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Education for sustainability - The reabilita E-learning course and the 2030 agenda in Brazil: perspectives and influences on the professional life of graduates

Educação para a sustentabilidade - O curso de E-learning reabilita e a agenda 2030 no Brasil: perspectivas e influências na vida profissional dos egressos

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ABSTRACT

The Graduate Course in Sustainable Rehabilitation of Architectural and Urban Environment (Reabilita) is an e-learning course whose mission is to prepare professionals in the fields of architecture, urbanism, engineering, building technician, geography, environment, among others, to deal with socio-environmental complexities. The course aims to provoke critical thinking on Sustainability Education as a cross-cutting theme at all levels of Education. From this perspective, this paper investigates how the Reabilita Course influenced professional performance related to social and environmental sustainability issues. Based on a qualitative and quantitative methodology, in addition to documental analysis and literature review, it uses data acquired through questionnaires directed to graduates to build a matrix of adherence/materiality towards the Sustainable Development Goals (SDGs). Our hypothesis is that; through the analysis of results, it is possible to measure the influence of the Course on the professional education of graduates, and, at the same time, evaluate the legacy of graduates to the society, regarding the implementation of projects oriented to the SDGs. Results show that the course encouraged a greater number of projects and that most of course's final paper addressed research on how to advance with the SDG11 Sustainable Cities and Communities with almost 19% of the work done. In sum, the course's role in promoting ways to a fairer, inclusive, and sustainable socio-environmental future in cities is discussed.

Keywords: 2030 Agenda, rehabilitation and sustainability, sustainable architecture and urbanism, educational practices, education for sustainability.

RESUMO

O Curso de Pós-Graduação em Reabilitação Sustentável do Ambiente Arquitetônico e Urbano (Reabilita) é um curso e-learning cuja missão é preparar profissionais das áreas de arquitetura, urbanismo, engenharia, técnico em edificações, geografia, meio ambiente, entre outras, para lidar com as complexidades socioambientais. O curso tem como objetivo provocar o pensamento crítico sobre a Educação para a Sustentabilidade como um tema transversal em todos os níveis de ensino. Nessa perspectiva, este artigo investiga como o Curso Reabilita influenciou o desempenho profissional relacionado às questões de sustentabilidade social e ambiental. Com base em uma metodologia qualitativa e quantitativa, além de análise documental e revisão da literatura, utiliza dados adquiridos por meio de questionários dirigidos aos egressos para construir uma matriz de aderência/materialidade em relação aos Objetivos de Desenvolvimento Sustentável (ODS). Nossa hipótese é que, por meio da análise dos resultados, é possível mensurar a influência do Curso na formação profissional dos egressos e, ao mesmo tempo, avaliar o legado dos egressos para a sociedade, no que se refere à implementação de projetos voltados para os ODS. Os resultados mostram que o curso incentivou um número maior de projetos e que a maioria dos trabalhos de conclusão de curso abordou pesquisas sobre como avançar com o ODS11 Cidades e Comunidades Sustentáveis, com quase 19% dos trabalhos realizados. Em



suma, discute-se o papel do curso na promoção de caminhos para um futuro socioambiental mais justo, inclusivo e sustentável nas cidades.

Palavras-chave: Agenda 2030, reabilitação e sustentabilidade, arquitetura e urbanismo sustentáveis, práticas educacionais, educação para a sustentabilidade.

1 INTRODUCTION

Education is one of the main pillars of sustainability. Aligned with the 2030 Agenda, this study seeks to assess the materiality of possible advances towards the Sustainable Development Goals (SDGs) through teaching-learning process and academic and professional practices of graduates of Reabilita Course (Brazil).

Brazilian large cities become the epicenter of a socio-environmental crisis. According to the United Nations (2018) 86.6% of the population lives in urban areas, with a projection of 92.4% for 2050. Deforestation and the accelerated process of urbanization imply both an increase in global warming and constitute a threat to the reduction of drinking water sources. Without significant changes in the capitalist mode of production and without the reduction in social inequalities, the current crisis tends to get worsened.

