RESEARCH ARTICLE

The region matters—for whom? The regional actor network for vocational education and training in tourism of Cancún (Mexico)

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Abstract
Actor networks are relevant to provide vocational education and training. Many studies have focused on such networks without a clear regional focus. Suggesting a conceptual approach of regional actor networks based on contributions of business education and economic geography, this study analyses the regional actor network in the tourism sector in Cancún (Mexico). Methodologically, the study follows an exploratory qualitative approach. The results illustrate that there are two dominant axes within the regional network, which comprise on the one hand hotels cooperating with applied universities, and on the other hand hotels cooperating with vocational schools. This local actor network has impacts on the practical relevance that vocational education and training provides to the learners, and generates a particular, and rather vulnerable, way of regional development.

INTRODUCTION

Particularly in regions of the Global South, international tourism is a relevant and dynamic sector of economy and employment (e.g., UNWTO, 2016). Still, competition in global tourism industries is severe. Upgrading into the profitable segments of expensive multi-star hotels is an attractive option for many hotels. Particularly in such an expensive segment of hotel business, hotels need skilled...
employees to serve the high demands of the international guests. Often, however, such skilled persons are not available on the local labour market. Principally, this void could prompt the hotels to address regional educational bodies, policy makers and further actors to improve the situation. Also in Mexico, many players have made efforts to train skilled workers. For example, the national government, with the help of other actors, introduced a Mexican dual system (Modelo Mexicano de Formación Dual, MMFD) in the 2010s to provide more practically applied competencies for the learners. The Mexican dual system is already being implemented in many regions of Mexico (Wiemann & Fuchs, 2018), including the tourism sector (CAMEXA, n.y.). Besides vocational schools, universities have also started to cooperate with hotels to offer dual study models in Mexico, combining theoretically and practically applied competencies (Graf et al., 2014).

While academic research has long recognised the relevance of actor networks for upskilling, studies have hardly focused systematically on regions (see Emmenegger et al., 2019). Still, such a regionally sensitive view is necessary, as networking activities always happen in particular places and not somewhere in a vaguely defined sphere, for example, in a national sphere or ‘on the head of a pin’ (Massey, 1984, p. 51). The regional actor network perspective points out that there are several stakeholders (such as organisations and persons within the organisations) who hold different kinds of relations, for example, who cooperate and coordinate their activities. The actors thereby ‘produce’ and ‘reproduce’ the region (e.g., McCann, 2002; Ward, 2006). This also includes the fact that the actors are sometimes embedded in different spatial scales, for example, in organisations that act on national or other spatial levels (Herod, 2003). In this study, the regional actor network is in focus. This contribution addresses this research gap concerning regional actor networks for initial vocational education and training. The research question is: What characterises the regional actor network for vocational education and training in tourism of Cancún (Mexico)? A particular research interest addresses the stakeholders and, thus, the contribution asks who participates, how and why. The perspective includes the local impacts of such network patterns.

The following starts with conceptual deliberations on regional actor networks, combining research of business education and economic geography. After explanations about the design and the method of the study, the results illustrate a pattern with two dominant axes of regional actor networks in Cancún’s tourism. The discussion embeds the findings in related studies. The final part concludes the socio-economic effects of such network patterns and includes related implications for the region.

CONCEPTUAL APPROACH: REGIONAL ACTOR NETWORKS

Networking in space has become an increasingly important research topic in business education since the early 2000s. Particularly, research on collaborative skill formation systems, such as Germany, Austria and Switzerland, illustrates that reliable and intensive stakeholder networks are essential for successful vocational education and training (Pilz, 2016a, 2017; Thelen, 2004). Moreover, regional actor networks have been proven to be successful for training systems of various other international countries (Mitchell, 1998; Seddon & Billett, 2004). Studies have emphasised the relevance of formalised (institutionalised) network relations as well as of various informal arrangements (Billett & Seddon, 2004) and stress that both require continuous coordination between the different interests of stakeholders (Bathmaker, 2013; Emmenegger et al., 2019; Seddon et al., 2005). Friction within regional networks of vocational education and training usually appears, for example, because of different objectives (comprehensive education vs. short training), content (theoretical and practically applied knowledge), and costs. In-house training activities of companies generate calculable costs but hardly calculable results. Moreover, training activities of a company make the in-house skilled
workforce subject to poaching by competitors. National and regional government is another stake-
holder, promoting and supporting coordinated training activities to enhance economic modernisa-
tion and to reduce local unemployment (Busemeyer & Trampusch, 2012), two objectives that do not
necessarily align (Wiemann & Fuchs, 2018). Educational bodies, like vocational schools, often feel
the need for regional cooperation with companies in order to organise their teaching in a practice-
oriented manner, to upskill their teachers and to receive up-to-date learning materials (Pilz, 2016a,
2017). In addition, supportive organisations play a role. These include economic stakeholders, such as
chambers and employers’ associations and, in some regions, trade unions (Emmenegger et al., 2019).
Research on countries of the Global South shows that there are ‘varieties’ of regional actor networks.
A comparison between India, Mexico and China illustrates that particularly smaller multinational
companies need cooperation partners on a local level to provide training but that these partners must
meet different local conditions (Fuchs, 2020; Pilz & Wiemann, 2020). Local conditions can vary,
which has an influence on training concepts and thus also on cooperation between actors (Vogelsang
& Pilz, 2020). For example, in India, many companies develop their own training concepts, whereas
in China companies cooperate more with vocational schools and the German Chamber of Commerce
(Pilz, 2016b; Pilz & Li, 2014; Vogelsang & Pilz, 2020).

