to its size. This problem counts for Curacao if planning to establish an education hub, too. The practical examples showed that political support has an important impact on the idea. The government has to support the education hub development financially. Furthermore, they need to develop long time strategies and improve the education sector. The universities have to have a high level of quality as well as a high variety of programmes. Singapore has around 1,200 private higher education institutes and 44 pre-tertiary schools, which offer various international programmes and international curricula. Instead of offering this high variety of programmes there can also be the chance to specialize as Qatar did. They decided to attract only these kinds of universities, which offer programmes needed for the current labour market. These programmes were Medicine, Engineering, Business and Computer Science (Ibnouf, Dou & Knight, 2014). All these factors and ideas presented above are relevant for the answer to what extent Curacao can be able to become an education hub. These practical policies, factors and strategies can show opportunities and threats for the final implementation of an education hub or specialized education hub.

## 2.6. Section Summary

It has been shown that countries need to elaborate different strategies to become an education hub and to decide which hub-types they are aiming for. Table 2.7 provides a short summary of the possible types and its focus, sectors and actors.

Table 2.7: Differentiation of Education Hub Types (Own elaboration supported by Knight & Lee, 2014, additional sources: Evers; 2008; Knight, 2014; Knight & Morshidi, 2014; Lee, 2014; Olds; 2007; Penco, 2013; Sidhu et al., 2011)

	Student hub	Talent Hub	Knowledge/ Innovation hub
Focus and objectives	revenue generation, teaching, learning, modernize the educational infrastructure, create competitiveness and provide access to international higher education	improving the workforce, expansion of talent, competitiveness improvement by strengthen the labour, creation of a service- and knowledge-based economy	increase public funding, attract foreign direct investments, construction of a knowledge- and innovation-based economy, the creation of local research institutions and the improvement of soft power.
	Primary:	Primary:	Primary:
Including sectors	higher education, trade and foreign affairs	industrial focused sectors, education, HRM, industry and immigration	science and technology, trade, labour and education
Ū	<u>Secondary:</u>	<u>Secondary:</u>	<u>Secondary:</u>
	tourism	foreign affairs	foreign affairs and immigration
Key Actors	higher education institutions local and foreign	home companies	research agencies, local/ foreign HEIs + R&D firms, business councils and trade boards

Summarizing the table, the student hub is focussed on "students as the main activity which produces other benefits for the institution and economy at large" (Knight & Lee; 2014, p. 35). Contrary to the student hub, the talent hub has a longer-term orientation focussing on the domestic and foreign development of human resources. Thus, it aims at creating a skilled workforce, which can be internationally completive. The last type is the knowledge hub, which is more focussed on creating new knowledge and innovations instead of just training students or attracting foreign institutions. Besides the knowledge on types of education hubs, it has been shown that countries are able to attract students and companies. Companies can be attracted by a good country reputation, good infrastructure or a strong country image. The student attraction depends on push and pulls that could be influenced or supported in some way. These push and pull factors are strongly connected to specific characteristics that have been investigated as important for students for their decision where to study. According to table 2.8 below, which is assorted by country and institution related criteria and from mostly mentioned to less mentioned answers, the most mentioned aspects were linked to financial and educational criteria. One the one hand, students named that it is important to find a good study quality and good university reputation and programmes. On the other hand, students are interested in financial support, low tuition fees and the possibility to work during the study and afterwards (Chen, 2007; Li, Liu & Mendez, 2013). Thus, the countries might focus on both student and business requirements, if they want to become a hub. Business requirements can be a good infrastructure (educational and logistical), a proximity to the market, international cooperation and the whole geography and land availability. Furthermore, political and cultural aspects play a role in a hub's development. As seen in the practical examples, a country needs decisions, strategies and changes to become an education hub.

Table 2.8: Criteria for student and company attraction (Own elaboration, Sources: (Chen, 2007; Cheng, 2013; Li, Liu & Mendez, 2013; Mazzarol,1998; Mazzarol & Soutar, 2002; Sidhu, Ho & Yeoh, 2011; Varghese, 2008, Wilkins & Huisman, 2011)

Country criteria	Institution criteria
Improve employment prospects and job opportunities	Image and reputation
Cost of living	Tuition fee
Quality of education higher abroad lower at home	Easy admission to the institution
Family influence	Easy to get information about the institution
Understanding of a foreign culture	High staff quality
Exiting place to live	Quality of program
Easy to find part time work and obtain visa	Content of program
English improvement and no language barriers	Broad range of programs
Friends, study or live there	Large number of international students
To gain knowledge of country	Willing to recognise previous qualifications
Recognition of qualification	Financial support
Missing requirements at the home country	Latest information and methods
External recommendations	Difficult to get better university back home
Value or scholarship by the home country	Training provides good job prospects
Country Image	Reasonable duration to complete the degree
Ties with the home country	Offered me the programme I wanted
Working possibilities	Excellent facilities
Research possibilities	Customer oriented culture
Political factors (stability, governmental support)	High (financial) resources
Economic factors (labour market, infrastructure, technology)	External recommendation
Demographical factors (health care, migration)	Friends study or life there
Geographical proximity and land availability	Family influence
	Accommodation
Cultural factors (religion, gender roles, language, human nature	Linked to other institutions
perspective, low discrimination, safe and social environment and	Recognition of the degree
cultural diversity)	English education
	International teaching

Overall, this chapter presented a detailed overview of the term education hub, its potential influences on cities and states, its characteristics and challenges. It has shown that internationalization and globalization are key drivers of the new developments in higher education. Several countries have adjusted their education policies to react to these global developments with difficulties in the underlying changing processes. The theoretical aspects do not guarantee a completely accurate hub development because each state has its own objectives and characteristics. Qatar has to fight against cultural differences, Malaysia against quality issues and Singapore has problems with geographical limitations.

# 3. The case of Curacao: A country in the developing process

# 3.1. Curacao in general

Curacao is a small country located 55 kilometres north of the coast of Venezuela. It is the largest and strongest economy of the Dutch Antilles (Curacao, Bonaire, Saba, St Eustatius and St Maarten) (Goede, 2008, Gerbranda, 2009, Schwanecke, 2013). The Netherland Antilles were granted internal autonomy in 1995. Geographically, Curacao belongs to the Caribbean, but in 2010, Curacao as a political entity, became a fully autonomous country with internal affairs within the Kingdom of the Netherlands (Curacao Report, 2013; Government of the Netherlands, 2013; Nuffic, 2011). However, Curacao still has constitutional arrangements with the Netherlands (CIA World Factbook, 2015; Ministry of General Affairs 2013) which implies that it is rather semi-autonomous. These arrangements include the responsibility of the Dutch Government to manage defence and foreign affairs. Even though Curacao is a self-governing country, 80-90 % of the regulatory system (laws and regulations) is equal to the Dutch one (Goede, 2008; CIA Worldfactbook, 2015). Curacao has a population of around 155,000 people, an area of 444 sq. km (CBS, 2015b) and 12.6 percent of its inhabitants are between 15-24 years old. In 2013, 5,393 people immigrated to Curacao, whereas 4,057 people emigrated (CBS, 2015b). Its capital is Willemstad, which is also the seat of government. Curacao has a parliamentary government, which shares power between the Head of Government, Prime Minister Uvar Asjes, and the Head of State, King Willem-Alexander of the Netherlands (CIA Worldfactbook, 2015).

# 3.1.1. The younger history of the island

The development of the island was influenced by several factors. In the 17<sup>th</sup>- 19<sup>th</sup> century, the West Indian Company influenced the island's development by using it as trans-shipment point. Then, the country was significantly influenced by the installation of a Shell oil refinery, which, even though it still exists, is not controlled by Shell anymore (Goede, 2008). In the following offshore finance period in the 1960s, the number of civil servants was increased. As other economic sectors started to struggle, tourism experienced a revival in the mid-1980 (Goede, 2008). However, the finance sector still exists on the island, which is connected to some tax advantages and established consultancies and finance companies like KPMG.

Other factors, which have influenced the country, were emigration, public finances and the constitutional development phase (Curiel, 2005). Another change resulted from the adjustment of the corporate government law in 2004. It leads to complications regarding the dialogue between governmental and private global organizations (van Erp, 2003). Another decision that changed the position of Curacao was the adaptation of the Anglo-American model of cooperate governance (Goede, 2008). Three different aspects characterize this model. Firstly, it includes the division of ownership to individual investors who are called outside shareholders. Secondly, this model has a legal framework that defines the rights of

stakeholders. Finally, it guarantees an uncomplicated procedure between shareholders (EWMI/PFS Program, 2005). The model has been driven by the history with the Netherlands because business schools and universities play an important role in Curacao and in the Netherlands (Goede, 2008). In the last years, Curacao has tried to achieve growth by implementing reforms in the education and training sector. The aim is to support knowledge development and to improve the worth of human capital (Ministry of General Affairs, 2013). One further development was also the liberalization of the telecommunication and labour market. In 2013, 38,054 companies have been registered in Curacao, 15,202 of which were offshore firms and 22,852 local companies (CBS, 2015b). In the past few years, Curacao has become more and more attractive for Dutch students who are interested in doing their internship in another country. This resulted in a reconstruction of whole blocks to provide housing for the students (Goede et al., 2011).

### 3.1.2. Cultural environment of Curacao

The residents in Curacao can be divided into European-Dutch citizens, African-Curacao citizens and people born in Curacao, who studied in the Netherlands and returned to Curacao. They are called Black-Dutch, meaning "too Dutch" (Heijes, 2011). According to Smits (1996), Curacao has an ideal geographical location for becoming a hub for Latin America. Its cultural aspects support this function. The families living in Curacao often have relatives still living in Latin America or Europe, especially the Netherlands. Therefore, Spanish, English and Dutch are spoken languages in Curacao, which makes communication with Latin America and Europe easier (Smits, 1996). In Curacao, the official legal language is Dutch which is spoken by 8% of the people (CIA Worldfactbook, 2015). The fact that it is the official language might explain why Dutch people often have better positions in the society of Curacao (Heijes, 2011). Contrary to the Dutch language written and spoken in the higher education sector, Papiamento, -a mixture between Spanish, Portuguese and some Dutch, African, English and French elements-, is the local language spoken by 81,2% of the inhabitants (Allen, Heijes & Marcha, 2003). The language aspects and the fact that Curacao has inhabitants from around 40 different nationalities, show its cultural and ethical diversity (Schotborgh-van de Ven & van Velzen, 2013). According to Schotborgh-van de Ven & van Velzen (2013), this could be considered as positive but led to negative sentiments against foreigners of the local population. Another cultural aspect in this regard is the continuous relevance of a human's skin-color (Heijes, 2011).

### 3.1.3. Economic aspects of Curacao

Financial figures are useful to analyse the ability of a country to invest in new developments and changes. A short overview of the financial figures of Curacao will give a better understanding of the current situation of the island. The latest figures concerning some key aspects are from 2012. At that time, Curacao had a GDP of 3.128 billion dollar, which

made it number 184 in the world (including income of 160 million dollar from the private education and 54 million dollar from the general education sector). Its GDP per capita was 22,619 dollar and its real GDP growth rate had decreased by -0.1 % (van der Molen, 2013). In the third quarter of 2014, the inflation rate was at 2.7% (Quarterly Bulletin 2014 Bank Curacao). Also to be taken into account is the overall unemployment rate on the Island, which was 13% while the youth unemployment rate stood at 37.2% in 2013 (CIA Worldfactbook, 2015; CBS, 2015b). However, according to the Curacao Chronicle (2015), it has decreased to 23% in 2015 but this is still higher compared to the overall unemployment rate of 9.9% in 2015. In 2011, a step towards potential improvement or further deterioration has been made by the political party Pueblo Soberano by deciding to create a labour market protection. Companies are obliged to employ at least 80% locals from Curacao and are only allowed 20% foreign employees (Schotborgh-van de Ven & van Velzen, 2013)

These economic figures are only meaningful when being compared to potential partners and competitors within the region. In the following, table 3.1 gives a short overview on the economic key figures of specific competitors in the Caribbean (Barbados, Trinidad and Aruba), of countries in South America (Columbia, Venezuela, Panama) and the Netherlands. *Table 3.1 Economic Figures* (Own elaboration, *Source CIA Worldfactbook; 2015*)

Country	Curacao	Aruba	Barbados	Trinidad	Columbia	Venezuela	Panama	Netherland
GDP in billion \$ 2014	3.128 (2012)	2.516 (2009)	3.846	42.23	638.356	538.932	80.811	794.349
GDP per capita in \$ 2014	22,619 (2012)	25,300 (2011)	16,200	31,300	13,500	17,900	20,300	47,400
GDP growth rate 2014	3.6% (2012)	2.4% (2005)	minus 0.6	2.3%	5%	minus 3%	6.6%	0.8%
Inflation 2014	2.7%	0.5%	1.3%	5.1%	2.9%	69.8%	2.9%	0.3%
Unemployment 2014	13% (2013)	6.9% (2005)	11.5%	5.3%	9.2%	7.8% 2	4.5%	7.4%

In addition to the figures already mentioned above, the table shows that Curacao has as a proportionally high GDP per capita but on the negative side also the highest unemployment rate and a high inflation rate compared to other countries within the region.

The economy in Curacao is diverse due to a spread focus on tourism, financial services, oil refining and international trade (Schotborgh-van de Ven & van Velzen, 2013). The most important sector in Curacao is the service sector which includes financial services and tourism, followed by the industry sector and, to a very small percentage, the agricultural sector (TAC, 2013, Quarterly Bulletin Bank Curacao, 2014-III; CIA Worldfactbook, 2015). In 2013, around 440,000 tourists have visited Curacao, which lead to a hotel occupation rate of 76% (CBS, 2015b). In 2014, the number of tourists has risen to 453,270 tourists ("Tourism a strong pillar", 2015, March 25). More current figures state that Curacao received 122,074 visitors in the first three months of 2015 which is an enormous rise compared to 2014 (+13%) ("Curacao: Tourism is surging", 2015). Main reasons for this development were marketing campaigns and additional flight connections to the US.

One aspect that influences the financial strength of Curacao in a negative way is the low tax revenue due to the weak economy. This led to a fiscal balance deficit in 2014 (Country Report Curacao, 2014) and can mainly be improved by implementing reforms in the education system leading to long-term fiscal stability. Another influential economic aspect,

which has often been mentioned, is the international trade using the airport and the harbour of Curacao. In this context, a private company called CPS which works in the field of transhipment in Curacao has stressed that it faces high competition by Panama and Trinidad. To give an example, Panama is able to handle 100,000 containers per month whereas Curacao is only able to handle around 1,000 per month. Furthermore, the infrastructural requirements of the harbour are not strong enough to satisfy the major players in the Cargo industry ("Is Curacaos Harbour", 2015).