It should be stated that, in September 2015, the 193 member countries of the UN, with Brazil as one of its signatories, adopted a new global policy: the 2030 Agenda for Sustainable Development, whose objective is to advance world's development and improve the quality of life for all.. As a result of such agreement, 17 Sustainable Development Goals (SDGs) were listed with 169 targets, to be achieved through joint-action that brings together different levels of government, organizations, companies, and society at the international, national, and local levels. This agenda is based on five areas of importance, the so-called 5 Ps: people, prosperity, peace, partnerships, and planet. It is understood in this study that the SDGs serve as a guide in seeking solutions and alternatives in building a fairer and more equitable society.

On the one hand, the socio-environmental crisis has a profound negative effect on the purposes of achieving the SDGs; on the other hand, civil society efforts have been made to reinforce the countries' commitment towards the 2030 Agenda and 17 Sustainable Development Goals implementation, to achieve a more inclusive and sustainable future.

Several theoretical studies ([1], [2], [3], and [4]) discuss the reinterpretation of school and current pedagogy in its real social function, advocating for a more democratic and inclusive



education, as determined by SDG 4. These discussions are fundamental as they intend to democratize education, expanding the offer of vacancies to include the largest possible number of people, without jeopardizing quality education. In this sense, with information and communication technologies enhancements, the pedagogical dynamics became self-organizing, making professional distance learning (DL) to pose itself as a tool capable of softening the dichotomy between knowledge and practice.

According to reference [5], “distance education is growing dramatically, at all levels of education. The increase in demand reinforces the idea that it is a teaching modality capable of transforming the educational process in a country”.

It should be remembered that the fourth SDG corresponds to Quality Education, which means, to ensure inclusive and equitable quality education, and to promote lifelong learning opportunities for all. According to UN guidelines, education has the power to eradicate poverty, transform lives and promote advances in all the Sustainable Development Goals.

In 2006, to contribute to the applied Sustainability Teaching, the course named Sustainable Rehabilitation of Architectural and Urban Environment (Reabilita) was created at University of Brasília. It includes a *lato sensu* graduate course offered by the Architecture and Urbanism Graduate Program, which seeks to combine sustainability knowledge with Architecture and Urbanism theories and practices. The Reabilita course, which takes place in Distance Learning modality, has been gaining, year after year, more space and relevance among academics and professionals.

In sustainability approaches, the Reabilita disciplines emphasize parameters that are aligned to the 2030 Agenda in a balanced reflection with the environmental, social, and economic dimensions regarding sustainable development through some of its SDGs. The connections are mostly aligned with the following SDGs: 4. Education and Quality; 6. Drinking Water and Sanitation; 7. Affordable and Clean Energy; 9. Industry, Innovation and Infrastructure; 11. Sustainable City and Community; 12. Responsible Consumption and Production; 13. Action Against Global Climate Change. Because they have a global relation and are connected to each other, the disciplines also indirectly permeate other SDGs such as: 14. Life in Water; 15. Terrestrial Life, among others.

The way to make possible the relationship between Architecture and Urbanism with the SDGs is in line with the New Urban Agenda (NAU) which, having been approved at the



UN/Habitat III in 2016, brings a new paradigm of science on cities, with standards and principles on the pillars of policy implementation, regulation, and urban legislation, planning and design, economics, and finance. This set of themes has aggregate levels of approach in the Reabilita's disciplines.

From this perspective, this paper seeks to answer the following research questions:

1. Can environmental education be evaluated as Sustainability Education and Professional Training in the Reabilita course?
2. Did the DL Reabilita Course have a positive impact on the graduates' lives, and did it influence their professional performance to promote advances in the 2030 Agenda?

The main objective of this study is to analyze the influence of the Reabilita Course, regarding Sustainability Education, in the professional life of its graduates, especially considering academic and professional contributions in relation to Sustainable Development Goals (SDGs).

2 METHODOLOGY

It was decided to adopt two types of qualitative research: documentary and case study. The documentary research corresponds to a literature review on the addressed topic. Therefore, forms with closed and open questions were sent to more than 500 graduate alumni of Reabilita, whose purpose was to map the professional performance and verify in which areas of sustainability these graduates have worked most or intended to work. Based on the obtained answers, qualitative and quantitative data were tabulated to create a materiality/adherence matrix.