While the region is usually considered to be relevant, in fact, in many studies about skill formation
the role it plays is poorly defined (Emmenegger et al., 2019). Skill formation is undertaken as an
internship (usually for some weeks and months) or as a comprehensive apprenticeship, for example,
as a dual apprenticeship combining systematically learning in vocational schools and in companies.
With regard to the particular region, where skill formation takes place, economic geography and
related regional and spatial studies offer conceptual insights here. ‘Region’ usually relates to the sub-
national level. ‘Regional’ often is used synonymously with ‘local’. A particular research focus relates
to regional actor networks providing knowledge to increase competitiveness and social welfare in
the region (Bathelt & Cohendet, 2014). Starting from notions about industrial districts, as ‘Marshall
districts’ with inter-firm networks (with reference to Alfred Marshall, 1892), this strand of research
today focuses on patterns and dynamics of various regional actor networks, including public and
private stakeholders. Since early on, research emphasised the multiscalar embeddedness of regional
networks, as multinational companies, national and federal state politics and so forth appear as players
within a region, or link their activities to the region (Brenner et al., 2011). Beyond such international
‘pipelines’, the regional actor networks consist of connections, which usually appear as ‘open commu-
nity channels (that could be depicted as buzz)’ (Bathelt et al., 2018, p. 1009), that is commonly shared
notions, rumours, estimations, assessments and so forth. Hence, this discourse has a particular focus
on informal network relations (Glückler & Doreian, 2016), as does research of business education
(see above). Face-to-face contacts, that is geographical proximity combined with cognitive and social
proximity, are relevant to generate commonly shared estimations and assessments, as mutual trust
(Boschma, 2005; Rallet & Torre, 2016). This means that in the case of productive and fertile regional
actor networks, those who are involved act on ‘a level playing field in which status depends on reputa-
tion’ (Bathelt et al., 2018, p. 1005). This implies a particular view on power. While strong ‘hubs’ and
‘spokes’ have been in the focus of research on spatial dependencies for a long time (Markusen, 1996),
now academic research includes subliminal power patterns generated by cooperation, coordination
and arrangements (or lacks and holes in such collaboration). This goes far beyond earlier notions of
institutional thickness or institutional voids (Amin & Thrift, 1994) as such expressions only serve as
metaphors for the quality of such underlying patterns and processes.

The previous deliberations on regional actor networks allow for specifying the hypothetically rel-
vant actors and their relations in tourism. Hotels, government, educational bodies (such as applied
universities and vocational schools) as well as private and public stakeholders are relevant actors.
Since stakeholders such as the Mexican Ministry of Education (SEP), Germany's Federal Institute for Vocational Training (BIBB), German Corporation for International Cooperation (GIZ), German-Mexican Chamber of Foreign Trade (CAMEXA) or employers' association (COPARMEX) are also involved in MMFD (BIBB, 2015; Wiemann & Fuchs, 2018), such stakeholders can also be important in a region. The local labour market plays a role but only appears as organisational actor if organised (e.g., in trade unions). Regional actors are not necessarily ‘local’ in the narrow sense, as they can relate to, or be part of, multiscalar organisations, such as governmental bodies or international companies. The relations between the actors differ with regard to their quality. There can be different types of relations, which can be of varying degrees of cooperation. Figure 1 illustrates the hypothetical regional actor network of the tourism sector. Next to the actors that are relevant in the tourism sector in a region, such as the hotels, universities, vocational schools, government, further stakeholders (e.g., employers’ associations and unions), there are different kinds of links between the interrelated actors. For example, cooperation can be described as ‘proactive and interdependent’, whereas coordination can only be described as ‘reactive and referencing’ or ‘active and adjustment’ (Gessler, 2017, p. 181). In the figure, the term ‘arrangements’ indicates that there is a complex formal and informal exchange between the actors (Glückler & Doreian, 2016). These actors and relations are embedded in broader socio-economic and spatial contexts with their relations and connections (Grabher, 1993).

CASE AND METHODOLOGY

Presentation of the case: The tourism industry of Cancún

Cancún (in the Mexican state of Quintana Roo, located at the Yucatán peninsula) was chosen for this study because of its outstanding relevance in international tourism in a country of the Global South. Often, the term Global South is used as a metaphor for countries with a largely poor population, for example, in Latin America. These countries have a colonial past and are still dependent on ‘Northern’ decision centres (Dados & Connell, 2012; Schneider, 2017). As such, their economies are characterised by less profitable parts of production value chains, and they have a large ‘informal’ economic sector with self-employed persons. Considering this, for many of ‘Southern’ governments, the tourism sector promises economic growth and employment opportunities for the population.

