

Chapter 12

Teaching and Learning Quality of Life in Urban Studies: A Mixed-Methods Approach with Walking Interviews



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Introduction

This chapter presents an approach and a series of case studies related to the practice of teaching and learning Quality of Life (QoL) in the context of urban studies. This practice is embedded within an MSc program with a specialization in Urban Planning and Management (UPM). The nature and scope of the UPM specialization relates to the field of urban studies. In this chapter, urban studies is considered a transdisciplinary field (Ramadier 2004) related to various disciplines associated with the study of urban areas like urban geography, architecture and planning.

Urban studies is in many cases associated with quantitative studies. In particular, urban planning may be predominantly oriented towards rational and quantitative approaches. As Eizenberg and Shilon (2015 citing Gaber 1993: 140) note, if planners primarily focus on quantitative-orientated research they might miss “(1) The link between planning researchers and the people they plan for; (2) [Subjective aspects of] quality of life issues; and (3) Informal/illegal activity” in addition to conflicts and varied interests. The teaching and learning practice reflected in this chapter is aware of these constraints and hence incorporates perspectives that are derived from mixed-methods approaches and are context sensitive.

The aim of this chapter is to share an approach for teaching and learning QoL in the context of urban studies and to illustrate its possibilities with specific learning activities and outputs. This chapter starts with a brief theoretical discussion on how urban studies relates to the concept of QoL. It describes top-down as well as bottom-up people centred approaches and explain how they are incorporated within the UPM specialization. Both approaches can generate relevant knowledge about QoL

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domains (objective and subjective) that are relevant to improve our understanding of the built living environment and its socio-economic context. To analyse and illustrate the foundations and challenges of these approaches, the chapter relies on the critical documentation of two courses carried out with a group of international MSc students in the last 10 years. Students following this approach were encouraged to define and operationalise spatial indicators to measure intra-urban QoL variations and to critically evaluate the use of several qualitative and quantitative methods. The teaching and learning described is grounded in the fields of planning, geography and critical cartography as well as mixed-methods. The chapter concludes with a discussion on the main challenges of this approach.

Quality of Life and Urban Studies

QoL is multidimensional in nature and relates to various domains of life such as housing, income, built and natural environment, health and the level of satisfaction that individuals have with those domains and the overall satisfaction with life (McCrea et al. 2006; Seik 2000; Sirgy et al. 2006; Tesfazghi et al. 2010). QoL studies distinguish between “objective” and “subjective” conditions. Objective QoL is usually measured by using indicators that represent observable and measurable conditions (e.g. durable housing, adequate water provision, availability of green areas, and accessibility to schools). It is usually considered as a relatively “objective” assessment done by experts. However, “objective” measures may require some sort of subjective judgment (for example, different standards may exist to consider a dwelling inadequate). Similarly, a “subjective” assessment is done by people when it is referred to subjective QoL.

In the UPM specialization, we follow a geographic and mixed-methods approach that facilitate the identification of both objective and subjective views as well as promote the integration of qualitative and quantitative data (Martínez 2009, 2016, 2018; Martínez et al. 2017), and more importantly, the integration of experts and people’s views. The recognition of people’s views and diversity of perspectives are also present in current co-production of knowledge, inclusive development and planning discourses (Feldman and Khademian 2007; Watson 2014). Eliciting people’s views is also advocated by those who promote new pedagogical approaches in planning for the in-depth understanding of people’s lived experiences (Eizenberg and Shilon 2015).

There is a long tradition in urban studies that explicitly engage with QoL (Smith 1973) in relation to human geography (Pacione 1982) and the social indicators movement (Wong 2006). The emergence of Geographic Information Systems (GIS) has also facilitated the integration of objective and subjective approaches as well as different forms of data sources (Marans and Stimson 2011). Marans and Stimson (2011) make use of the concept of quality of urban life (UQOL) which relates to objective conditions of the places in which people live and the different subjective judgments that people have on those conditions.

We can distinguish studies that incorporate top-down approaches aiming at urban and intra-urban comparisons (Baud et al. 2008) as well as bottom-up approaches that emphasize the context and the view of the residents. The social indicators tradition (Smith 1973), top- and bottom-up QoL studies as well as local government QoL reports¹ are integrated in the UPM teaching and learning practice. In particular, this UPM specialization emphasizes the relevance that QoL studies have to practice and policy by linking the need for a better understanding of QoL conditions with equity and social justice, the concepts of inclusive city and the just city (Fainstein 2010, 2014). In this manner, the concept of QoL (and variations of) can facilitate making inequalities more visible.

The Relevance of Empathic Forms of Quality of Life Mapping

In the UPM courses, we emphasize the importance of *empathic* forms of QoL mapping; these are forms of QoL analysis that make visible inequalities that negatively affect the ideal of a just and inclusive city. These empathic and sensitive forms of mapping require different forms of knowledge (not only the technical or scientific knowledge produced by experts) and the recognition of convergent and divergent views between different groups.

Our UPM students are trained in GIS, however we also encourage them to have a critical approach since maps cannot be considered neutral representations of reality, they are not value-free, but loaded with power and socially constructed (Harley 1989). We make our students aware of the implicit ‘slants’ that operationalization, validation, classification and spatial representation of information embody (Monmonier 1996). Informed by these critical cartography perspectives we explain to our students that cartographic representations of unequal QoL conditions (and other manifestations of inequalities) are shaped by three factors (Fig. 12.1). (1) the conceptualization of deprivations (e.g. theoretically driven), (2) the knowledge sources (e.g. census data and expert codified) and 3- the spatial representation (e.g. predefined census boundaries) (Martínez et al. 2016). All these factors are either shaped in top-down (by experts) or in a bottom-up (by people) fashion. Experts (e.g. urban planners) represent the external view -or in anthropological terms, the *etic view*- and peoples view represent the *emic views* (the internal view of the community) (Fig. 12.1).

