

Lifelong learning in bioethics and human rights: 10 years of the bioethics lifelong education programme in LAC

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Abstract The paper introduces a methodological proposal to teach bioethics relying on the lifelong education model called pedagogy of problematization. The general methodology and its main sources at the global and the Latin American level are presented. It describes the basic educative model, its goals and its differences with the Problem Based Learning model. The requirements necessary to implement this methodology in relation to a broad approach of bioethics including social, environmental and global bioethics and not only biomedical ethics are presented. It is argued that this methodology represents a way of teaching bioethics from a broad perspective and targeting an interdisciplinary and diverse audience. Most important, the reflection-action model of education here proposed aims at a change of attitude in adult students and at transforming the reality into which the ethical problems emerge. After introducing this model, the paper, provides an account of the framework from which the Lifelong Learning Program in Bioethics (Redbioética) in Latin America and the Caribbean has been developed, and how to use the tools necessary for making use of this methodology in a distance e-learning platform targeting adults. Finally, some of the main results of using this platform during its 10 years of existence are presented and it is showed that through this platform it has been possible involve almost 2000 participants from 26 countries in LAC.

Keywords Lifelong education · Bioethics education · Problematization method · Distance bioethics education · Bioethics e-learning

The author is responsible for the choice and the presentation of the facts contained in this chapter and for the opinions expressed therein, which are not necessarily those of UNESCO and do not commit the Organization.

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Introduction

Thinking the future of teaching bioethics requires reviewing changes that the discipline itself has undergone in recent years, particularly since the 1990s and, at the same time the global changes that have taken place. But it will also need to understand that no education program is neutral but carries within it a number of assumptions about what is right and wrong, about the subjects (teachers and students), about knowledge, power, justice and the future of society. Each program itself promotes a particular historical project, whether overt or latent. Thus, a brief history of bioethics shows how from the beginning education was not without debates.

In this paper I will not refer to medical ethics education, as we consider bioethics as a knowledge area that goes beyond the ethics of the medical profession and at the same time, it is addressing an interdisciplinary and plural audience. A debate about how to link the various currents of thought underlying bioethics into a plural education remains undoubtedly important, in particularly when taking into consideration events that have been part of the global debate from the beginning of the 21st century such as global inequality, injustice, environmental crisis, migration and wars. Such events will undoubtedly be a fundamental part of the current ethical debate. Here bioethics is considered as applied ethics to life in general and human health in particular, what necessary involves social, environmental and global approaches. Taking also in consideration the need for an intercultural dialogue on issues that affect the whole of humanity, the bioethics agenda has to be even broader and more complex. In this regards the universal ethical framework of Human Rights is the best approach for this perspective of bioethics.

Changes in the world situation after the 1990s established the necessity to rethink bioethics, i.e. bringing back the Potterian perspective of a global bioethics able to address global ethical problems of humankind (Ten Have and Gordijn 2014) and taking into account cultural differences and diversities. From this perspective the role of education is fundamental. Albeit an early concern for the need to train the trainers, initiatives of this sort have been introduced only recently and what has become to be known as “lifelong learning in bioethics” (Stirrat et al. 2010) has received little attention in the literature.

In Latin America, most institutional and academic developments of bioethics education have uncritically adopted the American model of medical ethics education as a basis for structuring the educational programs. Beside, many programs fail to define their educational objectives and associated methodologies, particularly in the field of bioethics education for adults which is the focus of this paper. In recent years, parallel to the expansion of bioethics, some new educational initiatives have been launched in the Latin American and the Caribbean region, focusing the attention on the issue of justice and human rights in low-income countries and suggesting a broadening of the field of work of the discipline and the inclusion of other views from the region (Garrafa et al. 2005; Vidal 2010; Garrafa et al. 2010). An example of such an initiative is the Lifelong Education Program in Bioethics (LEPB) of the UNESCO bioethics network in Latin America (UNESCO Redbioetica), supported by the UNESCO Regional Bioethics Programme for Latin America and the Caribbean, (PEPB, See: www.redbioetica-edu.com.ar).

Lifelong learning and bioethics adult teaching: the problematization method¹

Despite its long history, (Kallen 1996) lifelong learning (LL) started to be applied in the field of bioethics education only recently, when bioethics broadened its goals and began to become integrated with other educational strategies not only in medical schools but in other faculties and for a broader audience. UNESCO has been one of the most relevant agencies dedicated to give a background to this strategy for education although other organizations like the European Union and the OECD has provided others perspectives that should be revised to understand the different positions behind each proposal (Vidal 2015).

