

CAT 4 RESOURCE DEVELOPMENT

Group 4-063

Project CoroNOvirus

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Abstract

Project CoroNOvirus is a project that aims to educate students aged 13-16 on what the Coronavirus is and the existing types of it. We also want to raise awareness on the severity upon contracting the Coronavirus and what precautions to take to prevent oneself from being infected. As we have both online and offline resources, students are able to easily access important information on their phones or tablets, making it easy and convenient to use our resource package. At the same time, students can feel free to print out our resources to use it as an offline guide anytime they want, making our resources a one-stop package that is constantly within reach.

1 Introduction

1.1 Rationale

To people our age, COVID-19 is likely our first experience with a coronavirus, and it is also the first worldwide pandemic causing such extensive damage to our daily lives and much more. Furthermore, with the strong virtual connection we have with the world constantly, the youth in Singapore might be easily influenced by misconceptions online. Thus, many people will take COVID-19 as a trivial matter, as they are unaware of the possible implications of their actions. Therefore, Project CoroNOvirus aims to develop a resource package that can serve as an user-oriented medium that students can turn to to educate themselves on both the precautions and implications of COVID-19, well-suited for our target audience.

1.2 Objectives

1. Educating students on what the Coronavirus is, and what types of them there are.
2. Educating students on the severity upon contracting the Coronavirus.
3. Teaching students how to identify the symptoms of the Coronavirus, as well as the necessary precautions to take at all times.

1.3 Target Audience

Our target audience are students aged 13-16.

For our target audience, many of them are unaware of all the repercussions of coronaviruses, as some of us are under false misconceptions, a serious problem we

hope to solve with our project.

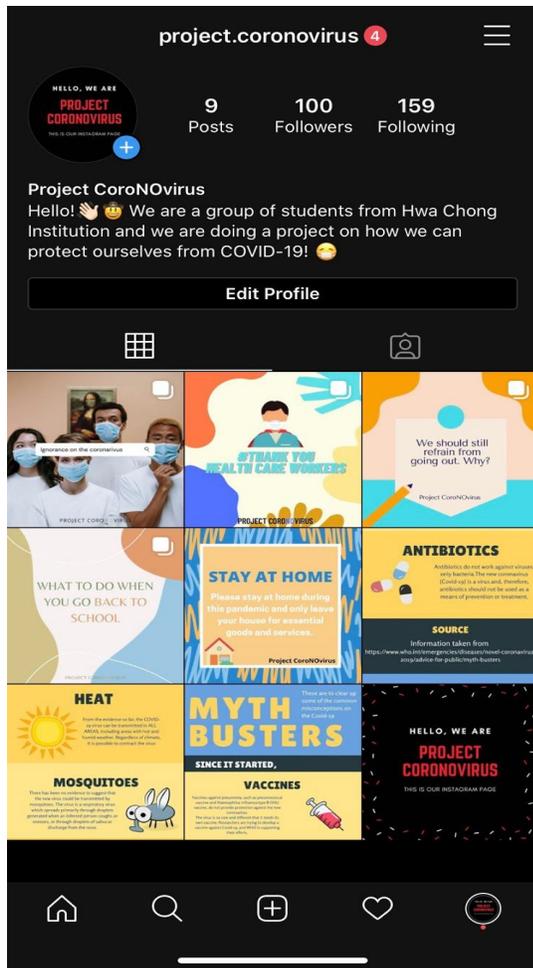
We chose this target audience as we are part of this group of people as well, which makes it easier for us to relate to their struggles, and makes it easier to communicate with them clearly through a common ground, such as social media, to get our message across.

1.4 Resources

Our resource package includes numerous resources, both online platforms as well as offline resources, to cater to all the different needs of our target audience.

1. Our social media account. On Instagram, we post infographics, reminders, tips and updates on the coronavirus. We feel that social media is the best platform to spread awareness to as many people as possible.

Link to the page: <https://www.instagram.com/project.coronavirus/>



2. Our quizzes and forms. These test our target audience on their knowledge about coronaviruses, through a fun and engaging way. These also help to verify the utmost importance of our project. The links for the quizzes are on the google site.
3. Our website. A website is a good platform for students to have access to all of our resources. Simply with a link, they can go onto our website and access a compilation of all the important information, well organised and prepared by us. Link to the website:

<https://sites.google.com/student.hci.edu.sg/projectcoronavirus/home?authuser=0>



4. Pamphlets. This is an offline alternative for our resources. As it will be difficult to hand out pamphlets to everyone who wants them, we will make it available in separate documents on our website, such that anyone can go on the website and print it out for themselves.