Mapping only the etic or expert views (e.g. producing maps based only on objective QoL conditions) is probably not counting what counts for people. Therefore, in the UPM courses we combine the emic and the etic view: we combine objective QoL measured by experts and QoL derived from people’s perceptions. QoL studies combining those views can determine divergent and convergent assessments of QoL conditions. One of the studies derived from the work of one of our UPM students

¹ See e.g. Bristol Quality of Life reports <https://www.bristol.gov.uk/statistics-census-information/the-quality-of-life-in-bristol>

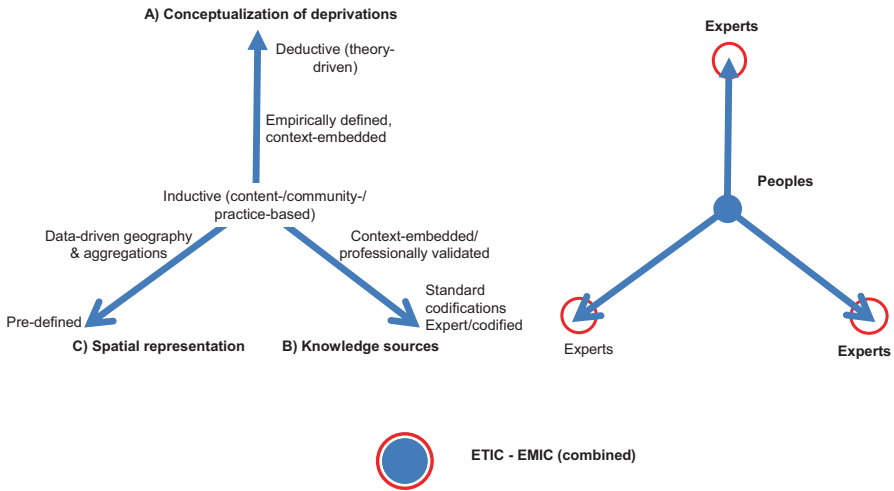


Fig. 12.1 Factors shaping cartographic representations, experts/peoples view, Etic-Emic. (Adapted from Martínez et al. 2016)

(Tesfazghi et al. 2010) illustrates how this combination allows four possible resulting states of QoL: well-being, deprivation, adaptation and dissonance (see Sect. 4).

The geographic dimension in this approach elicits spatial variations within and between neighbourhoods. This is of particular relevance for policy and planning because it maps the locations of deprived and well-being areas and places experiences and perceptions in their actual spatial context.

We make our UPM students aware of the risk of disciplinary bias when mapping QoL research only from an etic perspective. Rojas (2015, p. 340), while describing the risks of experts classifying people as being in a state of deprivation exclusively from their own constructs, writes:

“It is a common complain of politicians that ordinary people do not show the same passion for wellbeing indicators as those who are constructing and using them show. In consequence, experts face the risk of classifying others based on their own disciplinary focus, rather than on people’s own life focus” (Rojas 2015, p. 340)

The risks of a disciplinary bias can be reduced when both etic (expert) and emic (lay, peoples or communities) accounts are collected and when a multidisciplinary approach informs the QoL research. The two by two matrix in Fig. 12.2 reflects such an approach (Martínez et al. 2017).

In the following sections, we illustrate how this approach has been taught at the Faculty ITC, University of Twente (the Netherlands) within the Urban Planning and Management Specialization (UPM) of the 2-year Master’s Geo-Information Science and Earth Observation.²

²The UPM specialization is run within the Department of Urban and Regional Planning and Geo-Information Management at Faculty ITC in Enschede (the Netherlands). The Faculty ITC was funded in 1950 and has accumulated extensive experience in capacity building and institutional

	EXPERT VIEW (ETIC)	LAY VIEW (EMIC)
QUANTITATIVE data	<p>(material and objective or indicator based QoL conditions) Data from:</p> <ul style="list-style-type: none"> - Quantitative indicators 	<p>(perceptions / experiential) Data from:</p> <ul style="list-style-type: none"> - Assessments of satisfaction using numerical and categorical scales
QUALITATIVE data	<p>(material QoL conditions) Data from:</p> <ul style="list-style-type: none"> - Landscape appreciation - Consideration of human environment in terms of local cultural milieu - Relations material/social setting 	<p>(perceptions / experiential) Data from:</p> <ul style="list-style-type: none"> - Focus group discussions - Participatory mapping - Open interviews - Walking interviews

Fig. 12.2 Mixed methods approach to capture unequal QoL conditions and different ways it can be expressed

Teaching and Learning Quality of Life in an International Programme

For the last 10 years, I have been teaching in two UPM courses: *The Inclusive City* (5 ECTS³ credits, compulsory) and *Analysis of Intra-Urban Socio-Spatial Patterns* (5 ECTS credits, elective). The Inclusive City course⁴ relates to top-down city-wide approaches (predominantly etic views) while the Analysis of Intra-Urban Socio-Spatial Patterns course engages more within bottom-up, predominantly emic views and incorporates mixed methods and qualitative methods such as walking interviews and text analysis. The next sections describe in detail the learning objectives, content, methods, and (research) outputs derived from these two courses.