In this way, LL includes a variety of educational currents (Davini 1989a, 12): the pedagogy of diagnosis, community education, popular education, the pedagogy of problematization, participatory education, different contemporary adult education schools, among others.

The *problematization model* is part of LL, but its origins can be traced back to the Socratic method of maieutics which provides its fundamental base (Davini 1989a; Gracia 1998). In Latin America, this approach has two different roots of relevance for bioethics teaching. One was the adult education programs fostered by Paulo Freire in the adult literacy campaign in Brazil (Freire 2014). This approach regards education as a “tool” to promote critical thinking of individuals, bringing back their cultural values and using them as “problematizing” elements to develop education programs. Learning is not only a factor of attitudinal change; more importantly, it is a factor of change of individual’s own practices: “Awareness of the world and awareness of the self-grow together and in a direct relationship; one is the inner light of the other, one is engaged with the other. There is a direct correlation between conquering oneself, becoming more oneself, and conquering the world, making the world more human... This pedagogical method...aims at giving man the chance to rediscover himself, while reflexively assuming responsibility for the proper process by which he rediscovers, expresses and shapes himself: the awareness method... but nobody becomes aware separated from the others; consciousness constitutes itself as awareness of the world” (Fiori 2010, p. 18). The proposal could be included into an emancipatory educative approach, implying a double function of education, i.e. as an instrument to empower people, to develop critical thought and to develop autonomy, but at the same time as a way to give tools for action and transforming reality. Further to this, some authors considers that it is necessary to change an ontology regarded as colonial, advocating instead for an emancipating approach (Dussel 1980).

The second source of the problematization model was the Pan American Health Organization’s response (PAHO 1978) to the 1977 World Health Organization’s strategy of Health for All 2000. PAHO’s Human Resources Development Program, created in the 1980s, fostered what was called “lifelong learning in healthcare”, a concept adopted by many authors to develop the theoretical framework of the model to be used in healthcare education (Haddad and De Canales 1983). The aim was to analyze the issue of healthcare from the standpoint of the individual’s own political, socioeconomic and cultural reality, including community participation to develop

¹ A larger and more detailed version of this approach is in Vidal 2015

healthcare issues and to design actions to address them. The decision-making process was more democratic, with interdisciplinary teams that would use training as a strategy for transformation. Training had to be permanent and connected with the real issues affecting institutions and communities, where ethical problems are a central part. The method proposed to achieve this objectives was the problematization pedagogy (Davini 1989a). Most of the Public Health Care scholars followed this approach in that time (Testa 1989; Rovere 1993).

The LL in bioethics from the human rights approach

Due to its interdisciplinary, pluralist and deliberative nature, bioethics shares several goals with LL, but bioethics education at universities took a different path, particularly in LAC countries (Vidal 2012). Bioethics education was determined by the paradigm of biomedical bioethics developed in USA, i.e. the principlalist paradigm, (Beauchamp and Childress 1994) which kept away from a social, environmental and contextual approach to ethical problems of life and health, as well from global issues such as justice. The objectives, methods and curricula of most of the university programs were defined by this paradigm which brought forth fractures which need to be addressed when developing an education project. First, it broke with the social and historical roots of a bioethics based on human rights. Second, it broke with the Potterian vision of a global bioethics concerned with the environment, global justice and the future of mankind. Additionally, the model broke the ties between social and environmental determinants of health and wellbeing, and dismissing the importance of the right to health. Finally, the pragmatic methodology advocated as something new, represented a break with a 2500 year-old tradition in ethics teaching that went back to the *maieutic* method of the Socratic school. The approach we call “lifelong learning in bioethics” (LLB) seeks to retrieve those roots and traditions repairing the four fractures. In this way this propose a broad perspective of bioethics as the only way to build and understand ethical problems in complex situations.

LLB: the basic model

Many scholars within the LL model, particularly those identifying themselves with the model of problematization, believe that educational interventions can result in character and attitudinal changes. This is a key issue because, in contrast with other approaches, in this case establishing the objectives of (bioethics) education is more important than focusing on the contents. Objectives help to define contents and methods.

Three corresponding pedagogical models have been derived from the learning processes: *Pedagogy of transmission*, focusing mainly on knowledge, *Pedagogy of training*, targeting training of some specific skills, and *Pedagogy of problematization*, aimed at changing and promoting specific attitudes (Davini 1989a). Each model relies on a particular hypothesis and assumptions, producing manifest and latent effects and advancing different strategies for practical action, and work styles.

