

THE ELABORATION OF AN INVENTORY OF EVALUATION OF THE QUALITY OF USAGE OF AN ACADEMIC ESTABLISHMENT

D. BOUZID¹ L. RIOUX²

Abstract: *The Social Responsibility of the University (SRU) was born out of a wish of the European Higher-Education Area (EHEA) to build an European space of education. From this perspective, the universities become straightforward urban actors integrated in the urban area where they are implemented. Our research aims to elaborate an inventory of the quality of usage of an academic establishment. To this end, five studies were conducted in four French universities in order to design a tool composed of 97 items in which the intra and inter-judge reliability is completely satisfactory. Even though intercultural validation analyses prove to be necessary, this evaluation inventory of the quality of usage of an academic establishment seems to be adaptable at European level.*

Key words: *quality of usage; university; construction of a tool.*

1. Introduction

Since the Middle Ages, the universities have known stages of autonomy intermingled with stages of coming close and being integrated in the local structures (Nóvoa & Lawn, 2002), according to the rhythm of national and European reforms. Thus, in England, the liberal reform of the last 20 years has encouraged the universities to search for financial support in the economic and societal world, at the same time protecting themselves from the influence of local collectivities (Grossetti & Losego, 2003).

The Social Responsibility of Universities (SRU) was born as a result of an initiative of the European Higher-Education Area (EHEA), which was already present in the ministerial statements of London (2007) and Louvain (2009). It is based on missions going from academic excellence to the equality of chances, associated with an increasing will to trade higher education (Sultana, 2011) and with the construction of an European Space of Education (Nóvoa & Lawn, 2002).

Although the idea that the mission of universities entails dimensions which go beyond the promotion of knowledge and research corresponds to the classic models of European university (Zgaga, 2009), these preoccupations have only recently been associated with the SRU (for example (Larrán, López, & Márquez, 2011)).

¹ Université Paris 13-IUT de Saint Denis, dalel.bouzid@univ-paris13.fr.

² Université Paris Ouest Nanterre La Défense, France. lrioux@u-paris10.fr.

Similarly, it is only a few years since the globalization and the importance of innovation in the economic development redefine and intensify the relations between the university and the territory of its implantation (Camagni & Maillat, 2006).

Therefore the question of the emergence of universities as urban actors arises (Bruston, 2011). This is particularly the case in France, where the present politics have strong territorial incidences because they confront the institutions with a request to intensify their relations with their local partners, be they political, economic or social partners (Mattei, 2015).

This phenomenon is recent due to the fact that until the 80's politics were rarely interested in the relations that the university had with the urban territory. Two types of universities classically coexisted: (a) old university settings in the centre of the town which were little taken care of, although they were part of the urban historical heritage (the image of Sorbonne...) and (b) campus-sites built in the 60's, in peripheral areas, crowded spaces which were often deserted by their users as soon as the lectures were over, marking both spatially and symbolically, the separation between the university and the urban territory (Filâtre, 2003).

With the adoption of the plan 2000 University, a reconciliation of the society with its universities occurred, the latter becoming the heart of economic development. The plan Campus 2008 described a will 'of expansion and territorial openness' followed by the regrouping of universities and eventually by the creation of the Association of Universities and Higher Education Institutions, which is the most recent example.

Often major technological evolutions are added (video-conference rooms, IT-equipped rooms, numerical libraries...) to these economic, political and ideological mutations. This shows an increasing concern over the environmental issues (Poirrier, 2009). How can the European University take into account these disturbances which trigger both new facilities (INRS, 2014), new spaces and consequently new usage types? How to establish, inside the SRU, the degree of urban insertion of the university and the practices of its personnel (technical and administrative agents, teachers-researchers) and of the students?

Our research aims to elaborate an evaluation inventory of the quality of usage of an academic building. In order to design a tool to be used regardless of the type of university, we have chosen four universities categorized based on their structure (campus versus urban site) and their size (metropolis versus medium-sized city). Sixteen university agents and twenty-six students took part in five studies.