**FIGURE 1** Hypothetical regional actor network of the tourism sector
In the case of the Yucatán peninsula in Mexico, the Caribbean beaches and World Heritage Maya ruins are famous attractions. Today, various further attractions such as water parks aim at mass tourism. Formerly, the area was peripheral, mostly shaped by the Maya population working in the agricultural sector (Carte et al., 2010; Torres & Momsen, 2005a). Already in the 1960s, the Mexican government started to develop the tourism sector and established a master plan for the area (Torres & Momsen, 2005b). Over time, the number of multi-star hotels accelerated. Today, prestigious high-priced hotels extend over a small headland that surrounds a lagoon, opposite downtown Cancún. About six million tourists come to the city and the neighbouring coastline every year (in 2017; Statista, 2020). The population in the state grew from around 50,000 in 1960 to 1.7 million in 2019 (Consejo Estatal de Población, 2019; Instituto Nacional de Estadística y Geografía, 1962), mostly due to internal migration from other parts of Mexico. Spatial labour mobility is high as many employees work under low-wage conditions and with seasonal contracts (Bianet Castellanos, 2010). These dynamics and socio-spatial implications make Cancún a relevant case of tourism in the Global South (Vorlaufer, 1996). At the same time, the economic growth of the city is exposed to risks. Hotels in Cancún act under highly competitive conditions. The pressure is not only the result of competition between international tourism destinations. Moreover, directly in Cancún’s surrounds, the hotel sector is expanding. South of the city, many multi-star lodges have been established in recent years. North of the city, a new master plan has initiated the construction of a new hotel zone on a large headland surrounding another lagoon. Hence, competition in the Yucatán peninsula increases tremendously.

Methodology

The study followed an explorative design and used the method of qualitative analysis (Kuckartz, 2014). This is due to the research gap concerning regional actor networks in initial vocational education and training in tourism and because the regional particularities in a Mexican region could not be anticipated in detail before the empirical study. This allowed an open approach to adequately study the regional actor network. An interdisciplinary research team (two senior and two junior researchers) of business education and economic geography conducted empirical research in August 2019. Such jointly carried out survey and interpretation work increase the validity and improve the evidence of the qualitatively collected results (Flick, 2009). The interviewees were selected on the basis of an intensive web search, which took place in advance. The ten semi-structured interviews comprised 14 experts on the administrative level, including five Human Resource managers of five hotels (two domestic and three international hotels), five persons of two educational organisations (headmaster and dual training coordinators of a university and a vocational school), three experts on the administrative level of two public authorities (Municipal Tourism Office and Ministry of Tourism) and one expert of an employers’ association. All of the experts were selected because of their insider knowledge and expertise due to their professional position (Bogner et al., 2009).

The focus was on the all-inclusive multi-star hotels in the hotel zone, as these have the most rooms in Cancún (Secretaría de Turismo, 2018). Likewise, these hotels were selected because of the extensive range of services they offer, which means that the hotels require a large number of employees. The hotel companies located in the region are largely owned by U.S., Spanish, German and Mexican hotel chains. For this reason, the selection of the hotels was also based on the listed company headquarters. Trade unions do not play a role for vocational education and training in the regional actor network on site. The study comprised all relevant actor groups in the city. Given the different interests of the interviewed actors, the analysis benefited from cross-examination through the triangulation of the insights. The semi-structured interviews included questions on the macro-level (‘institutional structures
and economic, social and political framework’) (Pilz & Wiemann, 2020, p. 4) and relating to the conceptual approach outlined in section two of this manuscript. For example, the interviews asked which actors’ cooperation takes place, how exactly it takes place and the content of the cooperation. Additionally, the experts were asked about the structure of internships and apprenticeships. Moreover, it has to be emphasised that the following only analyses the parts of the interviews that are relevant to initial vocational education and training that includes coordinated activities. The hotels also perform various in-house upskilling activities with related career opportunities in further education, which are not the subject of this contribution.

Subsequently, the recordings of the expert interviews were transcribed. In total, the recordings were around 12 h long, with each interview being between 40 min and 2 h long (excluding the time taken for tours through the hotel, university or vocational school). The transcripts were collected into case summaries, which are closely oriented to the interview statements. The case summaries were categorised to allow for content analysis (Kuckartz, 2014). The interviews were conducted in Spanish. For the purpose of this manuscript, quotations have been translated into English.

As prominent approaches of qualitative research have a relatively strong formal structure (Mayring, 2000), understanding-oriented methods complemented interpretation (Soeffner, 2004). Intensive web research on secondary data completed the picture by examining unpublished documents, databases and online newspapers such as INEGI (National Institute of Statistics and Geography) or El Universal (one of the most popular national newspapers in Mexico).

**RESULTS: REGIONAL ACTOR NETWORK IN CANCÚN**

With regard to the regional actor network in Cancún, the hotels on the headland surrounding the lagoon are key actors. They belong to large domestic and international hotel groups. Yet, the hotels here practically have complete autonomy to organise and perform initial vocational education and training. Hence, having headquarters abroad does not play a role in the sense of external dependency.

The following illustrates that the local human resource departments of the hotels have established relationships with local applied universities and vocational schools. These relationships constitute the two dominant axes within the regional actor network.

**The hotel-university-axis (tertiary level)**

To start with the hotel-university relationship, human resource managers connect to university departments that match their demands, such as tourism administration. Such university departments have integrated practical stages into their curriculum. The main relationship is formalised—contractual—and regulates the internships of the learners in the hotels. The duration of the internship differs between a few weeks and several months. Hotels usually prefer long-term internships as they can then provide a broader spectrum of training and can deploy the student for different jobs in later stages, which is more financially beneficial for the hotels. An interviewee in a hotel explains:

[…] there are universities that send people for very short periods like one or two months, and it ends up being a disadvantage. We establish that the minimum period for an intern is three months because within the general program of training of the hotel, the intern is to be able to perform well and learn well. In three months, the intern already rises in
the learning curve, he becomes adapted to the hotel and the brand, and he really starts exercising his skills […] (Hotel 4)

Spatially, most of such relationships are between hotels and local applied universities in Cancún. In exceptional cases, hotels connect to tourism departments of other universities in Mexico. Hence, there is an obvious axis in the regional actor network, which connects the hotels and local applied universities.

