General Education on Implicit Problems for Adolescents

K. Vidya Sree, A. Rishika Reddy, P. Mihira, S. Rishitha Reddy, G.Meghana, Sri Kiran Kumar. B, Dr. Balachandar .S

I. INTRODUCTION:

1.1. Background:

Today adolescents face some personal issues quite often since it happens to be the most difficult stage of their lives. Teens are subject to a variety of external and internal challenges during this phase such as Hormonal changes, puberty, social and parental forces, work, and school pressures, and so on are all aspects they must deal with. Many teenagers believe that they are misunderstood, their feelings and emotions must be supported, particularly if the affirmation comes from their parents. The fact is they should be capable enough to handle their struggle with adolescent growth issues with handled delicately with care and a well-mannered approach to address the concerns by all stakeholders, including parents, teachers, and elders. We wanted them to be aware of unspoken issues and expose them to certain questions to avoid making impulsive decisions during this period which will affect their future. Since many students strive to be engineers but lack programming skills, we introduced them to some basic programming in a fun manner, so that it will be of great use in their subsequent academics and brush up their mathematical abilities.

The Student Social Responsibility (SSR) is a flagship student nonacademic project of Amrita Vishwa Vidya Peetham, Kollam campus, which aims at the overall development of the personality of a student while he or she spends the impressionable years at the portal of any educational institution. The Department of Corporate and Industry Relations (CIR) maintains a highly professional team of dedicated faculty, which has Br. Vishwanathamrita Chaitanya Swamy as its chief mentor has taken upon itself the onus of conducting this program with near perfection and full commitment. These projects are chosen carefully with a humanist character aimed at fostering values, attitudes, and habits in students that will enable them to think out of the box, with vigor and rigor and comprehensively understand and analyze reality and thus facilitate them to take personally as well as professional decisions through the prism of ethical responsibility. The goal of the SSR project is to heighten the awareness of any student to social commitment and responsible response towards the problems faced by fellow beings so that all can gain a good understanding of the ideas presented and subsequently adopting these values and applying them in their future professional as well as personal life. As responsible future assets of society, students can ill afford to turn their back on social problems that affect their surroundings, should be well trained to provide specific, committed, and lasting solutions to problems plaguing society in general. As it is rightly said, ***"The best feeling of happiness is knowing you're the reason for others' smile."***
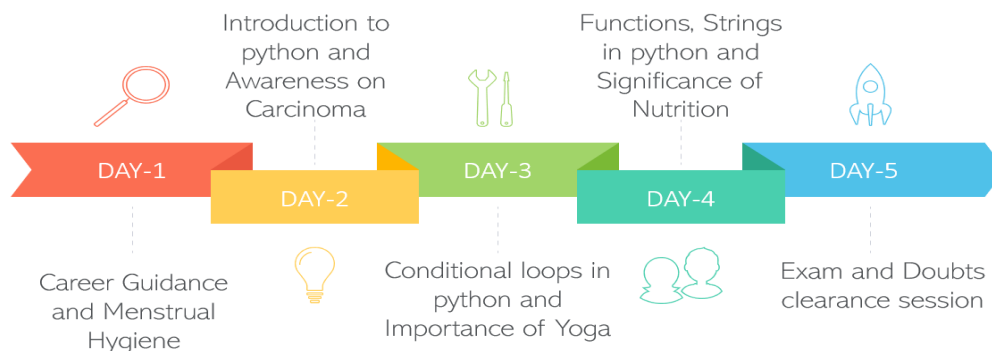
Launched in 2009, SSR was designed to make students interact with different communities and instill student's responsibilities in every student. These roles are ethically binding, and they suggest that each person should act in such a manner that the negative impact on those in their immediate vicinity is avoided. It is a little effort from students that could make a significant difference, for them and the beneficiary, because "Every change begins with a single step". The social responsibility of education is a process whereby the whole community transmits to the next generation appropriate values, traditions, skills, and cultural norms.

1.2. Objective:

We, team HER story makers decided to do this project at these times of pandemic, despite being away from college and not in direct connection with people with a primary goal to empower teens to make their own choices and choose the best path for them in their lives and raise consciousness among teenage girls about how to prevent the health issues that so many women are dealing with these days. Finally, our ultimate objective was to familiarize students aged 12 to 17 with programming and its basics to help them avoid problems in the event they choose a technical, engineering sciences career path.