The Inclusive City Course. Social Indicators

In UPM course *The Inclusive City*, two learning objectives were designed to engage students with social justice perspectives and social indicators in urban studies. Upon completion of this course, the students are able to:

development of professional and academic organizations and individuals specifically from less-developed countries in the field of geo-information science and earth observation and its applications (See: www.itc.nl)

³ECTS corresponds to the European Credit Transfer and Accumulation System (ECTS) credits. According to this standard, one academic year corresponds to 60 ECTS credits. One ECTS is the equivalent to 28 h of total workload.

⁴The name of this course was initially called “Analyzing and Monitoring Urban Dynamics” and it was later changed to “The Inclusive City”. Since September 2018, the course is called “the Inclusive and Competitive city”.

- Explain the theoretical notions of equity, fairness and social justice and their relation to the inclusive city concept;
- Identify, construct and analyse spatial and non-spatial indicators of multiple deprivation.

Following Blooms taxonomy of learning objectives (Anderson et al. 2001) these two objectives relate to the cognitive process dimensions of comprehension, application and analysis.

A key teaching approach which prepares students to reflect and evaluate their methodological choices is the spiral learning process for indicators development (Martínez and Dopheide 2014). Martínez and Dopheide (2014) recognize that teaching the methods and the use of the indicators is a challenge, since it requires -in a short period of time- the practice of the different steps of the development of the indicators. The spiral learning process (Fig. 12.3) differentiates several steps: from counting, construction and operationalization of the indicators to steps related to

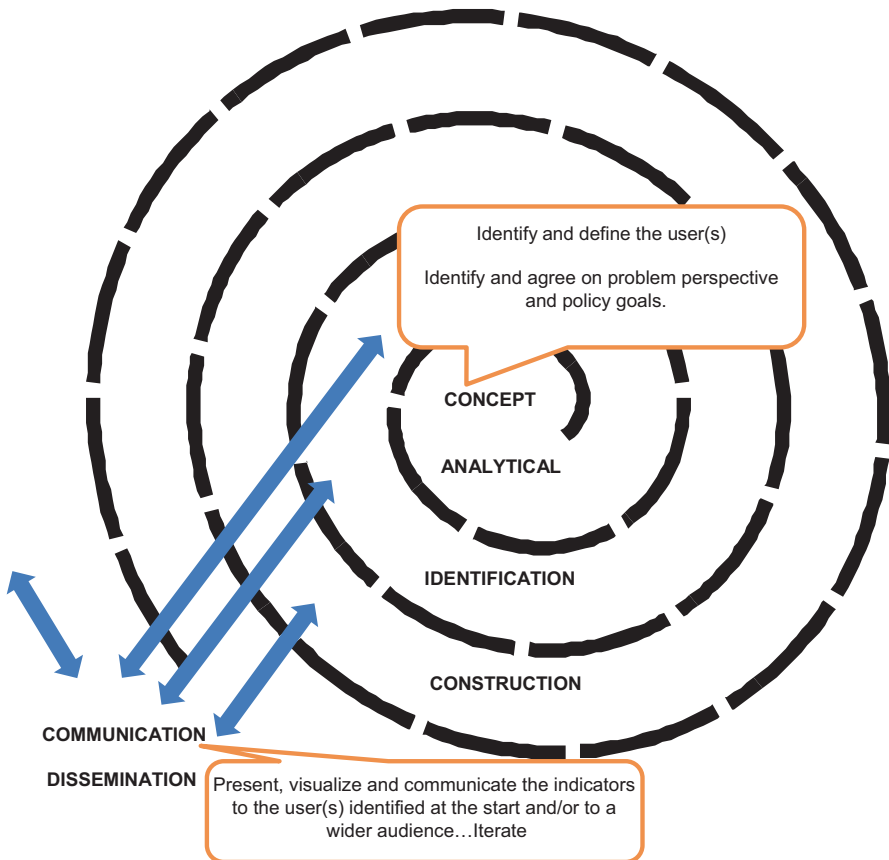


Fig. 12.3 Open spiral learning process for the indicators development (Martínez and Dopheide 2014). Steps adapted from Wong (2006, p. 106)

policy and learning that require a more critical, reflective process. Some of the steps are mechanistic while others require an iterative, reflective and metacognitive process.

In our teaching, we explain UPM students that indicators are qualitative or quantitative data that describe the characteristics of a given phenomenon and communicate an evaluation of the phenomenon in question. Furthermore, indicators should be explicitly selected for their relevance to policy issues and related to a specific time and place. With this definition, we want to emphasize the policy relevance of the indicators, particularly if they are used to inform planning. One of the strengths of indicators as a tool for urban planning is that they have the potential to communicate complex problems in a simple and understandable way. They help in the formulation of explicit objectives and in the development of a shared vision on relevant issues. They have the advantage of being objectively verifiable and can help monitor and evaluate progress. They are also a powerful communication tool that can inform the public, raise awareness about various topics of interest and encourage action and empowerment. In the context of governance and participation, it is worth noting that if indicators are properly developed they can promote transparency and accountability (Martínez and Dopheide 2014).

Our experience with teaching and researching on indicators shows that for a successful implementation and uptake of indicators some conditions are required. Key elements relate to stakeholders' participation, iterations and communication throughout all the steps of indicator development (Fig. 12.3), particularly in the identification of indicators and presentation (Martínez and Dopheide 2014). This spiral learning process pays explicit attention to the elements of communication, information sharing, collaboration, learning and empowerment.

This critical approach has been implemented in some of the MSc thesis of our students. For example, one of the first MSc studies resulting from this course was that of Trisusanti (2008) with a case study on multiple deprivation.⁵ Using official (top-down) secondary data, this student showed how the resulting rank of deprived areas could vary just by altering the methods that synthesised the indicators into a final index (Fig. 12.4). In relation to transparency of methods, Trisusanti (2008) also stressed the need to evaluate and show the sensitivity of different techniques to policy and decision makers. This case shows how students can demonstrate how top-down "objective" measures are sensitive to experts' choice and are not neutral representations of reality. Despite that students are exposed to secondary (e.g. official census data) and predominantly etic views, we emphasize a critical perspective on indicators.

