REPORT ON CREATIVE THINKERS INNOVATION CAMP 2019 held from August, 12th to August ^{23rd}, 2019

INTRODUCTION

The Creative Thinkers innovation camp was designed out of the need to introduce students to the essential tools of innovation. There is the belief that too much emphasis is being placed on rote learning and coming up with right answers; instead of children participating in an environment which encourages thoughtful questions and creative thinking. In many societies, including Barbados, it is widely believed that creativity comes from natural ability, a personality trait or something that is part of a person's genetics. Consequently, activities to promote creativity often do not receive the support necessary to encourage its wide spread application.

Children of all ages are creative and it was thought that this innovation camp could provide an opportunity for the Campers to develop and practice the skill of innovation by observing, discovering, interpreting, imagining and creating. With the resulting acquired knowledge they can use and apply these practical tools to becoming innovators and entrepreneurs.

RATIONAL FOR CAMP

- o To develop the essential ingredients associated with Creative Thinkers and Innovators.
- To provide a platform and to create an environment to enhance and nurture the creative ability of young persons.
- o To encourage Campers to cultivate the art of being unique together.
- To generate awareness and educate young students on the culture of innovation
- To stimulate the development of solution seekers and problem solvers by team work using various skill sets and creative abilities.
- To foster interdisciplinary relationships

PLANNING OF CAMP

The camp catered to thirty male and female students, between the ages of 13 to 19 years of age. It was held at St. Stephen's Primary School for two weeks starting Monday August 12th and ending Friday August 23rd, 2019. Application to the program was facilitated by an online portal and advertising of the programme was facilitated via the Government Information Service, social media via Facebook, What's app. and by use of a Flyer (attached to document).

In an effort to encourage student participation, a number of teachers, who participated in a previous innovation workshop held for teachers, were contacted via e-mail.

A total of twenty-nine (29) students attended the program.

The camp was facilitated by Mr. Norman Mayers a Creative Director, Entrepreneur, Designer, Writer and Teacher. He is a co-founder of REDMANGO, a creative studio based in Hannover, Germany and is the founder of the Creative Thinkers Program at the Caribbean Dyslexia Centre. He has received several international honors for his contributions as an Innovator including being named "Creative Director of the year" for Latin America and the Caribbean, by the McCann World Group.



Figure 1: Photo of 'Creative Thinkers' Campers under the guidance of facilitator and Creative Director Mr. Norman Mayers

OPERATION OF CAMP

Introduction to Creative thinking and Practice creativity with the class

A number of techniques were employed to allow the students to use the art of creative thinking. Including developing a new ending to a story by changing the characters or situation and ask the last person to conclude it.

In another scenario students were also provided with objects and asked to find 50 new ways of using each object.

They were encouraged to use applied imagination to their responses and the campers came up with various free flowing, unusual ideas. The ideas were provided without any criticism or being judgmental.

Students were encouraged to create drawings of their ideas, act out ideas (role playing) and were encouraged to come up with new ways of doing things by use of new skills and concepts.





Figure 2: Campers making sketches of Innovation

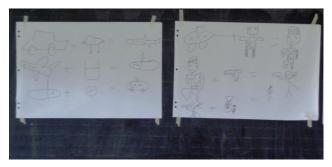


Figure 3: Cumulative results of Campers Brainstorming activities

Taught how to develop unique and unusual innovative ideas and elaborate on them.

Use of various techniques to develop creative ideas. Students were asked to create an invention based on the statement "One Man's Trash is another Man's Treasure". It would fall under 3 sub titles Solid, Liquid or Gaseous waste and would require repurposing the use of everyday items that were discarded.

They used their critical thinking skills to narrow down the possible solutions by asking questions such as: is the idea really new? is it similar to something else? will people really use it? is it practical? can it be made easily? is it safe? will it cost too much to make or use?

Naming the new innovation and communicating ideas with/to class mates.

Students were encouraged to find a unique name for their innovative product. They were named after the components of the innovation; Liquid Waste Destroyers, Sticks and Stones and Neon Lit. The steps to complete their innovation were listed in a chronological order. However, time did not allow for the development of a prototype by all the groups. The students were encouraged to actively participate in class, to work in teams and to use all techniques taught to come up with unusual ideas. They had fun, a memorable experience and made lasting friendships. They have formed a What's app group to stay in contact with each other.

TALKS WITH INNOVATORS

A distinguished scientist and innovator from industry Ms. Nicolette Campbell shared her experience and passion about her work. Her company is involved in Solid Waste management where microorganisms are used to break down solids is sewage and the resulting fluid is treated and can be used for irrigation, flushing toilets etc.



Figure 4: Photo of some Campers with Ms. Nicolette Campbell a professional industrial environmentalist of S.I.R Water Management Ltd. who was invited to give a presentation to the campers.

An attempt was made to connect with students from Vasyl' Stus Donetsk National University in the Ukraine who are working on creative ways of using recyclable materials. Poor internet connection on the planned date resulted in its cancelation. Further timing became a challenge for the students as the Ukraine is 7 hours ahead of Barbados and the innovation camp program was completed within 2 weeks. Each institution therefore created a video with their students and shared it with each other. However, the students were still able to communicate with the lecturer Ms. Mariia Yukova via Zoom, after the end of the Camp.



The Vasyl' Stus Donetsk National University and the MIST Innovation Summer Camp in Barbados have come together to create the WIC project, (Waste Innovation Collaboration) which aims to develop revolutionary ideas that address the urgent need for sustainable waste management solutions in the Ukraine.

Figure 5: Flyer displaying information on collaboration between Ukrainian and Barbadian students.

Work Challenges:

They were challenges with internet connectivity and so were unable to connect with an innovative instructor from Ukraine on planned date.

Maintenance work was being undertaken at the school and sometimes the noise was a bit disruptive.

Time did not allow for the development of the prototypes for some groups but the most ambitious team did complete their design at home.

Summary/Way Forward

Human creativity is a skill that can be learned or enhanced and there are strategies that can be executed to promote its use.

The two week programme was a successful one and it has clearly demonstrated how students can be encouraged to use their imagination in unique ways, be shown how to communicate their ideas effectively, to collaborate with their peers as a team, to connect with other international young persons, doing innovative like activities and how to make good use of their new ideas.

A suggestion is being made to have persons enter the program from 12 years on instead of thirteen as was advertised for this camp.

The camp should be run for 3 weeks instead of two weeks, so Campers can develop the prototype and introduce the business side of the innovation process, leading to entrepreneurship.

The facilitator is interested in continuing with the Campers and have approached the faculty of Science and Technology, University of the West Indies to continue working with the students.