### 3.2. Politics

As described in 3.1, Curacao is a parliamentary democracy, which has control of all internal affairs whereas the Netherlands are responsible for all external affairs, including defence and foreign policy as well as the higher court (Country Report Curacao, 2014). Changes in the government policies have been adopted in 2000 to improve the labour market and to strengthen the rights of employers and employees (Ministry of General Affairs, 2013). The goals for the next years are connected to wishes and needs of the people living in Curacao. One goal is the improvement of the economy and the improvement of services offered by the government. These come with the underlying goal to strengthen the relation to the Netherlands (Ministry of General Affairs, 2013). The cabinet led by the empowered minister is located at the Curacao-House in the Netherlands representing the interests of the Government of Curacao in the Netherlands (Kabinet van de Gevolmachtigde Minister van Curacao, 2014) (see Appendices Figure 4).

The government of September 2015 of Curacao is formed by a coalition -forming this coalition took six month-, which holds a one-seat majority and is led by Ivar Asjes. It is divided into nine ministries: (1) the Ministry of Finances, (2) Ministry of Justice, (3) the Ministry of General Affairs, (4) Ministry of Health, Environment & Nature, (5) Ministry of Economic Development, (6) Ministry of Education, Sciences, Culture & Sport, (7) Ministry of Traffic, Transport & Spatial Planning, (8) Ministry of Administration, Planning & Services and (9) the Ministry of Social Development, Labour and Welfare (Government of Curacao, 2015).

In the last couple of years, several positive as well as negative political developments have taken place starting with the already mentioned constitutional change in 2010. Since 2010, Curacao has had four different Prime Ministers (van der Molen, 2013). These fast changes could be problematic in the future due to a missing long-term view. In such a small country, major changes in the political sector are severely influencing possible changes and implementations in other sectors. Furthermore, these changes influence the reputation, image and political stability of a country. A major occurrence in the field of politics was the shooting of Mrs. Helmin Wiels in 2012. According to official statements, the shooting could be linked to his political intention of fighting corruption, which is proven to exist on the island (van der Molen, 2013). Only one example of corruption is the former minister Mrs.

Constancia who has been arrested due to implications in money laundering and misappropriation of public funds ("Former minister arrested", 2015). Similar accusations are linked to the former Prime Minister Schotte who is accused of being involved in forgery and money laundering ("Former Prime Minister before court"). Corruption plays an important role in the reliability and image of a country. In this context, Schotborgh-van de Ven and van Velzen (2013) state that the size of the island plays a role. Due to its small size, in Curacao more personal ties can be found between ministers and locals, which lead to intertwined professional and personal relationships. A term, that has been introduced to circumvent the threat of corruption or other negative decisions by politicians, is good governance. Although, there is no consistent definition of the term, there is a general agreement on several key elements. Mainly, a government has to be open and transparent; it needs effective, efficient and responsible policy behaviour (Oostindie & Sutton, 2006). Good governance also has the power to avoid corruption and tyranny in a country ("Good Governance in the Caribbean", 2015). Curacao tried to increase its attention to good governance over the last twenty years by organizing trainings and workshops about integrity and corruption (Schotborgh-van de Ven & van Velzen, 2013). The current situation in Curacao, which was investigated by Transparency International, has shown that the country faces problems concerning its integrity. Those above mentioned facts are a further potential threat to the reliability and attractiveness of Curacao for foreign investments and establishments of foreign institution and companies.

### 3.3. The current Educational system

The Education, Science, Culture and Sports Minister is Mrs. Irene Dick. The structure of the current education system in Curacao is based on the Dutch system and was established on Curacao in 2002 (EP-Nuffic, 2011). In the Charter of the Kingdom of the Netherlands, it has been stated that education belongs to the own affairs of member states. Curacao offers both public and private (mainly catholic) schools and focusses on its own population and foreign students. The difference between public and private schools is their teaching language. Public schools mainly use Papiamentu and Dutch, whereas private institutes mostly use English and Dutch. (Ministry of General Affairs, 2013; EP-Nuffic, 2011). The secondary education of Curacao is divided into the forms "special basisonderwijs (SBO)", "hoger algemeen voortgezet onderwijs (HAVO)" and "voorbereidend wetenschappelijk onderwijs (VWO)". All three allow students to access higher education - called the tertiary education sector – by giving out the "hoger beroepsonderwijs (HBO)" diploma (Rijksbegroting, 2010).

According to Goede (2008), in 2007 Curacao was already aware of development opportunities in the educational sector. The Ministry of Education, Sciences, Culture and Sport invested in curricula, developed global partnerships, improved the infrastructure facilities and fostered the dialogue with the private sector to put the opportunity of education as a means to potential growth into practice.

Figure 3.1 describes the structure of the current system including the level of education and the duration of the education stages, indicated by the grey numbers in the boxes.



Figure 3.1.: The current structure of the educational system of Curacao (Source: EP-Nuffic, 2011)

Furthermore, the Ministry established two foundations (the foundation for innovation in education and the Feffik foundation), which focus on education and they created the collective school administration, which controls the seven different school boards in Curacao. Even though some actions have been taken, according to Goede et al. (2011), around 450 students leave the country annually to study abroad and only 30% return to the island, which leads to a high amount of creative loss called brain drain. Moreover, there is a high rate of dropouts in the secondary education, nearly 40% leave without obtaining a diploma (Schotborgh-van de Ven & van Velzen, 2013). The mentioned positive developments in the last couple of years are endangered due to the opinion of the current minister of education, finding the current regulations education too strict for students on the island. She would like to make it easier by untying the country's education requirements from the requirements in the Netherlands. This would depreciate the education on the island and it would make it much more complicated to study abroad and to become an education hub ("Students and parents", 2015)

### 3.3.1. Higher education and research institutes in Curacao

Curacao has several universities, medical education institutes and research institutes, which build a basis for a potentially bigger role in the worldwide education system. The following section will give a short overview of these facilities.

#### 3.3.1.1. The University of Curacao (UoC)

The University of Curacao (former University of the Netherland Antilles) was founded in 1979 (Goede et al., 2011, UOC, 2015) and has five faculties offering higher professional and academic education. Its five faculties, (1) the Faculty of Law, (2) the Faculty of Engineering, (3) the Faculty of Social Sciences and Economics, (4) the Faculty of General Arts and (5) the Faculty of Social and Behavioural Sciences are accredited by the "Nederlands-Vlaamse Accreditatieorganisatie" (NVAO). The programmes are mainly offered in Dutch, and a limited number in English. The UoC is recognised and subsidised by the government and has 30 nationalities participating in their programmes (Goede et al., 2011). The overall development of number of students on the UoC is upwards from 684 students in 2000, to 2,058 in 2010 (UoC, 2015). In 2013, 2,254 students were enrolled on the UoC, 57 male and 167 female graduated in this year (CBS, 2015a). The UoC is connected to Europe, America and regional universities and aims to attract students and interns to the island. Two examples of cooperation partners in the Netherlands are the Rotterdam University and the Amsterdam University of Applied Sciences (Rotterdam University of Applied Sciences, 2015, Amsterdam University of Applied Sciences, 2015). Furthermore, the UoC has cooperation with local institutes like the Caribbean Research and Management of Biodiversity (CARMABI) and a School of Nurses (Goede et al., 2011). Besides offering courses, the UoC has -in cooperation with the government- developed a special education zone in Curacao named "Knowledge Zone" aiming at creating a knowledge economy in Curacao, with the UoC as centre of this economy (Goede et al., 2011).

### 3.3.1.2. The University of Dutch Caribbean (UDC)

The University of Dutch Caribbean is another university on the island, offering bachelor degree programmes in higher education. These degrees are held in Dutch and are recognized by the Ministry of Education & Culture of the Netherlands Antilles. The recognition allows students who graduate on the island to study all over the world. Its programmes are (1) Business Economics, (2) Commerce, (3) Higher education in law, (4) Tourism and Recreation, (5) International Business & Management Studies and (6) a 4-year HBO-bachelor's programme Business Administration (full time and part-time). Contrary to the UoC, the UDC is not subsidised by the government although it is recognised, too. International collaboration universities are the Saxion University in the Netherlands and the American Webster University (UDC, 2015).

### 3.3.1.3. The Intercontinental University of the Caribbean (ICUC)

The University of the Caribbean was formerly part of the UoC as Curacao institute for Social and Economic studies (CURISES). It is located in Willemstad in the Martinus College. Since 2009, it is independent and created the ICUC as their brand, offering several professional bachelor business programmes and one master programme in cooperation with the Dutch Vrije University in Amsterdam. The ICUC offers their programs in four different faculties. The School of Finance Management & Control, the School of Hospitality & Tourism Management, the School of Management & Leadership and the School of Educational Management. In their vision statement, they mention several aspects that have also been found in the literature concerning the quality of an education hub. They want to offer high quality, collaborations with high-ranked universities, attractiveness for professors, accredited programs and interactions between national and international students (ICUC, 2015)

### 3.3.1.4. Caribbean International University (CIU)

Another university on the island is the CIU, which is accredited by the International Accreditation Organization (IAO) and offers bachelor programs like Media and Technologies, Business Administration and Tourism and Hospitality. Furthermore, they offer two master programs. All courses are held in Spanish.

### 3.3.1.5. Medical education institutes

Moreover, Curacao has some medical schools, which offer programmes for students wanting to study medicine in other countries afterwards. One of these schools is the St. Martinus University, offering the United States Medical Licensure Examination, needed to enter residency programs in the Unites States. The university is recognized by the Government of the Netherland Antilles and approved by the World Health Organization since 2000. Partnerships programs are offered with universities in the US and one in Canada (St. Martinus, 2015).

Another medical school is the Caribbean Medical University, being one of the top medical schools in the Caribbean linked to Chicago. It offers premedical and medical programs and is recognized by the World Health Organization (WHO), the Ministry of Education and the Ministry of Health. Its current number of students is at 684. These students are prepared for American hospitals by using a standard US curriculum (CMU, 2015).

The third medical school is the Avalon University School of Medicine (AUSOM) founded in 2003. It offers a US curriculum in preparation for its students residency and medical career in the US or Canada. It is accredited and recognized by the WHO, the Government of Curacao and the Educational Commission for Foreign Medical Graduates.

#### 3.3.1.6. Research Institutes

Another focus when it comes to becoming an education hub and having a strong educational environment are the research institutes. Due to the fact that Curacao is an island, the main research institutes are connected to biology and marine. The first institute is the CARMABI. It was founded in 1955 and is a member of the Association of Marine Laboratories of the Caribbean. It is a non-profit marine research institute and it supports up to 70 international researchers and graduate students a year. The institute consists of four pillars being scientific research on marine and terrestrial ecological subjects, nature management of marine and terrestrial parks, environmental education and public advice and consultation. It is supported by a department responsible for the needed facilities and technical equipment. The main goals of the institute are linked to sustainability, environmental education and nature research as well as management (CARMABI, 2015).

Another relevant research institution is the Sea Aquarium Curacao, which combines research and tourism by using their own facilities, labs and water systems. Its unique characteristics combined with the high-end technical facilities and open-water system, offer very natural conditions for all organisms in the aquarium. Besides its own research projects like the Deep Reef Observation Program, the Sea Aquarium collaborates with the Smithsonian Institution, a biodiversity research centre, by providing facilities for their research on the marine ecosystem. Another collaboration is given with the University of North Carolina Wilmington, which regularly sends students and professors to conduct research in field coral biology and fish ecology (Sea Aquarium Curacao, 2015).

# 4. Methodology

# 4.1. Research Design

The research design used in this thesis is an explorative qualitative study, which is supposed to develop an understanding of education hubs as a future economic development possibility for the Caribbean, in particular Curacao. According to Babbie (2012), this sort of study is often used to examine new interests or for cases just being investigated partly so far. Lewis, Thornhill and Saunders (2007) see as way an exploratory study to clarify an understanding of the problem and to gain insight into the topic of interest. Regarding this thesis, it means that different parties have already investigated the possibility of Curacao as a logistic hub but the focus of becoming an education hub is new. The explorative study will be connected to a case study of Curacao, which is supposed to deliver information useful for other Caribbean islands, too. An explorative study is not as strictly structured as other research designs and it is informal with the aim to collect background information about the research problem (Burns & Bush, 2008). Furthermore, "exploratory studies are most typically done [...] to test the feasibility of undertaking a more extensive study and [...] to develop the methods to be employed in any subsequent study" (Babbie, 2012, p. 98). In this type of study, the data collection is not standardized and divided into literature research and expert interviews. The information will be gathered by the use of multiple data collection methods. The literature review is about hubs in general, internationalization of education, education hubs and practical examples of these hub types, which serve as the basis for the empirical research. The background literature was qualitative and describing from nature. In addition to scientific literature, practical reports, document study and databases were used as sources. After the collection of theoretical background information, the focus was on the qualitative interviews with experts of Curacao.

Additional to exploratory studies, the case study method is used, which is described in the literature as "empirical inquiries that investigates a contemporary phenomenon in its real-life context" (Yin, 2003, p. 13). A case study includes a detailed or in-depth examination of a single phenomenon and can be used to test a more general theory (Babbie, 2012, (Bryman & Bell, 2011). The single phenomenon investigated in depth in this thesis is the small Caribbean Island Curacao. The criteria found for the attraction of students and companies might be adopted on other small Caribbean Islands to check whether they meet the needed criteria.

# 4.2. Data Collection

The data collection process is a challenge because the data have to be relevant and adequate to measure the analysed aspects (Knight, 2014).

### 4.2.1. Secondary Data Collection

Thus, a possible problem concerning secondary data is its origin because secondary data often has been collected in another context or for another reason, which can lead to bias concerning its validity (Lewis, Thornhill, & Saunders, 2007).

This type of data is often called secondary documentary text data and is often used in a research using primary data, too (Lewis, Thornhill, & Saunders, 2007). The secondary data collection was based on scientific articles, expert homepages and specific reports. To extend the amount of information the *"snowball"* method was applied, meaning that new articles are retrieved from the reference list of articles already read (Van Aken, Berends, & Bij, 2007)

### 4.2.2. Qualitative Expert interviews

In addition to the theoretical investigation, the empirical investigation will be developed using primary data (data that are especially collected for the research topic) (Burns & Bush, 2008). In this case, the semi-structured expert interview approach is adopted to collect primary data. This approach supports the case study because the additional focus on qualitative research will lead to an inductive approach of the case investigated (Bryman & Bell, 2011). The semi-structured interview method has the beneficial aspect of containing a list of themes and key questions but it is a flexible method, which leaves space for spontaneous questions (Bryman & Bell, 2011). Thus, the interviewer can probe topics in which he is more interested (Lewis, Thornhill, & Saunders, 2007). Besides this aspect, it faces difficulties regarding potential bias, its reliability, validity and generalisability. The first bias, which may occur, is the interviewer bias, which means that the result is not clear enough due to mistakes by the interviewer. This can be circumvented by proof interviews. The second type is the response bias that means the missing or wrong answer to some topics. Finally, the participation bias is linked to the problem that some people will not participate due to time-consuming requirements, which can reduce the quality of the sample (Lewis, Thornhill, & Saunders, 2007).