⁵The use of indices of multiple deprivations diffused from the United Kingdom experience towards cases in the Global South and other European countries. This is also replicated in research carried at Faculty ITC in relation to a critical analysis of the use of indicators to rank multiple deprived areas by the Dutch government (Dopheide and Martinez 2007).

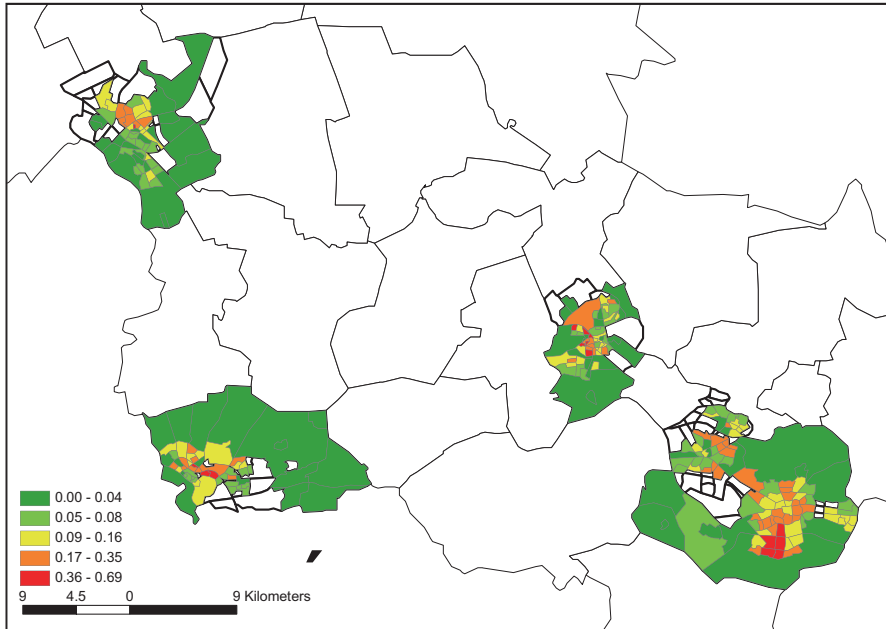


Fig. 12.4 Multiple deprivation across Overijssel. In read areas with high level of relative deprivation Trisusanti (2008)

Analysis of Intra-urban Socio-spatial Patterns Course. Mixed-Methods

In the UPM course Analysis of Intra-Urban Socio-Spatial Patterns, we explore issues of socio-spatial inequality, differentiation and fragmentation that have an impact on the urban environment and on the QoL of urban residents. The learning activities concentrate on capturing and understanding diverse forms of knowledge regarding intra-urban variations of QoL conditions and access to social infrastructure (e.g. health and education services).

Many of the learning activities in the course include “hands-on experiences” such as walking interviews. Eizenberg and Shilon (2015, p. 1131) present “hands-on experiences” as one of the key pedagogical inputs for qualitative research methods for planners as these methods require “stepping into the field and experiencing it”. Eizenberg and Shilon (2015) claim that this approach is necessary because in this way students can develop a deep understanding of both the case study area (the spatial) and its users (the social). Some of the strengths relate to “engaging with the field and its users in their natural settings” and “Immersion in the users’ point of view” (Eizenberg and Shilon 2015, p. 1131). One of the challenges the authors identify is observed in this course and it relates to “the brief experience due to the scope limits of an academic course” (Eizenberg and Shilon 2015, p. 1131).

In the study guide that students receive before enrolling to this elective course we explain that “a better understanding of the resulting socio-spatial patterns is essential for targeting (multiple) deprived areas and implementing area-based and regeneration policies” In this way directly relate the concepts to practice and policy. Upon completion of this course, the student will be able to:

- Explain intra-urban socio-spatial patterns and the relation with current theoretical and empirical debates in urban studies;
- Explain the importance of intra-urban patterns and inequality analysis in planning;
- Apply a combination of qualitative, statistical and GIS-based spatial analytical methods to detect and analyse intra-urban variation patterns;
- Describe the relevance and validity of selected quantitative and qualitative methods in the context of urban studies;
- Examine and critically reflect on the methodological choice and the incorporation of both quantitative and qualitative data analysis;
- Interpret results and relate these both to theoretical debates as well as to policy implications.

Following Blooms taxonomy of learning objectives (Anderson et al. 2001) these objectives relate to the cognitive process dimensions of comprehension, application and analysis and metacognitive dimensions that require critical reflection and evaluation.

In different learning activities that include (guest) lectures and group presentations, students learn concepts related to Intra-Urban Socio-Spatial Patterns in Urban Studies; Spatial Justice; Spatial Inequality and Environmental Justice. QoL is presented together with the concepts Community Well-Being and Deprivation. Diverse forms of knowledge and etic and emic views are explained (Fig. 12.2).

This UPM course also introduces a mixed-methods approach. We present the concept of mixed-methods in the context of QoL (Tonon 2015). Through a combination of (guest) lectures, reading assignments, exercises, and a final group work assignment, students learn to combine quantitatively derived patterns and measures with urban residents’ generated data and perceptions, and to interpret the complementary results acquired. Some of the quantitative tools learned are related to data reduction and factor analysis with examples in QoL (Pacione 2003a) and cluster analysis (K-means) as a form of neighbourhood analysis and targeting. Traditional quantitative GIS methods are taught to map intra-urban patterns and change as well as a qualitative GIS.⁶ In qualitative GIS we put emphasis on patterns of user generated data and qualitative data. A combination of these two methods allows students to distinguish between “objective” and “subjective” measures. Computer Aided Qualitative Data Analysis Software (CAQDAS) is taught to facilitate text analysis and geocode quotations.