2. Study 1. Semi-directed Interviews

2.1. Method

In each university, 4 employees and 4 students were interviewed by a teacher-researcher who was familiar with the interviewing techniques. All the students were enrolled at university for less than a year. The employees (two male participants and two female participants for each university) were aged between 24 and 58 and had a length in service at university ranging from 4 to 27 years. The students (two male participants and two female participants for each university) were aged between 18 and 25 and were studying psychology. The first question of the interview was the following: '*What in your university promotes the connections with the local environment?*' The interviews lasted from 35 minutes to 1h 15 minutes.

2.2. Results

The content analyses of the 32 interviews brought forward three themes:

- Proximity of the urban infrastructures. Movement facility in the local area;
- Partnerships with the local institutions (manifestations organized by the local institutions and sustained by the university, manifestations organized in partnership with the local area representatives);
- Use of the university by the local population (Openness of the university to the local population, actual presence of people who do not study at university).

3. Study 2. The Observation

When given a mixt binomial by the university, eight type 2 master students were asked to divide the space, jotting down precisely the elements of the environment which referred to each of the three dimensions and its components retained by the content analysis. These psychology students were aged between 23 and 29 and were trained in environmental psychology and in the inherent methodology of constructing an observation grid. Moreover, they did not know the university structure which had been devolved to them.

A common work session was afterwards conducted by the two French researchers, one specialized in psychology, the other in urban architecture, in order to analyse the observation items revealed by the students. Two changes were suggested: decomposing the part:

‘Actual presence of the people who do not belong to the university’ in *‘During the lecture time of the students’* and *‘Outside the lecture time of the students (including the weekend)’*.

93 items were thus created.

4. Study 3. The Focus Group

The clarity of the items was tested by a small group of 10 students - 5 male and 5 female - of various departments of a university in Paris which was not selected for the construction of the inventory (Letters, Management, Law). The first half of the sample were students in the first cycle while the other half were students in the second cycle. The participants were asked to assess each item based on its clarity on a five-point Likert scale going from (1) *‘not at all clear’* to (5) *‘very clear’*. One item was not classified as *‘very clear’* by three students and was consequently rephrased. The item is *‘transition spaces’* which was turned into *‘hallway’*. A second item was subdivided. *‘Gym Dojo’* was transformed into *‘Gym’* and *‘Dojo’*.

At this stage of the construction, the inventory measuring the quality of use of an academic building comprises 97 items divided into three dimensions: proximity of urban infrastructures (25 items) partnerships with the local institutions (24 items) and use of the university by the local population (48 items). The finite version is presented in the annex.

5. Study 4. The Reliability of the Inventory of Evaluation of the Quality of Usage of an Academic Establishment

The intra and inter-judge reliability was tested in the four universities.

The intra-judge reliability was apprehended in the following manner: an evaluator has completed the inventory two times for each of the four universities, at a month's distance. The inter-judge reliability was done in the same campus by two evaluators who completed the inventory in the four universities without consulting each other.

We note that Boarnet, Day, Alfonso Forsyth and Oakes (2006) recommend the use of the agreement percentage, rather than Cohen's kappa for establishing the inter-evaluator reliability, so as to avoid the underestimation of the agreement for the measures concerning small samples.

The intra-judge agreement percentages are all superior to 90% (from 91% to 94%). Although they are weaker (from 79% to 86%), the inter-judge agreement percentages remain acceptable.

6. Study 5. The Sensitivity of the Inventory of Evaluation of the Quality of Usage of an Academic Establishment

The inventory, investigated by the same evaluator, shows significant differences concerning the average global scores obtained by the four universities, from 1.23 to 2.62 ($p < .05$) (table 1).

Table 1

Sensitivity of the inventory of evaluation of the quality of usage of an academic establishment

	University				Insertion
	U1	U2	U3	U4	
Proximity of the urban infrastructures					
Proximity of urban facilities	2.04	2.65	3.62	2.59	U3=U1<U2
Mobility facilities in the local area	2.54	3.4	4.2	3	U3<U1<U2
Average	2.29	3.02	3.91	2.79	U3<U1<U2
Partnerships with the local institutions					
Manifestations organized by the local institutions and sustained by the university	1.5	1.6	2.6	2.6	U1<U2=U3
Manifestations organized in partnership with the local institutions	1.0	1.6	2	3	U1<U2<U3
Average	1.25	1.6	2.3	2.8	U1<U2<U3
Use of the university by the local population					
Openness of the university towards the local population	.99	1.23	1.45	3.72	U1<U2<U3<U4
Real presence of the people who do not study at university	.21	.97	.97	.82	U3<U1=U2
Average	.60	1.1	1.21	2.27	U1<U2<U3>U4
Average insertion score	1.48	1.91	2.47	2.62	U1<U2<U3<U4

