


The logo for YES21 Competitions is located in the top left corner. It consists of a green circle containing the text "YES21" in a bold, sans-serif font, with "YES" in blue and "21" in white. Below "YES21", the word "Competitions" is written in a smaller, white, sans-serif font.

**YES21**  
Competitions

# **Young Entrepreneurs Scheme (YES) Malaysia 2021 Report**

The background of the cover features a green diagonal band across the top. Below this, there is a light green area with a hexagonal pattern. A network of white lines with colored nodes (purple, blue, yellow, green, orange, red) is overlaid on the hexagonal pattern. At the bottom, there is a row of green and teal triangles.



## Young Entrepreneurs Scheme (YES) Malaysia 2021 Report

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# Acknowledgement and Dedication

We would like to thank the YES Malaysia 2021 trainers, mentors, judges and University of Nottingham UK for their support and making this programme a success. In addition, we would like to thank the working group members, Dr. Tan Boon Chin, Dr. Revathi Rajan, Dr. Mageswari Kunasegaran, Mr. Anir Syazwan Sharbirin, Mr. Edwin Anand Raj, Dr. Georgina E. Marsh, Prof. Lau Sian Lun, the late Dr. Aini Hamid, Dr. Chantara Thevy Ratnam, Dr. Avvari Visveswara Mohan, Dr. Anita Chakrabarty, Mr. Mohamad Hakeem Satya, Lt. Col. Ts. Ir. Dr. Vikneswaran Munikanan (R) and Dr. Mohamed Yunus Yasin for their support and contribution.

We at ASTI would like to dedicate this work to Dr. Aini Hamid who passed away before the YES workshop and competition took place. Even though she was not around for the event, but her contribution towards the success of the pilot project will not be forgotten. May her soul rest in peace.



# Young Entrepreneurship Scheme (YES) 2021

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# Executive Summary

Young Entrepreneurship Scheme (YES) is a programme that was launched in Malaysia for the first time in 2021 by the Association of Science Technology and Innovation (ASTI) in collaboration with the University of Nottingham. This programme was started in the UK 25 years ago and was piloted in Malaysia in 2021. This programme mainly intends to help coach young researchers from universities within Malaysia on commercialisation and entrepreneurship. YES is focused on participants from the field of Science, Technology, Engineering, Mathematics and Medicine (STEMM). It can help develop the emerging researchers with basic business and entrepreneur skills to provide possibilities for their subject of study to enter the commercial stage.

The YES Program was introduced and promoted via many social media platforms. A question and answer session (Ask Me Anything, AMA) was initiated to provide some information on this program for participants as this was a new project in Malaysia. YES was supplemented for 2 different STREAMS; Biological Science (Plant and Biomedical) and Physical Science (Fintech and Engineering). A total of 12 teams from both public and private universities registered to participate in the programme.

YES workshop and competitions was held for 3 days, 1st December 2021 until 3rd December 2021. The programme was held from morning till evening. The first 2 days of the programme was the workshop and the 3rd day was the competition day. The workshop started with the Intellectual Property session followed by Commercialisation session on the 1st day. The second day of the workshop was on Agriculture and Biological Science, Cybersecurity and Data Privacy, and Finance session. There were breakout sessions for one-on-one mentoring for all participating teams. The 3rd day was the competition day and participants were required to present their business idea and do a business pitch. The entire programme was conducted online via Zoom Meet.

The YES Malaysia 2021 was held successfully even though it was a pilot programme. It was the first time ASTI conducted a programme of this kind. A total of 28 volunteers contributed as judges, trainers and mentors for the programme to help make the programme a success. ASTI is also proud to have the National Association of Women Entrepreneurs Malaysia (NAWEM) as its partner. NAWEM helped tremendously by providing many trainers and mentors who are entrepreneurs themselves.

We would like to thank the YES Malaysia 2021 trainers, mentors, judges and University of Nottingham UK for their support in making this programme a success.

## 1.0 Introduction and Background

Since its establishment, ASTI, the Association of Science, Technology, and Innovation, has worked to inspire our country's young people to pursue careers in science and technology. We conduct a number of programmes, such as the Science Fair for Young Children (SFYC), the Young Inventors Challenge (YIC), and the ASTI Leap Challenge (ALC), in which students design and develop new inventions and innovations. Over the years, we have had the pleasure of witnessing many amazing talents as well as a plethora of inventive and one-of-a-kind creations.

All of our projects are intended to be educational, with participants learning from the activities they complete. Thus, in the Young Inventors Challenge, for example, our goal is not to develop innovations but to develop inventors by allowing them to participate in the creative process.

ASTI has lately launched a new initiative called the ASTI-Entrepreneurs (ASTI-E) to lead the organization's efforts in the field of entrepreneurial education. The goal is to assist young inventors and innovators in developing a business strategy for their ideas. To thrive in today's fast-changing world, all young people require entrepreneurial skills. The SFYC Champions League (ages 11-12), the ESA Community Impact Initiative (ages 12-17), and the Young Entrepreneur Starz (ages 18-19) are the three programmes that was held under ASTI-E.

