Revision

Freedom of professorship: a solution or part of the problem

Libertad de cátedra: una solucion o parte del problema

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ABSTRACT. Introduction. Academic freedom originated in 1966 when the elements that must be respected and attributed to teachers during the exercise of their profession were defined. Academic freedom allows teachers to use available pedagogical methodologies and develop scientific research without institutional influence or limitation. **Methods.** We reviewed the literature on articles, studies, laws, and university guidelines on the use of academic freedom published in Spanish or English between 2010 and 2022. **Discussion.** There is an effort by governments and universities to respect and promote academic freedom. This is enhanced when teachers know and implement different teaching and evaluation methodologies within a training system that allows and encourages teacher feedback and evaluation. Additionally, there are useful elements to improve the quality of academic freedom. **Conclusion.** Academic freedom represents an education intended to be free of biases and a fundamental pillar for a university to enjoy autonomy and its correct use offers benefits to students and teachers. However, due to the complexity of these processes, multiple factors could affect academic freedom and make it a methodological limitation that affects the quality of education.

RESUMEN. Introducción. La libertad de cátedra tiene sus orígenes en 1966 cuando se definieron los elementos que deben ser respetados y atribuidos a los docentes durante el ejercicio de su profesión. La libertad de cátedra permite que el docente utilice las metodologías pedagógicas disponibles y desarrolle investigaciones científicas sin la influencia o limitación institucional. **Métodos.** Se llevó a cabo una revisión de la literatura sobre artículos, estudios, leyes y lineamientos universitarios sobre el uso de la libertad de cátedra publicados en español o inglés publicada entre el año 2010 y 2022. **Desarrollo.** Existe un esfuerzo de parte de los gobiernos y las universidades de respetar y promover la libertad de cátedra. Esta se ve potenciada cuando los docentes conocen e implementan diferentes metodologías de enseñanza y evaluación dentro de un sistema de formación que permite e incentiva la retroalimentación y evaluación del docente. Adicionalmente, existen elementos útiles para mejorar la calidad de la libertad de cátedra. **Conclusión.** La libertad de cátedra representa una educación que procura ser libre de sesgos y un pilar fundamental para que una universidad goce de autonomía y su correcto uso ofrece beneficios a los estudiantes y docentes. Sin embargo, debido a la complejidad de estos procesos, múltiples factores podrían afectar la libertad de cátedra y convertirla en una limitante metodológica que afecta la calidad de la educación.

1. Introduction

Academic freedom originated in 1966 when the United Nations Educational, Scientific and Cultural Organization (UNESCO) defined the professional freedom of educators by describing elements that must be respected and attributed to academics during the exercise of their profession. Since then, there has been discussion about academic freedom, where the educator has the freedom to choose resources, teaching and evaluation methodologies based on what the teacher considers best and most adaptable for his students (UNESCO, 1967). This initial definition gives rise to what we now know as "academic freedom." The initial purpose was to promote educators' freedom to debate and teach without limitations imposed by institutional doctrines or institutional censorship (Ortega Gutiérrez, 2003; Aguilar-Tamayo et al., 2015). At present, due to the constant evolution of medical education worldwide and the constant scientific production where the impact and effectiveness of different teaching and learning methodologies are explored, it is

important to consider whether academic freedom has evolved hand in hand or has become obsolete. In Honduras, since the foundation of the medical career at Universidad Nacional Autónoma de Honduras (UNAH) in 1882, academic freedom has predominated as the approach chosen by different universities in the country for the training of different professionals in all areas of knowledge (Arita Chávez, 2019).

Academic freedom has been recognized as a constitutional right in the country, suggested in the constitution and highlighted in the Academic Norms of Higher Education by UNAH (1992). However, to date, no studies have explored the impact that this may have on the development of clinical and ethical skills, academic performance, and professionalism of medical students. It is important to highlight that academic freedom is not a teaching methodology but an approach where pedagogical methodologies converge for use at the educator's discretion. Academic freedom allows educators to use the methodology known to them, regardless of whether it is the best or the most appropriate.

On the other hand, the role played by research in medical education must be essential for strengthening training processes at all levels of the medical career in the country. Therefore, a review of the literature has been carried out on the available evidence concerning academic freedom, aspects of teaching and their impact on the training of health professionals, especially in medicine. This review aims to generate reflection and debate in the academy about implementing robust evaluation models for the pedagogical quality and its educational impact.

