Invitations to interview on the role of the library in the undergraduate academic life: survey to select participants from diverse origin through posters and digital social networks

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Abstract: this paper presents the selection of participants in a study related to the role of the library in University life at two Jesuit universities in Latin America. One of the main objectives of this research is to listen to the voices of students from different origins at the two institutions. Our research team proposed diversity markers that represent different characteristics of undergraduates in our communities based on our experience as professors, the knowledge of our community and the existence of institutional offices that support special groups of students. We used a list of markers of diversity as a base to design a survey that facilitated the selection of participants. Posters invited students to participate; these posters included a QR code to link to the survey. Social networks were used to upload the poster in digital format to a Facebook group with a large number of "friends" from the undergraduate community of one institution. More than 40 students answered the survey, 70% of them were from the University who used social networks. The responses of the survey gave us not only information to select the participants, but also preliminary results of the true diversity of our communities in contrast to our proposal of markers of diversity. These data also provide demographic information beyond what institutions commonly count.

Keywords: Research in libraries; Library in University life; Surveys; Diversity; User Studies.

1. Introduction

This paper derives from a research project that seeks to define the library's role in the University life of undergraduate students at two private universities in Mexico. As part of this project, on the following pages we present the design of the surveys, the process of implementation at two different Jesuit universities and the method to select participating students with different attributes. Our goal

was to try, in both institutions, to offer the same opportunity to students to participate in this work, as well as in the future listening of their voices through interviews.

The structure of paper has three parts. The first part refers to some publications related to the main topic of this article, which focuses on student diversity in higher education and how our research intends to listen to all the voices in that diversity in order to understand the role of the library in University life. The second part presents the methodology to design and implement surveys focused on diversity that were used as a tool to invite students to be interviewed about their University life in the two institutions involved. This section describes the process of designing a poster displayed in strategic places in both universities, for students to see it. This poster invited students to answer a brief questionnaire on diversity, built from diversity markers previously identified by the research team.

There was a proposal by one of the universities to expand the response to this invitation using digital social networks. For this reason, a PDF version of the poster was published through the Facebook account of a research intern in a massive group with more than 10,000 members. The aim was to achieve a more organic participation from the student communities of both universities with digital social networks and posters. Especially, because this way allowed for students interested in giving their opinion to voluntary approach, without any kind of incitement other than the information exposed in the poster and the hyperlink or the QR code to access the questionnaire. Finally, the third part presents results of the analysis of the answered questionnaires that have helped us and keep helping to select students to interview.

This project provides information to discuss how to generate surveys more efficiently, as well as to debate the possible diversities existing within universities. In general, this paper discusses the process of selecting participants for in depth interviews about their University life. One of the objectives was to give students full freedom to choose to participate and, at the same time, to verify if the diversity markers considered by the research team are suitable (see Fig. 1).

2. Background

We consider University life as a complex construct with multiple dimensions, where the University Library needs to be understood both in and out of its enclosure within the set of processes and actions that an undergraduate student carries out. There are studies that address a single dimension of the complex University life, as do Diez & López (2018, p.1) who carried out an investigation which objective was to characterize students' lifestyle in relation to their health at the Faculty of Accounting and Administration (FCA) in the Autonomous University of Yucatán (UADY). Results found by Diez & López indicated, among other things, that the best habits to maintain good health in students

relate to self-training and interpersonal relationships, while the worst practices were those that denoted a reduction in health responsibility, handling stress, nutrition and exercise. We believe that this type of results define valuable scopes of study for a University Library since they present indicators that could be used for the development of collections on health that students could use.