The model called *Pedagogy of problematization* regards educational action in two different ways (Davini 1989a): either the student possesses everything “within him/

herself” but is unaware of this, and will discover it through a maieutic situation; or he/she does not have the knowledge but through reflection, elaboration and inquiry he/she is able to discover which knowledge he/she needs. There is no transmission of knowledge here, but “an exchange of experiences among individuals, involving both their conscious level of knowledge and their emotions and deep psychology” (Davini 1989a, p. 14). The starting point is always a question, an inquiry into the individual’s own reality, experiences, and practices, in the context of his or her social, institutional and personal situations, whence problems are built.

The concept of problem cannot be further elaborated in these pages, but suffices it to say that it refers to “a gap between a reality or one aspect of reality as it is seen, and a value or a wish about how that reality should be in the eyes of a certain individual or collective observer” (Rovere 1993, p. 79). This analysis, this questioning (also called “pedagogy of the question”) should be done with other individuals who share the same problems and realities. It is an instance of collective, collaborative thinking, only feasible when carried out through deliberation and dialogue. Questioning what happens and why it happens helps to broaden the understanding of conflict, particularly when arising from ethical issues, but this can only be achieved through dialogue. Problematizing reality requires adopting a critical stance to it, and having in mind the need for a change of practice.

The aim of the Socratic model is to challenge conventional wisdom (attitudes, beliefs and knowledge) to provide reasonable justifications, and measure the worth of assertions passing judgment on women, race, social justice, and other values that seem to underlie social order (Nussbaum 1997). With this exercise, individuals are driven to think for themselves and to find the reasons supporting their thoughts and beliefs. This process requires deliberation with others, through dialogue and argumentation.

Finally, it is necessary to make clear the distinction between the problematization model, and the problem-based learning approach (PBE) which has had an enormous impact at academic level in the last years. As Table 1 shows, there are important differences between these models.

Defining goals in LLB

The point of departure of lifelong learning in bioethics is the idea that individuals are not “blank sheets” ready for printing, but the result of their own experiences, (assimilation and accommodation patterns), their values, practices, culture and history constitute their self. Hence, these are elements that must be taken into account in the teaching-learning process, a lifelong process. LLB seeks to develop educational processes resulting in an open moral, that foster the individuals’ creative spirit, imagination, their reflexivity, autonomy, their capacity for criticism and change, their collaborative spirit, broadening their sense of responsibility and solidarity, etc. This is oriented to what Nussbaum (1997) has called “to educate citizens of the world”, something which requires certain capacities.

The problematization approach argues that the idea presented above should be one of the goals of (bio)ethics education, given that many participants in adult learning programs will later become teachers or members of bioethics committees, acting as ethics consultants and advising others about value-laden decision-making. This approach rejects the training model in adult education in bioethics, which focuses on merely developing skills to solve specific clinical cases, ignoring the social and

Table 1 The problematization model vs. problem-based learning

Problematization Model in the LL	Problem-Based Learning (PBL)
Problems are developed by students after observing reality. One problem leads to the next. Through dialogue, subjective problems lead to objective problems.	Problems are built by an ad-hoc commission. Problems must fit the curriculum (it is regarded as a “neutral” description of the object of study).
Scientific sources are consulted, together with the students’ perceptions and representations of the problems. Learning results from combining technical knowledge with social, political and ethics knowledge.	Scientific sources are key to educational goals regarding knowledge and competencies.
Goal: inquiry skills and attitudinal changes (there is no total control of results in terms of knowledge).	Goal: knowledge and competencies previously defined.
Must develop solution hypotheses, but social reality is the starting and arrival point of the issues studied.	Must develop solution hypotheses which answers are anticipated by the methodology.
Results aim at changing reality, within the group’s possibilities, or suggest transformative interventions.	Problem-solving as an intellectual exercise. Aims at developing skills from pre-established models.
The process is practices- theorizations - practices	

Source: Elaborated from Berbel (1998)

environmental contexts where these cases take place, as well as global visions of the ethics of life in general and human health in particular.

The LLB project is clearly connected with two of the pillars of the UNESCO approach to education, *learning to be* and *learning to live together* (Delors 1996). When these are understood from this methodological approach, they clearly show the way forward for the design of educational programs in bioethics and ethics of the life sciences.