The study became valid with 50% of responses obtained, that is, with more than 250 completed forms. Once emailed to graduates, the forms were available for 15 days, extendable for another 7 days. This matrix will quantitatively categorize each project carried out by the student in relation to the goals of the Sustainable Development Goals achieved by the UN.

The qualitative research, of an exploratory facet, was based on published academic literature and on the answers of the open questions, in which the participants were free to express themselves in a less directed way. Quantitative research considered objective questions, tabulated and transformed into graphs and tables.



3 THEORETICAL BACKGROUND

New technologies arising from globalized world, broke down previously existing borders between countries and made the world more connected, affecting several areas of knowledge, especially those related to sustainable pedagogical practices. The rise of transnational companies, with their headquarters in developed countries and branches in developing territories, posed new challenges for education, especially to the poorest, forced to adapt to new forms of production to continue existing in the new and extensive labor market.

The contemporary world, with its constant pressure to reduce the State with a consequent reduction of its role and responsibility. The State, in the implementation of public policies aimed at the fundamental rights of all citizens, demanding from both students and teachers, new processes of continuing education. Teachers are expected to have the ability to reinvent themselves, not only through learning new technologies but also through their efforts to reformulate their teaching practices. From the student, it is expected more than understanding subjects, but valuing and scheduling their time better, discover their liberating vocation, and being capable of using learning to transform the reality of their countries. This, in part, means granting students a degree of autonomy, so that they can face the new challenges and the complex and exciting space of distance learning (DL).

Environmental Education (EE) emerged in the 1960s, from the realization that the Industrial Revolution and technological development were not only bringing benefits to the humanity, but also causing negative consequences to the environment, which made it urgent and necessary raising awareness among populations regarding the social responsibility of everyone. In 1965, the term Environmental Education (EE) was coined [6].

The concept of EE has evolved according to the transformations that occur both in environment and in society at a given time. Thus, although initially the environment itself was at the center of discussion over the years, the social aspect has assumed a role.

Another fundamental milestone was the Decade of Education for a Sustainable Future proposed by the UN in 2005 and 2014. This period became important for raising questions about the importance of expanding human, economic, social, and cultural rights. Education aligned with sustainable approaches requiring a critical stance to build a future where balance and opportunities are needed to everyone.



Therefore, it is important to emphasize that education for sustainability is not just an educational discipline, but an educational concept. This posture of breaking linear paradigms of discipline is recent, due to the constant debates about the myriad possibilities of education. When there are debates about training and learning processes, it should not be dissociated from themes that are intrinsically linked to social and ecological fair development [7].

Bearing in mind that the practices of Architecture and Urbanism necessarily interfere in the natural environment, there is no way to talk about its building practices without the natural world being invaded and modified at some degree. Thus, although architecture and urbanism are naturally invasive activities in relation to the environment, there are possibilities to materialize in everyday practice many of the solutions proposed by science, that produces sustainable architecture. In addition, sustainable architecture must be committed to the assumptions of social development, through practices able of valuing and implementing constructive practices originated from local cultures, generally with low environmental impact.

It can be said that sustainable architecture seeks to minimize environmental impacts, promote social and cultural development, and be economically viable. The conditions for promoting this type of architecture are determined by the development of technology and by social access to economic and environmental resources. The possibilities of developing a sustainable architecture must also be in line with the capacity of the biosphere to absorb the negative effects of human activities, an issue that has been on the agenda since the Stockholm Conference, in 1972, and is part of the “Meadows Report - The Limits of Growth”.

Therefore, designing architecture and sustainable urban environments means paying attention to different parameters, including the use of natural energy sources, efficient use of material and energy resources, respect for the topography and scale of natural sites, since they must be in accordance with the social and climatic characteristics of the place, linked to the social, economic, geographic, cultural, and ecological contexts [8]. These guidelines are the premise of sustainability in architecture and urbanism for minimizing environmental impacts and lower the consumption of energy and natural resources.

SDG 11 Sustainable Cities and Communities is aligned with the New Urban Agenda, agreed in October 2016, during the 3rd United Nations Conference on Housing and Sustainable Urban Development. One of its goals is to provide access to safe, adequate, and affordable housing, as well as basic services and slum urbanization. The 5th and 6th Articles of the Brazilian



Federal Constitution (1988) foresees that all inhabitants must have access to a place to live with dignity and access to means of subsistence, which includes housing among the basic vital needs to be met.