II.   METHODOLOGY:

We HERstory makers, as a team decided to raise awareness about topics that play a vital role in every teenager's life and accordingly planned a five-day online workshop to discuss each of these concerns in a sequential manner.

Introduction to python and Awareness on Carcinoma

Functions, Strings in python and Significance of Nutrition

DAY-1   DAY-2   DAY-3   DAY-4   DAY-5

Career Guidance and Menstrual Hygiene

Conditional loops in python and Importance of Yoga

Exam and Doubts clearance session

Our workshop-based online project commenced with career exploration and guidance for students about career progression since this is the first step in determining a student's future based on their interests. Later, advanced on to different awareness programs such as 'Menstrual Hygiene' and 'Breast Cancer' as well as the issues that arise during those times. To resolve these concerns, we designed a strategy that stressed the Importance of practicing 'Yoga' and understand the significance of 'Nutrition' which will help them lead a healthier lifestyle.

In a divergence from all the above, we introduced them to the basics of programming in Python as a user-friendly programming language. The schedule was developed in such a way that there could be minimal complexity, and the students would easily follow and implement learning on their own. We planned and attempted to make the sessions quite engaging and handled queries parallelly.

III.   SUMMARY:

3.1. Career Guidance:

Today, a teenager requires career counseling to make informed choices about themselves more comprehensively and reflectively. Our session on career guidance focused on extensive information on accessible topics, course material, career qualifications, and opportunities. It also enabled a deep inner exploration to consider one's core interests, family influences, personality, abilities. Provided students the required encouragement so they can make decisions and guide themselves away from confrontation and uncertainty and lead them towards elucidating on what they want to pursue and become as in their lives. Most importantly, our session engaged them in a significant decision-making process. They will remain inspired, enthusiastic, and confident when they do what they want to. This point is stressed to make them realize the value of making the right and appropriate decision about their future.

 Early childhood influences play a significant role in shaping a student's potential career choices. Hence, our first step towards career advice was to introduce students to the future of employability and the scope for employment based on different career options and the related academic courses available for them to pursue. We had begun with a casual conversation with the students about our life after school, our career path, how after schooling we took decisions, and the main factors inside and outside our control that affected our decisions and those decisions we had taken, and we liked or disliked about our current status. We planned & presented a TEDx talk named 'Three questions to unlock your authentic career' by Ashley Stahl. - (open source)

 These efforts promoted the participant's self-awareness, and we could observe through a 'self-assessment exercise' performed at the start and at the end of the session, during which we noted the difference in the student's opinions. We intended to make the students understand that a structured path towards their future will help them to deal with day-to-day pressure and maintain proper self-control. If operated in this manner they can learn more about their talents and hobbies, and their lifestyle will naturally be upgraded based on their choices. Therefore, early guidance for students will assist them in acquiring the skills needed for their chosen profession and building their confidence.

3.2. Menstrual Hygiene:

Menstruation is a monthly reality for any girl. Despite this, many women also face considerable difficulties in handling their periods. It can influence all facets of a girl's life, including academics, wellness, and active involvement. If not properly handled, it may cause significant disruptions in everyday life. During

adolescence, girls get their first period. Hormones cause them to go through physical and emotional changes. Bleeding can last anywhere from 2 to 7 days, depending on the individual. Girls appear to be uncomfortable these days, which could also lead to painful menstrual cramps.

Our goal for the session was to ensure that every girl understands the process and can take proper care of herself. Owing to a lack of information, some girls appear to neglect some anomalies during their periods, and as a result, they can find themselves in risky situations later. Children are trained in schools, but out of awkwardness and shyness girls appear to neglect them and refuse to pay attention. Therefore, we took this step forward by helping them understand that discussing periods is normal - 'It's okay to talk about periods'. Understanding that their period will come every month instills in them a newfound and inspiring sense of responsibility for their bodies' treatment.