It is noteworthy that the interviewees of the human resource departments in the hotels stressed that such contracts were necessary for insurance reasons, so that the hotel is not liable in case of students’ accidents. This axis of the regional actor network can be characterised as a somewhat frugal relationship between hotels and universities. There is some mutual cooperation, for example, about particular contents, learning objectives, pedagogics or didactics, or further notions on how to further shape and develop the hotel’s relationship with the students and their supervising university. Both partners, university and hotel, perceive it as their particular task to skill the student but do not engage in comprehensive coordination or intense mutual communication between themselves. An interviewee of a hotel describes this as follows:

The agreement [with educational organisations] includes legal things, like what will happen if a practitioner suddenly has an accident or how long the agreement will last […] The agreement is more about establishing the general guidelines; the department head is responsible for specific topics of what they are going to be taught. (Hotel 4)

Such largely inward-looking perspectives of the hotels are a particular way in which the hotels position themselves in the regional actor network. The inward-oriented perspective implies that it is largely left to the hotels how they organise the internships and skill the students. Some interviewees noted they make extensive efforts and have become a top employer in Mexico, while others frankly express that they sometimes use learners as cheap labour in high season. Still, generally, all interviewees stressed that they care about good supervision and rotation between different tasks.

The hotel-vocational school-axis (secondary level)

This rather frugal regional network, mainly comprising the hotel-university axis, raises the question of whether the patterns are more complex if the view shifts towards the relationship between hotels and vocational schools. In Mexico, companies and (particularly) vocational schools have long had various contracts; today additionally, they collaborate in a new way. Since the 2010s, the Mexican Model of Dual Education has been established and already been implemented in different Mexican regions. The Mexican Model of Dual Education means ‘dually’ integrated activities combining vocational schools and companies. It is intended to modernise the Mexican vocational training system and to reduce youth unemployment. International, and particularly German, educational policies inspired and supported this new educational route. As the German coordinated and collaborative skill formation system has a particular complex setting (e.g., including chambers and trade unions) and as is based on commonly shared notions of professional work and education, it was strongly modified when applied to Mexico (see Wiemann & Fuchs, 2018, for manufacturing industries).

Different from the German pattern, and different to the internships of university students as described above, the learners of the Mexican Model of Dual Education conduct an apprenticeship during their first two years in the vocational school and then during their third year spend four days a week in the company and one day in school. In Cancún, two training courses are implemented. The first
one is called ‘Hospitalidad Turística’ (Tourist Hospitality) and the second one is called ‘Alimentos y Bebidas’ (Food and Beverage).

Remarkably, even if the Mexican Model of Dual Education was generated by comprehensive common activities and mutual coordination between the various international and Mexican actors, and as its ‘duality’ might suggest comprehensive regional cooperation, again in this axis of Cancún’s regional actor network there is hardly any deeper exchange about detailed syllabi, learning objectives and contents between hotels and vocational schools. The interviewees on-site at the hotels complain about a lack of skills and—from their viewpoint—deficient work attitudes of the apprentices. While the reputation of vocational education and training in Mexico is generally low with some improvement over time (see Wiemann & Fuchs, 2018), it suffers from a particular low reputation in Cancún’s tourism sector. Many apprentices have parents who are migrants from other Mexican regions and who live under precarious conditions; the parents and the apprentices often (have to) prioritise family problems to the requirements of education. The labour turnover is high, and the hotels rarely find employees of the intermediate skill level, such as receptionists, advanced housekeeping and service staff for demanding and complex tasks.

A lot of the population of Cancún come from other states. […] When a person quits, he says he leaves because he couldn’t stand being alone or had some difficulty with his family […]. Therefore, the rotation is always there, because people who are not from here often go back to their places of origin again. (Hotel 4)

Still, low-skilled work, such as simple cleaning activities, auxiliaries in cooking and so forth, also require some basic skills and positive work attitudes, such as reliability, punctuality, accuracy, responsibility and some ability to work systematically. Such competencies generally lack on-site, as the interviewees in the hotels’ report. Some interviewees even explain that some job applicants cannot or hardly speak Spanish but only Maya (although alphabetisation and the Spanish language are very broadly spread in Mexico). An interviewee in a hotel explains:

People who sometimes have only primary or secondary school […] their knowledge is very basic. So, they come to work with us and we teach them, we train them, we give them training, resources. […] So, what do we do? Well, we try to have agreements with the universities. (Hotel 2)

The jobs in the lower skill segments are poorly paid. For the apprentices, the hotels usually only provide bus transport, hotel uniform, meals, and in some exceptional cases an allowance. The interviewees in the human resource departments noted that they perceive their supervisory activities and the training activities of their colleagues at the various workstations within the hotel as ‘emotional salary’ for the trainees. There is some evidence indicating that the learners are not exclusively used for simple routine work. Still, in the case of students in their internship, the danger of misuse is high given that the apprentices belong to the lower-skilled part of the learners. An interviewee of a hotel expresses:

So, they benefit us in the sense that when it is high season, we have several guys who are available […]. So, in this sense it helps us, because they come for temporary contracts. So, we hire them […] and allow them to practice when the season is high. And many times, when it is low season, we also have to reduce the staff. So, in this sense it does benefit us. (Hotel 2)
As unions do not appear on the scene as actors, ‘labour’ appears an unorganised ‘factor’. Different from Germany as a broad ‘template’ of the Mexican Model of Dual Education, apprentices do not have representatives who fight for their payment and their rights for a high quality of education and training (instead of partly being used as cheap labour).