Undoubtedly, students should be provided with the tools required to access and identify sources and to qualify the material they find. As argued by Davini: “Rather than defining content in an abstract way, in terms of disciplines or profiles, it is important to define which knowledge (theoretical or technological) is necessary to transform practices and attitudes, and their mutual relationships, thus shaping a system of thought and action” (Davini 1989b, pp. 18–29). To give the ways to get sources of knowledge is the better way to promote an active position related to learning.

A broad perspective of bioethics, as it was proposed before, is the only way to achieve these goals and the expectations generated by the methodology.

Lifelong education program in bioethics (LEPB): a Latin-american experience

The Lifelong Education Program in Bioethics is an initiative seeking to develop new educational actions in bioethics in Latin America and the Caribbean supported by the UNESCO Bioethics network, Redbioetica. Created in 2005, its main goal is to foster critical, plural and interdisciplinary reflection about the ethical issues arising from human

life and health by means of education. LEPB aims at promoting plural and interdisciplinary dialogue about (bio)ethical problems, taking into consideration their complexities, history and specific aspects of their context of emergence, as well as their universal dimension, social determinants and the rights of the individuals and communities involved.

Based on a reflection-action model, the Program aims at fostering respect for differences and plurality of ideas and moralities, encourages participation and transformative intervention, and considers respect for human rights as a basic requirement for conflict resolution. Three main characteristics of the Program are:

- It is rooted in the Human Rights approach
- It takes the UNESCO Universal Declaration on Bioethics and Human Rights as its normative point of reference (UNESCO Bioethics Core Curriculum is part of the material)
- The content of the Program reflects a broad perspective of bioethics including social and environmental issues.

From this perspective this is not only an educative method but a different paradigm of bioethics which includes the framework and contents of the discipline, its objectives of study, its method and also what is expected to do with it.

Thus, the main goal of the LEPB is to teach professionals of different disciplines the basic content required to carry out teaching, consulting and normative tasks in bioethics within the framework of a universal conception of justice and human rights, and taking into account the historical, social and cultural values held of each particular context.

The program is implemented through a distance e-learning tool. Distance education, thanks to technological progress and pedagogical changes, provides a flexible arrangement that allows access instances of training, overcoming limits of space and time, thus being an excellent alternative for LL. It establishes a student-teacher-student/s most of the time relation through the use of technological resources that foster independent, flexible and cooperative learning.

The information and communication technologies allow us to combine synchronous meetings (at the same time from different locations) and asynchronous (non-coincidence in time and place) using various resources such as forums, video conferences, teleconferences, chats, etc. where we integrate the written word, voice, image, video, etc. Those who study through the distance way are able themselves to manage knowledge, are active, autonomous and are the main actors in the learning process.

In the virtual classroom, and every educational space, complex exchanges called “mediated didactic dialogue”, between teachers and students and between students themselves are taking place, (Arrieta and Vidal 2012). The training material is usually organized into teaching units or modules, (4 in total). For each module a thematic forum is organized beginning with a question, and there is a specific theoretical material to support it. Guidelines for learning, reading guides, activities, evaluation criteria, etc. are presented. The forum is the main resource to develop the methodology: there the tutor make questions and provoke students for dialogue and argumentation.

Guidelines are offered to identify and solve the problems identified in cases proposed by the tutor which are evaluated promoting training in decision making methods.

Students complete their courses through the development of final projects of action, which in many cases, have led to actions and changes in their reality and practices.

The Program offers online basic content to guide learning with material written by LAC bioethics experts in the same line and proposal previously explained. Guidelines, cases and stories are elaborated by the academic coordinator. It is developed in an educative platform with 6 virtual classrooms. Each virtual classroom has three forums for debate coordinated by a tutor: one regarding the main issue of the module (the debate forum) where questions are the shot for deliberation and dialogue between students, a second is for answer questions and deliberation with the tutor (consultation forum) and a third one is the break, to have dialogues regarding different cultural or social issues among the participants from different countries and regions, taking into account that students come from at least 15 countries, it is very reach.

Two virtual classrooms are on bioethics and art, where student debate ethical issues using cinema, music or narratives. The students have access to different databases, sources to find information, journals, and a library with articles and texts. They have mandatory material to be read, prepared by LAC authors, as was mentioned before.

Two courses are currently being offered, "Introduction to Research Ethics" and "Introduction to Clinical and Social Bioethics." The 2015 cohort is the tenth group of students taking these two courses. The UNESCO Regional Bioethics Programme (Montevideo office) has offered scholarships for LAC participants, particularly those coming from the less developed, less advantaged countries with fewer resources, and who live far from training institutions and whose professions have less access to this kind of education (they pass for a selection process made by an international committee).

