Should Instagram be Used to Teach Teens outside the Classroom on Environmental Behaviors

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Abstract

A survey on students K-12 found that recycling isn't a topic taught in classrooms. The importance of creating recycling habits in young teens is meant to help with the environmental issues we face today. The purpose of this study is to conduct an informal approach to teach teens ages 12 through 16 about recycling with the use of Instagram. Research suggests that teachers in the medical field have been using Instagram to reinforce practices with students. Seeing that this method has been successful in the medical field (University level students), the researcher wants to find if the platform chosen (Instagram) is the better option to create the learning program.

Literature

The impact of plastics in our environment is a stressful matter and changes in our culture as a society need to be created Schmaltz et al., (2020) informs:

> "Since its popularization in the 1950s, plastic use has skyrocketed due to its benefits to societal health, safety, and energy (Andrady & Neal, 2009). However, due to plastics' longevity and resistance to decomposition (Andrady, 2015), their widespread use has led to an epidemic of mismanaged waste" (p. 1).

Plastic is widely used on our planet today, so much so that it has become part of our daily routines. This plastic culture we have created for generations is now one of our biggest problems. Plastics (Macroplastics and Microplastics) can now be found in our soil, water, and air. The pollution of plastic in our ecosystem from the smallest organisms is creating an epidemic. Microplastics are not only affecting our waters but its taking an effect on marine life, Chatterjee and Sharma state:

> "These tiny plastic fragments are persistent in the marine ecosystem and due to their micron sized particle nature, these fragments are mistaken as food and ingested by a

> range of marine biota which includes corals, phytoplanktons, zooplanktons, sea urchins, lobsters, fish etc. and ultimately get transferred to higher tropic level." (p. 56).

Ultimately Microplastics are infesting the ecosystem like a domino effect that will take over our resources. Chatterjee and Sharma (2019) state "The problem of microplastics has been ignored for a long time and this threat has been recognized only recently. At present, drinking water, table salt and other daily used food items are contaminated with microplastics".

Not only have microplastics impacted our oceans and marine life, it has recently been found that it has polluted our atmosphere. Falsini et al. (2022) reports "currently, airborne micro-nanoplastics (MNPs) have growingly raised attention and concern (Dris et al., 2017), due to their increasing presence in the atmosphere, and their capability to undertake long-range transport.". If as a society the urgency to start creating a plan to stop this plastic epidemic has not reached us, it should start now more than ever. According to Falsini et al. (2022) a study conducted on plants showed that those who were exposed to plastic polluted air in a controlled environment inhibited growth by half, and showed alterations in nutrient composition. The affects plastics have on our ecosystem includes effects that are harmful to animals and humans.

Due to the urgency of the nature the planet is found in today, younger generations not only need to be taught how to recycle correctly but also live zero waste lifestyles. However a survey conducted by the researcher found that schools do not teach pro-environmental lifestyles and most schools don't carry recycle bins unless the teacher puts in the effort in bringing one on their own Bulut (2020) states:

> "Education programs to raise awareness about zero waste and recycling is necessary for many communities. Within this context, it has become an essential

> responsibility for every society to alter their consumption habits and develop awareness about the implications for every material that is consumed"(p. 354).

We must keep haste and start developing plans to create a generation that is aware of how plastic affects our ecosystem. In order to make a difference on our efforts we must start exposing the younger generations to these topics. Bulut (2020) suggests that this effort should begin in pre-school when children are more impressionable, and creating games to encourage learners about the topic would help with motivation. Bulut (2020) also mentions that in order to leave a higher impression on children about recycling and zero waste living, teachers should teach about the subject through educational play methods. Even though it is agreed that students should be learning about eco-friendly life styles in schools, the matter of fact is that it is not.

However the lack of concern in teens is not there, Prestin and Pearce, (2010) stated "Junior high school and high school aged participants repeatedly expressed a positive attitude toward recycling, coupled with a sense of apprehension about the effect of non-biodegradable objects on the environment and the use of non-renewable resources." Not only was a positive attitude experienced towards the topic but Prestin and Pearce (2010) also mention that junior high and high school learners also expressed concern over the long term effects that plastic has on the environment as well as wishing there were more opportunities where they could learn about the issues.