During their epochs, some girls are unable to control themselves. They are uncertain about what to eat at that moment in time. Many students skip school during those few days and may fall behind in their studies, making them more insecure in and out of the classroom. We discussed these concerns so that a girl can consider the various circumstances that arise during her periods and be able to deal with them appropriately. This is only possible if she, as a young girl, is fully informed and comfortable discussing her period issues. One of us shared our first-period experience, inspiring students to come forward and ask questions, putting their shame and embarrassment aside, and taking the first step towards discussing periods.

3.3. DCIS (Ductal Carcinoma In situ):
Next on our agenda was to be conscious about one's health and disorder. We planned to talk about one important ailment which was Cancer. We explained to them that this was a condition of unwanted uncontrolled growth of tissues in a part or organ, can grow in any part of the body. Ductal carcinoma in situ, or DCIS, is a form of breast cancer that is probably one of the most overlooked cancers. Most people are unaware of it and only become conscious when it is too late. DCIS affects many women without causing any symptoms. Most of the cases are discovered by mammography screening. If cancer progresses, the first signs and symptoms will occur. The exact causes of DCIS are unclear currently. Women who have a family history of breast cancer, have had their periods at a young age, or have had late menopause are known to be at higher risk.

Early menstruation is one of the factors that trigger DCIS, so we wanted to educate the students about it so that they will not be subjected to danger in the future. We just need them to know that there are no specific signs of this cancer and having a checkup is recommended if they have early periods or have a family history of breast cancer. So, that they will be able to avoid it and undergo diagnosis before it is too late. If DCIS is left untreated, cancer cells can develop the ability to spread outside of the ducts and into the surrounding breast tissue. Invasive breast cancer is the term for this form of cancer. Invasive cancer can spread to other areas of the body which is of more risk. It is now a worldwide issue, but it is still diagnosed in its advanced stages due to women's negligence in self-inspecting and clinically examining their breasts. Our discussion included breast anatomy, risk factors, stages of breast cancer, diagnostic tests, and treatment options such as chemotherapy, surgery, and radiation therapy.

Most women do not pay attention to their breasts, the changes that happen in due course of time. The key problem is that they fail to notice insignificant developments in their breasts, which contributes to DCIS. As an outcome of this awareness initiative taken by us, we hope the participants are now more likely to pay attention to their breasts and start taking care of them. We presented a YouTube video, an open-source, of a celebrity '*Vanessa Bell Calloway*' who spoke about her struggle with breast cancer and how she overcame it. As a result, students gained a better understanding of the level of risk associated with DCIS. This awareness could lead participants to take better care of themselves and can also advise their friends and family.

3.4. Importance of Yoga:
The relevance and importance of Yoga in life was our next item planned to be discussed. A student is constantly on his/her toes, balancing studies, and social life. S/He must keep up with the fast-paced world around him/her. A day off would undoubtedly result in a significant amount of work, including studies and assignments. It is also difficult to carve out time to finish pending tasks in a heavy workload. Our session was intended to teach students the importance of practicing yoga at a young age. We highlighted a few yoga benefits that may assist them in maintaining a healthy lifestyle which is - Yoga can help you maintain healthy blood circulation. As a result, it aids in the transport of oxygen and nutrients throughout your body. Blood circulation is also beneficial to the health of your organs and makes your skin glow. By doing it daily, facilitates the participants, individuals, concentrate & focus on their postures and breathing, as well as the subject at hand. So,

they gradually ignore their stress. Yoga's Importance in a student's life could be a game-changer. It is difficult for a student to remain motivated despite the peaks and troughs in the outcome. Yoga is the union of the body's physical, emotional, and spiritual aspects. Yoga is bound to have a significant impact on a student's health and academics if he practices it regularly.

These simple yoga postures and mild exercises also help fight depression as it releases all the negative energy from the body. It supports them in evading the stresses of modern life. Regular practice of yoga maintains a better and deeper sleep which would benefit by making one less stressed and tired.

When a student's concentration is higher, he or she can finish a task faster comparatively. Another benefit of yoga in the life of a student is that it promotes self-determination and motivation. We presented a video - 'Monday Motivation' of a well-known actor who is very much dedicated to her yoga practice – Ms. Shilpa Shetty. This enthused student's interest in yoga and stimulated their desire to practice it for better health and posture. Another interesting fact that drew students to Yoga is that it aids in the improvement of memory function in children, with the direct benefit of improved academic performance.