But its main feature lies in the debate forums, where tutors ask questions to groups of 30 or 40 students (in each online classroom) from different countries in LAC. The Program has a video collection to clarify authors' positions, and a library with additional literature, databases, journals and internet search engines.

Some results: 10 years teaching bioethics in LAC

Between 2006 and 2014, 1784 students were enrolled in the LEPB. In total, 1249 students from 26 countries in LAC have completed the Program (See Figs. 1 and 2). When including 2015, 1952 students have entered the Program.

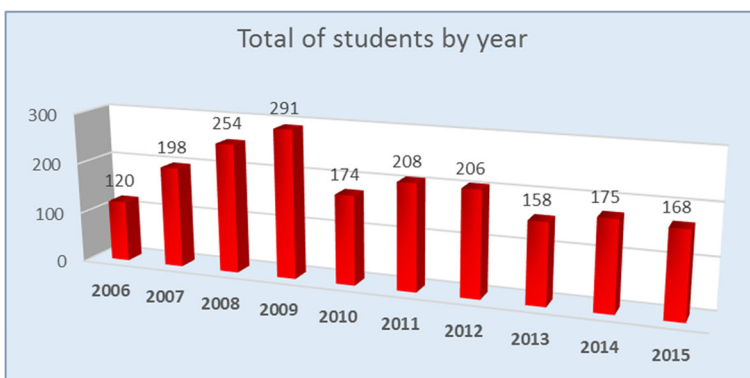


Fig. 1 Total of Students by year

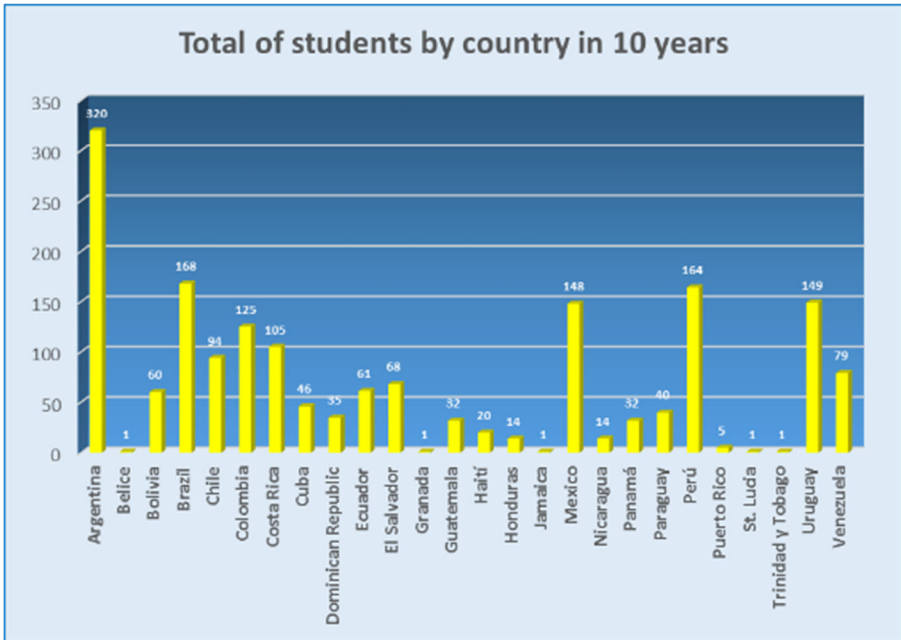


Fig. 2 Total of students by country in 10 years

We have a passing rate of 70 % which is very good for what is expected in distance education programmes (See Fig. 3).

Of the total, 1131 received scholarships, (it means that the courses was completely free) and 653 paid a fee (many of them were paid by educational institutions). Scholarship allocation has always been equal for all countries, guaranteeing equal access to countries with fewer possibilities. 62 % of the participants have been women, something which reflects a gender priority perspective (Fig. 4). Regarding the professional background of the students, physicians have since the start been most numerous,

