**Example of Success in Conducting an Education and Awareness Program for Combating Climate Change at Undergraduate Level: Gazi IDESA**

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**ABSTRACT**

The United Nations’ The Intergovernmental Panel on Climate Change (IPCC) published "Climate Change 2021: A Physical Science Basis" report documenting the changes in the Earth's climate including predictions on how continued changes would impact us in very near future while creating a positive climate future is only possible with the ongoing efforts of public, especially the adolescent and university students, as they understand the risks more and have to live a more fragile climate environment in their near future. Although the climate activists are more than ever, it is not enough yet to make a public pressure than the scientist on the regulatory bodies yet. More conscious and more active and willing to change people needed to mitigation efforts and carbon dioxide emissions reductions. It's important to address the problem and solution with all aspects together to the adolescents and university students such as connecting with communities impacted by climate disasters, welcoming climate conversations at school/universities, holding discussion groups, and using mindfulness and positive science informatics about climate needed. Gazi University Faculty of Pharmacy Climate Change and Zero Waste Community (İklim Değişikliği ve Sıfır Atık Topluluğu - İDESA) has been established with these vision and mission by late 2021 with 15 undergraduate members. The group first achieved self-scientific personal development with in-community 5-minute real/science fact informatic panels and then started society awareness programs with the help of academic mentor talks reaching over 500 students all over the university. The participation of the group members in the International eco-climate summit meetings gives undergraduates a perspective on the importance of climate change at the level of economy and country level in real life situation which are discussed with the participation of ministers from various countries such as Canada, Indonesia, Nepal and Thailand. As the academic year ends, group closes PlanDoActCycle with the view of all stakeholders and already planned the next year activities while prioritizing the İDESA as a sustainable community and reaching more members and communities.

**INTRODUCTION**

We set out on this path to be a part of the fight against climate change on behalf of the future of our world, our country and humanity. We established the IDESA Community as a result of the observation that university students across Gazi University did not come together on the climate crisis and carry out awareness activities before. Acting as a community is known to be effective in coping with stress, leading collective action in a coordinated manner, and providing motivation [1]. In this manner, the main goal of IDESA is to raise awareness of young generations and to create public opinion in the climate crisis. IDESA aims to bring together undergraduate students who are on the common axis of the climate crisis. In this context, information activities were held in which the relationship of the climate crisis with various fields was examined. After the activities, feedback was received from the members of the IDESA to evaluate how successful the target and effort were.

**METHOD AND PROCESS MANAGEMENT**

1. Establishment

Although there are currently 148 student societies affiliated with Gazi University, the absence of an organization that allows students who want to be united against the climate crisis to come together within the university caused the foundations of the community to be laid. Considering the lack of student-based activities on the climate crisis, it was aimed to raise awareness in every segment we can reach, starting with ourselves, in order to improve and reorganize the current situation on climate and environmental issues, and to apply different alternative methods. In October 2021, IDESA (Climate Change and Zero Waste) Community was established under the leadership of Prof. Dr. İlkay ERDOĞAN ORHAN and under the chairmanship of pharmacy undergraduate student Senem AKGÜL. It was formalized as a group of Gazi University Faculty of Pharmacy under the Gazi University Directorate of Health, Culture and Sport. An annual activity plan was created with the community academic leader Dr. Onur Kenan ULUTAŞ and the vice president of the community, pharmacy undergraduate student Nagihan ÖZBEK. With the laying of the foundations of IDESA, a team of 32 volunteer students who are sensitive and conscious about the environment was formed for the rapid and systematic progress of the studies. At the first meeting, the community hierarchy was determined.