* Reversed-score items

U1: metropolis campus, U2: urban site medium city, U3: metropolis urban site, U4: campus average city

The sensitivity of the inventory is sustained by the average scores which are significantly different to a point of .05, obtained specifically with three dimensions 'Proximity of the urban infrastructures' and 'partnerships with the local institutions' and 'Use of the university by the local population' and with the sub- dimensions 'mobility facilities in the local area' 'Manifestations organized in partnership with the local institutions' and 'Openness of the university towards the local population' ($p < .05$).

7. Conclusion

The tool is both a general one, due to the fact that it allows the evaluation of the global characteristics of the academic environment, and adapted, due to the smoothness of details, the fine measure of the evaluation characteristics of the quality of use of an academic establishment.

Although discriminatory and intercultural validation analyses prove to be necessary, this tool composed of 97 items, with satisfactory intra and inter-judge reliability and sensitivity can from now on be considered as a valuable tool to evaluate the quality of use of an European academic establishment, a fortiori a Romanian one.

Other information may be obtained from the address: dalel.bouzid@univ-paris13.fr

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Annex.

The inventory of evaluation of the quality of use of an academic establishment

1. Proximity of the urban infrastructures

1.1. Proximity of urban facilities (tick only one answer per item)

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1. inside the university
 2. less than 100 m
 3. less than 500 m
 4. approximately 1 km
 5. more than 1 km

Public establishments					
City Hall	1	2	3	4	5
Police Station	1	2	3	4	5
Post Office	1	2	3	4	5
County Administrative Board	1	2	3	4	5
Hospital	1	2	3	4	5
Train Station, Subway Station, Bus or Tram station	1	2	3	4	5
Another Higher-Education establishment	1	2	3	4	5
Another education establishment	1	2	3	4	5
Other	1	2	3	4	5
Commerce and services					
Restaurant	1	2	3	4	5
Hotel	1	2	3	4	5
Gas Station	1	2	3	4	5
Medical Service, Clinic	1	2	3	4	5
Dry Cleaning, Laundry	1	2	3	4	5
Drugstore	1	2	3	4	5
Bookshop	1	2	3	4	5
Bistro, coffee pub	1	2	3	4	5
Grocery Store (Butchery, Creamery)	1	2	3	4	5
Clothing Shop	1	2	3	4	5
Bank, ATM	1	2	3	4	5
Other	1	2	3	4	5
Liberal Professions					
Law Professions (notary public, lawyer)	1	2	3	4	5
Health Specialist (doctor, dentist, therapist, nurse...)	1	2	3	4	5
Other	1	2	3	4	5

Cultural Spaces					
Library	1	2	3	4	5
Museum, Exhibition venue	1	2	3	4	5
Concert hall, theatre	1	2	3	4	5
Cinema	1	2	3	4	5
Other	1	2	3	4	5
Sports Areas					
Stadium	1	2	3	4	5
Swimming Pool	1	2	3	4	5
Gym	1	2	3	4	5
Dojo	1	2	3	4	5
Outdoor Equipment (Hiking wall, running spaces ,playgrounds)	1	2	3	4	5
Other	1	2	3	4	5
Public Natural Spaces					
Public Square, Public Garden	1	2	3	4	5
Forest	1	2	3	4	5
Lake, Pond, River	1	2	3	4	5
Fountain, Pool	1	2	3	4	5
Other	1	2	3	4	5

1.2. Mobility facilities in the local areas (tick only one answer per item)

1. very difficult
2. difficult
3. feasible
4. easy
5. very easy

On foot	1	2	3	4	5
By personal car	1	2	3	4	5
By public transport means	1	2	3	4	5
By Two-wheeler	1	2	3	4	5
In Carpool	1	2	3	4	5
Other	1	2	3	4	5