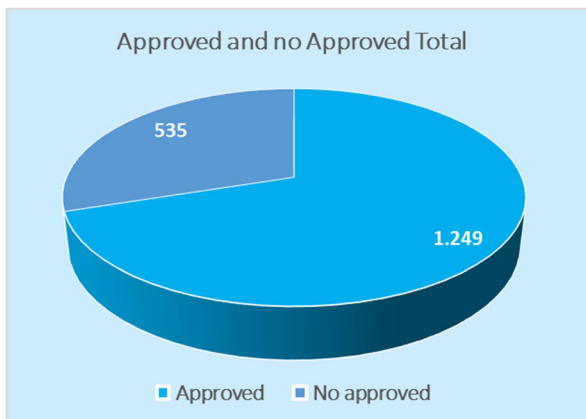


Fig. 3 Total of students approved and no approved

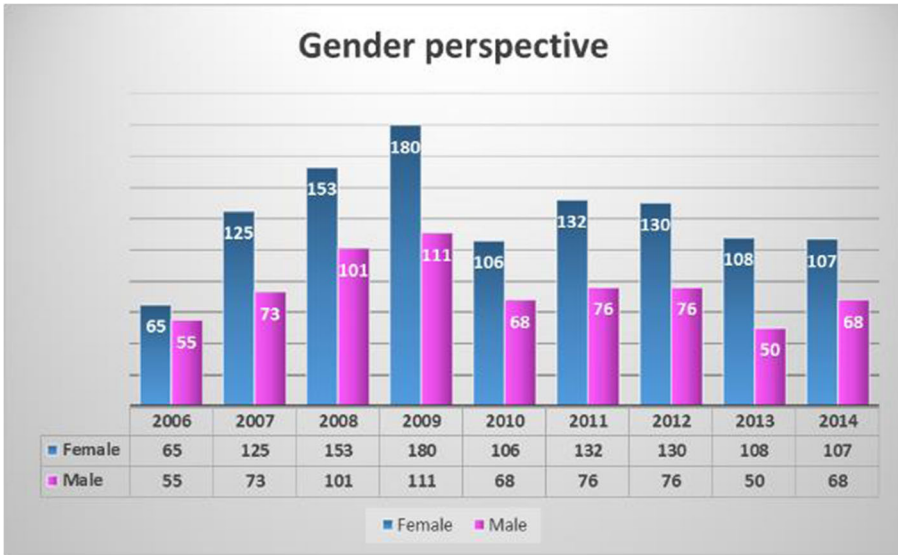


Fig. 4 Gender perspective

although in 2009 their numbers have declined, while more nurses, lawyers, psychologists, social workers and biochemists have entered the Program, as well as professionals from other disciplines, such as philosophers, veterinary medicine, pedagogy, political sciences, and human resources Fig. 5.

Taking into account that in 2015 168 students entered the program, it means that almost 2000 students (1952) have entered the program since its start in 2006, and so far 70 % have completed the courses (we don't have the 2015 results yet). All our students are adults, more than 60 % are between 35 and 59 years old.



Fig. 5 Profession of participants

Graduates are invited to take part in an alumni forum to keep up with the debate and the exchange of ideas. Currently, 1000 professionals are enrolled in this forum, (some don't want to participate) with two thematic classrooms coordinated by a tutor.

The more important results related to the methodology are:

1. very low dropout rate
2. number of final projects oriented to solve complex problems identified by students realized
3. High rate of satisfaction with the achievement of objectives
4. attitudinal changes expressed by students
5. changes in the vision of bioethics mentioned also by students

All approved students pass courses with a final implementation project, after conducting a diagnosis of the situation and identifying a need for change in their own reality. A survey assessing the impact of the interventions developed through the LEPB courses is currently being processed, to assess the real impact of the Program and including in-depth interviews to study the success of the Program in terms of changes in attitude and professional practice. From all the questionnaires sent, (1200), 270 were responded by the former students. 26 % of them had implemented their final project, while 24 % were in the process of implementation. This shows that 50 % of the students have done some action in their institutions which result is a measure of the impact in a different way. 65 % of those projects were educational projects or projects aimed at the development of ethics commissions or committees (Fig. 6). They address issues in: education (courses, chairs, training, etc.), institutional development (bioethics committees or commissions), normative function (regulations, institutional guidelines, promotion of rights), or governmental advisory (Fig. 7).

When students were asked about the reason for not implementation, most of them declared that they didn't have institutional support or other type of resources (See Fig. 8).