⁶For a detailed discussion on GIS, geo-technologies and urban governance see (Pfeffer et al. 2015)

A key assignment during this course is a “hands-on experience” in the form of a group work that requires carrying out a walking interview. The following subsection, discusses in detail this assignment.

Walking Interview Assignment

A walking interview is a mobile method for interviewing. It has some similarities with transect walks and rapid appraisal methods. It involves the researcher and participant walking along specific streets. Depending on the interviewee familiarity with the area, the researcher might be guided by the participant. A structured route can be set by the researcher if there is a specific area that needs to be studied. Walking interviews are important for QoL studies because they explore the relationship between what people say and where they say it (Evans and Jones 2011), they capture people’s understanding of a particular place or the whole neighbourhood.

The students that attend this UPM course are already familiar with traditional GIS software (i.e. ArcGIS™) which is designed for quantitative data analysis. The walking interview exercise allows students to experience the combination of qualitative data (text from the interviews) with GIS data (the track and location of the walk and points of interest mentioned by the interviewees). The importance of integrating qualitative data in a GIS is relevant in urban studies since people do not experience their lives in abstract Cartesian spaces but in places that have meaning and emotions. This has resulting in what is called qualitative GIS (Cope and Elwood 2009) and opened up as well the emergence of CAQDAS tools that integrate geocoding mechanisms (e.g. ATLAS.ti™). In order to analyse the walking interviews students learn with systematic instructions how to geocode data in a CAQDAS and perform basic analysis (i.e. coding and relations of codes in network diagram).

When we introduce these learning activities we explain to our students that there are several advantages associated to walking interviews (Clark and Emmel 2010; Evans and Jones 2011).

- They provide spatial context to the interview and allow to place events and experiences;
- They are useful to capture perceptions on QoL, built environment and how individuals perceive their neighbourhood;
- They provide policy makers with evidence on communities and individual perceptions, connections and identity with their neighbourhood.

In this UPM course, students practice walking interviews and learn to record the path or track they walk. For that purpose, they use a GPS or mobile GIS tools (e.g. Cybertracker, Locus, or a GPS-data logger device⁷). Voice and eventually video is recorded during the interview. Points of interests signalled by the interviewee are also photographed.

⁷For an example of the use of a GPS-data logger combined with walking interviews with older adults see (Zandieh et al. 2016)

The main objective for the walking the interviews is that students learn to collect, analyse and present geographic narratives. More specifically the student will be able to:

- Map the perception of the urban living environment / QoL of the city centre of Enschede (physical and social qualities). Identify patterns of negative and positive perception (e.g. across gender, age, country of origin)⁸
- Practice data collection via walking interviews
- Analyse the qualitative data with a CAQDAS software.

The outcomes of the walking interviews assignment includes: (1) a map indicating the location and extent of positive and negative hotspots as perceived by different students, (2) recorded interviews and geocoded photos of the visited areas, and (3) an analysis of the results in ATLAS.ti.

Before we introduce the topic students learn how some authors combine quantitative with qualitative data and how they show the variation of perceptions across different groups. For example the work of Pacione (2003b) where the author analysed gender-differentiated fear of crime at local level within the city of Glasgow. Pacione (2003b) collected information on perceived risk from criminal activities and perceived dangerous spaces by gender. Students also learn that qualitative GIS has been also used to analyse fear through geo-narratives (Kwan and Ding 2008). The work of Chawla (2002) and Alarasi et al. (2016) are used as an example to identify physical and social qualities of the local living environment focussing on children (Fig. 12.5).

The research of Alarasi et al. (2016) and Shumi et al. (2014) emerged from MSc theses. In both cases, the students had previously attended this UPM elective course and have learned to perform walking interviews. In turn, we also include their work in subsequent lectures to stimulate new student in the topic of QoL, qualitative GIS and mixed methods.

For the walking interviews assignment, students work in groups and exchange members in each round of interviews so that they interview each other. They interview four to six ITC students living in the city centre (at least two men and two women). The assignment consist of three parts: A- Preparation and concept consolidation, B- Walking interviews download, and C- Text analysis.

Part A: Preparation, concept consolidation and implementation

Before students go to the field, they discuss in a plenary the conceptualization of the urban living environment/QoL. We use the think-pair-share or snowballing

⁸In the first 2 years that we had run this course, during the walking interviews we had focused on the topic of perception of fear in the university campus and compared between gender and country of origin. Arranging the interviews with students living in the campus resulted in time-consuming efforts for the students therefore we opted for a topic that they could use to interview each other.