The generally low reputation of the learners (related to apprenticeships and—to a lesser extent—to internships of pupils from vocational schools) manifests itself in the fact that the hotels only partially employ their former learners. While interviewees in the educational bodies stress that better integration of education and later employment could improve the loyalty to the company and thus reduce labour turnover, hotels only partially perceive their investments in supervising and performing internships and apprenticeships as an opportunity for generating and improving the own human resource pool. Nevertheless, the benefit of the apprentices and pupils is seen by the hotels. They cannot accept every student after their apprenticeship or internship because they do not have enough vacancies.

Hence, besides the axis between hotels and universities, this axis between hotels and apprentices also appears as a frugal relationship. All this results in a situation where, on the one hand, there is a high demand for skilled labour (within hotels) and, on the other hand, there is a high demand for jobs in hotels (within the regional labour market). This is obviously a mismatch.

Certainly, the picture of the two axes is not complete, as there are networking activities of economic stakeholder organisations, such as hotels’ and employers’ associations, with social media tools and common coffee breaks through which information is exchanged. Yet, at least until now, such activities have not influenced the described pattern of the dominant axes and have only contributed marginally to the frugal mode of local skill formation. In addition, the interviewed employers’ association cooperates primarily with business beyond the hotels. Moreover, the government has little influence on the arrangements for learners. The local activities of chambers did not appear relevant in our case. In general, the chambers do not play a decisive role as they do, for example, in German dual apprenticeship. Nevertheless, the interviewees in the vocational school emphasize that their objective is that chambers should understand the importance of vocational education learners for the economic development of the region. As well, they stress that regional cooperation is the field of as yet unexplored win-win situations. For example, from their point of view educational routes could be improved for both learners and hotels by integrating the practice-oriented parts more systematically.

DISCUSSION

The former hypothetical network (see Figure 1) can now be specified and substantiated (see Figure 2). Hotels are the most powerful actors, and they predominantly have contractual relationships on two axes, which relate to applied universities and to vocational schools. Besides necessary contracts, there is little coordination about curricula, syllabi, learning objectives and so forth. Vocational education in particular suffers from a bad reputation. From the employers’ point of view, the hotels rarely find adequately skilled learners among the pupils and graduates of vocational schools. The high labour turnover particularly of persons who graduated from vocational schools causes further frictions (see Chang & Tse, 2011; Richardson, 2008). Hotels hardly use their investments in apprenticeship and internships by recruiting such former learners later on (see Farmaki, 2018). This generates unexploited potential of practically applied vocational and academic education (see Breakey et al., 2009; Kwong & Law, 2008; Lam & Ching, 2007; Yiu & Law, 2012). However, Cancun’s hotel business consists of large and prestigious firms; they are strong actors who could elaborate their ‘dual’ coordination with regional vocational schools and universities to establish lighthouse projects, which then could serve as role models for other hotels in other parts of the country (see Tukamushaba & Xiao, 2012). Such
new projects should not only contribute to practically applied competencies but also have to involve the interests of the learners and empower them (see Jiang & Tribe, 2009; Yiu & Law, 2012).

Figure 2 illustrates the relationships (axes) between the central actors, such as between hotels and universities, and between hotels and vocational schools. The arrows in Figure 2 show the relationships between the diverse actors. On the one hand, the universities enable internships in the hotels for their students. On the other hand, vocational schools provide apprenticeships in hotels. Because other stakeholders, such as employers’ associations and unions, play only a small role in the ‘local arena’ (McCann, 2002) they were omitted from the figure below. Government sets regulatory rules, however, it does play a small role as a promotor of the regional actor network for vocational education and training. There are two factors in particular that frame the vocational education network in Cancún: The high competitive pressure between the hotels, and the particularities of the local labour market in the city.

CONCLUSIONS, LIMITATIONS AND PERSPECTIVES

To conclude, this study showed that besides the formal bilateral contracts between hotels and applied universities, and between hotels and vocational schools, comprehensive regional networking and participation in ‘soft’ issues of notions, estimations and buzz is not a field of comprehensive engagement. The existing actor network does not follow common objectives, such as to generate new learning processes or innovations regarding vocational education (Bathelt & Cohendet, 2014; Finegold, 1999). Hence, in initial vocational education and training, hotels do not use the geographical proximity to other actors in the region (e.g., as it is in collaborative skill formation systems); in Cancún the actors perceive—and accept—cognitive and social distance (see Boschma, 2005; Rallet & Torre, 2016). Although there is social distance, it also shows that this kind of cooperation is especially beneficial for the hotels. Hotels can secure their future employees. Apart from that, universities and vocational schools also advance because they can offer educational programmes with practical learning.

There are some limitations to this study that need to be considered. The analysis is based on qualitative research and thus has an explorative character. Results cannot simply be transferred to other regions or economic sectors. Moreover, there is some bias in that only those hotels where human resource managers are engaged in good supervision and who care for the learners invited us for interviews. Hence, the critical issues mentioned above might be more severe than described. Additionally,
the study mainly considered the current state of the research topic. To describe the development over time, a long-term study would be helpful.