With the collaboration from the Young Entrepreneurs-Scheme (YES) in the UK (<http://www.yescompetitions.co.uk/>), ASTI organised a "Young Entrepreneurship Scheme" Workshop and Competition under ASTI-Entrepreneurs. The major goal of YES, which began 25 years ago in the United Kingdom, is to introduce young university researchers to the concept of commercialization and entrepreneurship.

The programme was conducted for three days and was designed to help participants acquire essential entrepreneurial skills such as financial planning, value proposition, marketing strategies, cash flow management, competitive strategic planning, and investment scheduling, among others.

The participants competed in a business plan pitching competition on the third day of the workshop, which was judged by industry leaders. The winning teams were then given prizes.

ASTI also managed to get the National Association of Women Entrepreneurs Malaysia (NAWEM) as its partner for this programme. NAWEM helped tremendously by providing many trainers and mentors who are entrepreneurs themselves for the workshop sessions.

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## 1.1 Objectives

The objectives of the workshop and competition are:

- To create an awareness among students to the business world and entrepreneurship
- To improve presentation skills and idea pitching to Potential Investors
- To introduce business concepts such as financial planning, value proposition, marketing planning etc. to students
- To facilitate coaching between successful entrepreneurs and the participants
- To give student a feel of the business and entrepreneurial world
- To recognise potential in the projects and allow it to come to fruition
- To work closely with the YES programme in the UK, to share resources and expertise, to further expand this program to the ASEAN region starting with Malaysia.

## 1.2 Target Groups

YES is a programme aimed at teaching postgraduate students, postdoctoral researchers and early career researchers at the university level in developing skills and understanding about commercialising ideas and research.

The participants may use their research as a basis for their business ideas although it is encouraged that they design a business plan based on their own ideas



## 2.0 Process Flow (Methodology)

YES Malaysia 2021 is open to Biological Science stream (Plant and Biomedical) and Physical Science stream (Fintech and engineering) participants in the Malaysian universities. This is a team base programme with each team made up of 4 or 5 members. It is the first time ASTI has organised a programme for postgraduate students and postdoctoral researchers.

YES Malaysia 2021 was launched on 7th September 2021. A poster containing YES Malaysia information was disseminated to ASTI contacts via WhatsApp, email and also posted on ASTI website and ASTI Facebook. Invitation were also sent to both public and private universities to disseminate the programme details to their students.

A briefing session was held on 14th September 2021 and was led by Dr. Georgina E. Marsh. The briefing was held to explain about the programme and answer questions from the public. Dr. Avvari Visveswara Mohan attended an interview on TraxxFm to talk about the programme on 21st September 2021. A Q&A session called ASK ME ANYTHING (AMA) was held on 30th October 2021 for potential participants in Microsoft Teams platform. Some of the YES Working Group members served as panels for the session. They were Prof. Lau Sian Lun, Dr. Tan Boon Chin, Dr. Avvari Visveswara Mohan, Dr. Georgina E. Marsh and Mr. Mohamad Hakeem. As a follow-up for the YES AMA session held on 30th October 2021, documents such as Guideline to Business Model Development, a sample of Business Model Canvas and a Business Model Canvas template were shared with the participants via email to help them in developing their business ideas. Teams were given an option to submit their business plan for feedback from the organiser to further improve their business plan.

A briefing session for the judges, trainers and mentors was held on 20th November 2021 via Zoom Meet and was led by Dr. Mohamed Yunus Yasin. The purpose of the briefing was to explain the programme and the role of the judges, trainers and mentors. ASTI shared a video as a guideline on how to participate in the workshop for the participants, judges, trainers, and mentors 1 week before the workshop. The YES Malaysia 2021 workshop and competition was held from 1st until 3rd December 2021. The first 2 days were the workshop and the 3rd day was the competition. On the second day of the workshop, ASTI shared a guideline with the participants on how to pitch their business plan. A post-mortem for the programme was held on 21st December 2021 virtually to reflect how the programme went and figure out what can be changed in the future to make the programme more efficient.

### 3.0 Participants, Mentors, Trainers and Judges List

Below is list of participants for YES 2021 Malaysia:

#### **Physical Science Stream**

NO.	UNIVERSITY NAME	TEAM NAME	PARTICIPANTS' NAME
1.	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA	BAMBUSCAPE	UMI NADIAH BTE NOR ALI
			MUHAMAD SYAQIR BIN SHA'RANI
			NURUL NAJWA BINTI AB RAHMAN
			BALYA MULKAN WIJAYA BIN MOHAMMAD YUSUF
2.	UNIVERSITI TEKNOLOGI MALAYSIA	REDiM	MUHAMMAD ANIQ RAZIN BIN ZULKIFLI
			HAMIDI BIN MURAD
			NUR FATIN MAISARAH BINTI DZULKIFLI
			NURUL 'AZIZAH MUKHLAS
			SAYYID ZAINAL ABIDIN SYED AHMAD AL -IDRUS
3.	UNIVERSITI TEKNOLOGI MALAYSIA	ANTHROPOMORPHIC TEST MANIKIN	MOHAMMAD HANIS BIN AHMAD TAJUDIN
			AMIRUDDIN ARIF BIN SAIFUDDIN
			SITI MAHIRAH CHE HUSIN
			SITI NUR'ATIQA BINTI HALIMI