Links to the Pamphlets:

[Mythbusters](#)

[How to wear a mask](#)

[Effectiveness of Masks](#)

[8 steps to wash your hands](#)

Rating different masks to wear during this pandemic

PROJECT CORONAVIRUS



1 SURGICAL MASKS



- ★ Cheap and easily accessible
- ★ Made of porous material and provides a looser fit
- ★ Able to block out some airborne particles and large droplets

2 CLOTH MASKS



- ★ Can be stuffy as cloth is a less porous material
- ★ Easily made and customisable using homemade materials
- ★ Less able to block out airborne particles and large droplets

3 N95 MASKS



- ★ Blocks out 95% of airborne particles which offers better protection
- ★ Can be very stuffy to wear, so it can pose a health risk to people suffering from respiratory problems

4 FACE SHIELD



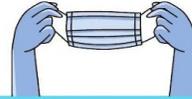
- ★ It is ineffective without a face mask as it does not filter out airborne particles or droplets
- ★ It provides extra protection as it minimises contact with one's face

STAY SAFE 

BY PROJECT CORONAVIRUS

How to wear a mask properly

HERE ARE 6 STEPS TO WEAR YOUR MASK CORRECTLY AMIDST THIS PANDEMIC



1.) SANITIZE YOUR HANDS

Wash your hands with soap and water, or with hand sanitizer before touching the mask



2.) CHECK YOUR MASK

Ensure that there are no holes or tears on either side of the mask before wearing it



3.) ORIENTATION OF MASK

First, determine which side of the mask is the top. The side of the mask that has a stiff bendable edge is the top and is meant to mold to the shape of your nose



Secondly, determine which side of the mask is the front. The colored side of the mask is usually the front and should face away from you, while the white side touches your face

4.) PUTTING ON THE MASK

Face Mask with Ear loops: Hold the mask by the ear loops. Place a loop around each ear.

Face Mask with Ties: Bring the mask to your nose level and place the ties over the crown of your head and secure with a bow.

Face Mask with Bands: Hold the mask in your hand with the nose piece or top of the mask at fingertips, allowing the headbands to hang freely below hands. Bring the mask to your nose level and pull the top strap over your head so that it rests over the crown of your head. Pull the bottom strap over your head so that it rests at the nape of your neck.



5.) ADJUSTING THE MASK

Mold or pinch the stiff edge to the shape of your nose.
Pull the bottom of the mask over your mouth and chin.