With regard to perspectives for future research on vocational training and development, and for practitioners within this field, the study showed evidence for the importance of regional particularities. The present regional network pattern in Cancún illustrates that a ‘region’ not simply specifies general (national etc.) conditions but exemplifies how power and particular interests take place. At the same time, the regional view sensitises actors for the local conditions. The picture showing dominant hotels structuring the axes of skilling is the result of particular regional conditions, such as strong economic competition between the local hotels and the volatile local labour supply. Certainly, regional networking is not a necessity per se; however, the discussion above suggests that a more elaborated regional cooperation in Cancún might help to explore still unexploited potentials of proximity (see Boschma, 2005; Brenner et al., 2011; Rallet & Torre, 2016) and improve the local knowledge pool (Asheim et al., 2007). Until now, the case of Cancún represents a slightly uncertain path, measured against objectives of sustainable socio-economic regional development. Even if the local labour market generally may offer more and possibly cheaper labour to the hotels in Cancún, the lack of labour with practically applied skills may challenge the hotels given the increasingly demanding customers in the multi-star hotel segment. In any case, the few activities of initial vocational education and training on the part of the hotels already causes problems for the social development of the community, as the graduates of vocational schools are often in a precarious situation on the local labour market.

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REFERENCES
Amin, A., & Thrift, N. (1994). Globalization, institutions, and regional development in Europe. Oxford University Press.
Asheim, B., Coenen, L., & Vang, J. (2007). Face-to-face, buzz, and knowledge bases: Sociospatial Implications for learning, innovation, and innovation policy. Environment and Planning C: Government and Policy, 25(5), 655–670. https://doi.org/10.1068/c0648
Bathelt, H., Cantwell, J. A., & Mudambi, R. (2018). Overcoming frictions in transnational knowledge flows: Challenges of connecting, sense-making and integrating. Journal of Economic Geography, 18(5), 1001–1022. https://doi.org/10.1093/jeg/lby047
Bathelt, H., & Cohendet, P. (2014). The creation of knowledge: Local building, global accessing and economic development—Toward an agenda. Journal of Economic Geography, 14(5), 869–882. https://doi.org/10.1093/jeg/lbu027
Bathmaker, A. (2013). Defining ‘knowledge’ in vocational education qualifications in England: An analysis of key stakeholders and their constructions of knowledge, purposes and content. Journal of Vocational Education and Training, 65(1), 87–107. https://doi.org/10.1080/13636820.2012.755210.
Bianet Castellanos, M. (2010). Cancún and the Campo. Indigenous migration and tourism development in the Yucatán Peninsula. In D. Berger & A. Grant Wood (Eds.), Holiday in Mexico: Critical reflections on tourism and tourist encounters (pp. 241–284), Duke University Press.
Billett, S., & Seddon, T. (2004). Building community through social partnerships around vocational education and training. Journal of Vocational Education & Training, 56(1), 51–68. https://doi.org/10.1080/13636820400200245
Bogner, A., Littig, B., & Menz, W. (2009). Introduction: Expert interviews—An introduction to a new methodological debate. In A. Bogner, B. Littig, & W. Menz (Eds.), Interviewing experts (pp. 1–13). Palgrave Macmillan UK.

Boschma, R. A. (2005). Proximity and innovation: A critical assessment. *Regional Studies, 39*(1), 61–74. https://doi.org/10.1080/0034340052000320887

Breakey, N. M., Robinson, R. N. S., & Beesley, L. G. (2009). Students go a “Waltzing Matilda”—A regional tourism knowledge exchange through innovative internships. *Journal of Teaching in Travel & Tourism, 8*(2–3), 223–240. https://doi.org/10.1080/15313220802714505

Brenner, T., Cantner, U., Fornahl, D., Fromhold-Eisebith, M., & Werker, C. (2011). Regional innovation systems, clusters, and knowledge networking. *Papers in Regional Science, 90*(2), 243–249. https://doi.org/10.1111/j.1435-5957.2011.00368.x

Busemeyer, M. R., & Trampusch, C. (2012). The comparative political economy of collective skill formation. In M. R. Busemeyer & C. Trampusch (Eds.), *The political economy of collective skill formation* (pp. 3–38). Oxford University Press.

Carte, L., McWatters, M., Daley, E., & Torres, R. (2010). Experiencing agricultural failure: Internal migration, tourism and local perceptions of regional change in the Yucatan. *Geoforum, 41*(5), 700–710. https://doi.org/10.1016/j.geoforum.2010.03.002

Chang, S., & Tse, E. C. (2011, July 30). *Accounting for Hong Kong hospitality students’ intention to join the industry: The role of service orientation, emotional intelligence, and satisfaction with the hospitality industry*. International CHRIE Conference, Denver, CO.

Consejo Estatal de Población (2019). Quintana Roo: Indicadores demográficos, 2010–2030. Retrieved from: http://coespo.qroo.gob.mx/Descargas/doc/3%20INDICADORES%20DEMOGR%C3%81%C3%81%20ROO/Indic adores%20Q.Roo%202010-2030-Actualizada.pdf (accessed 24 February 2021).

Dados, N., & Connell, R. (2012). The global south. *Contexts, 11*(1), 12–13.