Using the semi-structured interview method leads to the point that the interviewer has to fulfil two different roles. The first role implies that he has to be content oriented, i.e. the researcher has the aim of collecting unbiased information, thus presenting a valid and reliable answer to the research question (Aken, Berends & Bij, 2007). The concept of validity asks whether the collected data is a representation of the reality, thus the real meaning of the investigated topic. The aspect of reliability is linked to the aspect whether the research technique can be repeated several times and receives the same result each time (Babbie, 2012). This is often a problem in semi-structured interviews because the results will not be the same when interviewing individuals a second time. One way to solve this problem as best as possible is to make notes during the whole process. This ensures that external people know what has been done and among which circumstance (Lewis, Thornhill, &

Saunders, 2007). The second role is that the interviewer has to manage the interview, thus he has to guide the interview and maintain a good atmosphere.

The planned semi-structured interview has to be seen as a qualitative interview, which is different from a survey, because it is based on a small amount of in-depth questions instead of several standardized questions (Babbie, 2012). The qualitative expert interview has three quality criteria, which play a role regarding the interview outcome (Kaiser, 2014). First, the process of data collection and analysis has to be intersubjective understandable. This implies that external persons need to understand the process even when there were not directly involved. The second point is that it has to be based on a literature review (theoretical framework). The last aspect focusses on the attitude of the interviewer who has to be neutral and open to new results and interpretations (Kaiser, 2014).

#### 4.2.3. Interview Setup

The interviews will be conducted with experts in the field of the Dutch Antilles and Curacao as well as representatives of companies/institutions linked to the knowledge and education sector that are interested in these Islands. The process of interviewing will take place face to face or alternatively by telephone and skype due to the distance between Curacao and Germany. The experts have to fulfil the experience function and will be interviewed to generate knowledge about current problems, structures but also possibilities and opportunities of the Dutch Antilles, especially Curacao.

The interview (see setup Appendices D) contains 14 questions being divided into the categories "General Information", "Information on education in Curacao", "Requirements of an education hub", "Student and company attraction" and "Curacao in general". The focus of the interviews will be on requirements and criteria investigated and developed in the theoretical chapter. This means that the experts will be asked about success factors found in the practical examples of education hubs or about infrastructural and governmental aspects shown in the theory. Furthermore, these interviews are conducted to establish a link between the theory and the existing requirements of the island. Information will be collected under the investigations of possibilities concerning the establishment of branch campuses, the quality of the own universities or the possibilities for home and international students and organizations. Furthermore, it will collect information about Curacao in general, followed by information on the knowledge sector and information on education. The main question type will be open questions where the participant has the possibility to define and describe things in his own words. The second type is probing questions, which are supposed to explore given responses in more detail (Lewis, Thornhill, & Saunders, 2007). The whole interview guideline has two underlying functions: (1) the structuring of the group of themes and (2) the use as basis structure in the interview situation (Bogner, Littig & Menz., 2014)

All in all the interview process will be realised on basis of the seven stages developed by Kvale (1996). The first stage is "thematising" meaning the clarification of the interview

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purpose and concept. Then there is the stage of "designing" which includes the process to reach the purpose without ignoring the ethical aspect. Furthermore, in this phase the pretest, sampling and contacting of the potential participants will take place (Kaiser, 2014). The third stage is the "interviewing" itself and "transcribing" stage. The transcribed data needs to be analysed in the "analysing" stage, i.e. linking the collected data to the purpose of the study. The sixth stage is "verifying", i.e. checking the reliability and validity. Finally, the results investigated by the interviews need to be documented in the "reporting stage".

### 4.2.4. Survey Setup

Besides the conducted interviews, a survey has been developed (see Appendices F) to ask for some key requirements of Curacao and its education system. The survey has been send to 62 potential participants in the middle of June but only 19 persons filled it in. Due to this small amount of answers, this survey cannot be seen as representative. However, the validity of the survey is well given because the questions have measured what they have been intended to (Lewis et al., 2007). The survey will be used as background information to the results of the conducted interviews and the practical reports. Furthermore, it aimed at finding further additional experts being interested in participating in an interview. Overall, the questionnaire was divided into three parts. The second question was separated into three parts (1) general criteria, (2) country criteria and (3) institutional criteria. The reason for this setup is based on the literature review. Students and companies have valued their expectations, needs and wishes regarding these criteria.

### 4.3. Sampling

For the interviews, 31 experts, with different backgrounds, have been contacted and asked for participation. Although 24 were interested, only 16 interviews have been conducted in total. The interviews can be separated by the function of the participant. Thirteen experts work in the field of education and the Dutch Antilles and three are company experts. The units to be interviewed have to be useful in different ways. First, they need knowledge about the topic, which again leads to the fact that random sampling, or systematic sampling would not have been an adequate method. Furthermore, it was planned to have two points of view, one from the companies' side and one from the experts' side both providing different insights into the fields of Curacao, education and the Dutch Caribbean. This approach is called heterogeneous or maximum variation sampling, meaning the use of people with sufficiently diverse characteristics in order to get an insight from different points of view (Lewis, Thornhill, & Saunders, 2007). Maximum variation sampling has been adopted by conducting interviews with company experts, education representatives working in Curacao, governmental representatives and professors with knowledge about Curacao but working in the Netherlands. Furthermore, experts from advisory companies and foundations, which are focussed on Curacao and the Dutch Antilles, have been interviewed. The choice of these people has been made because of the highest possibility for getting good and truthful information. Conducting interviews with professors in Curacao and in the Netherlands delivers a detailed insight in the education sector and the current situation. Asking company experts was focussed on information about the labour market and complications on the island. The interviews with representatives and experts of the Antilles created an overall background and delivered information concerning the island structures. Due to a confidentiality clause, all interviews will only be named with general synonyms (participant) for the interviewed person. Representatives with different functions were chosen to get a broad insight on possibilities of Curacao and the Dutch Caribbean. Furthermore, it was supposed to prevent problems concerning the reliability and validity.

The interview partners have been chosen from basis collected during December 2014 and July 2015 by attending meetings about Curacao in Den Haag and Rotterdam and the collected survey Furthermore, contact data has been collected from docents and representatives of SPOC, ABC Advies and MEO. Based on the described characteristics and requirements, the sampling method of this thesis was non-probability sampling, which is also called purposive (judgemental) sampling (Babbie, 2012). This method is often used in case studies because the researcher has to collect specific information, which will not be gathered, by using probability-sampling methods (Babbie, 2012). Non-probability sampling is based on pre-requirements for the sample and pre-discussions with potential experts. One pre-requirement was a long time experience of the experts on the Caribbean. By using this method, the researcher has the ability to decide on his own which participants are the most useful or representative ones (Lewis, Thornhill, & Saunders, 2007). Furthermore, this method supports the own selection of cases which will be the best support to solve the central research question and to find an appropriate answer to it. Furthermore, on-probability sampling is often used for very small samples. It is important to recognize that this type of sampling cannot be seen as statistically representative of the total population (Lewis, Thornhill, & Saunders, 2007). Non-probability sampling has been further supported by snowball sampling, which implies that the researcher finds new participants by asking for contact data in previous interviews (Bryman & Bell, 2011).

### 4.4. Data Analysis

Analysing the raw material is done by using the method of coding which means "[...] --classifying or categorizing individual pieces of data --- coupled with some kind of retrieval system" (Babbie, 2010, p. 400). By using the method of coding, it can be distinguished between open coding, axial coding and selective coding. In this thesis, open coding is used (see Appendices E). By using open coding, each piece of data gets a code, which can be considered as an important concept in the analysis (Lewis, Thornhill, & Saunders, 2007). Open coding is supported by asking questions and comparing data. A comparison shows differences, similarities and forces the researcher to categorize them (Lewis, Thornhill, & Saunders, 2007). During the coding process, memo writing and making use of a dated codebook is needed to have better tracing and access to information and materials (Wolfswinkel, Furtmueller & Wilderom, 2013). Another beneficial point of open coding is that the analysis of the data can start if the first interview, or another form of textual material, is collected. This gives the researcher the possibility to make two steps simultaneously, conduct new interviews and already analyse conducted ones (Kaiser, 2014).

The coding process starts with the transcription of the interview and specific remarks about the interview situation (Kaiser, 2014). The first step of the real coding process is the deletion of all information, which is not relevant in the context of the thesis in order to reduce the high amount of interview transcriptions. The remaining material has been scanned and assigned, to the different categories already established for the interview guideline (Kaiser, 2014). The problem after this process was that the used categories are not sufficient to cover all given information. Therefore, more categories have been developed to make the different interviews measurable (Kaiser, 2014). Another aspect, which makes the method of open coding useful for expert interviews, is its applicability to different transcription types. The interview can be copied word for word (adopted in this thesis), by paraphrases or only via minutes out of the memory (Kaiser, 2014). The program, which has been used to analyse the data collected in the interviews, is the Maxqda coding software.

The next step was to combine the different statements in the interview, which belong to one category. This leads to dissolution of the primary interview structure (Kaiser, 2014). The overall goal was a combination of all interviews in different categories without losing important information by reducing the overall amount of data. It is important to add possible data found in the interview without literature background. Those information need to be researched by using a second resource to make it more useful (Kaiser, 2014). This has happened in combination with already existing reports on the education, the politics and the general environment of Curacao.

# 5. Results of the empirical analysis

# 5.1. Country criteria

This part of the thesis will analyse the 16 conducted interviews using the open coding method. The duration of the interviews was between 38 minutes and 75 minutes depending on the interview partner and his or her level of experience and his or her function. The interview results will be combined with already existing country reports and the results of the survey. The figures shown in the tables in this chapter count the given answers in the interviews, whereas the survey answers will be shown in percentages in the text. Sometimes there are more than 16 interview answers because some respondents had more than just one opinion about certain criteria.

## 5.1.1. Economic factors

### 5.1.1.1. Infrastructure

The first criterion is the infrastructure, which has been named in the context of company attraction and as the first level criterion to become a hub (Lee & Hobday, 2003; Lee, Huang & Teng, 2009). According to the Ministry of General Affairs (2013), the infrastructure of Curacao can be described as well-developed in relation to the size of the island. They named positive aspects like the telecommunication networks, roads, the harbour, the airport and the power/electricity provision. Taking into account the conducted interviews, the experts mostly had a positive opinion, too (see table 5.1).

5.1 Results of the interview. Intrastructure						
Infrastructure						
Positive		Neutral	Negative		No Answer	
	14	2		0		0

5.1 Results of the interview: Infrastructure

It has been mentioned rather often that the infrastructure of Curacao is well developed compared to other islands in the region. The air connection, the harbour and the IT facilities have been specifically noted as developed. As the two participants below confirmed:

"Infrastructure, looking at roads, and seas and airports, I would say that is okay. There is no constraint from that point of view [...]" [I5: 180-182]. "We have the logistics, the airport and the see harbour, but the telecommunication so that, those things makes it attractive to live and work in Curacao." [I6: 282-284]

This result is supported by the survey answers. The answer given most often was that the people agree (63%) or strongly agree (26%) to the question concerning well-developed infrastructure. Only some remarks have been given during the interviews concerning potential improvements or adjustments. It has been stated that the air connection between the Caribbean countries should be improved and the IT infrastructure has to be state of the

art due to its importance in global business and education. Furthermore, possible improvements of roads or general investments to maintain or improve the current status have been discussed. Overall, this criterion has been considered as positive on the island itself and in comparison to other islands in the region.

#### 5.1.1.2. Geographical proximity and land availability

One criterion that is related to the infrastructure is the land availability which is further connected to proximity to the market (Long and Grasman, 2012), geographic proximity (Mazzarol and Soutar, 2002) as well as location and physical geography of a country (Scholvin & Draper, 2012). By having a look at the results of the survey, land availability has been mainly seen as positive (37%) or neutral (47%). The geographical proximity to other countries (79%) and markets (74%) in Latin America and the US can be summarized as rather positive. The statements in the interviews regarding these aspects are positive, too. All 12 respondents that gave an answer to this topic had positive impressions. Easy access for students, close location to Latin America especially Columbia and Venezuela, which can be used for economic development and trading were discussed. However, there are some critical points on the fact that Curacao is an island. The statement below summarizes the major concerns regarding Curacao's geographical location.

"Yes, well, the good thing is the way to South America is not that long and to Miami it is not that long, so there is, there is proximity. On the other way everything has to be done by air or done by boat, you cannot take the car to go over to Venezuela, you need to take the plane or you need the boat. [I5: 187-190]

Another responder noted that geographical proximity or the *"physical distance"* [114: 104] are not that important anymore due to the high level of technological development, which includes internet and air connections. Overall, the location as well as the climate on the island can be seen as positive.

#### 5.1.1.3. Labour Market

The next criterion is relevant for organizations interested in doing business in Curacao. Their focus lies in having access to a skilled workforce as well as to an attractive overall labour market. The current situation is that Curacao faces a high level of unemployment. This has also been mentioned in the survey and interview responses. The employment prospects and working possibilities for staffs have been estimated as neutral or rather negative. Only the working possibilities for students have been seen as mainly positive. The interview responses were quite different, six respondents saw positive aspects of the market whereas 13 respondents saw it rather negative (see table 5.2).

5.2 Results of the interview: Labour market

Labour Market				
Positive Neutral Negative No Answer				
6	1	13	2	

On the one hand it has been mentioned that the quality of the workforce has to be improved because two participants mentioned that "*the weakness is the level of workforce*" [12: 81-82] and the "[...] vast majority of the population is not highly skilled [...]" [18: 27]. On the other hand, it has been noticed that Curacao should become more attractive for foreign organizations by improving the conditions of the labour market, the education level of people and the amount of jobs. Foreign people have to be attracted to improve the labour market with their quality. However, this is complicated by some specific rules like labour market protection.

The second criterion focuses on employment prospects and job opportunities after studying and on part time working possibilities during their studies, which have been considered as important (Chen, 2007; Cheng, 2013; Mazzarol & Soutar, 2002; Sidhu, Ho & Yeoh, 2011; Wilkins & Huisman, 2011). Both criteria are seen as rather complicated due to the mentioned rules and the protection of the labour market. Organizations have to search for local people first. Thus, future opportunities on the island are limited regarding working possibilities. Part time work has been estimated differently during the interviews. Some answers were more positive saying that there are some chances in the hospitality and tourism sector. Others said that it is rather difficult or difficult on a legal way.

### 5.1.1.4. Scale

Another criterion, which has been named in the theory and during the interviews, is scale. Scale has to be seen from various points of view. It can be linked to the country's small size or linked to the small existing market scale. Furthermore, the size of the country has been estimated positively and negatively regarding its influence on the island. Negative aspects can be found in the context of market size, missing ability to be self-sustaining, missing opportunities and rising problems (see table 5.3). As the example below confirms:

	Sc	ale	
Positive	Neutral	Negative	No Answer
2	0	9	5

5.3 Results of the	interview: Scale

"So, I mean, yes scale is a big problem. Small scale le	eads to all imbalances in the
political system, less stability and so on." [I	[8: 336-338]

Besides negative aspects, the scale can be seen as an opportunity due to the short ways of communication and shorter decision-making processes. However, overall, the scale has been considered as a negative aspect for the development of Curacao.