1. Activities

Our first event was held in a short time with the aim of announcing the started climate activism movement. Posters prepared by each team member based on their individual fears and concerns about the subject were hung on the pharmacy faculty boards. Over 50 posters about waste recycling, the impact of climate change on living things, minimalism, saving, carbon footprint, non-renewable resources, were presented to more than 500 faculty students. With this event, IDESA, apart from displaying its knowledge and opinion, also caught an environment to measure the perspectives of the students of the Faculty of Pharmacy towards a climate activist community. Feedback was received from faculty students with questions such as: “How do you find the vision and mission of IDESA” “What do you think about the contents of the posters?”. These feedbacks are critical for the construction of IDESA, which is a very fresh entrepreneurship on solid foundations. Weekly “Climate Dictionary" and "Did You Know These?" concept contents were regularly shared on social media accounts. The effects of humanity consuming more than it produces against nature were evaluated by presenting numerical data in "Did You Know These?" surveys in a question-and-answer format Contrary to students' feelings or guesses, we aim to show an understanding of how serious the situation of the world is with numerical and scientific data while wanted to reflecting the uncertainty about the future and the fear the generation Z felt in our efforts to form public opinion to our peers.

Addressing and assessing the climate crisis as a whole is difficult as it has far-reaching implications. IDESA aims to move forward with the “divide-research-learn-tell” approach. Based on scientific data and reliable statistics, current situations regarding the concepts of environment, climate and zero waste, which each team member deals with from different perspectives, were researched. A panel discussion on "A Look at Climate Change in 5 Minutes" was held where the researches were presented via the online platform with all members. IDESA members also took part in activities in different fields in order to find sensible and responsible students like themself. At the I. National Forensic Pharmacy Symposium held in the conference hall of the Faculty of Pharmacy (Gazi University), a booth was opened and the opportunity was reached to introduce the aims and principles of the community. In this event, the IDESA had the opportunity to reach non-Gazi University undergraduate students for the first time by making a poster presentation. The symposium participants who showed interest in the IDESA booth were informed about the aims of IDESA for the fight against climate change of the community.

The existence of healthy environments and ecosystems is essential for the long-term survival of all their lives. At this point, the concept of sustainability aims to increase both the quality of life and the services offered by the ecosystem. In line with this principle, IDESA aims to adopt the concept of sustainability in the professional lives of undergraduate students, the majority of whom are pharmacy students. Within the scope of the awareness campaign on sustainability, Faculty of Education Faculty Member of Geography Department Prof. Dr. Ülkü ESER ÜNALDI's Sustainability conference on “Saving Water, Electricity and Paper” was held. In this conference, where the concept of zero waste is also included; minimizing wastes, valuing recyclable wastes, taking action on the efficient use of resources and being informed on the axis of being individuals who not only consume but also produce individuals. Participation in the IDESA community, which was mostly made up of first-year undergraduate students, drew attention to this event, which included 100 people.

IDESA members participated in the ECO-CLIMATE Summit held at Ankara Ato Congresium on 30-31 March 2022 in order to gain perspective on the importance of climate change at the level of economy and states. This is the first nationwide organization IDESA have been involved in. Here we provided training on the methods followed by various companies and municipalities in their production and waste disposal processes. During the summit sessions, with the participation of ministers from various countries such as Canada, Indonesia, Nepal and Thailand, the policies that are followed and should be followed in order to combat climate change and minimize its impact on the economy were discussed. As a result of the observation of the current attitudes of governments towards global warming, it was decided to move towards our fight against global warming to take personal measures as well as to provide regulations in state policies.

In all these processes, announcements and up-to-date content created by the community research team were published on social media. In order to be included in the community, undergraduate and graduate students from the Faculty of Technology, Faculty of Education and Faculty of Engineering applied through social media in addition to the Faculty of Pharmacy. İDESA is now becoming known throughout the university. This has been an important step towards reaching out to liable undergraduates like us and expanding our awareness axis.

With the participation of the academic leader of the community, a year-end meeting event was held for the planning of the summer vacation and the 2022-2023 Education Period. At the same time, feed-backs were received from the participants for our 1st year of IDESA. Project ideas on climate change, which is a global problem that directly and indirectly affects many areas such as ecosystems, biodiversity, public health were discussed. At the end of the event, IDESA Web Site and team were established. It is planned to share the collections of articles reached by this research team on the effects of climate change as a blog post. In this way, we will be able to increase the effectiveness of our climate struggle on the internet and find the opportunity to achieve permanence in our learning and research outputs.