Fig. 1 Diversity markers for the construction of the survey to select undergraduate students who were willing give interviews on the role of the library in University life from the perspective of diversity
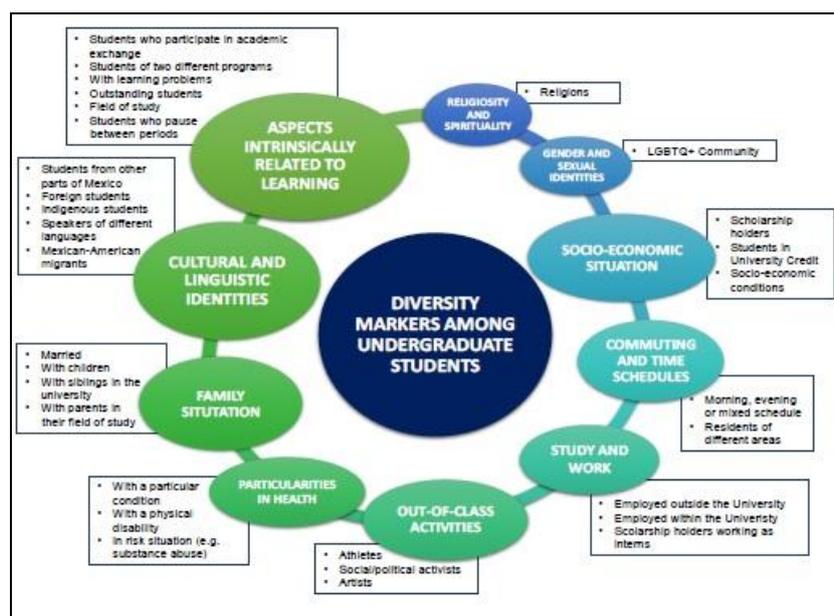
One of the initial objectives of this research gets context from the groups of students and their particularities observed through the researchers' daily experience of being in touch with their respective student populations. In order to achieve a realistic characterization, a proposal of types of students took form during the school period of spring 2018, which was then materialized and presented as a poster in a library congress. This typology included more than 32 markers of diversity grouped into 10 sets related with: learning (5), cultural and linguistic identity (5), family status (4), health particularities (3), extra-curricular activities (3), work (3), socio-economic status (3), moving to campus (2), gender (3), and spiritual identification (+ 1). This proposal emerged from our experience as professors and librarians in each institution, which has allowed us to learn about the diversity within our classes' groups and the community in general.

This work allowed us to compare our perspective with what Bausela Herrera (2002 p.1) reported about the differences between people: "people are different because of our heritage, interests, motivations, learning rhythms, social group of origin, sex, life expectations, sensory, moving or psychic abilities, possibilities and work experiences, language and ideology". Bausela prevented us that the danger of difference was inequality, inequity and injustice. In the case of a library, when we place our attention on serving the information needs of the majority groups we can disregard those who are less visible in a community. Considering this risk, we sought to design a survey that recovered the majority of different forms of being a student. For example, in terms of the recognized standards, we considered both average and outstanding students, and those who tend to have problems in their performance.

Bausela Herrera (2002 p.1) also noted that in the specific case of the Spanish higher education there were minority groups such as the disabled, who seemed invisible and therefore also mentioned the importance that efforts on their inclusion were part of a general plan for all institutions. This note reinforces our perspective on the direction towards which our libraries could further advance, looking to attend all University groups, certainly including disabled population. In our universities, attention to disability has already been a concern in some areas and programs aiming for comprehensive care, something in which we have been working with efforts such as this research. We retrieved another approach on diversity from Clauson, C. & McKnight, J. (2018 p.39), who reported certain aspects relating to it in a work based on global statistical studies on American higher education. Here are five of these aspects from a diagnostic perspective:

1. Constant increase in the diversity of students.
2. A sensible planning and design of the campus can raise awareness on diversity.
3. They indicate that inclusion within universities has advanced from the 60's to today.
4. The importance of the physical plant of the campus to promote a sense of inclusion among students.
5. 19% of students present a type of disability according to the 2016 Survey of the National Center for Education Statistics (2016).

These authors say that attention and respect to diversity makes that students choose a particular University. It is possible to assume that if the library also serves its diverse populations, it would also be more valued.

One aspect that has increasingly being recognized is the presence of a significant LGBT+ community in the population in general. The report of citizens who in the United States are identified with diverse identities increased from 5.8% in 2012 a 8.1% in 2018 (Newport, 2018).

At the University of Alicante, Spain, Tortosa, et.al. (2011, p. 423) indicate that:
"Diversity is a characteristic that is present at all social levels, and is an inescapable duty to adequately address it. The education system, especially, must be sensitive to this situation, taking appropriate steps to respond to this principle. Within this line of work, the main objective of our research is to know the strategies and actions that planned in the University context to enhance and facilitate learning outcomes in students with any education support needs, establishing a relationship with strategies and actions used in other sections of the teaching. As educators, we assume that the process of teaching and learning without addressing diversity is an announced failure. Therefore, we must identify the care, guidance and advice that the student receives, and at what extent does the university and the educator intervenes, as well as the channels of interaction that are established. This research work is contextualized in the University of Alicante, developing a methodology of case study, analyzing the situation, the evolution of the process of attention to diversity, the academic history of students, and the most significant changes that occur in the transition to the University World."