#### **Biological Science Stream**

NO.	UNIVERSITY NAME	TEAM NAME	PARTICIPANTS' NAME
1.	UCSI UNIVERSITY	HEYCO	CHU CHEE CHIN
			HOW YU HSUAN
			JESS ONG WEI TING
			ELAINE
			SIM YAN YI
2.	UNIVERSITI SAINS MALAYSIA	NANO VITAMIN	AMAL M.A. BADRAN
			RAGHAD RAJABI
			YASMIN TOMAIZI
3.	UCSI UNIVERSITY	CELLOACT	SIEW ZHI ZHOU
			VANIA SEPTA ANGGRAENI
			CARINE LIM SHU SHIEN
			LIM WIN YEE
			NG YING KI
4.	UNIVERSITI PUTRA MALAYSIA	NANNOVAC ZA	AISAMUDDIN ARDI ZAINAL ABIDIN
			DR. NORFARRAH MOHAMED ALIPIAH
			NUR FARHAH NABIHAN ISMAIL
			NOR IZZATI HUSNA NOOR HISHAM

5.	UNIVERSITI MALAYA	MUSHROOM	MATHAN A/L SINNADURAI
			MOHD IRWANI HAFIZ BIN SAHID
			DEVANTHIRAN A/L LETCHUMANAN
6.	UNIVERSITY OF NOTTINGHAM MALAYSIA	SCIONEO	HINA KAMAL
			AIMAN SYAHMI BIN MANSOL
			TAN GUANG HENG
			MAISARAH BINTI MOHD MAZLAN
			LAMIA NOUSHIN SADEQUE
			CHOWDHURY

Teams that withdrew from the competition are as below:

NO.	UNIVERSITY NAME	TEAM NAME
1.	UNIVERSITI SAINS MALAYSIA	VEMS
2.	HERIOT -WATT UNIVERSITY MALAYSIA	BIO -SEKITAR ENTERPRISE
3.	UNIVERSITI TEKNOLOGI MALAYSIA	INVENTHINK

#### List of trainers for YES Malaysia 2021 is as below:

- 1) Mr. Naidu Appanan
- 2) Ms. Karen Lau
- 3) Dr. Prakash Christiansen
- 4) Datuk Mohamed Shariff Bin Abdul Aziz
- 5) Mohd Ridzwan Nordin

#### List of mentors for YES Malaysia 2021 is as below:

- 1) Mr. Naidu Appanan
- 2) Ms. Biruntha Letchumi Mooruthi
- 3) Mr. Gameladha Nasiriffin bin Arifin
- 4) Ms. Norsavina Kaharudin
- 5) Ms. Emiliawati Zainol
- 6) Tengku Shahrir bin Tengku Adnan
- 7) Mr. Arutsothy Anamalai
- 8) Mr. Murugason R Thangaratnam
- 9) Dr. Prakash Christiansen
- 10) Ts. Dr. Naji Arafat Mahat
- 11) Mr. Mohd Ridzwan Nordin
- 12) Mr. Sasintheran Rajayandran
- 13) Capt. Arivananthan Muniandy
- 14) Mr. Devandran Krishnan
- 15) Tengku Farith Rithauddeen

#### List of judges for YES Malaysia 2021 is as below:

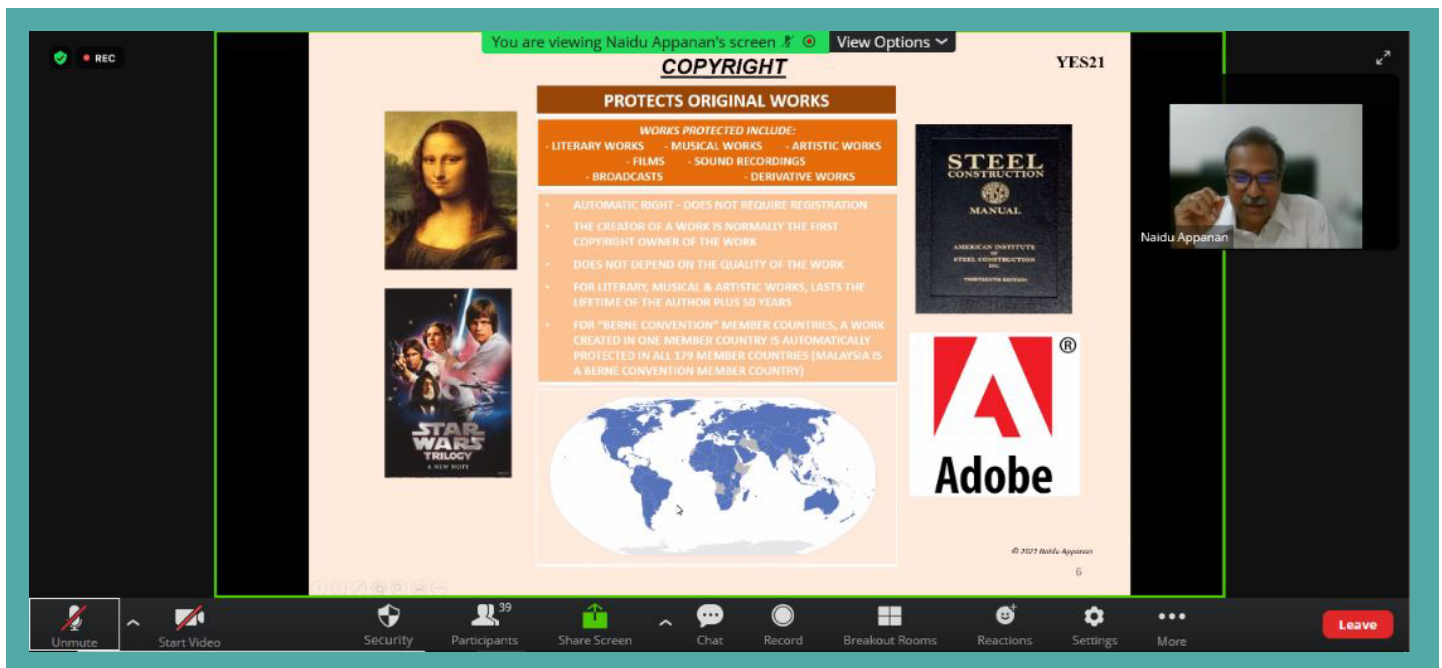
- 1) Mr. Murugason R Thangaratnam
- 2) Ms. Soh Eng Hooi
- 3) Ms. Anusuya Krishnan
- 4) Mr. Gowrishankar Sundararajan
- 5) Mr. Faizal Noor batcha
- 6) Mr. Tan Cher Hao
- 7) Mr. Philip Vincent
- 8) Mr. Michel Van Crombrugge
- 9) Mr. Mohd Fairuz Shuhaimi
- 10) Mr. Harry Hor
- 11) Mr. Ali Zareh
- 12) Mr. Lau Kean Cheong (KC Lau)