2. Methods

The use of academic freedom, also known as freedom of professorship, and its impact on the training of professionals in the health domain, with a particular focus on the medical field, were the subjects of a review of the literature that included publications, research, statutes, and university policies. The search terms utilized included "academic freedom," "medical education," "medical competences," "professionalism," "freedom of professorship," and terms related to teaching, such as "assessment" and "teaching techniques." Except for 15 articles because of their historical value and the content needed to develop the theme, the search was conducted in PubMed,

The Lancet, and SciELO, where the titles of the literature in Spanish or English published between 2010 and 2022 were initially recognised. The articles included in the review were then chosen from those whose summaries were pertinent to the development of the issue. This was followed by an evaluation of the article's body, which resulted in the choice of the cited papers, employing the "snowballing" approach to review.

3. Discussion

3.1. History of academic freedom

Since opinions are spoken without concern for responding to potential crimes committed during its practice, "academic freedom" is comparable to freedom of expression. Unless an ethical breach is demonstrated, it is acknowledged that educators have the right to conduct research, teach, and publish without fear of punishment (Madrid, 2013). Its elusiveness supports the use of pedagogical strategies. Academic freedom should be distinguished from "intellectual freedom," or the ability to pursue mental pathways that an individual deems appropriate (Aguilar-Tamayo et al., 2015). Examples might include 1) a professor who, for religious reasons, rejects Charles Darwin's theory of evolution; 2) a Jehovah's Witness who teaches surgery but does not believe in blood transfusions; 3.) and also an infectious disease professor who teaches students on "what they need to learn in life."

3.2. Medievel university and academic freedom

A morally religious nature structure emphasizing scholasticism, founded on the use of books as sources of authority and the educators' interpretation. European universities, or *studia*, were composed of guilds and associations with students and one or more lecturers as members. Two models were used: *universitas scholarium*, which students led, and *universitas magistrorum*, which educators led. The Protestant Reformation initially laid the 2 roundork for the denominational universities. The Counter-Reformation enforced the "convent-university" concept on religious organizations (Blasco, 2011).

3.3. Modern university and academic freedom

It utilized two models: 1) The Napoleonic University, which stood out for its authoritarianism and centralism. It focused on education as a state responsibility. Academic freedom and institutional autonomy are less influential. 2) The German University, State-owned, with a stronger focus on research and knowledge production, incorporating workshops, guilds, art schools, conservatories, and laboratories (González-del-Valle, 1981). By substituting civic morality with religious values, education is valued experimentally. Humboldt's Wissenschaft idea, which stands for "knowledge, science, and learning," characterized research universities (Blasco, 2011).

3.4. Postmodern university and academic freedom

Software and hardware platforms were incorporated,

just as new technologies such as audiovisual media (Campos Retana, 2020). Long distance education expanded, job skills defined curriculum vitae, university and business bonds grew, business logic intensified, global competitiveness increased, and liberal ideas were strengthened by consumer logic. The Revolution considered higher education a right. Undergraduate courses became training levels for basic skills, and postgraduate programs acquired more significant notability through scientific research (Blasco, 2011).

3.5. *Academic freedom in Latin America*

Under the ecclesiastical authority, the first universities in America were established. Due to this significant religious tilt in education, the dissemination of science and information was constrained. However, the new republics' independence in Latin America compelled academic institutions to pursue knowledge that would advance the country, following the interests of the new socioeconomic classes, who adhered to the "Scholarium" paradigm. In 1918, due to the Cordoba Reform, one of the most significant university movements in Latin America was adopted (Campos-Céspedes & Solano Gutiérrez, 2020). This change laid the groundwork for the growth of academic independence. This reform laid the foundations for the development of academic freedom. The changes in education resulting from the Reform of Córdoba that affected the university autonomy and academic freedom of the Latin American university, were:

1. Elimination of university dominance towards religion
2. Variability of training modalities
3. Oppositional competition to select teachers
4. Alternative of university community entities
5. Freedom of teaching and attendance
6. Exemption from university instruction and freedom

Table 1
Academic freedom at the constitutional level.