# 5.1.2. Cultural factors

### 5.1.2.1. Cultural diversity

Culture plays an important role to attract foreign students because they are looking for cultural diversity and a good social structure with a low level of discrimination (Chen, 2007; Cheng, 2013; Mazzarol & Soutar, 2002; Sidhu, Ho & Yeoh, 2011; Wilkins & Huisman, 2011). Organizations are also interested in cultural factors when deciding to go to a foreign country (Austin, 1990; Andreassen, 1995). In external reports, it has been stressed that the culture can play a role in the improvement of the education. According to the Ministry of General Affairs (2013), the renovation of the education system can guarantee well-trained and skilled children, which are connected to the culture, the business culture and business administration. The cultural background has been seen as positive in the survey answers. The respondents saw a multi-cultural environment (100%) as well as the cultural connectivity to Europe (79%) and America (63%). This does not completely fit with the estimation of the low level of discrimination because there are 27%, who disagree on that point. Taking the interviews into account, the evaluation of Curacao's cultural diversity is completely positive (see table 5.4). As one of the participants outlined:

5.4 Results of the interview: Cultural diversity

Cultural diversity						
Positive	Neutral	Negative	No Answer			
12	2 0	0	4			

"I think the cultural aspects are extremely positive. I think there is little or no aspect of our culture that would make students or researchers feel not welcome over here. Be it religious beliefs, sexual orientation, everybody can live the lifestyle they prefer [...]. This is very strong over here, culturally it is an asset." [I6: 161-165]

As presented above, respondents did not consider religion and gender roles as being problematic. This is strongly connected to the estimation that the country's population is very open to foreigners. Due to its already mentioned size, it is easier to get in touch with people and you find a multicultural environment, which can have positive influence on students. In summation, the information from the interviews, reports and the survey the cultural diversity can be evaluated as a big advantage of the island.

### 5.1.2.2. Safety

Safety is a criterion, which is important for both organizations interested in doing business and for students deciding to study abroad for a half year or longer (Goede, Neuwirth & Lousia, 2011). According to a report developed by the A.M. Best Company (2014), Curacao can be considered safe. The opinions of the participants in the interviews and survey were quite different on the question whether Curacao is safe or not. In the

survey, 63% agreed that Curacao is a safe place, 21% had a neutral opinion and 16% disagreed. In the interview, every point of view was stated (see table 5.5).

5.5 Results of the interview: Safety

Safety							
Positive		Neutral		Negative		No Answer	
	5		6		4		5

It has been stated that Curacao is a safe country with a comparatively low crime rate in the region, facing only the problems each country faces, like robbery or drug dealing. Furthermore, they have a good legal system due the connection to the Netherlands (see chapter 5.1.4.). Nevertheless, the respondents took negative experiences and events into account, which influence the feeling of security of foreigners and the image of the country. Respondents were positive, negative or careful concerning their estimation of the security in Curacao. As the two respondents below confirmed:

"There is always the problem of criminality but that is kind of general in that region like South America and on some islands, too. Still, I think it is manageable. [I12: 248-250]

"There is a substantial criminality unfortunately. Like stealing and much drug related of course. It is not that it is a very dangerous place or something like that but then in the end there are other places that are safer than Curacao." [18: 242-245]

Overall, there are some concerns about the safety of the island but it is not a completely unsafe island. It has to be said that the opinions on criminality and security in Curacao are different. It should be compared to other countries and afterwards it has to be defined what is seen as dangerous and unsafe.

### 5.1.2.3. Languages

The last cultural criteria are languages spoken in Curacao. Languages can be used as a competitive advantage in the development of a successful hub (Lee & Hobday, 2003). Languages also play a role for students who would like to study in a specific language, do not have any language barriers, or try to improve their language skills (Cheng et al., 2013). Companies are interested in languages in terms of international collaborations and communications. The survey shows that 79% have a positive opinion on the languages in Curacao. The opinions regarding the languages in Curacao need to be evaluated from two sides (see table 5.6).

			0	0		
Languages						
Positive	Neutral	Ν	legative		No Answer	
	12	0		6		2

5.6 Results of the interview: Languages

From a general perspective, it has been estimated positively that Curacao is multilingual. People on the island are able to switch between languages easily and can speak Spanish, English, Dutch and Papiamentu. In the tourist sector this knowledge is beneficial and supporting the position of Curacao. The number of languages are seen as "[...] great asset [...]" [13: 117-118] and as a "[...] competitive advantage [...]" [110: 400]. The critical part on the language aspect is its professional use and level. People can speak these languages to communicate on a simple level but not on a level required in education, taught courses in one of the foreign languages or communicate in complicated business or political matters. As the example statement below shows:

"Language is a problem because more Curacaos speak Papiamentu, [...], which means that students and staff use all other languages as a second or third language, even Dutch even English and that is a problem for the staff and for the students. [...]. That definitely is a handicap" [18: 151-157].

In the end, language can be considered as positive for the cultural environment and the needed openness to foreigners, especially tourists, of the island. Complications can be found if the inhabitants have to use it on a professional basis for education or negotiation. However, in general, the cultural factors have been stressed in a rather positive and beneficial way for Curacao while taking into account some problems and remarks.

### **5.1.3.** Political factors

After the already investigated cultural and economic factors, the political factors are also relevant in the context of becoming a hub and attracting organizations or students. Political factors are the political stability, governmental strategies, the political sustainability, the political structure and the governmental support.

#### 5.1.3.1. Political stability

Political stability has been considered rather positive. However, resulting from political complications and the small seat majority in the cabinet there is a moderate risk for the political stability of Curacao and thus a risk that the prime minister will not be able to govern until the next election in 2016 (A.M. Best Company, 2014; Country Report Curacao, 2014). These aspects can be seen as negative because a fragile political stability is unattractive for investments of foreign companies and for the attraction of students. The answers in the survey were divided, 31% did strongly agree or agree, 38% had a neutral position and 31% (strongly) disagree. The interviewed people had a rather different opinion and thought that stability is given and there is no danger concerning negative developments, which is due to the existing connection to the Netherlands (see table 5.7). Overall, the stability has been estimated positively in Curacao because political stability is mainly given on the island.

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5.7 Results of the interview: Political stability

Political stability					
Positive Neutral Negative No Answer					
8	1	1	6		

"Well, the political system is for a small island like ours it is relatively stable. Of course there are issues; some local issues. There are some issues between islands; there are some issues between Curacao and the European party [the Dutch representatives] in The Hague. There are several issues but on the long term or on a bigger perspective it is relatively calm."

[113: 151-154]

### 5.1.3.2. Governmental Strategies

Strategies are needed to reach goals in the short-term and in the long-term. This criterion has been evaluated negatively for the island (see table 5.8). It has been stated that the country lacks a vision and a long time view on strategies to implement policies. As the first statement below implies:

Governmental strategies				
Positive Neutral Negative No Answer				
0	0	12	4	

5.8 Results of the inter	rview: Governmental	strategies
--------------------------	---------------------	------------

"I think the first thing they should have is a clear and inspiring vision what kind of island do you want to become" [I15: 158-159] and "[...] there is a very big focus on short term things, short term effects, short term popularity and short term results." [I15: 395-397]

"Politicians tend to focus on results in the next six month or perhaps in the next 1-2 years. If you say we want to have a vision for Curacao in 2035, they will fall asleep. They are not busy with such a vision". [I15: 399-401]

In the second statement, it becomes obvious that this problem is strongly connected to the politicians. This is supported by other respondents who stated that the government has to focus on long-term planning instead of just focussing on short-term and short-term money. There is a total lack of a long-term political strategies or visions. Curacao would have the potential if they were able to use it and to create a long-term vision on transnational education. The politicians do not adopt a long-term policy and the parliament and representatives are not long-term focussed. In the interviews, the given responses were quite negative (see table 5.9).

5.9 Results of the interview: Political sustainability
--

Political sustainability					
Positive	Positive Neutral Negative No Answer				
0	1	10	5		

"The government will never commit itself to anything and if they committed then next year there are new elections, new politicians come up and they say, well the first thing we do is to change the policies of the past government because that was so bad. There goes all your investment and all your strategy. This is so embedded in society of these islands [...]". [15: 405-409]

This quote gives an impression of what is happening in Curacao. This is strongly connected to the attitude, which will be investigated later on. It indicates a problem concerning governmental support and structure. Curacao faces the difficulty that politicians only think about the short-term future or have priorities other than education. Furthermore, the political structure is seen as rather negative (42%) in the survey and in the interviews (see table 5.10). The response below gives an insight of the complications in political long time planning, support and structure.

Political structure, governmental support					
Positive Neutral Negative No Answer					
4	1	13	0		

5.10 Results of the interview: Political structure and governmental support

"They want to deal with safety, security first. We have an oil refinery, which is a big deal, we have international trade, there are so many other issues that have preference over poor educational system and this is really a shame. Therefore, I think education is not at the highest of the priority list of the government. [I13: 161-165]

Several participants argued that the government has to support the education development with commitment and with financial funding. This financial support is currently not in place. This has also been supported in the survey where only 11% had a positive opinion, 47% a neutral view and 42% saw no financial support.

To sum up the political factors, it becomes obvious that the whole environment and structure faces problems in different areas; missing willingness, missing money, missing ideas, missing attitudes and missing or wrong priorities. Furthermore, corruption and nepotism are problems that need to be taken into account (Country Report Curacao, 2014, "Former Minister Constancia arrested", 2015). Curacao faces structural economic weaknesses due to their political situation, the high business costs and poor labour market flexibility (Country Report Curacao, 2014). The island faces different interests of different groups including a missing linkage between the society and the politicians and a problem of understanding the use of good governance (Schotborgh-van de Ven & van Velzen, 2013).

### 5.1.4. Rules, regulations and attitude

In strong connection to political issues, it should be focussed on rules and regulations, too. This includes laws, visa, bureaucracy and red tape. A country's environment is further influenced by the attitude of people in a country.

### 5.1.4.1. Laws

The persons who talked about the law (5 of 16 respondents) have spoken about the juridical factor positively. The positive opinion exists due to the strong connection to the Netherlands and the existence of a "[...] reliable [...]" [115: 278] "[...] high-quality Dutch legal system." [17: 177] This relation is seen as positive for the island and for possible businesses or business problems. A major factor, which leads to this positive estimation, is the existence of the already mentioned higher court in The Hague that can become responsible if complications occur. As the supported in the statement below:

"The strong part is that the justice department is still linked to the Netherlands. So you are sure that if you have your rights and something is going injustice that you can go to the Dutch court and that you can fight your case and win." [I11: 258-261]

### 5.1.4.2. Visa

Another criterion that has been named in the literature and stated as preference of students is the easy availability of visa in a country (Cheng et al, 2013). This should be guaranteed to be a country aiming at becoming a knowledge hub or just attractive for its education. Respondents of the survey saw this criterion different; 37% had a positive view and 37% a negative opinion. The rest had a neutral position. This criterion is seen as complicated by different interview respondents stating that challenges and problems may occur in the context of getting a visa. Only one respondent did not find getting a visa to be a problematic process.

### 5.1.4.3. Bureaucracy

Visa and bureaucracy can be strongly connected. Bureaucracy was one of the criteria mentioned very often during the interviews. The interview respondents had negative opinions and talked about barriers, which have to be crossed in order to get a visa or other things, which are connected to governmental institutes.

Bureaucracy					
Positive	Neutral	Negative	No Answer		
0	0	12	4		

5.11 Results of the interview: Bureaucracy

"Getting the permit to go there, that takes some time because of the red tape and the bureaucracy. [...]. I organized several round table sessions with people from the agency over there and that was really mentioned at the priority number one. They think that the government should go on. [...]. Because know you need permit from different departments but it is better to have one and they organize that" [111: 343-348]

These complications and barriers are problematic for both student attraction and company attraction. Companies would like to have an attractive business environment and

this is only seen by 43% of the survey respondents, 37% had a neutral view, whereas 21% even disagreed on this criteria. The bureaucracy step for students is linked to the point that they need to get permission from the university. Companies face problems with labour or establishment permits. In the end, most students and companies will get a permit, but it takes time. Overall, the interviewed people agreed with each other stating that bureaucracy is negative in Curacao including the complication of getting a bank account.

### 5.1.4.4. Attitude

Another critical criterion is the attitude in Curacao. Pioneers or visionaries are nearly missing on the island for developing new ideas. Furthermore, if there is a visionary, there is the threat that he or she will face problems concerning the mentioned bureaucracy, individualism or personal difficulties due to jealous people.

"The focus is you pay me, I get my money if you go and you do not succeed at least the country good money from you. That is basically the attitude." [I10: 387-389]

"This probably is the biggest challenges for Curacao. Stop talking and start doing. [...]. They are very good in talking about where to go and what to do but actually doing and going is a problem." [115: 327-330]

Besides the statements above it has also been mentioned that each minister has his or her own ideas including the possibility that the ideas of the former minister will not be implemented anymore. Politicians have the tendency to make contradictory statements. If party B decides to do this and after the election party A comes to rule the country, they will do it the other way around. However, not only the individualistic criteria are rather negative. According to the respondents, the overall attitude on the island lacks entrepreneurial thinking. Summarizing the given answers of the interviews, it shows a clear picture of the expert's opinions (see table 5.12).

5.12 Results of the Interview. Attitude							
Attitude							
Positive Neutral Negative No Answer						٦	
	0		0		14		2

Overall, it has been mentioned that Curacao faces problems due to their cultural background, their old connection to the Netherlands but also with their own attitude and willingness to take effort to implement changes.

### 5.1.5. Business case and financial factors

Another criterion that has been investigated in the literature is the importance of the business case including image and reputation and financial factors for attracting organizations and foreign students. Underlying criteria for this target group are specific tax issues, the tuition fee and the cost of living.

### 5.1.5.1. Image and reputation

As already presented in the theoretical part, the image and reputation of a potential destination is important to attract companies and students. A problem stressed by the respondents is the negative impact on the current image of the some criminality issues in the past (see table 5.13).

Image and reputation					
Positive	Neutral	Negative	No Answer		
0	1	6		9	

5.13 Results of the interview: Image and reputation

The different opinions on image were also existent in the survey. Most respondents had the opinion that Curacao has a positive business case (48%) and a positive image (42%). The problem is that the education image has been seen as rather negative (37%) compared to 21% positive views. Furthermore, there have been critical answers concerning the country image (27%) and business case (26%), too. The following quote directly links the image to the political aspects and further to negative events influencing the island.