## 4.0 YES Workshop Summary

### 4.1 Workshop Day 1

The Moderator, Ms. Siti Nur Fathiah Kamarulazam, began the YES Workshop with a welcome remark and introduction. Professor Simon Mosey of Nottingham University Business School gave the next address, followed by Dr. Mohamed Yunus Yasin, President of ASTI and a former YES UK participant.

The workshop began with an Intellectual Property (IP) training session titled 'Protecting your innovative ideas'. Mr. Naidu Appanan conducted the training. Ms. Biruntha Letchumi Mooruthi gave a case study on Intellectual Property. Participants were then led to respective Breakout Rooms for mentorship sessions after the case study presentation. A mentor was appointed to each team. Participants presented their business plans to the mentor during the mentoring session in order to receive advice on how to enhance their business plan. Mr. Naidu Appanan, Ms. Biruntha Letchumi Mooruthi, and Mr. Gameladha Nasiriffin bin Arifin served as mentors for the IP session.

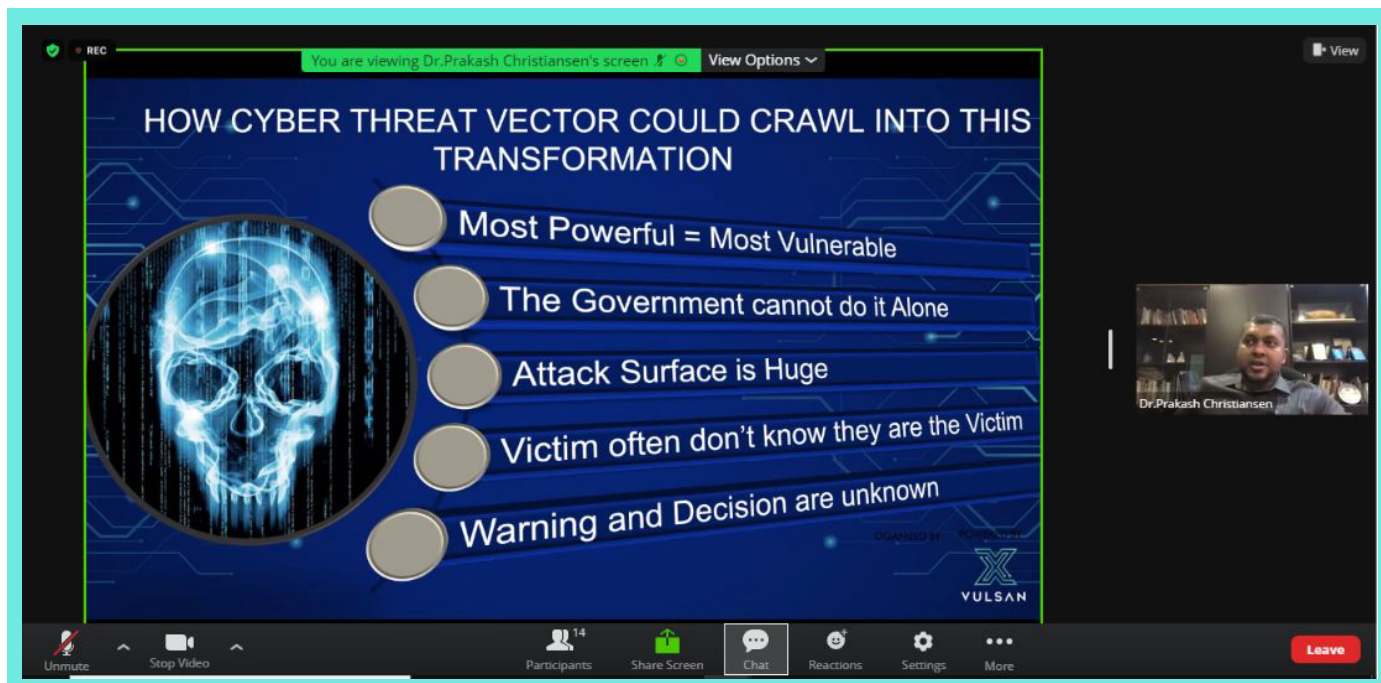


After a lunch break in the afternoon, the commercialisation training resumed. Ms. Karen Lau led the training on "Commercialization Strategies for Novel Technologies." Meanwhile, Ms. Emiliawati Zainol led the case study for commercialization session. The next session was mentoring session for developing business plan. Ms. Norsavina Kaharudin, Ms. Emiliawati Zainol, and Tengku Shahrir bin Tengku Adnan served as mentors, assisting the participants in refining their business plans from a commercialization point of view. The mentorship session wrapped up the first day of the workshop. On the first day of the workshop, a total of nine (9) teams took part. Three of the registered teams have withdrawn from the YES Malaysia 2021 Workshop and Competition.