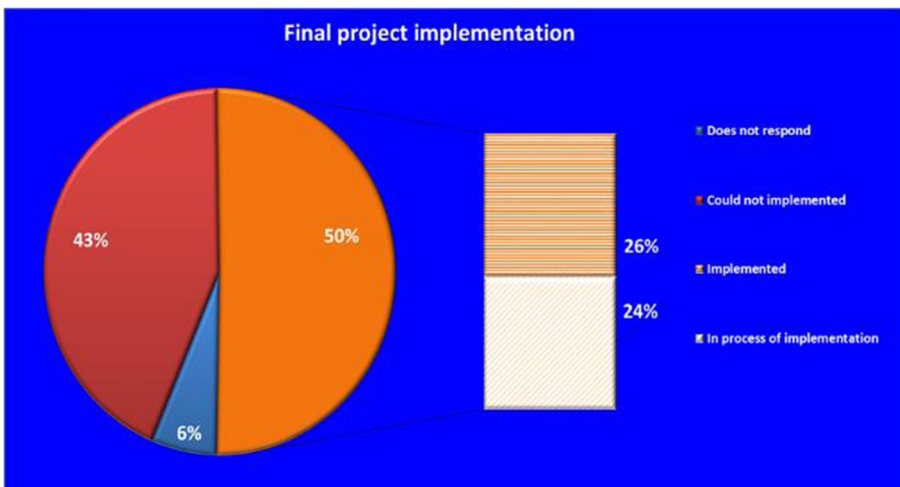


Fig. 6 Final project implementation

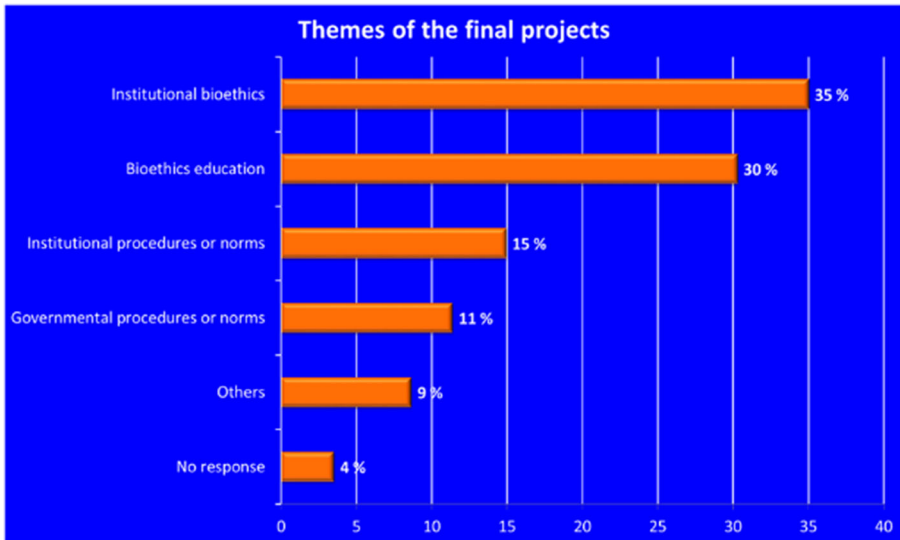


Fig. 7 Themes of final projects

An impact assessment of the LEPB program shows three significant results. First, dropout rates have been lower than expected vis-à-vis online training standards, which is a good indicator of the success of the Program (Fig. 3). Regretfully, most of the dropouts are recipients of scholarships. Second, the rate of implementation of the final projects shows that a large number of projects have been effectively implemented (see Fig. 6). The third result is the student evaluation. When students were asked about the Program's level of "accomplishment of educational goals", 99 % said it was very satisfactory or satisfactory (90 and 9 %, respectively), and only 1 % said it was poor, which indicates a very high level of satisfaction among participants Fig. 9.