"So the image of Curacao is very important to attract business to the island. [...]. This is not as good as it should be at the moment [...]. I think we have some politicians who make a black island from Curacao and I mean black in the sense of image. Do not do business in Curacao and that is a problem, some Dutch politicians say that often in the media. That does not support the image of the island" [I14: 143-149]

Overall, the current image of Curacao is neither positive nor negative. It will depend on the expectations companies and students have, to see an image as positive or not. A problem for attracting students will be the negative image of the education (see chapter 5.2)

### 5.1.5.2. Cost of living

For students the costs of living play an important role because it is directly connected to their opportunities and possibilities during their studies abroad. The meanings of the respondents of the interview were divided over the real level of cost of living (see table 5.14).

					Ũ	
	Costs of living					
Positive		Neutral	Negative		No Answer	٦
	4	4		4		5

5.14 Results of the interview: Costs of living

Some respondents stated that Curacao is cheaper compared to the Netherlands or Germany, whereas others stressed that Curacao is comparatively expensive. Another point of view was that the costs of living are comparable with European standards. In addition, the last view was taking into account Latin American students and their financial possibilities. The same has been seen in the survey where 47% had the opinion that the costs of living are feasible whereas 26% did not agree on this.

One possible problem, it depends where the student is coming from, is that the island is experienced as being expensive. Coming from Europe you won't have the problem I think but coming from Columbia or Venezuela, depending from what economic background you come from, the island will be expensive." [I6: 173-176]

The statement above indicates these costs are felt to be subjective and the country of origin and the financial background of potential students should be considered. This should be taken into account for possible attraction strategies, too.

### 5.2. Institution and education criteria

As presented in the theoretical part, to become an education hub and in order to have the chance to become important enough to attract foreign institutions and students Curacao has to fulfil several criteria (see Chapter 2.4.2.). In the context of education, it can be supportive that Curacao has its own Ministry of Education, Sciences, Culture and Sport, which aims at creating an educational system in which every citizen has the same rights and opportunities to get a good education. Another supportive factor that has been investigated in connection to education and the planning of an education hub is that Curacaos policy focusses on both home and foreign students. According to the Ministry of General Affairs (2013), Curacao made progress in the last couple of years due to policies of the government to improve the general higher level of education and to create a knowledge economy. The Ministry of Education, Sciences, Culture and Sport invested in curricula, developed global partnerships and improved the infrastructure facilities. They also fostered the dialogue with the private sector to realize the opportunity of education as growth potential (Ministry of General Affairs, 2013). These steps can play an important role for the further development of the island, because it has been seen in practice that those opportunities are necessary for becoming a hub. Another supportive step is the collaboration between the IT, the tourism sector and the education boards, aiming at creating possibilities for students (Ministry of General Affairs, 2013).

### **5.2.1.** Education environment

If a country or city would like to become an education hub, the educational environment is essential. This includes criteria like education opportunities based on the education infrastructure (e.g. universities, IT), education quality, brain drain and accommodation for students and staff, but also already existing cooperation or the potential to cooperate. As presented earlier, Curacao faces negative developments due to missing sustainability, low economic growth and an inadequate functioning of the education and training system.

#### 5.2.1.1. Education infrastructure and facilities

Regarding the education infrastructure, it has been responded that physical facilities are existing and that the country could devote its focus towards developing the "modern classroom." Furthermore, Curacao has several universities and institutes (see chapter 3.3.1.) This chapter showed that there could be easy access to higher education, which has been confirmed by the interview and the survey respondents, too. Only 16% of the survey people mentioned that they do not see easy access.

#### **5.2.2.** Education quality

Besides a sufficient education infrastructure, it is essential to guarantee education quality and those aspects linked to it. On the one hand, it should be thought about the study quality from a local and international perspective. On the other hand, it is important to have a look whether brain drain still exists or not.

#### 5.2.2.1. Study quality

The study quality is one of the major things, which need to be excellent to attract students from abroad to study in your country (Chen, 2007; Cheng, 2013; Mazzarol & Soutar, 2002; Wilkins & Huisman, 2011). This implies that Curacao has to guarantee a good, competitive study quality to have a realistic chance to become an education hub. However, the estimation on this criterion is not beneficial for Curacao. While the survey respondents had a rather positive or neutral estimation in this criterion, the participants in the interviews provided answers that were rather negative (see table 5.15).

Study quality				
Positive		Neutral	Negative	No Answer
	1	5	9	3

5.15 Results of the interview: Study quality

The survey responses of the three questions linked to quality differ from good quality (42%) or high quality (37%) to low quality (27%). The most persons had a neutral view on these three questions related to the quality of the education and the staff (see Appendices Table F1-3). This might be linked to both missing experience and uncertainty. Some interviewed persons also showed a neutral view but there have also been nine persons, which stated that the study quality is rather negative.

First, the respondents criticized the current political development (see chapter 3.2. and 5.1.3). The current minister of education is planning to lower the standards, which directly would imply a lower overall quality and in a negative future perspective for the higher education sector in Curacao. Another statement that has been mentioned often in different words is the missing quality of the current universities on the island, which are neither comparable to the Dutch and European standards nor to the level of the university in Puerto Rico or Trinidad. However, in comparison to their competitors in the Caribbean region, Aruba and Bonaire, Curacao can be seen as the best choice for education but still on a level, which

should be improved. There is a basis, which could be further developed, but there is not competitive advantages.

"I think the biggest problem would be the education quality at the moment for students to come to Curacao" [I15: 257-258]. "I think the quality of the education is not that good that it would look good at your CV". [I15: 292-293]

"And one thing I was talking about was exactly this how the educational system is going; it is such a limited level, such a low level. [...]. They first have to improve their local education and before you can start thinking of internationalization of your education [...] that is definitely not the case at the moment." [18: 220-225]

Besides these constraints on the education presented above, there have been respondents, who were more direct and asked for the real attractivity or competitive advantage of Curacao for education and a real educational benefit for students deciding to study in Curacao. This, in comparison with factors mentioned before, also implies a negative image of the education in Curacao.

#### 5.2.2.2. Brain Drain

As a result of the missing perspective on the labour market and the low level of education, the biggest current problems related to the idea of becoming a hub, are the existing brain drain and the high percentage of unemployment of the youth (Ministry of General Affairs, 2013; Curacao Report, 2014). This negative phenomenon has already been named and investigated 19 years ago by Smith (1996) who stressed that brain drain is a major problem of the island. Students leave and never come back; mostly they leave to the Netherlands due to the historical proximity. In 1996, the island already implemented an obligatory rule to stay after graduation, but foreign private companies bought this obligation from the country to get the skilled people (Smith, 1996). Brain drain has also been a major concern in the interviews (see table 5.16).

Brain Drain				
Positive	Neutral	Negative	No Answer	
C	0	8	8	

5.16 Results of the interview: Brain drain

"The weakness is [...] let us say the brightest students [...] say they go abroad for further study but if they are in Holland for two or three or four years or in America they stay there because they have better paid jobs there and they don't come back." [I1: 78-81]

To circumvent this negative aspect Curacao has to improve its education sector. Furthermore, they have to provide a long time perspective to young people. Criteria connected to this long time perspective are working possibilities, education quality and stability. Currently this factor is influencing the idea of the hub in a negative way, as one respondent confirmed.

"It doesn't make much sense to me if bear in mind that most of the talented Curacaos students go to the Netherlands or the US rather than to stay in their own country for education. So, if their own elites go somewhere else why would foreigners go there for their studies?" [18: 201-204]

The problem is that the brain drain results from several factors presented above, which are currently that negative that students and young people decide to go. The specialized education hub can be a step towards improvement because an attractive study environment can attract organizations and companies, which provide working possibilities and thus, perspectives.

#### 5.2.2.3. Accommodation

The last criterion is related to students, who mentioned that it is an important decision criterion whether it is easy to find accommodation in the country or not (Wilkins & Huisman, 2011). In the survey, it has been distinguished between accommodation for staff and for students. The results were completely different. While 33% saw problems for staff to find accommodation, the majority had a positive (47%) or neutral (37%) opinion for accommodations for students. The interview participants had a positive view on the aspect (see table 5.17) and one stated "[...] accommodation will not be a problem [...]" [I4: 222]. As presented below, one respondent was more critical on this aspect and noted that accommodations have to be developed

Accommodation						
Positive		Neutral	Negative		No Answer	
	5	1		2		7

5.17 Results of the interview: Accommodation

"I think the accommodation is one of the most important thinks because we just have problems that the bachelor students will get a good accommodation. So I think they have to organize that, they have to build facilities that would be affordable for students." [I11: 313-

315]

### 5.2.3. Education hub and its sub-types

The last part of the chapter will include aspects connected to the education hub itself, i.e. a deeper insight to check whether there is already cooperation or an existing knowledge hub, talent hub or student hub. Furthermore, it will be analysed whether there is the basis for potential education hub specializations in Curacao.
### 5.2.3.1. Cooperation

First of all, the focus is on cooperation in general. In Chapter 3, some existing collaborations between institutes and industries or between institutes and institutes have been presented. A positive estimation on cooperation has also been shared by the survey participants who mainly had positive (48%) or neutral (37%) opinion on education and business cooperation's. Only the exchange between universities has been seen more critical with 26% negative statements. The interviews presented nearly the same picture (see table 5.18). Besides information on further cooperation, the participants have estimated the chances to collaborate in the future. The experts have seen the general possibility of collaboration as being rather positive and as a chance for economic development.

Cooperation				
Positive		Neutral	Negative	No Answer
	9	3	0	4

5.18 Results of the interview: Cooperation

Another aspect that has been mentioned in the context of collaboration is the chance and the potential of a linkage between the tourism sector and the education sector. On the one hand, there is a chance of cooperation between the universities and the tourism sector on the island itself. On the other hand, there can be collaboration between the islands education facilities with international institutes or with institutes in the Netherlands (e.g. the Hotelschool The Hague) to exchange students of the tourism sector. Overall, it has been stressed that there are some existing cooperation, which can create opportunities for Curacao (see chapter 6)

# 6. Discussion and Conclusion

The analysis of the interviews has shown that the respondents had different opinions and outlooks on Curacao. Some criteria have been valued positive like the infrastructure, the cultural environment or the proximity to other markets and countries. Others have been rated negative where the experts agreed on Curacao's low level. In addition, several criteria were not rated entirely positive or negative. Chapter 6 will provide the results, the discussion, the conclusion as well as an outlook onto future opportunities.

Country criteria	Assessment	Institution criteria	Assessment
Exciting place to live	+	Tuition fee	+
English improvement and no language barriers	+	Easy to get information about the institution	+
Geographical proximity and land availability	+	Customer oriented culture	+
Infrastructure,	+	Accommodation	+
Health care	+	Easy admission to the institution	0
Religion	+	Broad range of programs	0
Gender roles	+	Large number of international students	0
Low discrimination	+	Latest information and methods	0
Safety	+	Reasonable duration to complete the degree	0
Social environment	+	Offered me the programme I wanted	0
Cultural diversity	+	Linked to other institutions	0
Cost of living	0	English education	0
Language	0	International teaching	0
Country Image	0	High staff quality	-
Easy to obtain visa	0	Image and reputation	-
Research possibilities	0	Quality of program	-
Political stability	0	Training provides good job prospects	-
Technology	0	Excellent facilities	-
Easy to find part time work, working possibilities	0/-	High (financial) resources	-
Improve employment prospects and job opportunities	-	Content of program	x
Quality of education higher abroad lower at home	-	Willing to recognise previous qualifications	x
Governmental support	-	Recognition of the degree	x
Political Sustainability	-	Financial support	x
Labour market	-	Difficult to get better university back home	x
Scale	-	External recommendation	x
Brain Drain	-	Friends study or life there	x
Bureaucracy	-	Family influence	x
Attitude	-		
Long Time Planning	-		
Family influence	x		
Understanding of a foreign culture	x		
Friends study or live there	x		
To gain knowledge of country	x		
Recognition of qualification	x		
Missing requirements at the home country	x		
External recommendations	x		
Value or scholarship by the home country	x		
Ties with the home country	x		
Migration	x		

Table 6.1 Summary of criteria for student and company attraction

Table 6.1 presents a summary of the investigated criteria and its level of fulfilment. Not all of these criteria have been shown in detail in the analysis part because the focus was on the major criteria. If aspects received a plus (+) it means, that Curacao has a positive evaluation in this area. A positive evaluation is given if the experts, survey responses and the investigated reports agreed on a positive opinion. A zero (0) describes a combination of positive, neutral and negative factors, which means that the participant opinions and other basic factors have not been homogeneous. Finally, a minus (-) indicates that Curacao has failed on this criterion. A minus is given when the majority of evaluations were negative. Criteria with an x have not been tested in this thesis due to its untestable personal subjective notion like family influence or friends study or live there.

## 6.1. Discussion

The theoretical part has shown that the mainly mentioned criteria for students were linked to financial and educational aspects. Students want to have a good quality of studies, good university reputation and good study programmes. Furthermore, they are interested in financial support, low tuition fees and possibilities to work during their studies and afterwards (Chen, 2007; Li, Liu & Mendez, 2013). Business criteria for organizations are e.g. a good infrastructure (educational and logistical), proximity to the market, international cooperation and the whole geography and land availability. Considering these criteria, it is very important to be critical on the evaluation of criteria for Curacao presented in table 6.1. The results will be brought into context to the theory to show as to what extent positive or negative evaluation is influencing the position of Curacao and the idea of the education hub. Hereby it is also important to distinguish the three possible stakeholders (students, organizations and the country itself).

### 6.1.1. Positive evaluated criteria

Table 6.2 presents the positive evaluated criteria of Curacao. First, it can be seen that there are more positive country criteria than institution criteria. The institution criteria focus on living circumstances and bureaucracy processes instead of showing quality issues. Taking into account that students often named, "tuition fee" and "easy to get information about the university" as reasons for studying abroad, Curacao meets these criteria. The fact that there are less language barriers and that it is an exciting place to live in, are also beneficial but not as much important as study quality or future perspective.

Country criteria	Assessment	Institution criteria	Assessment
Exciting place to live	+	Tuition fee	+
English improvement and no language barriers	+	Easy to get information about the institution	+
Geographical proximity and land availability	+	Customer oriented culture	+
Infrastructure,	+	Accommodation	+
Health care	+		
Religion	+		
Gender roles	+		
Low discrimination	+		
Safety	+		
Social environment	+		
Cultural diversity	+		

Table 6.2 Positive criteria for student and company attraction

Probably the biggest strength for the development of a hub of Curacao is its cultural diversity and the related social, and comparatively safe and healthy environment. However, it cannot be seen as some kind of competitive advantage because other countries also fulfil these criteria. For the attraction of both foreign organizations and students especially from

the Netherlands, the US and Latin America, the geographical proximity and the land availability can be considered as beneficial. Curacao can develop cooperation with those countries due to the easy connection and cultural proximity. The last investigated criterion, which has rated rather positive, is the existing infrastructure being a supporting factor for the attraction of organizations, which need good infrastructural circumstances to do business. However, even though its infrastructure is considered as being positive, Curacao has to further develop and improve roads, the harbour, air connections, and housing for staff and students to stay competitive and further develop this competitive advantage.