These determinations, presuppose planning strategies capable of reducing impacts on the environment, such as: popular participation, use of less polluting technologies, better use of local climatic conditions, waste treatment, , among others.

According to the Ministry of Education (2016), Distance Learning is a teaching modality in which students and teachers are physically or temporally separated. In Brazil, DL is regulated by a specific legislation and can be implemented in basic education, youth, and adult education, secondary technical education, and higher education.

DL went through several phases and gradually became relevant, incorporating itself into the Brazilian culture. In Brazil, DL began in 1904, with the first correspondence courses, serving a few more than 35 million students, configuring its initial phase [9]. Its second phase began in the 1960s, with the improvement of printed materials, the development of tele-education and the use of mass media, such as radio and television. Already in the early 1990s, with the Internet, there was a transition to its third phase, setting up a new educational scenario by the impulse of DL using satellite networks and the computer, defining new horizons, challenges, and possibilities [9], [10].

According to [11] the rapid and continuous development of Information and Communication Technologies has contributed to making this type of education a decisive milestone in expanding the possibilities of knowledge access. There are significant advances from the scientific and technological point of view, however, much still need to be done before an effective democratization of access to knowledge. Although the efficiency and empathy in relation to DL are discussed, it can be considered that this teaching modality expanded the possibilities of bringing knowledge to people who did not have access to face-to-face courses.

Debates between the qualities and limits of DL and face-to-face teaching are still very present in studies. Among the advantages of distance courses, there is the reach and inclusion of a larger and more varied public, either because of easing logistics, flexibility of schedules, course fees and technologies used, thus ensuring greater access to education. In this way, it seeks the democratization of knowledge, making methods and materials more flexible, serving people without time availability [9].



It is important to emphasize that it is essential to make technologies related to DL more accessible. It makes no sense to open education without public policies for inclusion of internet and equipment to make the practice effective. It also requires an integration of these policies in general, and involvement and commitment of those who oversee teaching. [11].

In the context of the Covid-19 pandemics, remote teaching has established itself as an efficient tool, preventing schools and universities from completely stopping their activities and reducing damage to school calendars. The remote modality was an alternative adopted on an emergency basis at all levels of education, from elementary to higher education.

However, it is necessary to set the difference between remote teaching and distance learning (DL). While the first corresponds to a temporary solution to continue the pedagogical activities and has the internet as its main tool, the second one was designed to aid, apply activities, classes and other demands in an environment of continuous learning, with the support of tutors and tech resources that facilitate teaching.

If remote teaching has applications and virtual classrooms such as, Google Classroom, the DL modality requires a more robust structure, capable of allowing videos and classes, forums, didactic and pedagogical activities according to the profile of the students, and the contents to be taught, etc [12].

Furthermore, reference [13] argues that higher education institutions are no longer seen as unique sources of knowledge for both training professionals capable of integrating into society and contributing to its socioeconomic development. Nowadays, the training of specialized professionals is becoming increasingly dependent on taking complementary postgraduate courses. Mainly those courses capable of offering opportunities to participate in real and applicable sustainable projects, having as a central factor - education inducing positive changes of a collective nature.

Following this logic, the Graduate Program of the Faculty of Architecture and Urbanism (PPG-FAU/UnB) started, in 2006, the lato sensu graduate course Sustainable Rehabilitation of Architectural and Urban Environment (Reabilita). Initially, the Reabilita Course used the elaboration of written didactic material as the main mean of teaching to dialogue with the student. This material was focused on encouraging students to be autonomous and proactive. In all editions of the course, the first discipline was the Learning to Learn in Distance, with the aim of facilitating this learning process and developing in students a sense of autonomy [11].



Since its first versions, the Reabilita Course has had as its main guideline the total interaction of its participants. The motto “studying at a distance does not mean studying alone” is part of the pedagogical structure of the entire course team, being reflected by all students during more than 10 course’ editions already completed.