Emmenegger, P., Graf, L., & Trampusch, C. (2019). The governance of decentralised cooperation in collective training systems: A review and conceptualisation. *Journal of Vocational Education & Training, 71*(1), 21–45. https://doi.org/10.1080/13636820.2018.1498906

Farmaki, A. (2018). Tourism and hospitality internships: A prologue to career intentions? *Journal of Hospitality, Leisure, Sport & Tourism Education, 23*, 50–58. https://doi.org/10.1016/j.jhlste.2018.06.002

Federal Institute for Vocational Education and Training (BIBB). (2015). New alliance in German-Mexican vocational education and training cooperation. Author.

Finegold, D. (1999). Creating self-sustaining, high-skill ecosystems. *Oxford Review of Economic Policy, 15*(1), 60–81. https://doi.org/10.1093/oxrep/15.1.60

Flick, U. (2009). *An introduction to qualitative research* (4th ed.). SAGE Publications Ltd.

Fuchs, M. (2020). MNCs’ open international strategy–local dynamics: Transfer of German “vocational education and training” to emerging economies. *Critical Perspectives on International Business*, Online First. https://www.emerald.com/insight/content/doi/10.1108/cpoib-12-2019-0106/full/html

German-Mexican Chamber of Foreign Trade (CAMEXA). (n.y.). *El Modelo Mexicano de la Formación dual*. https://mexiko.ahk.de/es/dual/formacion-dual-mexicana

Gessler, M. (2017). The lack of collaboration between companies and schools in the German dual apprenticeship system: Historical background and recent data. *International Journal for Research in Vocational Education and Training, 4*(2), 164–195. https://doi.org/10.13152/IJRVET.4.2.4

Glückler, J., & Doreian, P. (2016). Editorial: Social network analysis and economic geography—Positional, evolutionary and multi-level approaches. *Journal of Economic Geography, 16*(6), 1123–1134. https://doi.org/10.1093/jeg/lbw041

Grabher, G. (1993). Rediscovering the social in the economies of interfirm relations. In G. Grabher (Ed.), *The embedded firm. on the socioeconomics of industrial networks* (pp. 1–31). Routledge.

Graf, L., Powell, J. J. W., Fortwengel, J., & Bernhard, N. (2014). Dual study programmes in global context: *Internationalisation in Germany and transfer to Brazil, France, Qatar, Mexico and the US*. DAAD. Ditges print+more gmbh.

Herod, A. (2003). Scale: The local and the global. In S. Holloway (Ed.), *Key concepts in geography* (pp. 229–247). Sage.

Instituto Nacional de Estadística y Geografía. (1962). *VIII Censo General de Población* 1960. Resumen General. Estados Unidos Mexicanos. Secretaría de Industria y Comercio Dirección General de Estadística.
Jiang, B., & Tribe, J. (2009). ‘Tourism jobs—Short lived professions’: Student attitudes towards tourism careers in China. *Journal of Hospitality, Leisure, Sport and Tourism Education, 8*(1), 4–19. https://doi.org/10.3794/johlst.e.81.168

Kuckartz, U. (2014). *Qualitative text analysis: A guide to methods, practice and using software*. SAGE Publications Ltd.

Kwong, R., & Law, R. (2008). The perceptions of graduates and students on quality of hospitality management program and future development: The case of Hong Kong. *Journal of Quality Assurance in Hospitality & Tourism, 9*(3), 257–274. https://doi.org/10.1080/15280080802412735

Lam, T., & Ching, L. (2007). An exploratory study of an internship program: The case of Hong Kong students. *International Journal of Hospitality Management, 26*(2), 336–351. https://doi.org/10.1016/j.ijhm.2006.01.001

Markusen, A. (1996). Sticky places in a slippery space: A typology of industrial districts. *Economic Geography, 72*(3), 293–313.

Marshall, A. (1892). *Elements of economics of industry*. Macmillan.

Massey, D. (1984). *Spatial divisions of labour: Social structures and the geography of production*. Methuen.

Mayring, P. (2000, June). *Qualitative content analysis*. Forum: Qualitative Social Research. http://www.qualitative-research.net/index.php/fqs/article/view/1089/2385

McCann, E. J. (2002). The cultural politics of local economic development: Meaning-making, place-making, and the urban policy process. *Geoforum, 33*(3), 385–398. https://doi.org/10.1016/S0016-7185(02)00007-6

Mitchell, A. G. (1998). *Strategic training partnerships between the state and enterprises*. International Labour Office.

Pilz, M. (2016a). Typologies in comparative vocational education: Existing models and a new approach. *Vocations and Learning, 9*(3), 295–314. https://doi.org/10.1007/s12186-016-9154-7

Pilz, M. (2016b). Training patterns of German companies in India, China, Japan and the USA: What really works? *International Journal for Research in Vocational Education and Training, 3*(2), 66–87. https://doi.org/10.13152/IJRGET.3.2.1

Pilz, M. (2017). Policy borrowing in vocational education and training (VET) – VET system typologies and the “6 P Strategy” for transfer analysis. In M. Pilz (Ed.), *Vocational education and training in times of economic crisis. Lessons from around the world* (pp. 473–490). Springer International.

Pilz, M., & Li, J. (2014). Tracing Teutonic footprints in VET around the world? The skills development strategies of German companies in the USA, China and India. *European Journal of Training and Development, 38*(8), 745–763. https://doi.org/10.1108/EJTD-10-2013-0110

Pilz, M., & Wiemann, K. (2021). Does dual training make the world go round? Training models in German companies in China, India and Mexico. *Vocations and Learning, 14*(1), 95–114. https://doi.org/10.1007/s12186-020-09255-z

Rallet, A., & Torre, A. (2016). Geography of innovation, proximity and beyond. In H. Bathelt, P. Cohendet, S. Henn, & L. Simon (Eds.), *The Elgar companion to innovation and knowledge creation* (pp. 421–439). Edward Elgar.