2. Partnerships with the local institutions

2.1. Manifestations organised by the local institutions and sustained by the university (tick only one answer per item)

1. never
2. occasionally (or during the weekend)
3. once or twice a week
4. from 3 to 5 times a week
5. All week (including the weekend)

Sports activities	1	2	3	4	5
Charity activities	1	2	3	4	5
Cultural activities	1	2	3	4	5
Formation	1	2	3	4	5
Social activities	1	2	3	4	5
Other	1	2	3	4	5

2.2. Manifestations organized in partnership with the actors of the local institutions (tick only one answer per item)

1. never
2. occasionally (or during the weekend)
3. once or twice a week
4. from 3 to 5 times a week
5. All week (including the weekend)

Sports activities	1	2	3	4	5
Charity activities	1	2	3	4	5
Cultural activities	1	2	3	4	5
Formation	1	2	3	4	5
Social activities	1	2	3	4	5
Other	1	2	3	4	5

3. Use of the university by the local population

3.1. Openness of the university towards the local population
(tick only one answer per item)

1. never
2. occasionally (or during the weekend)
3. once or twice a week
4. from 3 to 5 times a week
5. All week (including the weekend)

Sports Activities					
Stadium	1	2	3	4	5
Swimming Pool	1	2	3	4	5
Gym					
Dojo					
Outdoor Equipment (Hiking wall, running spaces ,playgrounds)					
Other	1	2	3	4	5
Cultural Activities					
Show Hall	1	2	3	4	5
Lecture room	1	2	3	4	5
Hall	1	2	3	4	5
Other					
Formation					
Lecture room	1	2	3	4	5
Amphitheatre	1	2	3	4	5
Other	1	2	3	4	5
Social Activities					
Green spaces	1	2	3	4	5
Hall	1	2	3	4	5
Amphitheatre	1	2	3	4	5
Lecture room	1	2	3	4	5
Other	1	2	3	4	5

3.2. Real presence of the people who do not study at university

3.2.1. During the lectures of the students

(Tick only one answer per item)

1. nobody
2. one or two
3. from 3 to 20
4. from 21 to 50
5. more than 50

Sports Activities					
Stadium	1	2	3	4	5
Swimming Pool	1	2	3	4	5
Gym	1	2	3	4	5
Dojo					
Outdoor Equipment (Hiking wall, running spaces, playgrounds)	1	2	3	4	5
Other	1	2	3	4	5
Cultural Activities					
Show Hall	1	2	3	4	5
Lecture room	1	2	3	4	5
Hall	1	2	3	4	5
Other	1	2	3	4	5
Associative Activities					
Show Hall	1	2	3	4	5
Lecture room	1	2	3	4	5
Hall	1	2	3	4	5
Other	1	2	3	4	5
Formation					
Lecture room	1	2	3	4	5
Amphitheatre	1	2	3	4	5
Other	1	2	3	4	5
Social Activities					
Green spaces	1	2	3	4	5
Hall	1	2	3	4	5
Amphitheatre	1	2	3	4	5
Lecture room	1	2	3	4	5
Other	1	2	3	4	5

3.2.2. Outside the lectures of the students (including the weekend)

(Tick only one answer per item)

1. Nobody
2. One or two
3. From 3 to 10
4. From 11 to 20
5. More than 20

Sports Activities					
Stadium	1	2	3	4	5
Swimming Pool	1	2	3	4	5
Gym	1	2	3	4	5
Dojo	1	2	3	4	5
Outdoor Equipment (Hiking wall, running spaces ,playgrounds)	1	2	3	4	5
Other	1	2	3	4	5
Cultural Activities					
Show Hall	1	2	3	4	5
Lecture room	1	2	3	4	5
Hall	1	2	3	4	5
other	1	2	3	4	5
Charity Activities					
Show Hall	1	2	3	4	5
Lecture room	1	2	3	4	5
Hall	1	2	3	4	5
other	1	2	3	4	5
Formation					
Lecture room	1	2	3	4	5
Amphitheatre	1	2	3	4	5
Other	1	2	3	4	5
Social Activities					
Green spaces	1	2	3	4	5
Hall	1	2	3	4	5
Amphitheatre	1	2	3	4	5
Lecture room	1	2	3	4	5
Other	1	2	3	4	5

* Reverse score items