Climate change directly and indirectly affects many areas. We decided to proceed more programmatically and to prevent information pollution in such a serious matter. The members of the Board of Directors of IDESA, responsible for the determined themes (Table.1), were appointed. In order to make our outputs more professional and of academic quality and to provide personal competence to the members, it was obligatory for each member of the board of directors to take 'article browsing' and 'blog writing' trainings from various online platforms.

**Table 1.** Decided themes for academic research and raising awareness for dedicated months.

|  |  |
| --- | --- |
| August | Climate Change and Public Health |
| September | Minimalism and Simple Living |
| October | Climate Change and Gender Equality |
| December | European Union Policies on Climate Change |
| February | A View of the Climate Crisis from the Perspective of Turkey |
| March | Sustainability |

We believe that IDESA, in only 10 months, have become a true climate-leading community. We all want to do a lot about it, but we think it's more effective to give community members the ability to concentrate on the areas of impact of global warming that they're interested in. We believe that we will increase the efficiency in our activities by offering the opportunity to choose their own theme in line with the curiosity of the undergraduates.

**FINDINGS AND DISCUSSION**

1. Presentations

With the decision taken after the first meeting, the posters prepared by the members were hung on the faculty boards, resulting in interest in the activism movement of the community. As a result of this interest, an increase in community members was observed. Feedback received from faculty students; IDESA was that the vision and mission were found to be meaningful and powerful, and that the posters exhibited evoked a sense of self-action on the issue of climate crisis. In addition to receiving positive feedback and support for the purpose of establishing a community; Some undergraduates expressed concern about the climate crisis while reviewing the posters. The ones, who expressed their concerns, stated that they wanted to become a member of IDESA, believing that acting jointly on this issue was more effective and resounding, which is already investigated and published before [2]. The first people we reached were the generation Z, the undergraduates of faculty of pharmacy.

1. Social Media

Active use of LinkedIn and Instagram accounts has been provided. The interactions we receive in the "Climate Glossary" and "Did You Know?" concept content are the result of the social media activism movement. Our increasing number of followers and connections can also be counted among these results. At this point, it is understood how effective and accessible the attention paid to design and post contents in line with the effective use of social media, which is a necessity of the technology age, is in terms of the climate awareness we want to bring to people.

1. A 5-Minute Look at Climate Change

This online event, which included 10 different presentations and speakers, 34 participants, was held in the form of an intensive panel where current climate crisis events and information were conveyed. Community members reported being enthusiastic and excited about sharing the information they learned. Believing that research-presentation activities are effective in raising awareness, requests were made to be carried out again later. Listeners reported that they were worried about climate change, but that acting within the framework of the community made them feel hopeful [3]. Seeing that IDESA responds to this expectation of undergraduates as a whole is a valuable source of motivation for IDESA.

1. Opening a Stand

At the First National Forensic Pharmacy Symposium held within the Faculty of Pharmacy (Gazi University), 17 new members were registered and the current number reached 49 people. Being able to take part in a symposium that does not have a climate change concept shows that IDESA is supported by the faculty members and administration.

1. Sustainability Conference

The number of participants and interest in this community-led conference has been undeniable. The interest in what was said in the conference, which was dominated by the first, second and third grades of the bachelor's degree, and after the conference, many people did not leave the hall and asked questions to the community members and the speaker. Seeing that the IDESA create activities that push students to wonder and question is proof that we are fulfilling our mission. In this event, where the community had the opportunity to reach a greater number of undergraduates, the community reached 89 members with 40 new registrations.

1. Year-End Meeting

Community members expressed that they felt happy to be on the team and "useful individuals to the community". All of the members stated that they were satisfied with the operation and that they wanted to take part in IDESA in the coming years and that they would announce it to their friends and peers. These comments, which prove that IDESA is on the way to becoming a sustainable community, have been also a motivation for us for the processes ahead.