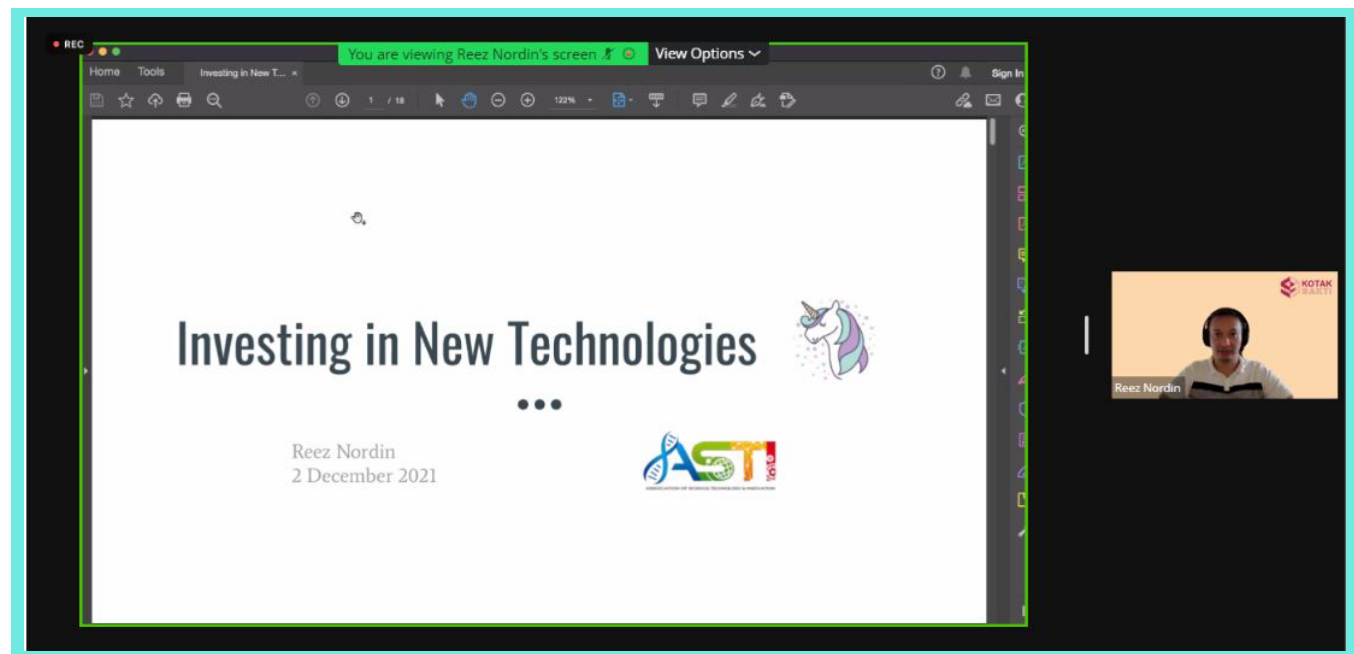
## 4.2 Workshop Day 2

The morning session on the second day was divided into two parts. Dr. Prakash Christiansen led the training and case study session for the Physical Science stream. Dr. Prakash Christiansen, Mr. Arutsothy, and Mr. Murugason Thangaratnam served as mentors for the Physical Science stream session. Datuk Mohamed Shariff Bin Abdul Aziz gave a talk on agriculture for the Biological Science stream session. Ts. Dr. Naji Arafat bin Naji Mahat and Mr. Devandran Krishnan served as mentors for participants in the Biological Science Stream. After the mentorship sessions, participants from both streams took a lunch break before returning to the workshop for the afternoon session.



Mr. Mohd Ridzwan Nordin led the finance training session titled "Investing in New Technologies." Tengku Farith Rithauddeen presented a case study based on his own experience as an entrepreneur on finance and cash flow management following the training session. Next, participants joined their respective breakout rooms for mentoring session. Mr. Mohd Ridzwan Nordin, Mr. Sasintheran Rajayandran, and Capt. Arivananthan Muniandy served as mentors, advising the participants on how to improve their business plans. The workshop's second day concluded with the finance mentorship session. The nine teams that took part in the first day of the workshop also participated in the second day.