Constitution of the Federal Republic of Germany, 1949.	"Art, science, research and scientific education are free. Freedom of education does not exempt one from loyalty to the Constitution".[a]
Weimar Constitution, 1912.	"Art and science are free, as well as their teaching. The State guarantees their protection and takes part in their promotion".[b]
Constitution of Finland, 2000.	"Scientific, artistic and higher education freedom is guaranteed".[c]
Constitution of the Italian Republic, 1947.	"Art, science, and education are free".[d]
Spanish Constitution, 1978.	"The rights are recognised and protected: a) To freely express and disseminate thoughts, ideas, and opinions by word, writing or any other means of reproduction. B) To literary, artistic, scientific, and technical production and creation. C) To academic freedom".[e]
Political Constitution of Colombia, 1991.	"The State guarantees the freedoms of teaching, learning, research, and academics".[f]
Political Constitution of the United Mexican States, 1980.	"Universities and other institutions of higher education to which the law grants autonomy, will have the power and responsibility to govern themselves; they will carry out their purposes of educating, researching, and disseminating culture following the principles of this article, respecting the freedom of academics and research and the free examination and discussion of ideas".[g]
Political Constitution of Costa Rica, 1949.	"Academic freedom is a fundamental principle of university education".[h]
Constitution of the Republic of Honduras, 1892.	"The state recognises and protects the freedom of research, learning and academics".[i]

Note: Table 1 exemplifies how Academic Freedom is now an international guarantee at the constitutional level. [a]Constitution of the Federal Republic of Germany (Federal Republic of Germany, 1949), [b]Weimar Constitution (Weimer Republic, 1912), [c]Finland Constitution (Democratic Republic of Finland, 2000), [d]Italian Republic Constitution (Italian Republic, 1947), [e]Spanish Constitution (Kingdom of Spain, 1978), [f]Political Constitution of Colombia (Republic of Colombia, 1991), [g]Political Constitution of the United Mexican States (Republic of the United Mexican States, 1980), [h]Political Constitution of Costa Rica (Republic of Costa Rica, 1949), [i]Constitution of the Republic of Honduras (Republic of Honduras, 1892).

3.6. Academic freedom today

Currently, the guarantee of academic and research freedom is frequently included in the fundamental right to freedom of expression in the constitutions of several countries (Table 1). International organizations have similarly made decisions about academic freedom.

It was first included in the Universal Declaration of Human Rights by the United Nations (UN) in 1948 and then in the World Declaration on Higher Education in the 21ˢᵗ Century: Vision and Action by UNESCO in 1997 (Organización Internacional del Trabajo [OIT], & Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [UNESCO], 1997; Cippitani, 2014).

3.7. Academic freedom in Honduras

The Universidad Nacional Autónoma de Honduras (UNAH), in Article 160 of the Constitution of the Republic, establishes that: "academic freedom consists of the right of educators to carry out their teaching activities professionally and respectfully, without restriction due to their ideological orientation or political preference."

In other words, a specific ideology is not imposed on the educators, who, therefore, have the right to express their convictions, even if they may disagree and detach from the prevailing government or ideological policies; this contributes to the improvement of scientific, social, and cultural knowledge by questioning the status quo. In the same way, the organic law of the UNAH refers to "*ideological pluralism, full freedom of teaching, study, research, and communication between the university and society*" *(*Chávez Caraza et al., 2019).

Table 2
Advantages and disadvantages of academic freedom.

	Teachers	Students
Advantages	1. They challenge rigid, standardized approaches to teaching and learning, such as adding internships, field trips, museums, seminars, and labs. 2. They place critical and routine inquiry between students and teachers at the center of teaching and learning, for exampl", "Oxbri"ge" applied a system of students and tutors holding discussions and to strengthen what was learned, three essays were written monthly.[a] 3. Students get involved in the relevance of academic citizenship.[b]	1. Having an intellectual curiosity and being aware of personal and professional biases and assumptions will enable students to be intellectually curious; resulting in a spirit willing to change a point of view due to a new understanding that comes from a productive disagreement on the part of their teachers. 2. Participation in debates, seminars and conferences with students and teachers on important topics.[b] 3. Belong to a special status with additional protections recognized both in culture and in the law, being university students the aim of research and intellectual debate, of free thought from which new ideas can arise to challenge the comfortable consensus of society.[e]
Disadvantages	1. The criticism and censorship of scientists (teachers) is not the result of violence or fraud, but rather due to the expression of a particular viewpoint (...) being able to publish a sensitive topic from the wrong perspective. 2. Academics report that they are bullied by their colleagues because of their views.[c] 3. To the extent that the voices allowed are only those who occupy positions of power, and as long as these people are only men, the ability of women teachers to participate in debates may be affected.[d]	1. Insecurity sown throu"h "hate spe"ch" towards certain groups. [f] 2. Tolerate difficult and sometimes uncomfortable conversations as some ideas are found to be challenging or unpopular with students.[b]

Note: Table 2 describes the advantages and disadvantages of academic freedom found in the literature for students and teachers in the classroom. [a] Miñana Blasco, 2011, [b] Darbyshire et al., 2021, [c] Karran & Mallinson, 2017, [d] Ronconi & Schuster, 2021, [e] Department of Education, 2021, [f] Morgan, 2021.