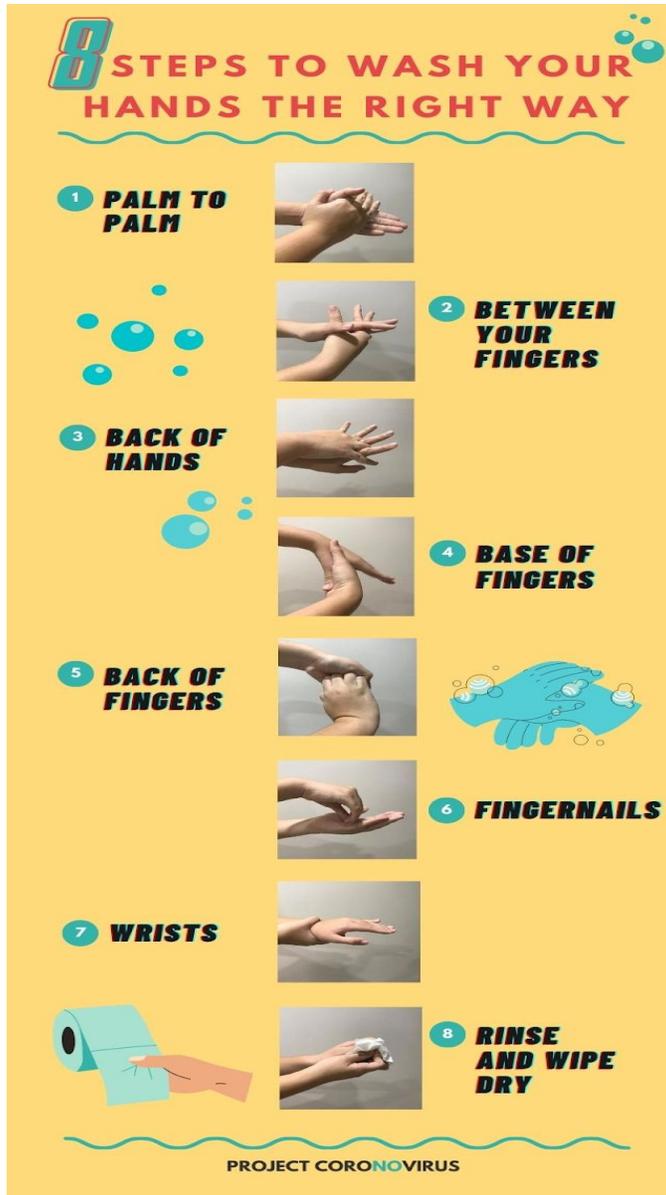


6.) DISPOSING THE MASK

Remove the mask from behind and put it into a plastic bag before disposing it in a closed bin. Wash hands with alcohol based hand rub or soap and water.



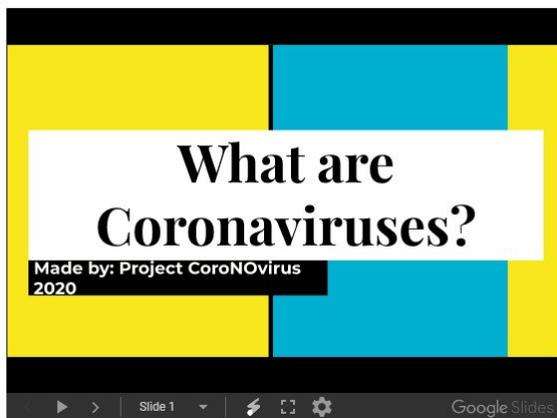
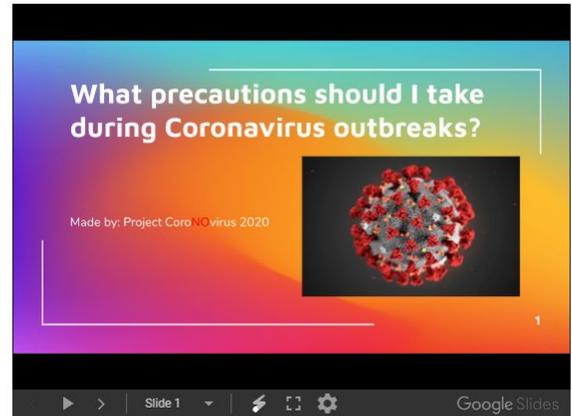
Information taken from <https://www.sfdcdp.org/communicable-disease/healthy-habits/how-to-put-on-and-remove-a-face-mask/>



5. Lesson Packages. Besides our resources mentioned above, we have also created 3 lesson packages in the form of Google Slides. These slides can be utilised by teachers to educate students more about the Coronaviruses, and students can also refer to these slides during their free time. It can be used in the future as well, especially with the possibility of new coronaviruses emerging. Links to the slides:

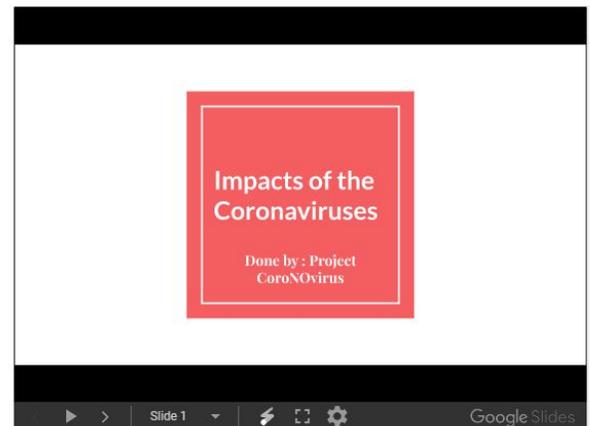
- [What are Coronaviruses?](#)
- [Coronavirus precautions](#)
- [Impacts of the Coronaviruses](#)

This lesson package educates students on 4 ways we can protect ourselves during this pandemic, and future ones where the virus is easily transmittable.