### 4.3 Workshop Day 3

On the third day of the workshop, by 8:00 a.m., 7 teams submitted their business plan presentations. At 10.00 a.m., the judging of the presentation by participants began. The judging rooms for the Biological Science and Physical Science stream were separated. Mr. Murugason Thangaratnam, Ms. Anusuya Krishnan, and Mr. Gowrishankar Sundararajan were the judges for the Physical Science stream. Ms. Soh Eng Hooi, Mr. Faizal Noor batcha, and Mr. Tan Cher Hao were the judges for the Biological Science stream. Teams presented their business plans to the judges, who then asked questions. The participants were dispersed after the teams had completed their presentations. The judges had a discussion right after the presentation to choose the best two teams from each stream for the final competition, which was conducted at 6.00 p.m. the same day. The best two teams from each stream were shortlisted by 12.00 noon, and the teams were notified immediately via e-mail, phone call, and WhatsApp message so that they could prepare for the final competition.

All four teams that were chosen for the final confirmed their participation in the competition and were present for the final competition. The following is list of the teams that have been shortlisted for the final:

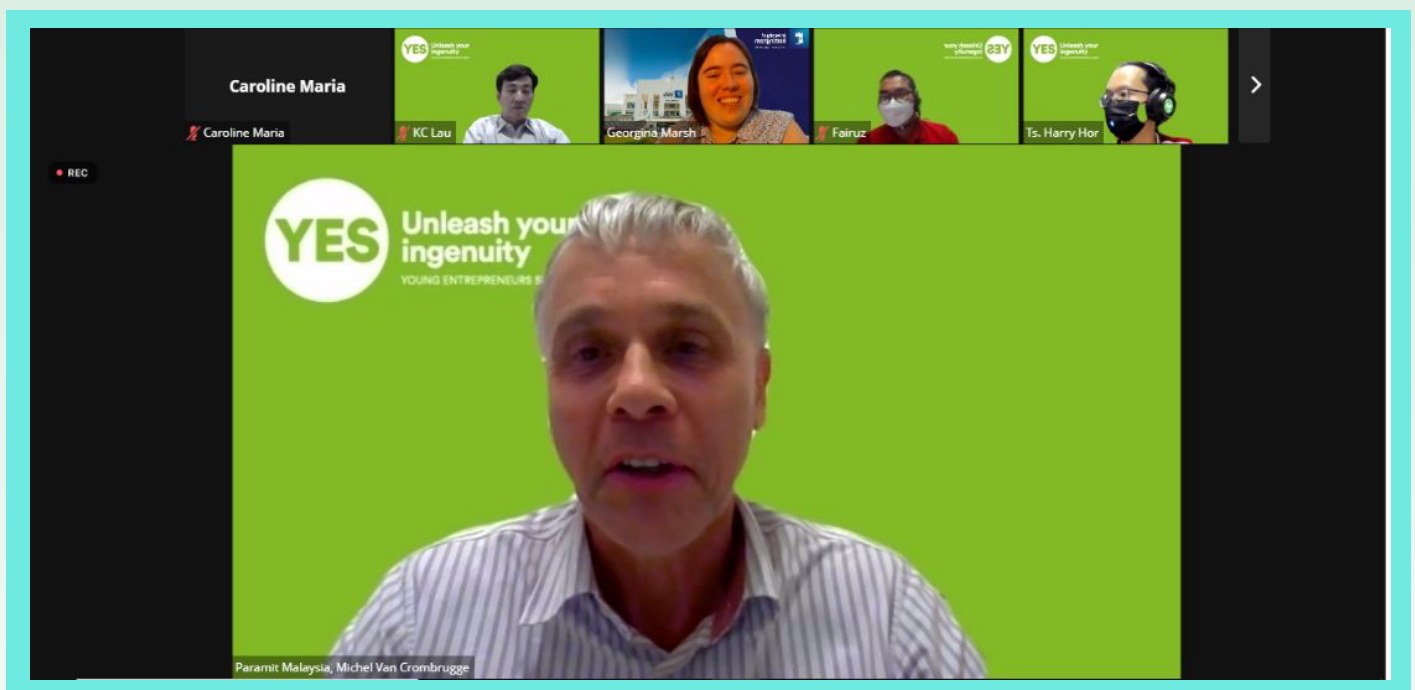
Team Name	University Name
NannoVac ZA	Universiti Putra Malaysia
SCIONE	University of Nottingham Malaysia
REDiM	Universiti Teknologi Malaysia
Anthropomorphic Test Manikin	Universiti Teknologi Malaysia

Table 1: YES Malaysia 2021 Finalists



Dr. Georgina E. Marsh of the University of Nottingham Malaysia served as the evening's moderator. Dr. Georgina E. Marsh congratulated the 4 finalists of the YES Malaysia 2021 competition and welcomed all who attended the grand final ceremony. Dr. Georgina E. Marsh gave an overview of the evening's proceedings and requested the judges to introduce themselves. The finalists for the YES Malaysia 2021 Competition were judged by a new panel of judges. Mr. Philip Vincent, Mr. Michel Van Crombrugge, Mr. Mohd Fairuz Shuhaimi, Mr. Harry Hor, Mr. Ali Zareh, and Mr. Lau Kean Cheong were the judges for the evening.