3.8. Advantages and disadvantages

Academic freedom is an art that not everyone possesses nor develops. It has advantages and disadvantages for proper academic evolution (Table 2). Since it originates from freedom itself, it could veer off into debauchery. That is why understanding academic freedom's use helps discern its advantages and disadvantages. Academic freedom is about faculty and students being able to discuss and debate ideas without the threat of social media bullying and digital shaming (Darbyshire et al., 2021).

3.9. Methodologies in academic freedom

What makes a good educator? According to Stack (2021), five common characteristics make an educator "good" (Figure 2). If an educational system has clear and established methodologies and proactive educators, the learning process can be optimized. These teaching methodologies are shown in Table 3.

3.10. Summative evaluation or formative Evaluation in academic freedom

Most higher education institutions use a single instrument to make meaningful choices. For instance, a council of experts at the postgraduate level must decide whether to accept an extended candidate mainly bases on his or her exam result. This makes it more difficult to assess other factors with higher predictive value for performance in the future (Sánchez-Mendiola & Diego-Maldonado, 2017).

Evaluation is described by UNESCO (2005) as "the process of acquiring relevant, valid, and trustworthy information to enable interested players to make the appropriate decisions to enhance actions and results." Both formative and summative evaluations are used in education. Summative evaluation makes use of objectively measuring results. As an alternative, formative assessment enables educators to modify their teaching methods to meet their students' requirements (Rosales, 2014). Although formative evaluation offers advantages, it has not yet been used in Honduras (Labarca et al., 2014; Carrió-Pastor, 2021).

Evaluation plays a vital role in achieving the most significant educational potential offered by academic freedom since that is where the evaluation criteria and content prioritization are born (Anijovich et al., 2010). According to Black (2010) the elements that affect the quality of the evaluation are listed as follow:

1. Educators' perception of themselves as educators and evaluators.
2. Educators' perspective on the subjects he teaches in the curriculum.
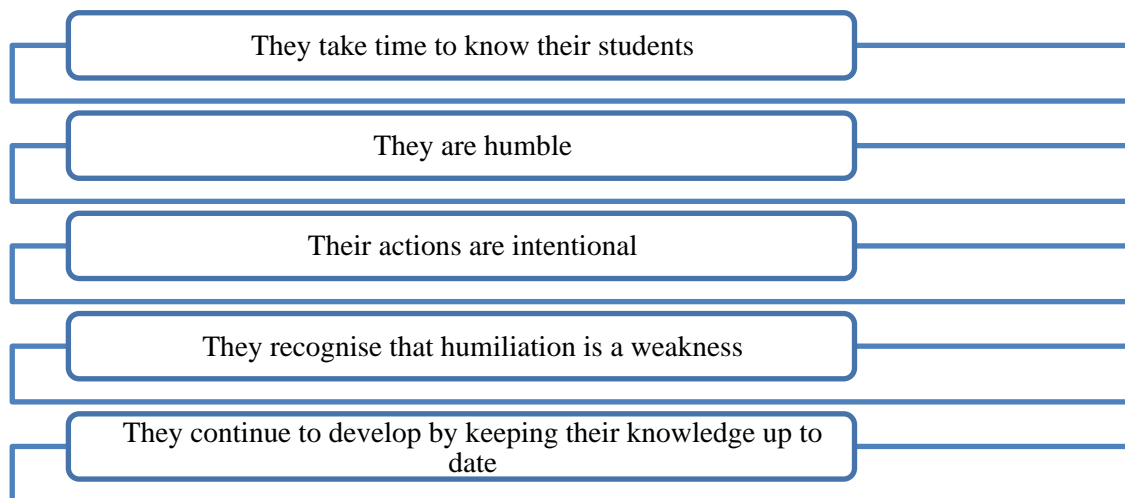3. Social traits of students and how the educators view them individually and collectively.

Figure 1. Characteristics of a good educator. Modified from Stack (2021). Five characteristics of an outstanding ward attending.

Table 3
Learning methodologies in academic freedom.