This set of slides describe what the virus is, its symptoms as well as its impacts on the world.

This set of slides talks about how the corona virus has impacted the world and on a personal level.



2 Review

To further prove that our project work is important, we have analysed 2 articles online. The first article came from an article published by Gavi, The Vaccine Alliance:

There's a reason why governments and public health experts worldwide have been telling us to wash our hands – it really works. Good hand hygiene could reduce [cases of respiratory diseases by 20%, and diarrhoea by 30%](#). That means it has potential to have a huge impact on the spread of the coronavirus.

This shows that having good hand hygiene is vital in keeping ourselves safe during these times and that our project work is required to educate students how to do so.

Another article published by the Straits Times said this:

While other measures - such as adhering to social distancing recommendations and staying home if one feels ill - are important, Mr Masagos said that it was also important for people to practise good cleanliness habits.

"Public hygiene, personal hygiene is our first defence. And it's not just our defence against Covid-19 today, but against other breakouts that we cannot foresee in future," he said.

This shows that personal hygiene can indeed protect us and that we must practise it. He noted that having good hygiene can protect us from other breakouts in the future, which shows that the knowledge that we impart through the project will be useful in other outbreaks, thus proving our importance.

3 Methodology

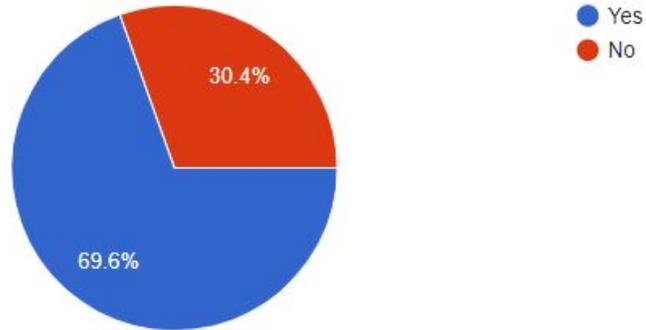
3.1 Needs analysis

A needs analysis was needed to verify the relevance of our project work. We surveyed students from our target audience using google forms and we had 115 respondents. We asked various questions regarding the Coronavirus situation and if they would like to know more. Indeed, most of the respondents gave results that proved the relevance of our project, and that they are interested in our project.

3.2 Survey Results

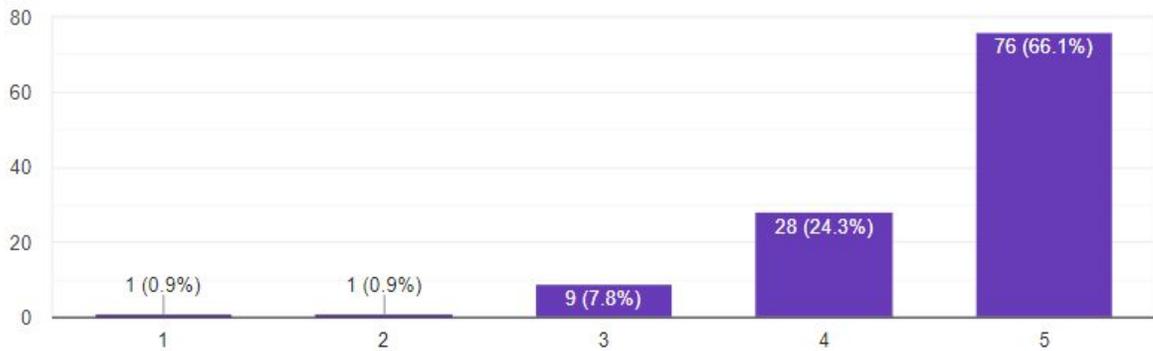
Do you think that the current COVID-2019 situation in Singapore is very dangerous?

115 responses



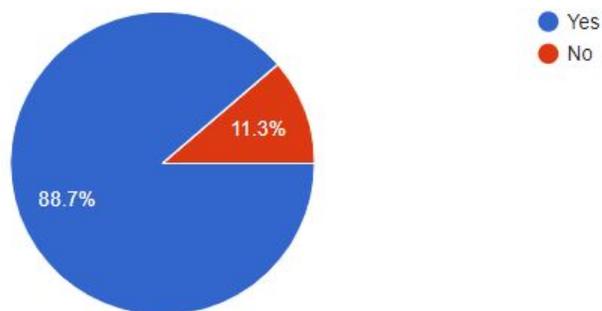
How important do you think it is to protect ourselves from the virus?