### 6.1.2. Neutral evaluated criteria

The empirical analysis did not just discover positive criteria but also some, which have been estimated as neutral due to indecisive answers or because of both positive and negative opinions. Students are strongly interested in costs of living and easy access to part time work; both factors have been rated positive and negative. A problem, which may occur, can be that Curacao faces problems with future working possibilities and job prospects. This will be described in more detail when looking at the negative aspects as it is mainly linked to the current labour market. The neutral evaluation on working possibilities has still been given because European, especially Dutch students compared to non-European students have it easier to find part-time work but it might be problematic or complicated. The second criterion, the costs of living has been evaluated neutrally because it cannot be generalized; it depends on the country of origin of the student. A student from Europe has other perceptions about high costs of living than a student from Latin America or the US. In this context, it is again important to critically check the access to part time work mentioned above.

Country criteria	Assessment	Institution criteria	Assessment
Cost of living	0	Easy admission to the institution	0
Language	0	Broad range of programs	0
Country Image	0	Large number of international students	0
Easy to obtain visa	0	Latest information and methods	0
Research possibilities	0	Reasonable duration to complete the degree	0
Political stability	0	Offered me the programme I wanted	0
Technology	0	Linked to other institutions	0
Easy to find part time work, working possibilities	0/-	English education	0
		International teaching	0

Table 6.3 Neutral criteria for student and company attraction

By looking at the institutional criteria in Curacao and its importance for students, it can be concluded that easy admission, a broad range of programs and large number of international students are important criteria. However, these aspects are still not as important as the financial and quality criteria. Therefore, if Curacao wants to become an education hub, it has to meet high standards in all of the above criteria. Just to name a few besides an easy visa process, Curacao has to guarantee an easy and fast admission to the universities and it has to offer English education including tutors speaking very good English because it is the international education language and the current language level has been considered as beneficial for tourism but not for professional use. This is the reason why language has been rated zero. Another example could be a "broad range of programs" and "offered me the programme I wanted" were often named as pull factors for international students. This is a point where Curacao already has a basis but they should further develop this, to establish its education improvement and student attraction on this.

### 6.1.3. Negative evaluated criteria

When looking at the analysed results it becomes clear, that six main criteria of the country and institution criteria got a negative assessment. This would not be a problem, if they were not important for becoming an education hub, attracting students and organizations or at least were compensated by the positive criteria (see 6.1.1).

The main issue Curacao faces, is the governmental support, which has been rated very negative due to a high bureaucracy but also missing sustainability and long-time planning. Thus, the whole political structure does not support planned changes on the island. This is also reflected in the attitude that many people display by focussing on their own benefits first. Satisfying governmental support and structure play a major role in relation with the development of a hub (see Singapore, Malaysia and Qatar) otherwise nearly all positive aspects are not useful.

Policies and governmental support also play a role in the second major criterion, which cannot be satisfied by Curacao: employment prospects. Curacao has only limited job possibilities on the island. This can also be seen in the assessment of the labour market, which is negative, too. Some sectors of the labour market have a low quality of professional staff or do not offer jobs for graduated students. Most jobs can be found in the financial and hospitality sectors. This might be because of the current education system, which does not aim at educating knowledge workers (Ministry of General Affairs, 2013). Additionally, Curacao faces a bad mobility of workers, leading to high costs of labour and low productivity in comparison to competing Latin American countries (Ministry of General Affairs, 2013).

Country criteria	Assessment	Institution criteria	Assessment
Easy to find part time work, working possibilities	0/-	High staff quality	-
Improve employment prospects and job opportunities	-	Image and reputation	-
Quality of education higher abroad lower at home	-	Quality of program	-
Governmental support	-	Training provides good job prospects	-
Political Sustainability	-	Excellent facilities	-
Labour market	-	High (financial) resources	-
Scale	-		
Brain Drain	-		
Bureaucrazy	-		
Attitude	-		
Long Time Planning	-		

Table 6.4 Negative criteria for student and company attraction

The third criterion rated negative is the level of education, which might overall not be good enough to guarantee good job opportunities or a promising influence on the curriculum of the student's life. Education or better education quality compared to the student's home country is also mentioned -on country level- by students as reason for going abroad. On institutional level, the first reason to choose an institution is its quality based on staff, facilities

and program. By looking at table 6.4, it becomes clear that none of these three factors have been rated positive on Curacao although the universities are accredited by Dutch, Spanish or American organizations. However, the complication exists due to the language problem (see previous chapter). The medical schools can be seen as qualitatively high because they prepare the students for the final medicine education, which will follow in America. Besides the comparatively low quality of the some studies on Curacao, the institutes also have a rather bad image and reputation. According to the reports, the interviews and the survey, the universities are mainly seen as tertiary education institutes, which are not competitive in comparison with institutes in the Netherlands or other European countries. Furthermore, they are not as prestigious as the University of the West Indies, which offers more programmes and is established in three countries in the Caribbean region (Barbados, Jamaica and Trinidad & Tobago). Nevertheless, the negative estimation of study quality can again not be generalized. There are programmes or parts of programmes that have better quality than the overall rating shows. However, after all it comes down to creating an educational competitive advantage, which does not exist until now. Students have to choose Curacao as study destination because of the e.g. high quality of the hospitality education, the marine education or the law school. Here, Curacao has to identify already existing quality and use these programmes as its strengths.

A further negative criterion that has to be taken into account is the negative influence, of the existing brain drain, which among other things results of the two criteria presented above and has been a problem in Curacao for decades. This suggests some kind of a vicious circle. A country that loses its skilled young people does not have enough skilled workers to create a higher-level educational basis or to become attractive for investments by foreign companies, resulting in a missing perspective for young locals. Then, this is again not attractive for foreign students. This negative circle can foremost be interrupted by the government by making Investments towards the improvement of education quality, creating perspectives and thereby improving the attractiveness of the country for exchange or longterm students.

The fifth criterion that has been rated negative is the limited financial power of the island, the institutions and the education sector. This is again a result of the low economic level and the missing governmental support on the island. In the interviews, it has been stated that the public institutes have to finance themselves, without receiving funds from the government and if they do receive funds, it will not be used for overall improvement for sure. The country's general financial situation does not help as it has low domestic savings and faces a low economic growth, large fiscal deficits and low foreign currency reserves, which can lead to financial problems (Ministry of General Affairs 2013). Also, the inefficiency of the islands investments, investigated in 2013, in combination with the current political situation add up to a, major (economic) threat to the island.

The last criterion playing a negative role for the economic attractiveness of the island is its limited size limiting the country's economic strengths, its development possibilities and its educational width. However, on a positive note, the scale can also be seen as beneficial as the shorter ways of communication can lead to faster implementations of changes.

### 6.1.4. Comparison of the evaluated criteria

The discussion above showed that Curacao's potential has to be evaluated on three levels. First, Curacao fulfils some criteria needed for students and companies. For companies, the good infrastructure and good geographical proximity can be considered as positive. Students have easy access to information about the institutions, they easily find accommodation and Curacao is an exciting place to live due to its cultural diversity and openness. However, the problem of Curacao is based on the neutral and negative criteria. Many criteria, which are more important for students and companies -compared to the positive ones-, have been evaluated neutral or even negative. The important financial aspects are not seen as very negative but also not as positive for students. The working possibilities, the general image of the country and the low level of professional use of the English, Spanish and Dutch language make it unattractive for foreign companies and students. However, the worst criterion for attracting students is the comparatively low quality of studies and the missing (job) perspective.

Overall, the analysis and the discussion afterwards revealed big and small problems of Curacao in every sector in the country. The education sector is limited but it can be developed. The political sector faces problems of corruption and missing sustainability. Even the positive aspects of cultural diversity and many spoken languages are not positive in every detail. Often, the languages are not spoken fluently or on a professional level. Finally, the cultural benefits cannot be fully used due to a high bureaucracy, making it complicated to immigrate to Curacao for working, studying or for establishing a company.

### 6.2. Limitations of the study

This research has limitations, which have to be acknowledged and potentially influenced the result of the research. First, it needs to be considered that it has been an explorative study. There has not been a similar research setup with this exact focus and this number of samples so far. This implies that the conducted interviews can only be seen as an example and cannot fully guarantee the external validity of the research. However, the used samples can be seen as representative for all expert opinions. The study gave an insight into the problems and possibilities of Curacao by taking into account the view of well-known experts in this field. Therefore, the study is an example case describing what problems exist and to what extent. A second limitation of the study was time and money. This includes that there has only been the option to conduct interviews via Skype instead of flying to Curacao and speaking to locals and students in person. The time restrictions were linked to a huge change in the research focus after four month of research due to changes and missing support in the previous setup. The last limitation is connected to investigation possibilities of some criteria found in the literature. Some criteria named by students were too personal and subjective to be evaluated, checked and to be connected to Curacao. Overall, this research gave a detailed insight in Curacao's problems and opportunities. Now, it has to be separated into several projects to guarantee improvements.

### 6.3. Conclusion

The theoretical investigations on the education hub, on attraction models and on criteria, which are needed to become an education hub, to attract foreign companies/ institutions and students have built the basis for the empirical research, which now presents the answer on the research question:

# To what extent is it realistic and possible for Curacao to become an education hub, which boosts the national economy?

It can be concluded that there is a small long-term possibility for Curacao to become an education hub because some needed requirements and criteria (languages, universities, and attractiveness) are partly given or can be further developed. However, some problems remain and will be hard to solve. An aspect that needs to be considered is the timeframe in which Curacao can try to become a hub. Curacao will not be able to become an education hub, which boosts the economy in the next years because this step needs time and Curacao has to change and improve several things first. This includes the most relevant criteria of an education hub, like governmental support, high education quality, good facilities and a skilled workforce. In Curacao, these criteria are currently not sufficiently developed and one (main) reason that makes the implementation of the changes difficult is the current political situation with its missing political sustainability.

Furthermore, as a result of Curacao's size, current structure and problems they need to specialize in some sector. Curacao should be able to attract foreign students and professionals in the tourism and marine sector as the country and its institutions are experienced in these fields. In the tourism sector, sufficient structures and knowledge are available and a specialization can take place. The second specialization could be in cooperation with the marine sector where Curacao already has some knowledge. They have the CARMABI institute that is successful and renowned in the field of marine research. Furthermore, they have the Seaquarium, which has also a reputable research department. These two institutes can attract and already do attract foreign students, to write their final thesis or dissertation. Additionally, they are also able to attract skilled staff in the field of water management or biology because Curacao has its coral reefs and the possibility of air water conditioning.

A comparison between Curacao and the hub examples presented earlier (Malaysia, Singapore and Qatar) indicates that these hubs – other than Curacao - have met some core

requirements. First, their governments were able to give financial support, which is currently not realistic for Curacao due to its economic situation. The development of a hub, which generates money, is not possible without making pre-investments. Second, the existing hubs had and have long-term strategies, which are also partly planned for Curacao, but not implemented yet and and even seem unrealistic in medium-term due to the missing political sustainability. A third step that has been adopted by the hub examples is their international collaboration. This is something, which can be realistically reached by Curacao, too, because of its given amount of universities and institutes, the good global connections and the comparatively well-developed infrastructure.

However, the overall conclusion is that the idea of becoming an education hub cannot be a short-term solution for the economic development on Curacao. This idea will take time and costs money before it can even start to boost the economy. Curacao can develop the needed criteria but other changes are needed first. After the implementation of political and structural changes, Curacao has a limited potential to become an education hub. It must try to specialize, as Qatar did, because its size, education facilities and overall conditions will not be able to support a huge education hub like Malaysia or Singapore. A possibility in the current situation of Curacao can be a combination between all three types of the education hubs (see chapter 2.2.3.) whereas the knowledge hub will take much more time because it is path-dependent. Curacao as a country has its potential and different possibilities but it has to put a lot of effort into this to create a competitive advantage for the island instead of being one of a hundred islands in the Caribbean.

### 6.4. Implications for the future: Recommendations for Curacao

Curacao should foremost improve its political situation as this builds the basis for development and the country's image. The politicians on the island have to be trustworthy and cooperative instead of confronting because the island can only develop if the parties work together. This way, political sustainability and stability can be established making the most important step towards all other positive developments. Once this is achieved, the next step should be the development of a vision, meaning a long-term strategy like the other already existing education hubs did. Once working together – at least in a better way than they are doing nowadays – the current cabinet has to draw up a clear plan with steps needed for the development. An idea might be the "Cureduconomy Plan 2030" leaving 15 years, which is comparable with the time of the existing hub visions, to slowly develop the island (see chapter 2.5). The included reforms and goals are linked to all currently existing problems as well as to existing opportunities. Parts of the presented steps below can be implemented in the same time whereas other parts are only realizable after specific previous changes.

### The "Cureduconomy Plan 2030" could be as follows:

#### 1. First Step: Reduction of bureaucracy simplification of rules

Curacao has to implement changes in its bureaucracy. This includes an improvement of governance, a reduction of the existing red tape as well as the simplification of the visa procedure and the change of immigration laws. Curacao has to ease the visa procedure for foreign students, who are interested in studying on the island, also including the (part-time) working permit for all foreign students and several skilled people. This means they have to re-develop the labour protection law (see chapter 3). Changes like a special treatment of students, liberalised employment and immigration rules will have a positive influence on the whole island. Changes are also needed to enable the development of a student or talent hub. The reduction of the red tape can be done via the implementation of one organization, which is fully responsible for the education sector in cooperation with the Ministry of Education. This organization has to be authorized to make decisions and implement changes without asking various other institutions or ministers before the adjustment can be realized.

#### 2. Second Step: Financial support from the government and industries

The development of changes in the education sector and the attraction of students is all but impossible without (financial) governmental support. This could be seen in Malaysia, Singapore and Qatar. Therefore, the government of Curacao has to guarantee a specific fund where public education organizations can receive or borrow money. This fund can be established in cooperation with Curacaos companies, which support this fund with e.g. money or internships. The incentive for companies could be that students have to develop specific projects for the company, which could be beneficial and useful for the companies in competition.

#### 3. Third Step: Promote English, Dutch and Spanish as teaching language

This step should improve the described language problems. If the aim is to attract foreign students to the country, the education programmes have to be taught in international languages on an appropriate level. Therefore, not only the universities have to guarantee a good level of language but also the primary and secondary schools have to implement English, Dutch and Spanish in the curriculum. This will lead to an increased quality of language on the island over time. Curacao should make use of its cultural background and the three existing languages to teach its children to be trilingual. The number of hours in the curriculum should rise contentiously linked to the age of the students (comparable with the system in Germany)

#### 4. Fourth Step: Changes in the education sector

Changes in the education sector are strongly connected to the first three steps of this plan. Curacao has to widen and improve the access and quality of teaching and learning. Public education institutes have to be able to invest in their facilities, equipment, courses and staff. Investments can improve quality, improved quality can lead to better student attraction, which can lead to more tuition fees and thus, to financial strengths and revenues.