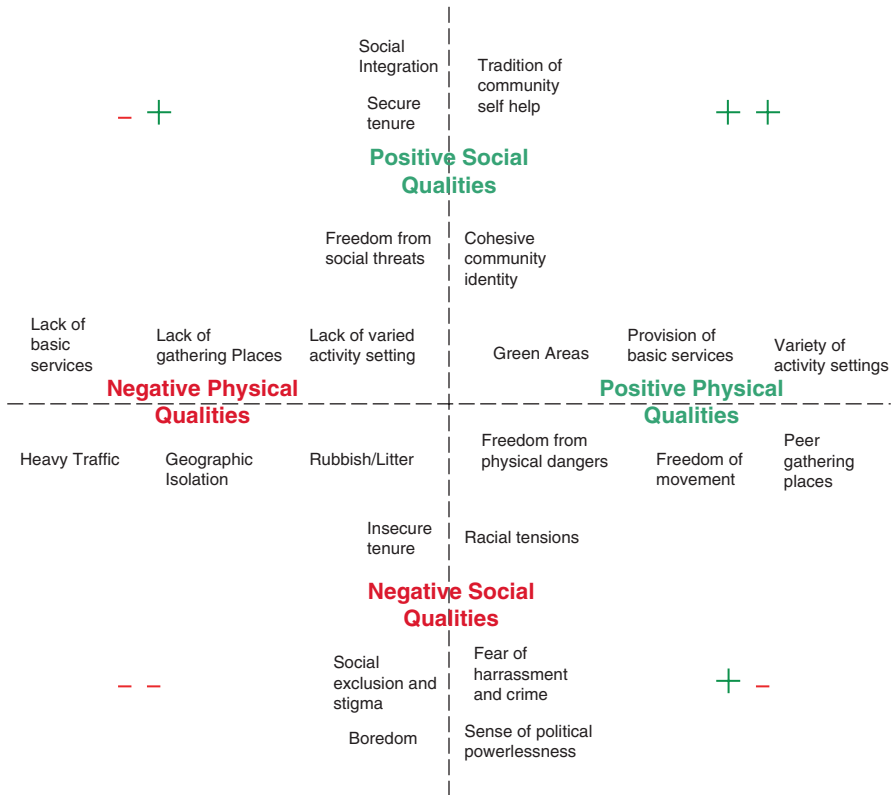


Fig. 12.5 Qualities of the living environment. (Adapted from Chawla 2001 by Al Arasi 2013)

approach so that students first reflect individually, then discuss in pairs and then in group the following points:

Firstly, how they would define the urban living environment and QoL. As a group, they need to agree on the same conceptualization (note that this also corresponds to the spiral learning of indicators step 1 in Fig. 12.3). They are encouraged to base the conceptualization on the literature as well as their own experience as residents of the city centre of Enschede (the students live at the same students' accommodation in the city centre). We suggest them to think about positive and negative social and physical elements and/or domains of life.

Secondly, students elaborate some hypothesis on the factors influencing the perception of quality of the urban living environment and possible variations across gender, age and country of origin, discipline and background of the interviewee.

Finally, we provide them with a draft interview guide with further instructions and we ask them to fine-tune the questions suggested for the walking interviews (Box 12.1). We ask them to revise the suggested questions based on their own conceptualization and hypothesis. We ask them to think about items in the interview guide that they should add or leave out.

Box 12.1: Walking Interview Guide

Note: For the walking interview, you need to carry with you:

- A paper map of the area (e.g. from Google Earth)
- A Tablet with GPS or Locus or OSM tracker app pre-installed
- A digital camera (with same time set as in the tablet GPS/app). Geocoded photos can also be taken with a tablet
- A digital recorder (note that to synchronise with the tablet GPS app you will need to turn on the recorder before the GPS app is open and verbally indicate when the GPS is on –add a verbal time stamp-)

At the starting point of the walking interview, you need to:

Explain briefly the aim of the activity.

Ask your interviewee if you could walk with him/her.

Important: read issues of consent and confidentiality in Clark and Emmel 2010

The interviewee decides the route. Options could be walking to: supermarket, square, shops, most visited place, etc.

Explain that you will walk with them for a maximum of 30 min and stop at some points to take photos and notes on his/her perceptions and places they point at (in particular when they refer to positive and negative qualities).

Begin the interview with the following (suggested) questions [add and discuss more questions before departing to the field]

Q1- Where have you been born?

Q2- How many months have you lived in Enschede?

Q3- Mark on this map the following:

(a) *Where do you live?*

(b) *Which areas do you frequently visit in the city centre?*

(c) *Points and spaces where you observe positive and negative locations in the city centre. Why?*

Does your perception change during the night and during the day [Interviewer labels the points and areas in the map and distinguishes day and night]

Start the walking interview.

Suggested open questions while walking:

As we walk around think about what do you like / and not like the area? What do you think about the quality of the public space? Why do you think that?

Ask also questions on key issues that you identified and based on how you defined in your group the urban living environment / quality of life.

E.g., do you feel unsafe in any of the areas we walk by? Why?/Why not? Can you remember a time when you walked here and felt unsafe? Would you walk here anytime of the day? Why? Why did you choose this route?

Think in advance more questions

Currently we assign 4 h for this assignment but in our latest staff evaluation, we notice that this part (A) require more time (in the next year we expand the course from 5 to 7 ECTS).

Part B: Walking interviews download

Once students come back with the walking interviews, they follow instructions on how to download and analyse the data they collected during the walking interviews. They learn to import the track or transect, the audio, pictures and eventually video material. We remind them that they have to stick to the agreed conventions in terms of colour, symbol and type of object (point, line, and polygon). For each of the walking interviews: they digitize the perception of urban living qualities in ArcGIS or Google Earth (as points, lines and polygons).

If they worked with ArcGIS we asked them convert the map documents to a Google Earth file. They download the tracks, photos and audio in Google Earth and they compare the results of the different walking interviews. They save the result in a Google Earth file format (kmz) and share the file in the course Learning Management System (LMS). The results are discussed in a plenary session.

Students make use of a portfolio to present the results and discussion of this part. One of the outputs is a map indicating the location and extent of positive and negative hotspots as perceived by different interviewees. They are asked to briefly discuss the results in terms of geographic patterns, commonalities and differences across interviewees, unexpected results, etc.