115 responses



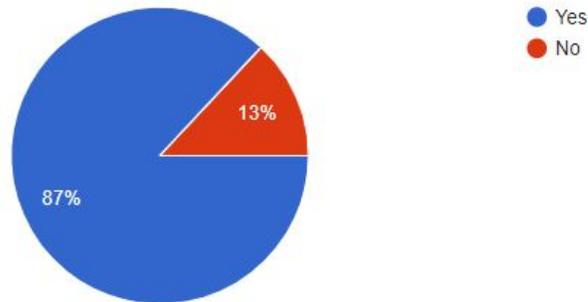
Would you be interested to know more about the Coronaviruses?

115 responses



Do you think that knowing more about these Coronaviruses, and what precautions to take will help you in your daily life?

115 responses



3.3 Development of resources

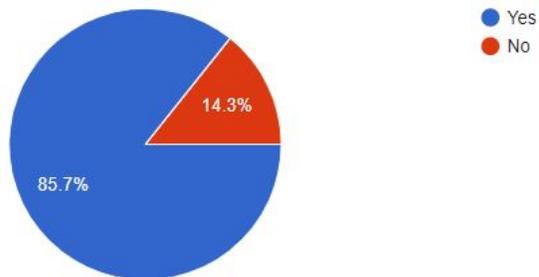
We have taken information from certified websites such as the WHO and MOH and concise them into easy-to-read resources. This will allow students to better comprehend as sometimes information online may be too lengthy and complicated. Taking information from certified websites allows us to be as correct as possible and not take any false information. We have also taken feedback from the pilot tests conducted and project evaluation to improve on our resources.

3.4 Pilot Testing

We have made a Google form to ask respondents about the effectiveness of our infographics. We have also included a question to ask them to give suggestions on how our infographic can be done better, such that we are able to fine-tune them. Generally, the feedback was positive which meant that most of them found it helpful in learning about the different ways of protecting themselves. The results are shown below.

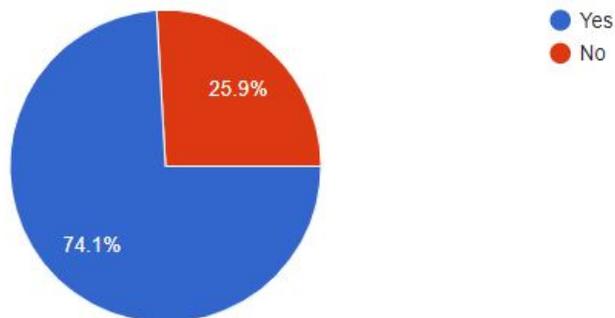
Do you think that this info graphic is able to educate students on how to wear a mask?

112 responses



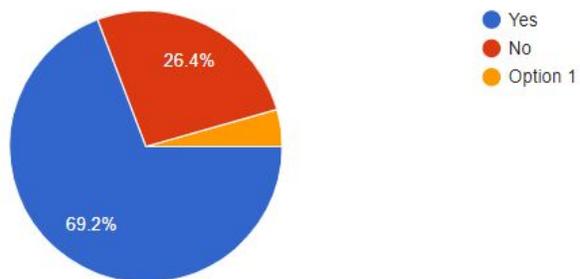
Does this infographic clear some misconception of the coronavirus?

112 responses



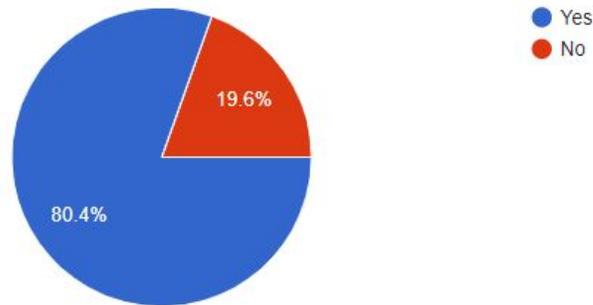
How do you think this infographic is able to tell you how to wash your hands properly without much words?

91 responses



Do you think that this infographic was able to allow you to understand the effectiveness of different masks in protecting ourselves?