Mr. Ali Zareh, the Chief Judge, led the judging panel. Following the judges' introductions, the teams were given 3 minutes to pitch their ideas, followed by questions from the judges. Upon completion of the presentation by the 4 teams, the judges convened virtually in a separate meeting room to deliberate and determine the event's winner. The winners were announced via a video presentation. Mr. Michel Van Crombrugge was invited to provide feedback on the judging after the winners were revealed. He stated that the judges enjoyed the finalists' presentations and provided feedback to each team. Mr. Ali Zareh, the Chief Judge, also provided feedback to the teams. Mr. Lau Kean Cheong finally offered some advice to the teams. Dr. Georgina E. Marsh thanked everyone and invited the winning team to say a few words at the end of the ceremony.





## The winners of YES Malaysia 2021 are as below:

### **Winner**

Team Name : REDiM  
 Invention Title : Realtime Wireless Structural Dynamic Monitoring System for Offshore Structures  
 Stream : Physical Science  
 University : Universiti Teknologi Malaysia

### **Best IP Award**

Team Name : Anthropomorphic Test Manikin  
 Invention Title : Anthropomorphic Test Manikin  
 Stream : Physical Science  
 University : Universiti Teknologi Malaysia

### **Best Business Pitch Award**

Team Name : NannoVac ZA  
 Invention Title : Microalgae (Nannochloropsis sp.) for Fish Oral Vaccination  
 Stream : Biological Science  
 University : Universiti Putra Malaysia

## 5.0 Funding and Budget

YES Malaysian 2021 was sponsored by ASTI using its internal fund. Expenses of the YES Malaysia 2021 is shown below:

	Description	Costing (RM)
<b>Income</b>		
Income		0.00
Module Development and Licensing (In kind)		9,000.00
Project Manager Wages (In kind)		7,500.00
Project Officer Wages (In kind)		15,200.00
<b>Total Income</b>		<b>0.00</b>
		<b>31,700.00</b>
<b>Less Expenditure:</b>		
<b>(1) Workshop and Competition Fund</b>		
Module Development and Licensing		9,000.00
Cash Prizes Virtual Finals Champion, Best IP Award, Best Business Pitch Award	RM5,000 RM1,000 RM1,000	7,000.00
Designing (Poster, Certificates, Banner, Backdrop, Souvenir Book)		1,000.00
Judging (Stream and Virtual)		5,000.00
Evaluation, Monitoring		1,000.00
<b>Total</b>		<b>23,000.00</b>
<b>(2) Operations Management Fund</b>		
Project Manager (Wages, EPF, SOCSO, Insurance)	RM5,000 X 1.5 Month	7,500.00
Project Officer (Wages, EPF, SOCSO, Insurance)	RM3,800 X 4 months	15,200.00
<b>Total</b>		<b>22,700.00</b>
<b>Grand Total</b>		<b>45,700.00</b>
Excess of (Expenditure)/Income *		-14,000.00

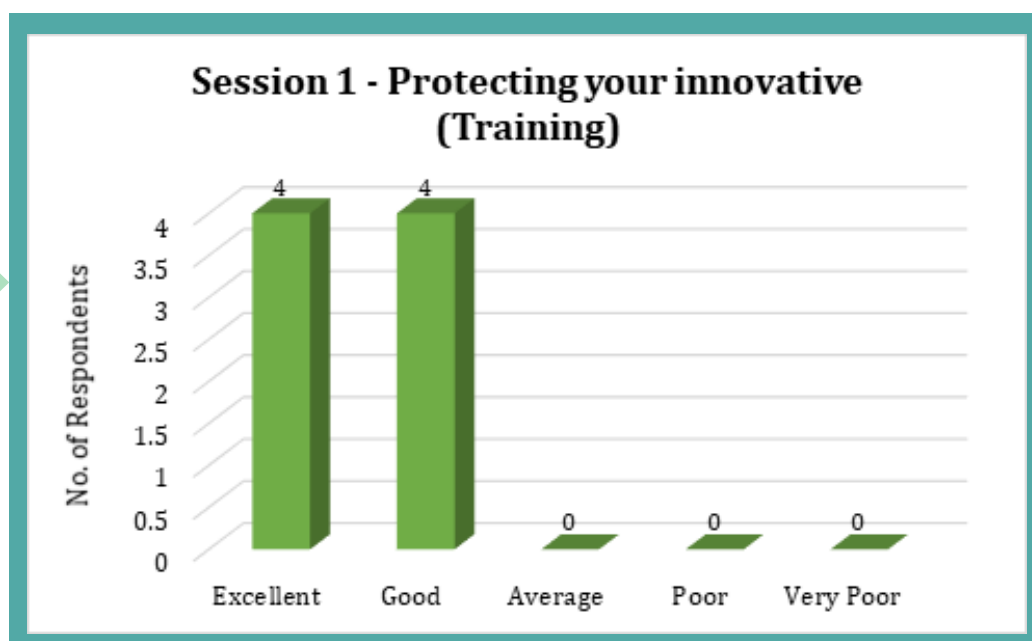
\* The excess of expenditure was paid by the Association of Science, Technology and Innovation (ASTI). Most of the expenses were covered by a waiver from ASTI.