The importance of didactic content and its constant updating make the course an example of the improvement of Distance Learning in the academic field. Over the tenth edition of the course, the didactic material of all modules underwent several renovations, always seeking to bring the most current concepts and topics of environmental sustainability in architecture and urbanism.

With the advance of computer technologies and the need for new ways of learning, the course also took significant changes in pedagogical aspects. In the first versions of the course, contact between professors and students, in addition to being completely online, was carried out using forums and a textual chat (written chat) carried out by the Virtual Learning Environment itself. Currently, students attend synchronous online classes, that is, livestreamed, where professors teach their content and clarify their doubts simultaneously with all students in the course.

To ensure student engagement, the Virtual Learning Environment adopts constant recycling in its design and layout, always seeking to present new trends in these areas, which encourages both new students and the team of teachers at Reabilita. In the first editions of the course, the Virtual Learning Environment was mostly presented through texts. Currently, it has interoperability with several other platforms, allowing the insertion of images, gifs (animated images), videos and other forms of use for its users.

Another significant update that the course presented during its 10th edition was the change in handling its final paper. Initially, students prepared a monograph to present individually to an evaluating professor’s panel, guaranteeing or not their approval in the course. Currently, students carry out the preparation of a scientific paper, which can be published in various events or academic journals, in addition to its presentation at the Reabilita Symposium.

It is clear, therefore, the importance and relevance of the course with its DL modality, in addition to its capacity in scientific production for the Architecture and Urbanism graduate program at University of Brasilia and the expansion of knowledge focused on environmental sustainability, both in the academic and professional spheres.



The purpose of the Reabilita course is the continuing education of professionals focused on urban planning, the physical rehabilitation of space and the preservation of built heritage with a focus on sustainability. Currently, the course has a total workload of 480 hours, it is developed at distance with two face-to-face meetings for application of tests and the final paper presentation. The total period of the course comprehends 17 months, 14 of which are devoted to the provision of disciplines and 3 are intended for the preparation of a scientific article, that also counts for increasing the productivity of the Research and Graduate Center from FAU-UnB.

Reabilita has a wide range of enrolled professionals, students of different ages, varied academic backgrounds, from all parts of Brazil and abroad. This personal and professional experience and the regional reality of each one is an enriching factor, as students feel encouraged to contribute to research, exchanging information and professional experiences.

The Reabilita team also sought greater social insertion and democratization of education, allowing access to University of Brasilia and continuing education.. In addition, the Reabilita group allows the participation of students, through the presentation of their research projects in "lives" and rewards the best academic works as a way of encouraging their publication and the professional improvement of students. Although Reabilita is a tuition-paying course, attention should be drawn to the possibility of access to social grants, whose purpose is to contribute to a more democratic and inclusive education.

4 RESULTS

The contribution of the course was evaluated not only for the student's professional life, but also its public utility and positive impact to a fairer and more sustainable society.

The questionnaire was applied from May 17 to June 27, 2022, sent to 663 graduates in the ten initial classes of the course, from which 349 responses were obtained. The questionnaire consisted of 9 questions, mainly identifying knowledge about sustainability before taking the specialization course, the main intention in carrying out the Reabilita course, the applicability of the knowledge acquired in addition to the relationship of the new concepts acquired with the SDGs.

Based on the results obtained in this research, it was possible to verify that 62.42% of the students did not have a good experience with the subject of sustainability during their undergraduate trainings. This result is correlated with the response of motivation to attend the



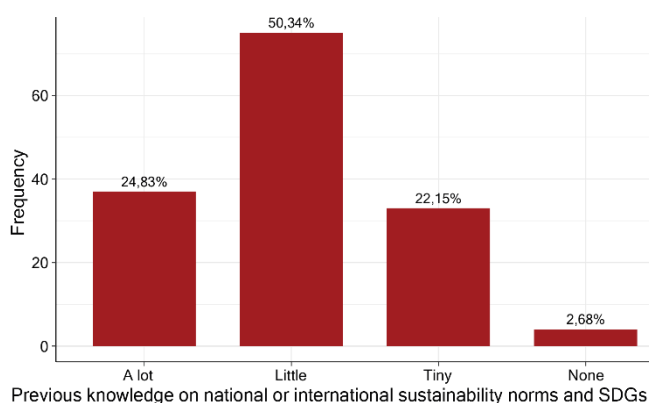
grad course, where approximately 96% of students had as motivation to carry out the specialization towards continuing education, professional growth, and research development in sustainability subjects.