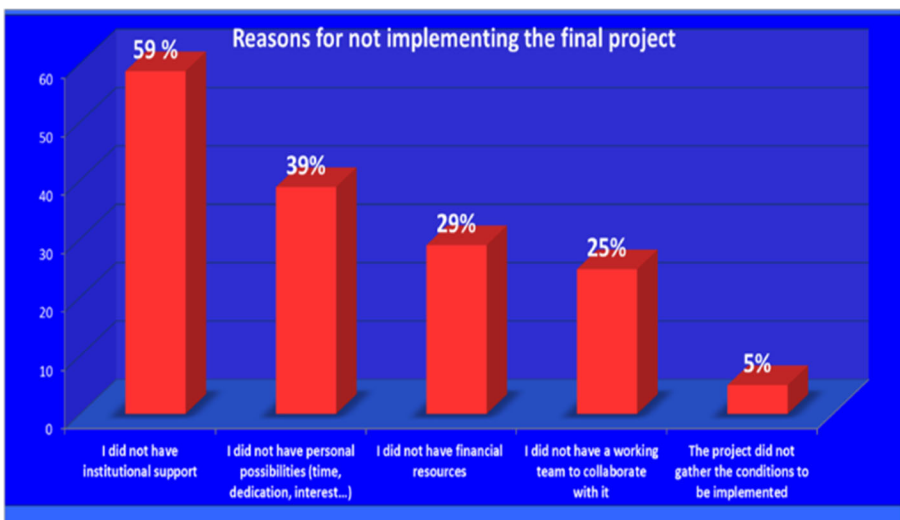


Fig. 8 Reasons for not implementing the final projects

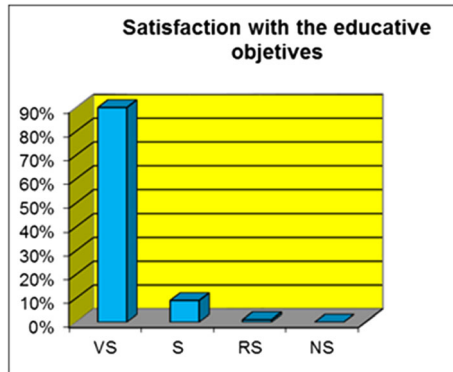


Fig. 9 Satisfaction with the educative objectives

When we asked the former students in which way the courses changed their lives, they answered in a diverse way (For this, see Fig. 10 below). Although further analyses are necessary we considered these answers the different ways in which attitudinal changes are expressed.

Changes in the values in their lives, to be more tolerant in related to others, behavior changes, to be more reflective, improve the consideration related to human rights and changes in the decision making models, are the most frequent attitudinal changes mentioned by the students.

Conclusion

Lifelong learning in bioethics making use of the problematization methodology aims at helping individuals who take part in the teaching-learning process to acquire a critical reflective attitude about their own practices and those of the societies in which they live. Furthermore, the aim is to enable them to identify ethical issues in life and human health in their societies, develop possible solutions through a pluralistic and democratic

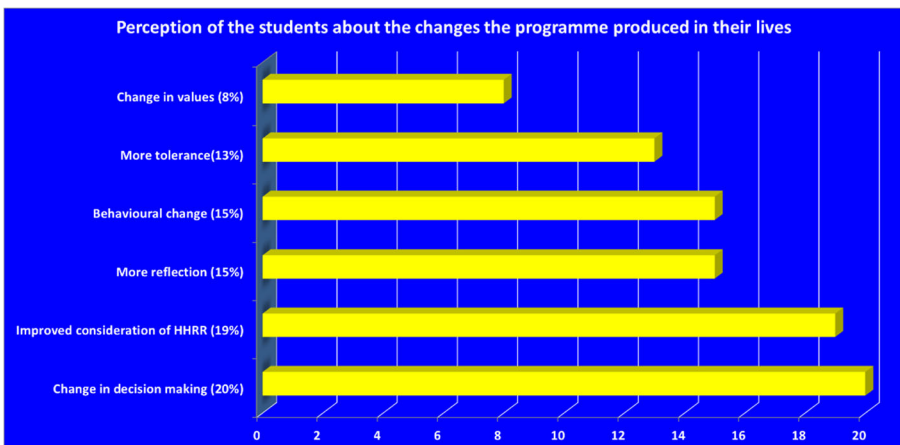


Fig. 10 Perception of the students about the changes the programme produced in their lives

dialogue, provide justifications legitimizing their recommendations, and proposals for concrete actions. In this way, hopefully they can become more responsible not only vis-à-vis themselves and their environment, but also become freer, more tolerant and more prudent. Bioethics teaching not only involves the transmission of knowledge, but also the fostering of an attitudinal change among those who will become teachers, members of bioethics committees, and better professionals. Rather than mere training, this requires the joint work of teachers and students through a maieutic form of moral education, which aims at developing critical (self) reflection and the attitudes needed for plural deliberation. This is a process that begins with self-examination followed by thinking about and with others, and about other cultures and societies. The use of distance e-learning is a way to obtain these objectives. Notwithstanding many difficulties, in the last 10 years the LEPB has shown very good results. And as mentioned earlier, bioethics education should always aim at contributing to citizenship building and to the promotion of a more just and decent society. This should be in mind thinking the future of teaching bioethics. The Lifelong Education Program in Bioethics strives to contribute to the achievement of these goals.

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Compliance with ethical standards

Conflict of interest The author declares to not have conflict of interest.

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