We believe that, although this literature review is not exhaustive, it justifies the approach of diversity that our research suggests, in particular, having designed and promoted a survey that invites students to share diversity markers already reported in 2018 (Rivera-Aguilera, et.al.).

3. Method

A common exploratory study about undergraduate academic life and the place of the library took place in two different private universities. At first, it was considered relevant to generate contrasting hypothesis about institutional differences and based on that principle some basic agreements about instrument operationalization for data recovery were established. Through individual and group interviews in both universities, institutional data and shared experiences of teachers, a common set of diversity markers were drawn to address differences regarding undergraduate academic life and student profiles. The instrument of research presented here aims to explore undergraduate academic life, in which the place of the library was not to be the main role, not asking directly for this subject and thus allowing each student to elaborate on their own voices about academic life and diversity. Due to different dynamics and institutional spaces, ongoing constructions and technological restrictions, the success rate of data recovery in each university varied, obliging each team to develop a promotional strategy to invite participants. Although a common research instrument was developed that addressed institutional differences with a subset of diversity markers, the strategy to promote the study in both universities needed to address institutional differences into the research design.

It should be noted that the procedure for carrying out the survey to select students for interviews, was generally agreed by the two institutions involved.

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Survey at University 1

The use of a poster that invited students to access a survey through a QR code. This poster was displayed in several crowded sites of the University 1, in corks accommodating other relevant adverts for students, such as future conferences, workshops, and classes of various kinds, as well as ads for sales or lost objects. The creation and initial design of a poster were developed by the research team of University 2. A research intern from University 1 proposed a summarized version of the poster from the perspective of a young undergraduate. It was decided that the version of the students would be used at both universities with small adjustments.

A Facebook post was made by a research intern at University 1 in a Facebook group with the name "University 1 carpool, Ads and Badly Parked" with more than 10,000 members belonging to University 1 (students, alumni, professors, administrative and support staff, etc). Through the post it was aimed to encourage students to answer the the same survey promoted by the poster, receiving moderate attention by members of the group. The publication received the response of University 1 students, as well as from alumni who remain part of the group on the social network.

Survey at University 2

Invitations to answer the common instrument were set at University 2 through visual aids: posters and public screens at specific places on the campus. The students' collaboration was requested in posters, appealing students to share their own experiences in academic life. Each poster contained a QR code instead of an URL, which directed them directly to a web form with the instrument where students could freely choose to participate through their mobile phones. Although it was the first option at the beginning of the research, email campaigns were not used due to the lack of a unified register of email in the library. In addition, the IT infrastructure requires all institutional e-mail to

identify in promotional emails. This request could skew the participants' responses.

Another place to promote invitations to students was through a screen system that displayed common information all over campus. Digital versions of the posters were displayed the screen system. In addition, the University 2 Library was expanding at the time, undergoing a series of extensions that prevented working and directly promoting the survey in spaces within the library.

4. Results

Below are the markers of diversity used in the web survey. Each marker was divided in nine groups (in bold) and the two columns on the left show, in gray if it is at least one student was found with the marker (with their respective percentage) and white if a student with this marker was not found (0%).

Table 1. Results of 25 diversity markers used in the survey.

	UNIV.1		UNIV. 2	
Aspects intrinsically related to learning				
Academic exchange	3	10%	0	0%
More than one program/degree	0	0%	0	0%
With learning problems	5	16%	0	0%
Excellence students	4	13%	1	7%
Field of study	18	50%	14	39%
Pause in an academic program	2	6%	2	13%
Cultural and linguistic identities				
Students from another region/State	12	39%	5	33%
Foreigners	0	0%	0	0%
Indigenous	0	0%	0	0%
Speakers of other languages	28	90%	14	93%
Inmigrants	1	3%	1	7%
Family				
With brothers and sisters at the University	5	16%	2	13%
With parents in the same field	1	3%	1	7%
Health				
A particular health condition	3	10%	1	7%
With a physical disability	0	0%	0	0%
With any situation of health risk	0	0%	0	0%
Work				
Employees outside of the University	9	29%	3	20%
Employees within the University	1	3%	0	0%
With grant's work within University	3	10%	2	13%