It is noteworthy that approximately 70% of the students had a specialization degree and 20% a master's degree.. It was also observed that 65% of the students had little or no contact with any practice focused on sustainability before Reabilita and, in addition, few or no knowledge about the SDGs.

Still, on the impact of Reabilita, it is possible to observe that less than 20% of the respondents claimed that the course had no influence on their professional life and that more than half, 66% of the students, answered that what they learned from the course had direct applicability in their professional work, while 30% said they had indirect applicability.

Analyzing Figure 01, the column chart for the question: How do you rate your knowledge about national and international sustainability goals and the SDGs (Sustainable Development Goals), being 0 (none) and 3 (a lot)?. As it is a categorical variable, its representation is done using a bar graph. It is possible to verify that most students knew little or nothing about the subject. Exactly 50.3% revealed having little understanding of the SDGs. On the other hand, only 24.8% knew a lot about sustainable goals.

Figure 01. Column chart for the question: How do you rate your knowledge of national and international sustainability targets and the SDGs?



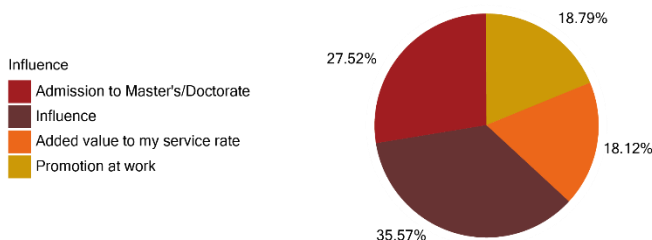
Source: authors.

Analyzing Figure 02: *what is or was the influence of the Reabilita Course on your professional life?* This nominal variable, brings the main changes that the course can provoke. It is noticed that there is not such a discrepancy between one observation and another. However, it



is worth noting that the greatest influence was on adding value and volume to their businesses and products, according to 35.57% of the participants. On the other hand, 18.12% stated that they had not noticed any influence resulting from the course in their professional life.

Figure 02. Pie chart for the question: What is the influence of the Reabilita course on your professional life?



Source: authors.

As shown in Table 01: *was your final paper at Reabilita related to which of the theme(s) below?* The final paper was written relating a wide range of themes. In specific, 31.14% of the students chose to work on the following themes: sustainable cities and communities, health and well-being. The other 352 students based their content on the other 14 available topics. Furthermore, it is worth mentioning less chosen themes: life on water, eradication of poverty, zero hunger and sustainable agriculture, together accounting for 3.68% of the total (table 1).

Table 1: TCC's Theme in Reabilita course

TCC's Theme in Reabilita course	Frequency	Percentage
Sustainable Cities and Communities	98	18,96%
Health and wellness	63	12,18%
Innovation and infrastructure	36	6,96%
Responsible Consumption and Production	36	6,96%
Industry	36	6,96%
Clean and Affordable Energy	34	6,58%
Clean water and sanitation	33	6,38%
Education and Quality	28	5,42%
Action against global change	27	5,22%
Partnerships and means of implementation	18	3,48%
Decent work and economic growth	18	3,48%
Reduction of inequalities	17	3,28%
Gender equality	15	2,90%
Justice and effective institutions	12	2,32%
Peace	12	2,32%
Terrestrial life	11	2,13%
Life in water	8	1,55%
Poverty eradication	8	1,55%
Zero hunger and sustainable agriculture	3	0,58%
Total	513	100%

Source: authors.

About the Table 2, *what is the relationship of your Architecture and Urbanism projects or your professional activities with the sustainability goals described below?* As in the previous



question, the goals: Sustainable Cities and Communities, Health and well-being were highlighted in 161 answers that regard respective alumni projects. The least related sustainability goals were also those that had the lowest selection for the final paper theme among the students (table 2).

Table 2: What is the relationship of your Architecture and Urbanism projects or your professional activities with the sustainability goals described below?