#### 5. Fifths Step: Image and labour market improvement:

For the attraction of companies and institutes, Curacao has to improve its image and its labour market. This can be achieved by preventing small negative events influencing Curacao's reputation in a negative way. This could be realized by creating more positive news than negative events. The labour market can be improved by generating more working possibilities for graduated students, to prevent brain drain. This can be supported by cooperation (see step six).

#### 6. Sixths Step: Intensifying local and international collaboration

First, Curacao should create a regional cooperation concerning common interests with other islands or countries. The small Caribbean countries should work together instead of being competitors. Sharing their resources, knowledge and opportunities could make all three countries stronger. However, this idea is only applicable in some specific fields like e.g. education infrastructure. Twinning programmes on the islands could be a possibility. The second field of cooperation can be in international and national institutional cooperation. An opportunity arising from such cooperation will be the improvement of skills and productivity of the workforce and/or the attraction of a skilled workforce. This can be achieved by cooperate education and training programmes focussed on knowledge generation and the establishment of workshops for skilled workers, conducted by some experts or professors. Another way of cooperation can be the exchange of workers, meaning that local organizations try to cooperate with foreign organizations and "borrow" or exchange workers for a couple of months or a year. Exchange would prevent the problem that some workers are afraid of losing their jobs due to foreigners. The foreign workers will bring knowledge and experience to the island, which can be useful for local companies, whereas the local people going abroad will learn other ways of working and will afterwards bring knowledge back as well. In the end, this cooperation can only work if the labour market protection and the visa procedure will become easier (see first step). Furthermore, Curacao has to use their geographical conditions and opportunities while continuously improve the infrastructure and connectivity to the world, to strengthen their attractiveness. One step towards improvement in this matter has already been made by signing an agreement between the government and the trade and industry association in Curacao (Country Report Curacao, 2014).

Besides the presented main steps of the plan, Curacao has already two useful measures in place. It already offers internships in the hospitality industry but also in other industries to attract foreign students, mainly from the Netherlands. Curacao should further create exchange programmes, workshops, internships and its own programme in cooperation with Dutch or other universities. This idea would be supported by the already existing trainee bureau for students. Further ways are the attraction of students for exchange programmes with foreign universities in the Netherlands or the US. Curacao has the chance to attract students for a specific time (3-12 month) due to its positive climate, culture and geographical location, which can be more attractive for a short time, compared to the study quality. Here, the partnership model by De Meyer, Harker & Hawawini (2004) can be implemented if Curacao cooperates with foreign universities or companies in the tourism sector, by the exchange of students and facilities. The import model can also be a possibility for the marine sector where the knowledge and the guality of research are relatively high. In the marine area, it can also be possible to have deeper investigation in the field of blue (water) sustainable energy or coral research. Curacao has already made investigations in the field of seawater conditioning. This can be an attractive field for foreign researchers, especially under the current change of thinking worldwide.

Finally, it should be pointed out that Curacao already has some aspects of a knowledge hub due to the existence of American medical schools, which have been established on the island. To improve these strengths, Curacao should attract foreign universities to establish a small department (one programme), which is more realistic compared to a whole branch campus, on the island offering the same standards as in their home countries. However, this is rather a long-term strategy and strongly connected to an improvement of the education quality and the other mentioned steps.

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# Appendices

# A. Tables

Table 1: Key figures and information of Curacao, Singapore, Qatar and Malaysia (own elaboration, Data from: https://www.cia.gov/library/publications/the-world-factbook/)

Curacao	**	Singapore	
Capital	Willemstad	Capital	Singapore
Area	444 sq km	Area	697 sq km
Population	146,836	Population	5,567,301
Land use	arable land: 10%	Land use	arable land: 0.89%
	permanent crops: 0%		permanent crops: 0.14%
	other: 90%		other: 98.97%
Chief of State	King Willem-Alexander	Chief of State	President Tony TAN Keng Yam
Head of Government	Prime Minister Uvar Asjes	Head of Government	Prime Minister LEE Hsien Loong
Government Type	parliamentary	Government Type	parliamentary republic
GDP	\$ 3.128 billion	GDP	\$ 295.7 billion
Growth Rate	3.6 %	Growth Rate	4.1 %
GDP per sector	Agriculture: 0.7%	GDP per sector	Agriculture: 0.%
	Industry: 15.5%	1	Industry: 29.4%
	Service 83.8%		Service 70.6%
Unemployment rate	13%	Unemployment rate	1.9%
Inflation Rate	3.2%	Inflation Rate	2.4%
Languages	Papiamentu 81.2%, Dutch (official)	Languages	Mandarin (official) 36.3%, English (official)
	8%, Spanish 4%, English 2.9%	- J. J. J.	29.8%, Malay 11.9%
Legal system	based on Dutch civil law system with some English common law influence	Legal system	English common law
Qatar		Malaysia	
Capital	Doha	Capital	Kuala Lumpur
Area	11,586 sq km	Area	329,847 sq km
Population	2,123,160	Population	30,073,353
Land use	arable land: 1.21%	Land use	arable land: 5.44%
	permanent crops: 0.17%		permanent crops: 17.49%
	other: 98.62%		other: 77.07%
Chief of State	Amir TAMIM bin Hamad Al Thani	Chief of State	King Tuanku ABDUL HALIM Mu'adzam Shah
Head of Government	Prime Minister ABDALLAH bin Nasir bin Khalifa Al Thani	Head of Government	Prime Minister Mohamed NAJIB bin Abdul Najib Razak
Government Type	emirate	Government Type	constitutional monarchy
GDP	\$ 213.1 billion	GDP	\$ 312.4 billion
Growth Rate	2.9 %	Growth Rate	4.7 %
GDP per sector	Agriculture: 0.1%	GDP per sector	Agriculture: 11.2%
	Industry: 72.2%	1	Industry: 40.6%
	Service 27.7%	1	Service 48.1%
Unemployment rate	0.3%	Unemployment rate	3.1%
Inflation Rate	3.1%	Inflation Rate	2.2%
Languages	Arabic (official), English (commonly used as second)	Languages	Bahasa Malaysia (official), English, Chinese
Legal system	Islamic law (in family and personal matters)	Legal system	mixed legal system of English common law, Islamic law, and customary law

# B. Figures



Figure 1: Function of a Hub (own elaboration)



Figure 2: Institutions contributing to the Knowledge hub (Source: Turpin et al, 2002)



Figure 3: Institutions of the knowledge hub (own elaboration according to Penco, 2011)



*Figure 4: The cabinet of the empowered Minister of Curacao in the Netherlands (own elaboration, Source,* (Kabinet van de Gevolmachtigde Minister van Curacao, 2014)

# C. The interview setup

General Information	Motivation
<ol> <li>Can you please introduce yourself, who you are and what is your connection to Curacao and the Dutch Antilles are?         <ul> <li>For how long are you working connected to Curacao and the Dutch Antilles?</li> <li>Where have you been working/ are you already working?</li> </ul> </li> <li>Information on education in Curacao</li> </ol>	Obtain general Information about the Interviewee  Motivation
2. How do you estimate the chance of Curacao to become a hub for	
foreign companies or institutions? a. Positive, why and what type do you have in mind? b. Negative, why?	Estimation of the expert concerning the idea of becoming a hub for Curacao
<ul> <li>3. Are you familiar with the idea of the education hub/ education cluster/ research hub and its sub-types student hub, skilled workforce hub/ talent hub and knowledge hub?</li> <li>a. If yes, which conditions are necessary to become a <ol> <li>i. student hub: objective is revenue generation and attracting students</li> <li>ii. skilled workforce hub: objective is train students and develop human resources</li> <li>iii. knowledge hub: objective to attract foreign direct investments</li> </ol> </li> <li>why and which ones are already fulfilled?</li> </ul>	investments

<ul> <li>4. To what extent is there currently collaboration between the knowledge /education sector with innovation industries and additional national and international businesses?</li> <li>b. Do the universities in Curacao have and create enough top talents or representatives to attract foreign students and researchers?</li> </ul>	In the literature is has been stressed that international and local cooperation is needed to become a successful hub. Terms named in this context were exchange programs, twinning programs and branch campuses (Knight 2014, Kinser & Lane, 2008; Lee, 2015).	
<ul> <li>5. Which of the following possibilities could contribute to the internationalization of education in Curacao and why? If an option is not possible in your opinion, why is that?</li> <li>a. Attraction or exchange of (foreign) students</li> <li>b. Attraction of skilled workforce</li> <li>c. Attraction or exchange of (foreign) institutions/universities</li> <li>d. Attraction or exchange of knowledge, material and information</li> <li>e. Collaboration with foreign business partnerships and companies</li> </ul>	Knowledge industries form a major part of the whole economy of industrial countries, thus the most initiatives are more focussed on developing or middle-income countries, to improve their position (Altbach & Knight, 2007). Twinning programs, exchange programs, branch campuses	
<ul> <li>6. Which opportunities and challenges do you see in the education sector in Curacao and why?</li> <li>a. On a local focus</li> <li>b. On an international focus</li> </ul>	The current biggest problems related to the idea of becoming a hub, are the existing brain drain and the high percentage of unemployment of the youth (TAC, 2013; Curacao Report, 2014). The negative phenomenon has already been named and investigated 19 years ago by Smith (1996) who stressed that brain drain is a major problem of the Island.	
Criteria and requirements of an education hub	Motivation	
7. Do you think that the following environmental factors are influencing the location of Curacao and thus the idea of becoming an (education) hub? How?	On country level, the literature presents four pillars, influencing the nationals policy (Austin, 1990) and three are relevant four our context:	
<ul> <li>a. <u>Political factors like e.g.</u>: stability, ideology, institutions, governmental support and geopolitical links/land availability</li> <li>If yes, how?</li> <li>If no why not?</li> <li>c. <u>Cultural factors like e.g.</u>: religion, gender roles, language, human</li> </ul>	<ul> <li>a. The political pillar, focussing on stability, ideology and institutions.</li> <li>b. The Cultural pillar includes factors like religion, gender roles and language.</li> <li>c. Economic point of view natural resources, labor,</li> </ul>	
i. If yes, how? iii. If no why not?	<ul> <li>d. Demographical population growth, age structure, urbanization, migration and health status</li> </ul>	

<ul> <li>d. <u>Economic factors like e.g.</u>: natural resources, labour, capital, technology, proximity to the market and infrastructure <ol> <li>i. If yes, how?</li> <li>ii. If no why not?</li> </ol> </li> <li>e. <u>Demographical factors like e.g.</u>: population growth, age structure, urbanization, migration and health status <ol> <li>i. If yes, how?</li> <li>ii. If no why not?</li> </ol> </li> </ul>	The development of an education hub depends on several criteria that need to be adjusted. According to Long and Grasman (2012) the existing criteria (infrastructure, proximity to the market, land availability and governmental/industrial support) have a different level of importance
<ul> <li>8. Do you think the following business environmental factors are influencing the location of Curacao and thus the idea of becoming an education hub? <ul> <li>a. <u>The international environment like e.g.</u>: interaction among countries <ul> <li>i. If yes, how?</li> <li>ii. If no why not?</li> </ul> </li> <li>b. <u>The national environment like e.g.</u>: policies and strategies adopted by the government <ul> <li>i. If yes why?</li> <li>ii. If no why not?</li> </ul> </li> <li>c. <u>Industry level like e.g.</u>: the structure and dynamics of the knowledge/research/sustainable industry <ul> <li>i. If yes why?</li> </ul> </li> </ul></li></ul>	These environmental factors are further influencing the business environment, which depends on (1) the international environment including interaction among countries, (2) the national environment meaning the policies and strategies adopted by the government, (3) the industry level focussing on the structure and dynamics and finally (4) the company level that is about the strategies and operations of companies (Austin, 2002).
ii. If no why not?	Motivation
Student and company attraction         9. Which challenges do you see emerging for students or companies interesting in studying, working or doing business in Curacao?         10.         a. For (foreign) students regarding for example:         i. Cultural environment         ii. Financial requirements like cost of living, tuition fee and financial aid         iii. Accommodation, visa and registration	Motivation The push-pull model (Altbach, 1989) investigated two factors with influence on international students. This model suggest that the movement of students may depend on a "push", meaning that students chose to leave their home country due to missing or dissatisfying education conditions or as a result of several reasons and forces (Altbach, 2004).

<ul> <li>iv. (Part-time) working possibilities</li> <li>v. Education quality and facilities</li> <li>vi. Safe, health and social environment</li> <li>b. For (foreign) companies regarding for example: <ol> <li>Tax issues</li> <li>Infrastructure</li> <li>Skilled workforce</li> <li>Rules and regulations</li> <li>International cooperation's</li> <li>workforce, working possibilities, business case, image and reputation</li> </ol> </li> </ul>	The second related factor is the "pull", suggesting that students are leaving their home if they are able to obtain and finance a better education elsewhere in the globalized world. The pull factors can be considered as favourable conditions in comparison to push factors because of its opportunities to support study (Varghese, 2008)
<ul> <li>11. Which opportunities and benefits do you see emerging for students or companies interesting in studying, working or doing business in Curacao?</li> <li>a. For (foreign) students regarding for example: <ol> <li>Cultural, safe, health and social environment</li> <li>Financial requirements like cost of living and tuition fee</li> <li>Accommodation and registration</li> <li>(Part-time) Working possibilities</li> <li>Education quality and facilities</li> </ol> </li> <li>b. For (foreign) companies regarding for example: <ol> <li>Tax issues</li> <li>Infrastructure</li> <li>Skilled workforce</li> <li>Rules and regulations</li> <li>International cooperation's</li> <li>workforce, working possibilities, business case, image and reputation</li> </ol> </li> </ul>	The push-pull model (Altbach, 1989) investigated two factors with influence on international students. This model suggest that the movement of students may depend on a "push", meaning that students chose to leave their home country due to missing or dissatisfying education conditions or as a result of several reasons and forces (Altbach, 2004). The second related factor is the "pull", suggesting that students are leaving their home if they are able to obtain and finance a better education elsewhere in the globalized world. The pull factors can be considered as favourable conditions in comparison to push factors because of its opportunities to support study (Varghese, 2008)

Curacao in general	Motivation
<ul> <li>12. Which <u>challenges and weaknesses</u> do you see thinking of Curacao?</li> <li>a. Regarding its geography, infrastructure and level of internationalization</li> <li>b. Regarding its science and technology conditions</li> <li>c. Regarding its social system and the feeling of security on the island</li> <li>d.</li> </ul>	This question focusses on additional aspects that have been investigated as being important for a country to become an education hub. The environmental factors and the push and pull model have already been introduced but these questions should figure out the current status of Curacao and its opportunities and challenges, also compared to neighbour countries.
<ul> <li>13. Which strengths and opportunities do you see thinking of Curacao?         <ul> <li>a. Regarding its geography, infrastructure and level of internationalization</li> <li>b. Regarding its science and technology conditions</li> <li>e. Regarding its social system and the feeling of security on the island</li> </ul> </li> </ul>	This question focusses on additional aspects that have been investigated as being important for a country to become an education hub. The environmental factors and the push and pull model have already been introduced but these questions should figure out the current status of Curacao and its opportunities and challenges, also compared to neighbour countries.
<ul> <li>14. What <u>competitive advantages and disadvantages</u> can be found in Curacao in comparison to other Caribbean Islands in the region like Aruba or Bonaire or countries in South America? <ul> <li>Regarding its education sector, science and technology conditions</li> <li>Regarding its geography, infrastructure and level of internationalization</li> <li>Regarding its workforce, working possibilities, business case, image and reputation</li> <li>Regarding its culture, social system and the feeling of security on the island</li> </ul> </li> </ul>	This question focusses on additional aspects that have been investigated as being important for a country to become an education hub. The environmental factors and the push and pull model have already been introduced but these questions should figure out the current status of Curacao and its opportunities and challenges, also compared to neighbour countries.
15. Finally, what type of additional opportunities or way of specialization would you suggest and do you see for Curacao to improve the own economy instead of becoming an education hub? Why and how?	With this question the intention was to find out additional possibilities for the island from an experts point of view.