Learning methodology	Basis
Learning based project	The student creates an artifact applying research strategies. a
Flipped classroom	The activities that happen in the classroom are carried out outside the classroom and vice versa. [b]
Problem-based learning	Maximizes the development of competencies. [c,d,e,f]
Gamification	Use games in environments other than the same. It enriches work, loyalty, and collaboration. [g,h]
Design thinking	Analytical and creative process that generates innovative ideas. [i,j]

Note: [a] Botella Nicolás & Ramos Ramos, 2022, [b] Mohammed & Daham, 2021, [c] Johnson et al., 1999, [d] Huber, 2008, [e] Johnson & Johnson, 2014, [f] Juárez-Pulido et al., 2019, [g] Dicheva et al., 2015; [h] Andreu & Manuel, 2020, [i] López-Pérez & Hafez-Pérez, 2013; [j] Arias-Flores et al., 2019.

4. Infrastructure, tools, instructional materials, guidance from the principal, and curriculum.
5. Standardized evaluation instruments are imposed on a national or regional scale.
6. Understanding the significance of the educators' role in instructional strategies.
7. The educators understand the various teaching methods and the function that evaluation plays in teaching-learning.

Successful application of formative evaluation will require ongoing support from the authorities to ensure that there are suitable infrastructural conditions, resources in the school, and educators' preparation for the particular academic techniques beneficial in their curriculum as a type of evaluation.

3.11. Bias in medical education

Cognitive biases fundamentally influence how we perceive and classify reality (González de la Garza, 2020). This reality may be impacted if the two primary goals of education are overlooked (Ortega Gutiérrez, 2003; Bertrand, 2017):

1. Education must facilitate definite knowledge.
2. Students should be given the mental habits necessary to learn new information and establish their own judgment afterwards.

Since every person has a right to discover many truths, all forms of bias in education must be eliminated.

3.12. How to improve academic freedom

3.12.1. Recognition of the importance of the concept and adequate exercise of academic f reedom

We must acknowledge that medical schools today use a market-driven strategy to improve academic freedom (Association of University Professors [AAUP], 2015; Suissa & Sullivan, 2021). The proportion of professors who devote most of their time to clinical care work may distract educators from their duty to teach and discourage academics from focusing on graduate pedagogy or university service. Furthermore, the hierarchical structure of deans, directors, and department heads frequently lacks academic skills and makes poor choices in terms of teaching strategies. On the other side, the rivalry for private or public financing may influence the choice of research topics, and in some situations, it may be challenging to secure money for non-conservative research or research on politically sensitive matters.

So, in order to enhance academic freedom, we must implement a methodical strategy based on 3 elements (AAUP, 2015; Madrid Ramírez, 2015; Woods et al., 2016):

1. **Freedom to research and publish within the area of especialization**: By promoting free will to choose a research topic in any area of knowledge without fear of reprisals. This will allow educators to achieve knowledge in an institutional dimension.
2. **Freedom to teach within the assigned subject area:** to allow educators freedom of academic discourse supported by research and reflection processes. That is, to promote an opinion based on scientific evidence, not anecdotal. To receive ongoing training on the different teaching and assessment

methodologies to strengthen their teaching skills. Also, to socialize the objectives of the study plans in order to raise awareness about the planning of academic activities based on the curriculum, adding freedom of thought and expression (both the educators and the student) as a parallel axis to the selected methodology, in that way, to offer an education without political or religious censorship.

3. **Freedom against censorship:** motivate the discussion of issues that generate controversy within academic environments to propose studies that find solutions to improve learning processes. This is vital as long as public order, morality and good customs are affected.

Based on these principles, we can recommend some elements to consider strengthening academic freedom in Honduras. First, we must recognise that teaching activities must be based on study plans and programs, general regulations of universities and health institutions, and regulations established by technical councils of faculties and schools without preventing educators from expressing their opinions (Arita Chávez, 2019).

Second, educators must adhere to the curricula and determine the teaching content as long as they incline towards a pedagogical methodology (Woods, 2016). Third, the training of educators should be promoted to understand the difference between academic freedom and freedom of expression to encourage them to practice quality academic freedom (Madrid, 2013). Finally, we must recognise that our academy needs a reform process to offer students the best academic experience recognised for the good of the future patients they will serve.