1 Sustainability goals	Frequency	percentage
Sustainable Cities and Communities	98	18,96%
Health and wellness	63	12,18%
Innovation and infrastructure	36	6,96%
Responsible Consumption and Production	36	6,96%
Industry	36	6,96%
Clean and Affordable Energy	34	6,58%
Clean water and sanitation	33	6,38%
Education and Quality	28	5,42%
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Gender equality	15	2,90%
Justice and effective institutions	12	2,32%
Peace	12	2,32%
Terrestrial life	11	2,13%
Life in water	8	1,55%
Poverty eradication	8	1,55%
Zero hunger and sustainable agriculture	3	0,58%
Total	513	100%

Source: authors.

Based on this, it was possible to develop the Materiality/ Adherence Matrix by associating the questionnaire answered by the graduates of the Rehabilita course in their professional relevance, in contrast with SDGs (Figura 03).



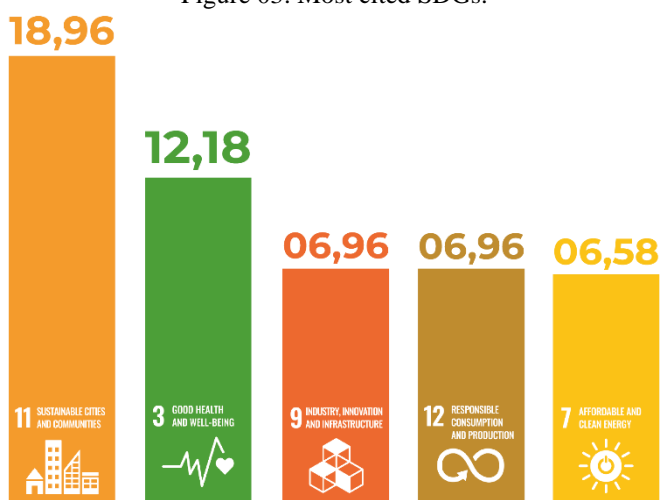
Figure 03. Materiality/Adherence Matrix – Relationship between professional achievement and the advances towards the SDGs.



Source: The authors.

Observing the matrix, one can see the importance of the applicability of the knowledge acquired in the Course as well as in the professional projects developed by the graduated students, relating them directly to the SDGs (figura 03).

Figure 03. Most cited SDGs.



Source: The Authors



5 CONCLUSION

This research had as its main objective the applicability of sustainability concepts from the distance specialization course named Sustainable Rehabilitation of Architectural and Urban Environment (Reabilita) in the professional and academic life of graduating students, associating these concepts with the Sustainable Development Goals (SDGs).

The methodology consisted mainly of a qualitative analysis of an exploratory nature, based on a review of literature and the application of a questionnaire with closed and open questions to the more than 500 Reabilita graduates.

The literature review consisted of studies for a theoretical foundation, addressing University Education and Teaching, Sustainability in the Architecture and Urbanism courses, Distance Learning as the main concept and its presence in the Graduate Program of the Faculty of Architecture and Urbanism at the University of Brasilia, besides documents from the Reabilita Course.

Alumni responding to the questions evaluated whether the course posed a positive impact on their professional lives and thus, the adherence of their professional performance towards the SDGs, promoting progress in the Agenda 2030. After results, it was understood that, although the graduating students had little contact with the concepts of sustainability and the SDGs before the course, they proved that this knowledge was acquired and improved through writing their final paper and materialized in their professional practices.

It was also noticed that, as Reabilita is a course more targeted at Architecture and Urbanism professionals and related areas, approximately 75% of final papers and the professional performance assessed from students were directly related to the following SDGs: 3. Good health and Well-Being ; 4. Quality Education; 6. Clean Water and Sanitation; 7. Affordable and Clean Energy; 9. Industry, Innovation and Infrastructure; 11. Sustainable Cities and Communities; 12. Responsible Consumption and Production; 13. Climate Action.

In conclusion, the study presented satisfactory results regarding the learning of sustainability concepts and their applicability in the continuing education/ professional career of students who graduated from the Reabilita course. However, it was understood that due to the importance and relevance of the themes presented here, this research should also be carried out on an ongoing basis to guarantee, that the Reabilita course can always be consistent with the steps adopted in concepts of environmental sustainability and in new future SDG targets.



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