1. Thematic Progress-August

Within the framework of the August theme "Climate Change and Public Health", 2 blog posts were published on the İDESA Web site. 4 posts were created through the İDESA Instagram account, 1 of which was created every week. We once again understood the effectiveness of IDESA in the event held with Assoc.Prof.Dr. Sinem CANKARDAŞ on climate change and mental health. It was argued that acting jointly under the roof of a community in the fight against the physiological and psychological negative effects of global warming has a great share in coping with eco-anxiety. IDESA exists to prevent young generations, who tend to be pessimistic or ignore the problem in the face of climate disaster scenarios, from feeling lonely and to contribute to taking responsibility for the environment.

RESULTS AND DISCUSSION

As a result of various activities and participations, the contribution of each new activist formation to the transformation of people into relatively more conscious individuals is undeniable. It is seen that the awareness of collective action causes the members to assume more responsibility for activism. There is a positive correlation between the number of community activities and the new member. In every study that IDESA does/takes part in, the number of undergraduate and graduate level students who want to take part in the community voluntarily is increasing.

A lot of data and statistics on the effects of global warming are being published. We are all aware of the seriousness of the situation we are in now. However, it is a motivating factor that disaster scenarios have examples of success in order to encourage people to take action on this issue. İDESA aims at motivating success for the formation and spread of this awareness in young people at this point. As people's awareness of success grows, struggles gain momentum with other people's participation. That is why success stories, especially for young people, such as IDESA, need to be featured much more on platforms on climate change [4].

Realizing the necessity and lateness of the climate pioneering movement in our faculty, and also throughout our university, we started this journey with the desire to gather under one roof. In addition to IDESA's goal of raising awareness of climate problems with individual actions; IDESA sees the problem of climate change as a problem of the system and governments. We aim to raise awareness by investigating the causes, domains, consequences and solutions of these questions. With the help of experts, we have adopted the principle of discussing our ideas and transferring what we have learned to our surroundings starting from the core. We have planned our activities within this framework. We believe that we get the right information from the right sources, that our perceptions of the environment expand in this process and that we can reach people. On this path that we started with an idea, we have become a motivated team where many young people take part by volunteering and carry out their work with devotion. At this point we have reached in 10 months, it is proud to see that our motivation to take action for the future of the world that excites us has led to IDESA. Due to the physical location of the faculty and our faculty course curriculum weight, we were able to perform fewer activities than we thought in our first academic year. Since we were newly established, we had problems in reaching out to environmental volunteers and meeting with them. This was the experience for IDESA to proceed more carefully and planned in the new period. For us; Controlling our waste is as important as improving our production and consumption habits. We contacted the faculty management to place the missing recycling bins in our faculty. We experienced partial failure in our zero waste part due to the applicability of the compost concept and the disruptions in the workshop training. It is among the important issues that we need to focus on for the new period.

**CONCLUSION**

As IDESA, our motivation and efforts on the manner increases and our community is supported by the academic staff and the administration, we believe that we shall create a long needed public opinion throughout the university. Our first goal is to come together with environmentally conscious students within Gazi University and work towards the question "What can we do in our own fields?". In the following stages, IDESA would carry out joint comprehensive activities with the environmental communities of other universities in Ankara. In this direction, we aim to be a sustainable community by providing interactions among young people, sharing information, and making continuous improvement a common goal.

For the first 6-month period within the 2022-2023 Academic Year, 6 specific areas affected by climate change have been identified already. Trainings will be received from experts in the field related to the subject of each month and activities will be carried out for the subject of the month. This program; Encouraging current developments in Turkey and in the world to investigate existing and alternative solutions will increase the effectiveness of climate awareness in the IDESA members (responsible of the subject). Obtaining information by encouraging research from the right sources, rather than being presented ready-made, will be an opportunity for inquiring thinking minds. With the IDESA e-journal, which is planned to be published at the end of this 6-month period, our activities will be able to reach wider audiences in the digital environment in accordance with today's technology age.

In our activities, we plan to move forward by not only informing and raising awareness of the participants, but also by encouraging them to develop their questioning aspects and becoming actionable, inspiring and conscious environmentalists.

Since we do not have sponsor support, we may experience axes in our events. We believe that IDESA will find sponsor support as it grows.

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