Part C: Text analysis

In the last part of the assignment, students perform text analysis in ATLAS.ti. When students analyse the data that they collected during the walking interviews we ask them to experiment with the following points in text analysis while keeping the focus on urban living environment and QoL. They are asked to code a few relevant quotes and make links between them (networking diagrams). They also learn to add fieldwork notes with their observations and geocode the most relevant photos (e.g. of elements in the urban environment that are pointed at or referred to by the interviewees). The different transect walks of the walking interview places of positive and negative qualities could be added to the ATLAS.ti project and geocoded. Each member of the group codes separately and exports the work as project bundle.⁹

This part of the assignment is supported with online micro lectures (e.g. on ‘Creating and Displaying Semantic Linkages’) and specific online software tutorials. For instance, for organising and distributing the data analysis among the group members, students can have a look at the “How to Document ‘Team Work with ATLAS.ti 8 Windows” tutorial.

Students make use of a portfolio to present the results and discussions of part C. One of the outputs is to present the three most relevant findings of the walking interview and ATLAS.ti analysis. They also have to critically reflect to what extent

⁹The bundle is something like an ATLAS.ti specific zip archive. It is used to merge the work of different group members.

the findings contribute to a better understanding of the patterns discussed in part B. Finally, they need to illustrate and support the findings with screenshots and photos of the walking interview, quotations, relevant parts of the codes and the semantic network.

Cases Resulting from the Teaching and Learning Approach

One of the first studies informed by this approach was that of Tesfazghi et al. (2010). It combines objective and subjective perspectives –the material and the experiential– determining divergent and convergent assessments of QoL conditions (Tesfazghi et al. 2010). GIS was used to visualize the four conditions of QoL in Kirkos sub-city (Fig. 12.6). Areas of *dissonance* are of particular interest since they show areas where the perception of QoL is worse than objective conditions.

Tesfazghi et al. (2010) mapped areas of *adaptation* and *dissonance* (where there was a mismatch between the etic and emic (experts and people’s views on QoL). However, the quantitative methods used were insufficient to answer questions related to the reasons of divergence between the external (etic) and the internal view (emic). Henceforth, in subsequent studies the authors incorporated mixed methods,

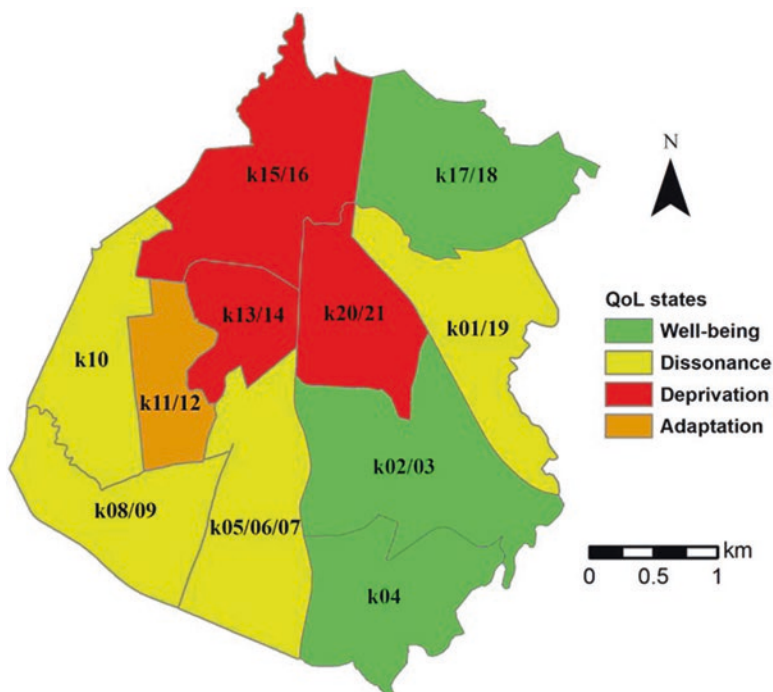


Fig. 12.6 Spatial variation of QoL states in Kirkos sub-city. (Source: Tesfazghi et al. 2010)

crossing the qualitative vs quantitative divide by looking for comprehensive, contextual, and explanatory accounts. Above all, it allows eliciting diversity of views: expert, lay and across residents. The authors incorporated walking interviews to bring a contextual explanation of *adaptation* and *dissonance*. The walking interviews helped identifying the reasons behind the divergence between emic and etic views (Berhe et al. 2014).

From the walking interviews, the authors found some explanations of *adaptation*:

we are only two even though the room is small it is enough for us. Even though it has no kitchen but I am satisfied. Getting a house is very difficult in this Ketena since it is located in the centre of the city.

the house is small and it is not in a good condition but I am satisfied because I cannot pay more than what I am paying now for house rent if I do so my kids will starve.

Explanations of *dissonance* were also sought in the QoL domain of education:

I am not satisfied because it is very expensive [access to education]. The other issue is most of the students in the school are from rich family and since they are teenagers there is high competition in dressing and school meals.

While the etic view used GIS and considered access to social infrastructure (e.g. education) as an issue of proximity, the walking interviews with residents exposed other dimensions attached to accessibility such as affordability and safety (the school was located at the side of a busy road where children were exposed to traffic accidents).

Another student applied a mixed method approach to identify and compare the gendered (emic) QoL domains in a deprived and non-deprived neighbourhood in the city of Birmingham (Khaef 2013). Alongside the quantitative data obtained from an Index of Multiple Deprivation, open questionnaires and individual interviews were used to obtain residents' emic perceptions about QoL conditions in their neighbourhood.