92 responses

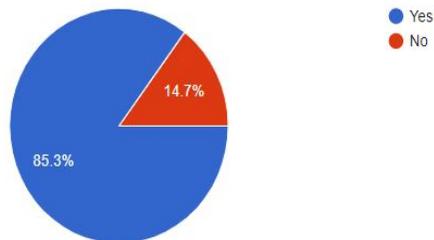


For our lesson packages, we conducted a survey and asked respondents whether they feel that our lesson packages are effective in educating them. We also asked them how we could improve on it. Similarly, we have received positive results as the majority of our respondents felt that the lesson packages were helpful. These are our results.

Have a look at this set of slides:

<https://docs.google.com/presentation/d/1k3bm6bdOZpYPwklOqLof3cbwHWHN-AajhdGQaTuK6w/edit?usp=sharing> Do you think it is effective in teaching you about what precautions are to be taken during an outbreak?

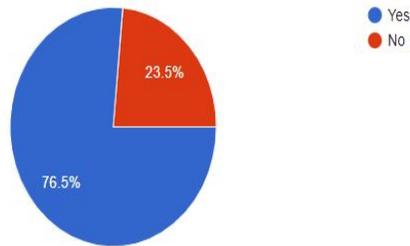
34 responses



Have a look at this set of slides:

https://docs.google.com/presentation/d/1vMKddUVzkZdo_NwyLIY5kNhDyO-cNjTYOXs9SFJsJcQ/edit?usp=sharing Do you think it is effective in teaching you more about the coronaviruses?

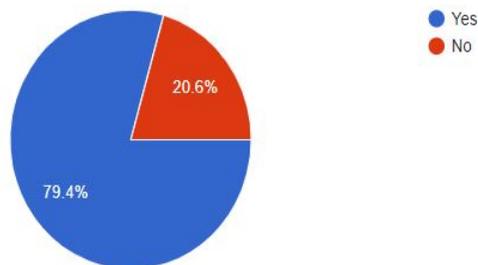
34 responses



Have a look at this set of slides:

<https://docs.google.com/presentation/d/1mOXO6BgID8uK7hHMBChqexogqYgR-A88lVEtKY8CmUY/edit?usp=sharing> Do you think it is effective in teaching you more about the impacts that coronaviruses bring about?

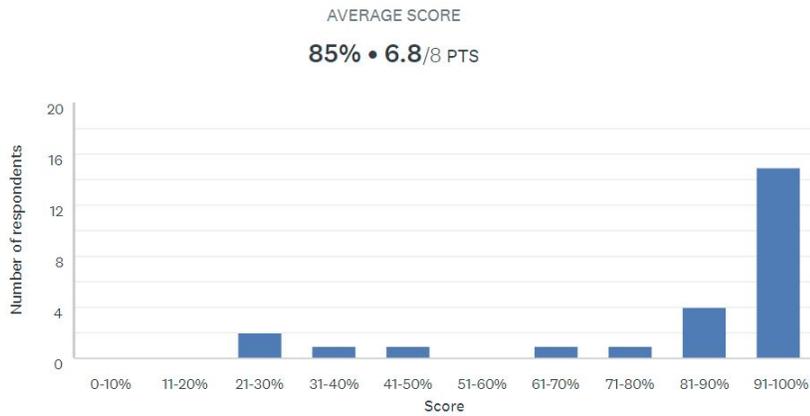
34 responses



We have also created quizzes that test students on their understanding of the Coronavirus. After reading through our lesson packages, we gave students quizzes to test their understanding. Generally, the students displayed a higher level of understanding of the Coronavirus and thus shows that our resource package is effective. These are the results of the quizzes.

This is the quiz results on 'What are Coronaviruses?'