3.5. Significance of Nutrition:
Students can learn more effectively when they are well-fed and adhere to eating healthy food could result in getting higher grades, improved memory & alertness, and faster information processing. Because our main goal is to guide teenagers in all aspects of their lives, we cannot avoid discussing nutrition. Many nutritionists use the phrase "eat the rainbow" to remind people to eat more fruits and vegetables in their diet. We presumed that it is possible to talk to students, help them take the necessary steps to ensure they maintain healthy eating habits. If we communicate to students on the nutritional values of the commonly available fruits & vegetables, how they encompass micronutrients and vitamins or other trace elements needed, it was assumed that they would keep in mind that the value they could get all the nutrients they could access through their diet. The importance of right cooking was shared and the fact that some foods prepared are overlooked solely due to a lack of knowledge. Students were made to understand that no one wants to be sick or be suffering because of a poorly managed diet.

We, for sure anticipated that if we could impart them about the importance of each food item, they will be able to create vegetable combinations that are both tasty and healthy. Some people refuse to eat certain foods because they are unpleasant to them. However, if they were aware of the nutrients in it, they might consider eating it or combining it with other foods to ensure that they do not miss out on those essential nutrients in their diet. We suggested some foods which help them to target definite functions. For example, foods high in lecithin, such as peanuts, soybeans, and wheat gram can help with memory. Potassium-rich fruits involve bananas, peaches, avocados, and melons, which boost energy and brain function. The authentic sources of information were also shared, to keep it factual.

Every student desire to excel in their academics, eventually, they would or seldom avoid eating fruits and vegetables, which in turn help them improve their memory and concentration. A balanced diet aids them in maintaining their health. When broken down into its most basic components, nutrition may become less bewildering. Foods are divided into five distinct food groups, each with its function. Understanding how these food groups affect your body can assist a person in deciding what to eat and how much too! As a result, students could hopefully become more aware of the significance of nutrition. They may gradually stay away from junk foods since they would by then have understood that when properly managed and attuned to their new eating habits, they can obtain delicious and healthy food.

3.6. Programming in Python:
Have talked about the above sessions and reaching that point of time our engagements with students with these online sessions, we presumed that the participating students felt jaded with continuous sessions on awareness. Owing to this, as already premeditated, we scheduled sessions to involve and engage students in computer programming for the first half of the day, followed by an awareness session on a different subject each day. We took the basics step of teaching programming to students because it would be simpler for them in their subsequent classes since we knew if come to know how to program at a young age with prior knowledge of their mathematics, it would hugely benefit them. It was expected that their current coding knowledge would positively help them gain confidence and enthusiasm for it in the years to follow. For a beginner on the path to becoming a programmer, selecting a beginner-friendly programming language is a crucial decision, we knew very well from our own past experiences. Nonetheless, if a student wishes to choose a complex language when just getting started in programming, he or she can quickly lose interest in the field.

From our knowledge, we understood that in comparison to other languages, Python is simple to code and read. Python syntax can be learned in a short amount of time by everyone, if interested. Python programming is like the English language, as could promote and encourage the learner to concentrate on the outcome. Technically, there is no need to recall the architecture or memory management, which makes python an excellent choice for students. Thus, we went through the fundamentals, which included data types, loops, strings, and functions. This made the students excited because it was their first experience of coding.

To first start learning the basics of coding, one does not even need a computer, because many compilers are already available online. So, we chose one of the online compilers to make students run their program on their own, from their mobile phones. The ability to solve problems is a skill that is beneficial in all aspects of life. We all want to improve our problem-solving skills so that we can resolve any challenges we encounter. Learning to code allows students to develop this form of ability while still young, which will benefit them later in life. This is one of the most important benefits of learning to code.

We are aware that students learn and develop their knowledge by experimenting. They may be innovative, and they are encouraged to provide it. Creativity is both a part of the process and a product. Coding also enables students to imagine abstract ideas, allows them to apply math to real-life scenarios, and makes math enjoyable and imaginative. Students who learn to code have a better understanding of how to organize and structure their thoughts, as per our understanding. All these demonstrations fascinated student's learning to code, which was reflected in their active involvement throughout the session.