Participatory mapping techniques allowed Khaef (2013) to identify the different perspectives and QoL concerns between men and women. The results also show that in deprived neighbourhoods both women and men mentioned similar QoL domains to be relevant for their community (access to facilities, street condition, safety, green space and social interaction). However, there were different emic views towards issues of safety, access to facilities and street condition. Overall, a qualitative analysis for the neighbourhoods revealed that while in deprived contexts many differences toward gendered perception of QoL have been found; in non-deprived areas respondents showed strong similarities in the perception of their neighbourhood.

One of the advantages of applying the mixed methods approach that we teach to our students is that it exposes many axis of differentiation that might be ignored if only an etic view or quantitative data is included. In particular, gender is one of the dimensions to be considered in the experience and perception of QoL in order to elicit emic views of vulnerable groups. In another study (Shumi et al. 2014), we

used this mixed-method approach and elicited emic views to understand how the QoL of women garment workers in Dhaka (Bangladesh) was affected by the walking conditions of the routes they take from home to work. Next to gender we have also studied in the Global North (the city of Enschede, the Netherlands) children's perception (Alarasi et al. 2016) and ethnicity (Desriani 2011).

Conclusions

In this chapter, we presented an approach for teaching and learning QoL in the context of urban studies. In particular, we gave details on how we use a heuristic framework to critically look into expert and peoples view (Figs. 12.1 and 12.2), and how we frame indicators under an open spiral-learning process (Fig. 12.3). We give details on how this framework can be translated into a learning activity (the walking interview) and indicated the relevance of incorporating a mixed methods approaches.

We claim that the approach we use with our students facilitates a more sensitive and empathic form of QoL mapping. We illustrate this with some case studies that emerged from the work carried with our students. We showed how thanks to hands-on experiences our students learn how to elicit different forms of knowledge (not only from experts but also from residents) and the critical recognition of convergent and divergent views between different groups (Figs. 12.4, 12.5, 12.6, 12.7, and 12.8).

One of the main challenges identified in this approach relates to the group work characteristic of one of the assignments. The walking interview is performed as a group work assignment to facilitate hands-on-experience and learning from each other. Some of the advantages of group work are that students have the potential to maximize and share their skills with the rest of the group (Brewer and Klein 2006; Haigh and Gold 1993). However, during group work, cooperation is not always facilitated and motivated and it might be challenged when students have different cultural backgrounds, disciplines or skills (Hennebry and Fordyce 2018). From the different course evaluations, we know that our students appreciate the group work and the walking interviews. Nonetheless, some of the challenges of group work were observed, as students are required to share the interviews across members of the group and distribute labour intensive tasks such as transcription of the interviews in order to use them in a CAQDAS software. Furthermore, to be able to compare results among groups in the final presentation we ask them to collaborate with each other and agree on using the same mapping conventions and legends (e.g., how they mark things on the map -colours, symbols- and what kind of labels they will use). Under certain conditions, collaborative learning approaches can promote and facilitate among students each other's efforts to learn, resulting in *positive interdependence* (cooperation) (Brewer and Klein 2006), critical thinking (Cooper 1995) and students satisfaction (So and Brush 2008). In order to improve this teaching and learning approach we are currently studying a better implementation of the group assignment mediated by a Learning Management System (LMS). The main goal of



Fig. 12.7 Example of state of adaptation in QoL housing domain. Source: Berhe et al. (2014)

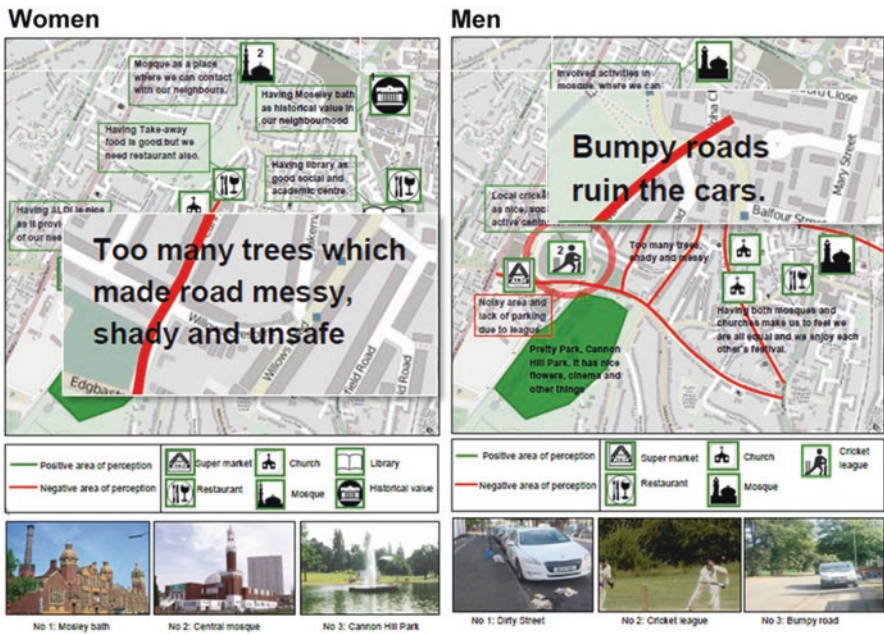


Fig. 12.8 Women and men perceptions. Source: Khaef (2013)

that research is to develop a (computer-supported) collaborative learning approach that promotes positive interdependence in this type of group assignments.

The main conclusion of this chapter is that teaching and learning QoL in urban studies can benefit by the combination of methods, critical approaches and empathic forms of QoL mapping. In the UPM courses, we emphasize the importance of forms of QoL mapping that make visible inequalities that negatively affect the ideal of a just and inclusive city. These empathic and sensitive forms of mapping require different forms of knowledge (not only the technical or scientific knowledge produced by experts) and the recognition of convergent and divergent views between different groups.

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