Quiz Summary



STATISTICS

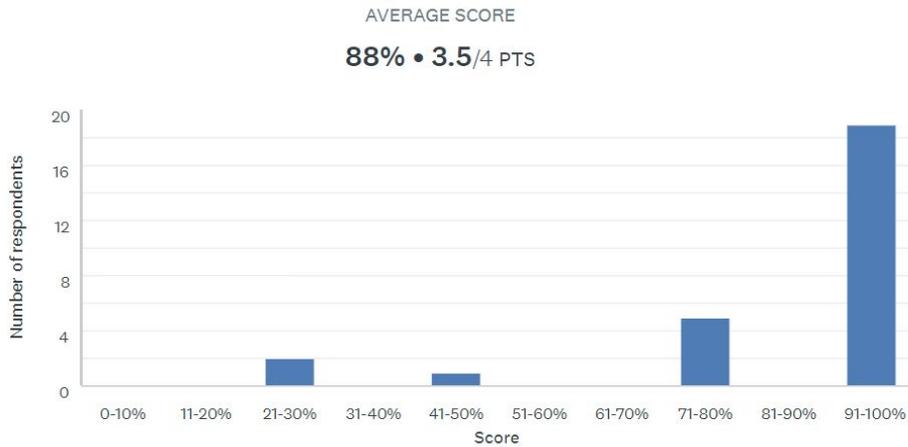
Lowest Score	Median	Highest Score
25%	100%	100%

Mean: 85%

Standard Deviation: 25%

This is the quiz results on 'Impacts of the Coronavirus'

Quiz Summary



STATISTICS

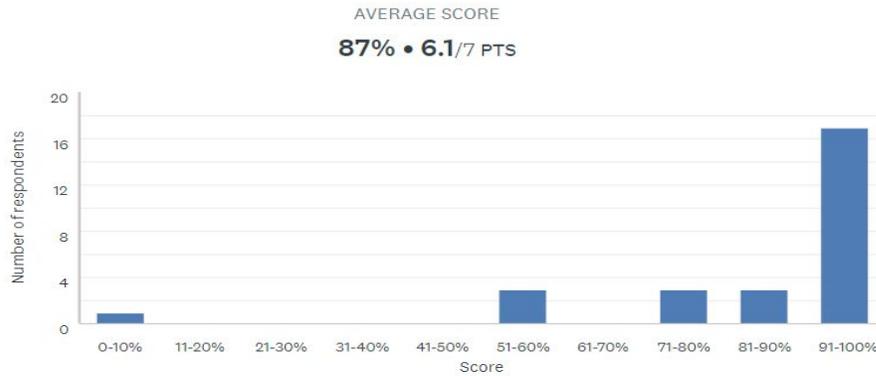
Lowest Score	Median	Highest Score
25%	100%	100%

Mean: 88%

Standard Deviation: 22%

This is the quiz result on 'Precautions to take during Coronavirus outbreaks'

Quiz Summary



STATISTICS

Lowest Score
0%

Median
100%

Highest Score
100%

Mean: 87%

Standard Deviation: 23%

4 Outcome & Discussion

After our initial pilot test, the results showed that our resources were efficacious in improving our target audience's knowledge towards coronaviruses, and we were successful in ensuring that our objectives as stated above were accomplished. At the same time, this also proved our project's effectiveness and importance especially during these trying times, as it is essential for people our age to do everything we can to prevent the further spread of the virus.

However, it is important to note the necessary changes we had to make in order to improve our resources. This includes the numerous changes we had to make with regards to the judges' comments in our first evaluation, as well as other alterations we made to our package after many discussions between ourselves, such as the decision to remove the videos we made for other resources we felt were a necessity for our project.

5 Conclusion

Project CoroNOvirus has been a challenging project work, but nonetheless a fulfilling experience. We faced many challenges this year, especially the Coronavirus outbreak hindering our project work's progress, limiting our ability to do physical pilot testing. However, we still pushed through this period and tried our best to use the current situation to our advantage. This project work has also allowed us to build up on our researching skills and knowledge on the Coronavirus. Creativity and design were crucial in coming up with our resources, as we needed them to be appealing and relatable to our target audience - a reason why our resources are better than the existing ones.

6 References

Why is washing your hands so important during this pandemic? (2020, April/May).

Retrieved August 11, 2020, from

<https://www.gavi.org/vaccineswork/why-washing-your-hands-so-important-during-pandemic>

Tan, A. (2020, March 23). Personal hygiene can help to reduce the spread of Covid-19 and flatten the epidemic curve: Experts. Retrieved July 13, 2020, from

[https://www.straitstimes.com/singapore/health/personal-hygiene-can-help-to-reduce-t](https://www.straitstimes.com/singapore/health/personal-hygiene-can-help-to-reduce-the-spread-of-covid-19-and-help-flatten-the)
[he-spread-of-covid-19-and-help-flatten-the](https://www.straitstimes.com/singapore/health/personal-hygiene-can-help-to-reduce-t)