Socio-Economic

With Scholarship	12	39%	10	67%
University Loan	0	0%	5	33%

Transportation to the University

Class hours	31	100%	15	100%
Residents of different areas	6	19%	5	33%

Gender/Sexual Diversity

LGBTQ + Community	4	13%	0	0%

Espiritual

Religion	12	39%	6	40%

From 25 markers, University 2 presented 16 markers (64%) and University 1 19 markers (76%). We must emphasize that the sample in each case, 15 at University 2 and 31 at University 1, do not have any statistical representativeness, however there is an observation that can indicate that there exists, to some extent, this diversity marker at each institution. A statistical process is certainly required to test this hypothesis, or the use of a non-parametric method [Carl F. Siebert]. However, for this text we will discuss some of the exploratory values that we found.

Aspects intrinsically related to learning
- Field of study. It is clear that with only a small sample we cover 40% of the degrees of University 2 and 50% of University 1.
- Students who have stopped their studies. A couple of students at each institution stated to have stopped their studies at least for a semester.

Cultural and linguistic identities
- Speakers of another language. The vast majority of those who answered the survey speak another language (in almost all cases is the).
- Students from another region/state. Despite being in two different cities of the country, one third of respondents indicated they were from another region/State, both in University 2 and University 1.
- Immigrant. At least one migrant from each institution responded the survey.

Family status
- With brothers and sisters at the University. Approximately one in six students has brothers or sisters in the university.
- With parents in the same field. A student at each institution has parents in the same career field.

Situation of health or risk
- A particular health condition. Around 10% of students indicated having a particular health condition.
- No student indicated to have a physical disability or to be in any situation of risk.

Work and study, socio-economic situation
- There were students for virtually all of the markers, which shows us that many work (inside and outside of the University) or they are scholarship holders. No students with student loan credit were found at Universidad Ibersity 1 and it is possible that this marker is not present in that institution.

Transport to University
- Schedule preference. This marker has 100%, both institutions are characterized by a system in which students may select their courses and schedules (evening, morning, and mixed). This is a distinctive feature of our institutions.

Sexual and gender identity
- At least four students in the University 1 identified themselves as part of LGBTQ+ community.

Religion
• Almost half of the respondents in each institution considered themselves as religious

In general, from 25 markers of diversity that we asked, we find that in our observation there is presence of more than half of them. This may be an indication that our selection of markers may have a significant representation in each institution. It is important to note that both University 2 and University 1 have about 10,000 undergraduate students and a survey with statistical representativeness will take place in a later phase in our research. One of the main uses of our pilot survey is to find evidence of markers of diversity that we are considering in this study.

5. Conclusiones

The approach of listening to our students on their college life to extract from their voices the role of the library is an approach that provides complementary aspects to traditional users and satisfaction studies.

The selection of interviewees from a survey that retrieves the diversity of the community supported the objective of this research to listen if not all voices, at least the integration of voices from much of majorities and minorities.
The collaborative design of the poster inviting to the survey between researchers and research interns enriched our perspective

The use of social networks increased the response to questionnaires beyond the posters. In the future, we must integrate a question on what was the means by which the student learned of the survey and decided to answer it.

Although the survey results shown in table 1 are not statistically representative of the entire population at each University, they represent an important initial exploration about the diversities existing in our communities.

The survey will be replicated during the period of Summer-Fall 2019 and it will integrate items related to the qualitative model that has been generated with the analysis of interviews, its results will have statistical validity.

The results of the interviews with selected students, as well as the results on the role of the library in University life will be exposed in other works.

Collaborative work, discussions, differences and agreements, are essential to carry out this kind of advances in the knowledge of the communities served by University libraries.

The interdisciplinary of the team (education, library science, physics and communication) and inter-institutional approach contribute significantly to the quality of the research work.

The Involvement in fundraising for research by submitting our work to the same rigor and interdisciplinary required for academic colleagues in other departments, contributes for our work as academic librarians, who also teach, to be recognized as useful research developed from the University library.

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