Richardson, S. (2008). Undergraduate tourism and hospitality students attitudes toward a career in the industry: A preliminary investigation. *Journal of Teaching in Travel & Tourism, 8*(1), 23–46. https://doi.org/10.1080/15313220802410112

Schneider, N. (2017). Between promise and skepticism: The global south and our role as engaged intellectuals. *The Global South, 11*(2), 18–28.

Secretaría de Turismo (2018). Actividad Hotelera en México por categoría (anual). Retrieved from: https://www.datatur.sectur.gob.mx/ITxEF/ITxEF_QROO.aspx (accessed 24 February 2021).

Seddon, T., & Billett, S. (2004). *Social partnerships in vocational education: Building community capacity*. National Centre for Vocational Education Research.

Seddon, T., Billett, S., & Clemans, A. (2005). Navigating social partnerships in VET: Central agencies –local networks. *British Journal of Sociology of Education, 26*(5), 567–584. https://doi.org/10.1080/01425690500293488

Soeffner, H.-G. (2004). Social scientific hermeneutics. In U. Flick, E. von Kardorff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 95–100). SAGE Publications Ltd.

Statista. (2020, January). *Number of international tourists in Cancun, Mexico from 2016 to 2025*. https://www.statista.com/statistics/805974/number-international-tourists-cancun/

Thelen, K. (2004). *How institutions evolve. The political economy of skills in Germany, Britain, the United States, and Japan*. Cambridge University Press.

Torres, R. M., & Momsen, J. D. (2005a). Gringolandia: The construction of a new tourist space in Mexico. *Annals of the Association of American Geographers, 95*(2), 314–335. https://doi.org/10.1111/j.1467-8306.2005.00462.x
Torres, R. M., & Momsen, J. D. (2005b). Planned tourism development in Quintana Roo, Mexico: Engine for regional development or prescription for inequitable growth? *Current Issues in Tourism, 8*(4), 259–285. https://doi.org/10.1080/1368350508668218

Tukamushaba, E. K., & Xiao, H. (2012). Hospitality and tourism education in Uganda: An integrative analysis of students’ motivations and industry perceptions. *Journal of Teaching in Travel & Tourism, 12*(4), 332–357. https://doi.org/10.1080/15313220.2012.729457

Vogelsang, B., & Pilz, M. (2020). Conditional factors for training activities in Chinese, Indian and Mexican subsidiaries of German companies. *European Journal of Training and Development*, online first. https://doi.org/10.1108/EJTD-04-2020-0066

Vorlauffer, K. (1996). Mexico: Regionale Disparitäten, Staat und Tourismus. *Zeitschrift für Wirtschaftsgeographie, 40*(1–2), 193–223. https://doi.org/10.1515/zfw.1996.0013

Ward, K. (2006). “Policies in motion”, urban management and state restructuring: The trans-local expansion of business improvement districts. *International Journal of Urban and Regional Research, 30*, 54–75.

Wiemann, J., & Fuchs, M. (2018). The export of Germany’s “secret of success” dual technical VET: MNCs and multi-scalar stakeholders changing the skill formation system in Mexico. *Cambridge Journal of Regions, Economy and Society, 11*(2), 373–386. https://doi.org/10.1093/cjres/rsy008

World Tourism Organization (UNWTO). (2016): UNWTO highlights. 2016 edition. https://www.e-unwto.org/doi/pdf/10.18111/9789284418145

Yiu, M., & Law, R. (2012). A review of hospitality internship: Different perspectives of students, employers, and educators. *Journal of Teaching in Travel & Tourism, 12*(4), 377–402. https://doi.org/10.1080/15313220.2012.729459

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**APPENDIX**

**LIST OF INTERVIEWEES**

| Stakeholder group         | Person | Age (approx.) | Gender | Role                          |
|---------------------------|--------|---------------|--------|-------------------------------|
| **Hotels**                |        |               |        |                               |
| Hotel 1 (International)   | 1      | 45            | Female | Training manager              |
| Hotel 2 (International)   | 1      | 40            | Female | Training manager              |
| Hotel 3 (Domestic)        | 1      | 50            | Male   | Training manager              |
| Hotel 4 (International)   | 1      | 30            | Male   | Training manager              |
| Hotel 5 (Domestic)        | 1      | 45            | Male   | Training manager              |
| **Educational Organisations** |        |               |        |                               |
| University                | 1      | 40            | Male   | Dual training coordinator     |
| Vocational school         | 4      | 40–50         | Male   | Dual training coordinator, headmaster, executive general coordinator in the state, general manager in the state |

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| Stakeholder group                  | Person | Age (approx.) | Gender       | Role                                           |
|-----------------------------------|--------|---------------|--------------|------------------------------------------------|
| **Public Authorities**            |        |               |              |                                                |
| Municipal Tourism Office          | 2      | 40, 50        | Female, Male | Experts on the administrative level            |
| Ministry of Tourism               | 1      | 35            | Male         | Expert on the administrative level             |
| **Employers’ Associations**       |        |               |              |                                                |
| Mexican Confederation of Employers| 1      | 30            | Female       | Expert on the administrative level             |