IV. RESULTS AND OBSERVATIONS:

We were able to carry out the program as planned and stood up to our expectations. Our curriculum left a lasting impression on both students and parents. They were excited about the program and actively participated in every session. The students were enthusiastic about learning new things. They felt enlightened and entertained as a combined result of our activities. Brainstorming helped in addressing unspoken concerns that some participants may have about how this would fit into their daily lives. By asking them to consider what obstacles they anticipate when attempting to implement them, they were taken out of context and forced to consider various scenarios, increasing their ability to look at a situation from various perspectives. Students appreciated our perseverance and hard work in making this program a success. Aside from academics and life skills, health care, the knowledge gained on social issues they were grateful for the opportunity to learn the basics of one programming language. Furthermore, there were suggestions that they wanted more programs like these.

4.1. Experience:

The basic objectives should be thoroughly organized in advance to ensure a smooth and continuous learning process. After deciding on the objectives and considering the logistics, the next step was to plan the program's content and figured out what we wanted to do to guide participants through their experience. The plan was designed in such a way that the online participating audience would learn in small sequential steps. Each step was built on demonstrating everything and having the audience practice, involve or analyze it. We did our homework so that we would be confident in dealing with most questions and issues that might arise. In general, our understanding was the audience could be extremely quiet or extremely volatile, extremely apathetic, or extremely responsive, or somewhere in between. It is entirely up to us to engage them in activities and deliver our content in such a way that our audience becomes interactive. Before addressing a difficult or sensitive topic, it is important to get the audience comfortable. One approach was to tell a good story that was loosely related to the topic. So, we congregated some videos to help the audience understand how important it was to discuss the topic and to encourage them to voluntarily come forward and speak about sensitive issues. Spent most of our time developing enjoyable and engaging exercises for both awareness and programming sessions. Tests were given in between the sessions to see how much they had learned from our sessions and errors were corrected and questions were answered, allowing them to discover the benefits and drawbacks of the new skills they were learning.

We learned a lot of new things and interacted with a lot of teens as a result of this. We had a great time providing our expertise and experience to them and were thrilled to be able to educate students on topics they were previously unaware of. Learned and explored our experience on this group project, which includes a variety of elements such as analyzing articles, research papers, and many more. This initiative has given us a new perspective on interacting with new people and exchanging ideas with them, which has allowed us to effectively develop our skills. Their enthusiasm for learning and willingness to ask open-ended questions about

everything made the sessions more interesting. Finally, our program has been deemed a success after receiving such positive feedback from both students and parents.

4.2. Scope For Future:

For our program, we created a Gmail account and are also available on WhatsApp, so we could respond to their questions at any time. It was assured that at least one of us would be available to answer their concerns and questions regardless of the subject, in the days and years to come. Also, provide them with additional tools to use as a guide in the future when issuing the certificates. Willing to take extra sessions on a student's requested subject if they need it. As committed, we are keeping them up to date on new opportunities that they can take advantage of. Staying in touch with the participants regularly, inquiring about their plans as many of them are approaching the end of their tenth grade. We regularly share health and nutrition-related content on our social media platforms. Also posted the requisite instructions for dealing with the pandemic, the need to be conscious about good hygiene. Suggested a few activities and courses keep them occupied and active in their spare time. We are sure that future improved efforts by us and many youths like us could bring about more significant positive results and create better awareness among the teenagers.

V. CONCLUSION:

Honestly as a youth many within us had faced similar challenges, based on our observations, we compassionately attempted to make certain things simpler for today's teenagers within our limitations. We had made our agenda for adolescents and suggested tips for their careers and health observatories. This awareness program taught our adolescent participants about programming fundamentals and aided them in a variety of ways, such as career planning and, healthy living & personal hygiene. Participated students were drawn into discussions regarding livable futures based on health and technical frameworks that could respond to extremes and evolving phases. We let them break free from the bubble and explore subjects that are rarely discussed. They were motivated to practice yoga daily and to adopt healthy dietary habits. To ensure that everybody was on the same page, we held some practice sessions and a final exam.

ACKNOWLEDGMENT

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