# D. The coding process

Code	1 <sup>st</sup> Sub-Code	2 <sup>nd</sup> Sub-Code	Example
	Infrastructure		<i>"Infrastructure as I mentioned, we have the infrastructure, roads and boats but also ICT."</i>
	Geographical proximity and land availability		"Basically the land availability and geography is positive however you cannot create more land and people."
Economic factors		Job opportunities	"Well, human perspective is rather negative because there is high unemployment on the island; there is a large proportion of the population that is not well educated and partly because of the language problem."
	Labour Market	Workforce	"Well, yes, oh many. There are so many. Of course, still the workforce is relatively, still relatively qualified".
		Part-time working possibilities	"Therefore, if you are a student from Germany and you want to come to the island for six month to do an internship it is hard to actually work here. You can work as a student part time in a bar or anywhere but there would be, I think for, if it is not for your internship purposes most of the time it would be illegal."
	Scale		"Therefore, I mean, yes scale is a big problem. Small scale also leads to all imbalances in the political system, less stability and so on. Therefore, you know, yes, small scale definitely matters a lot."
Cultural factors	Cultural diversity		"Yes, social system, the island has a very mixed population; I think more than 18 nationalities. I think there are no huge problems all these nationalities. They all live peacefully together."

	Safety		"There is always the problem of criminality but that is somewhat general in that region like South America and one some islands too. Still, I think it is manageable. In all those years I lived there, I heard a lot, you have to be careful always especially during the night but that is in my opinion not the greatest problem."
	Languages		"Well there is one big advantage that we have here. People speak, some of them fluent some of them not. We speak multiple languages, we speak Dutch, we speak English, the most of us speak Spanish as well, because we had Spanish in school, We speak our own languages Papiamentu."
	Political stability		"Well, the political system is for a small island like ours it is relatively stable. Of course, there are issues within some local issues. There are some issues between islands; there are some issues between Curacao and the European party in Den Haag. There are several issues but on the long term or on a bigger perspective it is relatively calm."
Political factors	Governmental Strategies	Sustainability	"However, the problem is and that goes back to one of my earlier remarks is that the attractiveness of an educational system or of being a hub. Because the whole administration, or the whole government is actually focused on dealing with local problems and of course not having really a vision on how the educational system should be managed."
		Political structure/ support	"Stability and governmental support are missing on the island regarding education. You need interpretation of good governance and enough strong institutes to prevent too much political interference in such kinds of fields."
Rules and regulations	Laws		"The strong part is that the justice department is still much linked to the Netherlands. So you are securing that if you have your rights and something is going injustice that you can go to court and that you can fight your case and win."

	Visa	"For foreign students it might be a bid harder because they need to receive a residence permit, they need have to be accepted by the university first. If not they will not receive e residence permit and we are a bit selective in terms of students."
	Bureaucracy	"There is a lot of red tape around of that as well i mean in theory the regulations exist and you have to apply for a certain status for not having to pay taxes but getting that application through the whole governmental system will cost you a year or 1.5 years or something like that."
	Attitude	"This is what we have. Now, I see them talking a lot. This is probably the biggest challenges for Curacao. Stop talking and start doing. They have a, they need to become more active in getting concrete results, in getting things done. They are very good in talking about where to go and what to do but actually, doing and going is a problem."
Business case and	Image and reputation	"Challenges, overcoming the crippling effects of criminal activities and the impact it has on our image."
financial aspects	Cost of living	"In general, you can say that the costs of living are on the same level like in the Netherlands. Therefore, it could be problematic for students from South America, but it depends also, on what kind of living you want to have on an island."
Education environment	Education infrastructure	"There are three, there is one state university, that is the University of Curacao and then we have the ICUC that is also a university, which does international business studies and all those kind of things. Then we have the Dutch Caribbean University that is well I think HBO level but I am not sure, maybe they also have academic level and there are lots of, or at least three medical universities."

	Brain Drain	"If they are talented, they will be attracted to going to the US or they go to Europe. They follow up their career there instead of on Curacao."
	Study quality	"You need to have very high level of your University and you need staff which excels also in other languages, particularly I guess in English that on this moment is not the case."
Education Quality	Accommodation	"I think the accommodation is one of the most important because we just have problems of that the bachelor students will get a god accommodation. Therefore, I think they have to organize that, they have to build facilities that would be affordable for students."
Education hub	Cooperation	"Attraction or exchange of foreign universities, yes UDC for example works with I think Leiden, there are some connections between the universities but for example the ICUC works with an American university and so yeah there are a lot of connection. There are but in my opinion there should be more and there also more possibilities."

## E. Survey

Dear Sir or Madame,

Thank you very much for your support. It will help me a lot if you could fill in this short questionnaire. Furthermore, I would appreciate to receive your e-mail address to have the possibility to stay in contact with you after this meeting, for a potential follow up interview, if you are interested. It is of course voluntary to provide me your e-mail address.

Name\_\_\_\_\_

E-mail address (voluntary):\_\_\_\_\_

### 1. How do you estimate the following criteria by focussing in Curacao?

## A. General criteria

Criteria	strongly agree	agree	neutral	disagree	strongly disagree
Well-developed infrastructure (streets, harbour, IT, airport, electricity, drinkable water)					
Research possibilities are easy available					
Land availability is positive					
Good geographical proximity to other markets					
High technological level is given					
Good governmental support of the education sector does exist					
Good international business cooperation's and strategic alliances are given					
Good international education cooperation's are given					
Exchange programmes between universities are sufficient given					
Accommodations for students are easy available					
Accommodations for staff and workers are easy available					
Working possibilities are available for each student					
Working possibilities for professionals are sufficient available					
Good financial support by universities or government is given					
Education institutions image and reputation is positive					
High level of scientific staff available					
Difficult access to higher education					
Easy access to higher education					
Well-developed industrial support					
Skill shortage and limited skilled workforce					
Well-developed international agreements					
Tax free zone has positive impact on business					
Tax free zone has positive impact on education					

# B. Country criteria

Criteria	strongly agree	agree	neutral	disagree	strongly disagree
Multi-cultural environment is given					
Good employment prospects and job opportunities are given					
Cost of living are financially feasible for students					
Safe, healthy and social environment provided					
The quality of the higher education is low					
The quality of the higher education is high					
Easy to find part time work					
Easy to obtain visa					
Good English improvement possibility and no language barriers					
Low discrimination					
Good geographical proximity to other countries existing					
Curacao has a strong business case					
Curacao has a positive country image					
Attractive tax regulations for companies					
Attractive company environment					
Existing cultural connectivity to Europe					
Existing cultural connectivity to Latin America					
Political stability is existing					

# C. Institutional criteria

Criteria	strongly agree	agree	neutral	disagree	strongly disagree
Tuition fee is financial feasible at the moment					
Easy admission to the institution					
High staff quality on the institutions					
Good research institutes are given					
Quality of program is good					
Content of program is broad					
Broad range of programs					
Large number of international students					
Latest information, methods and technologies are used					
Training provides good job prospects					
Excellent institution facilities					
Links to other institutions are given					
English education is available					
Broad range of disciplines and faculties					

General Criteria	Mann	Median	Strongly	/ Agree	Agree		Neutr	al	Disag	ree	Strongly	Disagree
General Criteria	Mean	Median	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Well-developed infrastructure (streets, harbour, IT, airport, electricity, drinkable water)	2	2,0	5	26%	12	63%	0	0%	1	5%	1	5%
Research possibilities are easy available	3	2,9	1	5%	6	32%	6	32%	5	26%	1	5%
Land availability is positive	3	2,7	1	5%	6	32%	9	47%	3	16%	0	0%
Good geographical proximity to other markets	2	2,1	4	21%	10	53%	4	21%	1	5%	0	0%
High technological level is given	3	3,1	3	16%	2	11%	6	32%	7	37%	1	5%
Good governmental support of the education sector does exist	3	3,3	0	0%	4	21%	7	37%	6	32%	2	11%
Good international business cooperation's and strategic alliances are given	3	2,5	4	21%	5	26%	7	37%	3	16%	0	0%
Good international education cooperation's are given	3	2,6	2	11%	7	37%	7	37%	3	16%	0	0%
Exchange programmes between universities are sufficient given	3	3,1	0	0%	5	26%	9	47%	4	21%	1	5%
Accommodations for students are easy available	3	2,7	0	0%	9	47%	7	37%	3	16%	0	0%
Accommodations for staff and workers are easy available	2	2,5	1	5%	10	53%	6	32%	2	11%	0	0%
Working possibilities are available for each student	3	2,8	2	11%	7	37%	4	21%	5	26%	1	5%
Working possibilities for professionals are sufficient available	3	3,2	1	5%	3	16%	7	37%	7	37%	1	5%
Good financial support by universities or government is given	3	3,4	0	0%	2	11%	9	47%	6	32%	2	11%
Education institutions image and reputation is positive	3	3,3	0	0%	4	21%	8	42%	5	26%	2	11%
High level of scientific staff available	3	3,2	0	0%	5	26%	7	37%	5	26%	2	11%
Difficult access to higher education	4	3,4	0	0%	4	21%	5	26%	9	47%	1	5%
Easy access to higher education	3	2,5	3	16%	6	32%	7	37%	3	16%	0	0%
Well-developed industrial support	3	2,9	0	0%	5	26%	10	53%	4	21%	0	0%
Skill shortage and limited skilled workforce	2	2,5	2	11%	8	42%	6	32%	3	16%	0	0%
Well-developed international agreements	2	2,5	2	11%	8	42%	7	37%	2	11%	0	0%
Tax free zone has positive impact on business	2	2,2	1	5%	15	79%	2	11%	0	0%	1	5%
Tax free zone has positive impact on education	3	3,1	0	0%	6	32%	7	37%	4	21%	2	11%

### Table F1: Survey results of the general criteria

Country Oritoria			Strongly Agree		Agree		Neutral		Disagree		Strongly	Disagree
Country Criteria	Mean	Median	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Multi-cultural environment is given	1	1,5	10	53%	9	47%	0	0%	0	0%	0	0%
Good employment prospects and job opportunities are given	3	3,3	0	0%	2	11%	10	53%	6	32%	1	5%
Cost of living are financially feasible for students	3	2,8	0	0%	9	47%	5	26%	5	26%	0	0%
Safe, healthy and social environment provided	2	2,5	1	5%	11	58%	4	21%	3	16%	0	0%
The quality of the higher education is low	3	3,1	2	11%	3	16%	5	26%	9	47%	0	0%
The quality of the higher education is high	3	3,0	1	5%	6	32%	6	32%	4	21%	2	11%
Easy to find part time work	3	3,1	0	0%	5	26%	9	47%	4	21%	1	5%
Easy to obtain visa	3	3,0	2	11%	5	26%	5	26%	5	26%	2	11%
Good English improvement possibility and no language barriers	2	2,2	5	26%	10	53%	1	5%	2	11%	1	5%
Low discrimination	3	2,9	1	5%	7	37%	6	32%	3	16%	2	11%
Good geographical proximity to other countries existing	2	2,2	4	21%	11	58%	2	11%	1	5%	1	5%
Curacao has a strong business case	3	2,7	2	11%	7	37%	5	26%	4	21%	1	5%
Curacao has a positive country image	3	2,9	1	5%	7	37%	6	32%	3	16%	2	11%
Attractive tax regulations for companies	2	2,2	2	11%	12	63%	4	21%	1	5%	0	0%
Attractive company environment	3	2,7	2	11%	6	32%	7	37%	4	21%	0	0%
Existing cultural connectivity to Europe	2	2,2	2	11%	13	68%	3	16%	1	5%	0	0%
Existing cultural connectivity to Latin America	2	2,2	4	21%	8	42%	7	37%	0	0%	0	0%
Political stability is existing	3	3,0	1	5%	5	26%	7	37%	5	26%	1	5%

## Table F2: Survey results of the country criteria

Table F3: Survey results of the institution criteria

Institution Criteria	Mean	Median	Strongly	/ Agree	Agre	е	Neutr	al	Disagree		Strongly	Disagree
Institution Criteria	wean	weulan	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Tuition fee is financial feasible at the moment	3	2,6	2	11%	3	16%	14	74%	0	0%	0	0%
Easy admission to the institution	2	2,4	1	5%	9	47%	9	47%	0	0%	0	0%
High staff quality on the institutions	3	2,9	0	0%	4	21%	12	63%	3	16%	0	0%
Good research institutes are given	3	3,2	1	5%	3	16%	8	42%	6	32%	1	5%
Quality of program is good	3	2,6	1	5%	7	37%	10	53%	1	5%	0	0%
Content of program is broad	3	2,6	1	5%	7	37%	9	47%	2	11%	0	0%
Broad range of programs	3	3,1	1	5%	3	16%	9	47%	5	26%	1	5%
Large number of international students	3	3,3	0	0%	3	16%	9	47%	5	26%	2	11%
Latest information, methods and technologies are used	3	3,3	0	0%	3	16%	8	42%	7	37%	1	5%
Training provides good job prospects	3	2,9	0	0%	5	26%	10	53%	4	21%	0	0%
Excellent institution facilities	3	3,2	1	5%	2	11%	11	58%	3	16%	2	11%
Links to other institutions are given	3	2,6	2	11%	7	37%	7	37%	2	11%	1	5%
English education is available	2	1,9	5	26%	10	53%	4	21%	0	0%	0	0%
Broad range of disciplines and faculties	3	3,1	2	11%	2	11%	10	53%	3	16%	2	11%