As it seems learners in junior high and high school levels are more than willing to learn about the effects that plastic waste has on our environment, research suggests they exhibit concern for the well-being of the planet. However it also suggests that schools are not teaching this topic in classrooms. The researcher will than take the informal approach through the use of social media (Instagram) to facilitate knowledge to teens ages 13 through 17. Using Instagram

features to teach seems to be a valuable tool that is not being taken advantage of. A study conducted in *"Instagram for Peer Teaching: Opportunity and Challenge"* by Gulati et al. (2020) for the medical field suggests that this form of teaching can be very beneficial for the learner. Instructors in the medical field created interaction with their students through Instagram to create an informal approach for learning. Gulati et al. (2020) states "Students commented that the Instagram page was 'helpful during this time period', 'helped to consolidate [their] learning', and the 'question bank was extremely relevant and thought-provoking.'" The article identifies the positives in using Instagram in an informal setting. Even though a positive outlook was seen in using Instagram features in the informal approach, when it came to using Instagram in the formal Sakr (2020) found that:

> "The main findings .. were that while some students experienced the project – and particularly, the use of Instagram, as a traversal of the divide between academic learning and personal life, others were unfamiliar with Instagram and experienced it as 'one more thing to learn'." (p. 868).

According to *"Instagram for Peer Teaching: Opportunity and Challenge"* by Gulati et al. (2020) and *"'It just opened my eyes a bit more': student engagement with Instagram to develop understanding of complex concepts"* by Sakr, M. (2020) the feedback when using Instagram in the informal approach was more successful than that of the formal setting. Therefore in order to address the topic and teach learners about eco-friendly lifestyles, the researcher had chosen the Instagram platform. However another problem arose, before a learning program could be implemented. The researcher questioned whether Instagram would be the ideal choice for teens ages 13-17. Though the platform worked for university students who are adults, and receive

information online differently, that doesn't mean that the same results could be used with teens. Therefore data on how teens use social media platforms need to be gathered.

Method

In order to conduct the study and see if using the Instagram platform to teach in an informal setting will have an impact on learners ages 13-17 about recycling and zero waste lifestyles; qualitative data was gathered. This was conducted to see If the platform picked is the best way to go. Many questions arouse while the researcher looked at the literature review. Finding methods to use Instagram to teach outside the classroom were positive, however it was overlooked weather this platform should be used to create a learning program for teens. What platforms are used more by teens ages 13-17, what is the amount of time spent on them, and what do teens spend most of their time doing online?

How do teens today use their mobile device? According to Schaeffer (2019) it is indicated that 95% of all teens in the U.S. have access to mobile devices, and 83% of teens claimed that they will use it to learn new things. 72% of teens state that often the first thing they do when they get up is check for notifications. 56% feel either anxious and or lonely when their without their phone.

The second question the researcher found themselves asking was, where do teens spend the majority of the time when on the web? Vogles and Gelles-Watnick (2023) found that 95% teens ages 13 to 17 most commonly used platform is YouTube. Tik-Tok being at 67%, Instagram at 62%, Snapchat at 59%, Facebook 32%, twitter 23%, twitch 20%, whats-app 17%, reddit 14% and tumblr at 5%. It was also found that the majority of teens that did use Tik-Tok were female. When it came to YouTube, 97% of male teens reported using this platform vs female teens at 92%. It was discovered that certain social media platforms varied depending on gender. The data

also showed that the top two platforms used by teens on the daily were YouTube at 77%, and Tik-Tok at 58%. Only half of teens used Instagram (51%) or Snapchat(50%) on the daily.

Results

The Researcher found that only about 50% of all teens use Instagram on a daily basis. Finding that 77% of teens check YouTube on daily, and spend the majority of their time on this platform, it seems that the researcher should revise on going forward with Instagram for the learning program. The researcher should also focus on what is viewed by teen on this platform.

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