3.12.2. Evaluation of the educators in academic freedom

Teacher evaluation is crucial to educational processes because it provides tools for reflection and observation of the use of academic freedom and improves the competence of educators, students, and institutions. It is required that the review come from a variety of people, including students, classmates, and outsiders. Students' assessments of their educators' performance play a crucial role in encouraging active participation. This student feedback is a widely used, dependable, and useful method (Husain & Khan, 2016; Musharraf & Sabina, 2016). These assessments qualify areas like student preparation of the class and the learning environment for the professor to demonstrate, reinforce teaching, monitor, and reflect, increase knowledge of student needs, and continual development to reach beneficial goals.

Teacher evaluations inside national institutions might be strengthened by reorganizing or setting up a forum for unbiased comments on enhancing academic freedom. It has been demonstrated that student evaluation of teaching,

also known as SET (Student Evaluation of Teaching), is an approachable strategy to advance medical education and affects the performance of educators (Debroy et al., 2019). The clinical teaching setting has adopted several assessment tools, including the following (Raupach et al., 2011):

- Medical Student Experience Questionnaire o MedSEQ
- *Marburger Fragebogen zur Evaluation des Lehrangebots in der Medizin* or Marburg questionnaire for the evaluation of courses offered in medicine.
- Medical Instructional Quality o MedIQ
- Stanford Faculty Development Program survey o SFDP-26
- Student Evaluation of Teaching in Outpatient Clinic o SETOC

When using this kind of evaluation, we must underline its enormous worth and utility for teaching, as well as the fact that by using it, the student bears responsibility and commitment for their learning.

3.12.3. Academic freedom index

Strengthening instruction while considering academic freedom is crucial for raising the standard of learning and research in medical institutions across our nation. Academic independence combined with the requisite expertise can improve teaching, but how can we oversee its use? In order to strengthen the academy, we can develop and disseminate information about the various teaching methodologies, put them into practice within the parameters of academic freedom, and enhance their application by gathering factual information about how well educators adhere to that freedom through the use of a compliance rubric. For this purpose, experts have developed an academic freedom index (Kinzelbach et al., 2020) (Table 4).

This tool is useful because it allows it to gather information, confirm that academic institutions adhere to norms for academic freedom, and identify any weak points across the board. An assessment tool created to collect information on whether educators use appropriate teaching approaches, while exercising academic freedom can be used as part of the country's efforts to improve the academic training provided by medical schools.

4. Conclusion

Academic freedom stands for education free of bias and is necessary for a university to exercise its complete autonomy. There are enough convincing arguments in favor of this to conclude that using it properly will assist

students and educators in the teaching-learning process. Due to its complexity, academic freedom could be impacted by a number of circumstances and become a methodological restriction that lowers the quality of student training.

Table 4
Essential components of the academic freedom index.

Components	Concept
Spreading and trade of academic freedom.	The extent to which academic exchange and dissemination are or are not subject to restrictions or censorship.
Freedom to research and to teach.	The extent to which there is the freedom to conduct research and teaching without being subject to interference.
Campus integrity.	It means that it is respected and free from politically motivated surveillance or free from threats or intimidation, including violence or closure.
Institutional autonomy.	It means that universities develop and exercise their decentralized decisions from non-academic actors.
Expression of academic and cultural ideas along with institutional autonomy.	It translates into whether or not there is censorship, intimidation, or restrictions on academic freedom, academic activities, or cultural expression.

Note: According to Kinzelbach et al. (2020), the purpose of the academic freedom index is to monitor compliance with academic freedom according to five components.

The educator's academic freedom will be constrained if he is unfamiliar with all the different teaching methods. The potential reach of these instructors will also be impacted if the setting in which they are trained does not support their ability to engage in independent study and professional growth through attempts to create resources or space. This impacts learning since every student learns differently, and only one teaching approach cannot accommodate them.

In Honduras, there are no available studies on the effectiveness of teaching methods, so it is difficult to understand the situation of medical education in the country concerning academic freedom. In the context of our country, it is crucial to develop mechanisms to offer training processes and evaluate the quality of medical education methodologies to extend the available resources of teachers. Additionally, we must involve the student so that he knows the scope of academic freedom and provide

evaluations that improve teaching performance. Finally, institutions must provide communication channels and spaces for discussion to socialize the differences between freedom of expression and academic freedom and prevent it from losing its objective.

5. Author Contributions

JS proposed the conception of the article and coordinated its elaboration. JS, BM, DG, and AB carried out the literature review. All authors wrote, edited, and approved the final version of the article prior to its publication.

6. Conflicts of Interest

The authors declare that they have no conflicts of interest.

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