## 6.0 Survey Analysis

A google survey was conducted during the 3 days of the workshop to get feedback regarding the programme. The google survey form was distributed to the participants at the end of each workshop day. An analysis of the feedback we received through the survey is shown below:

### Day 1



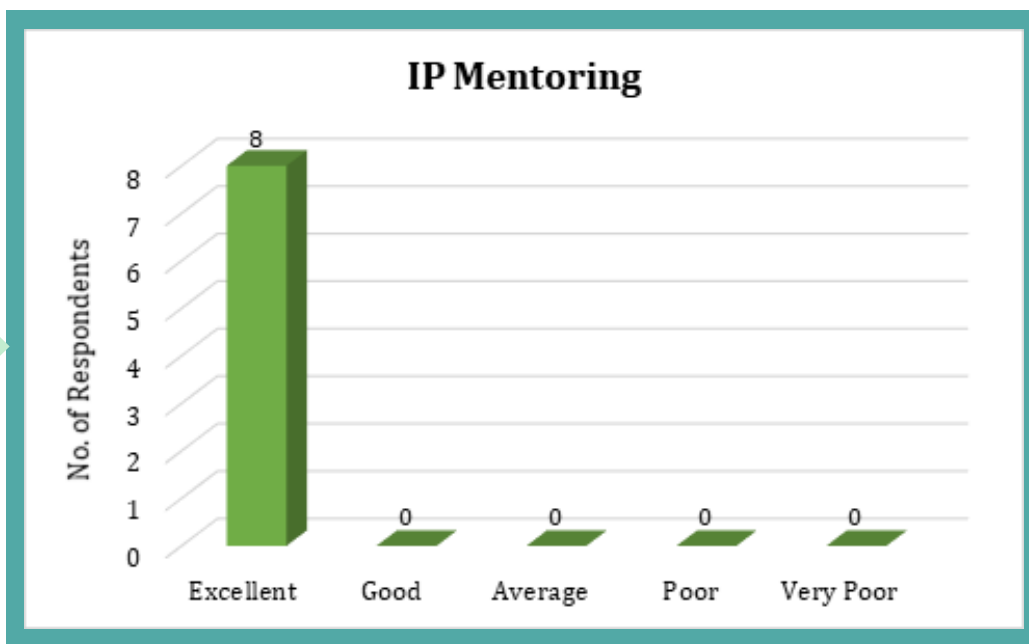
*Figure 1: Session 1 – Protecting your innovative (Training)*

A total of 8 participants took part in the online survey on the 1st day of the workshop. The first session of the workshop was on Intellectual Property. Figure 1 shows participant satisfaction for Session 1 training entitled “Protecting your innovative”. All the 8 participants rated the training session as excellent and good.



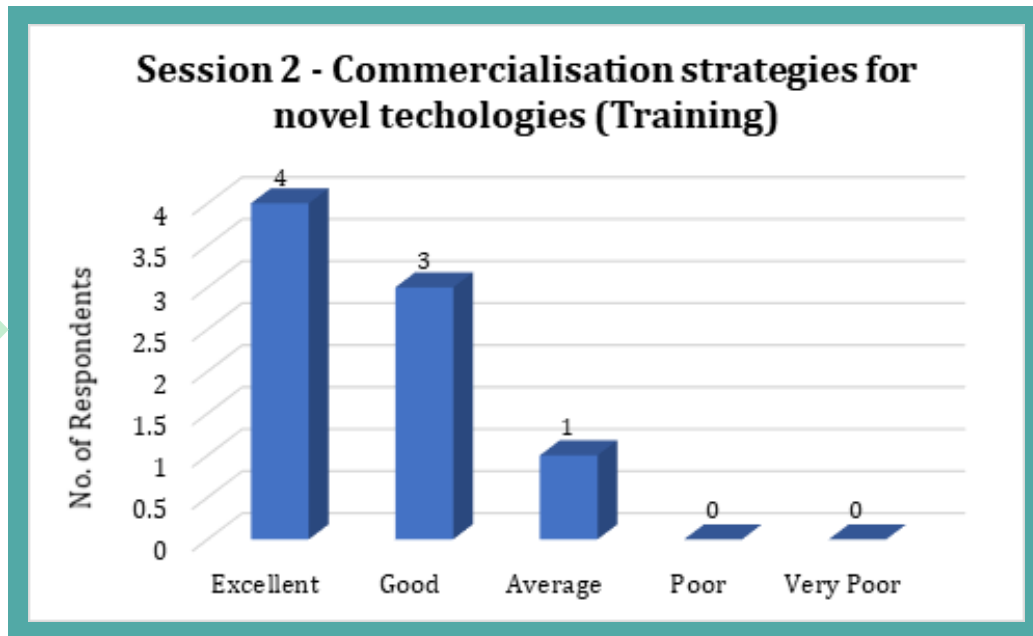
*Figure 2: Session 1 – Case Study*

All the participants rated the case study for Session 1 as excellent and good which can be seen in Figure 2.



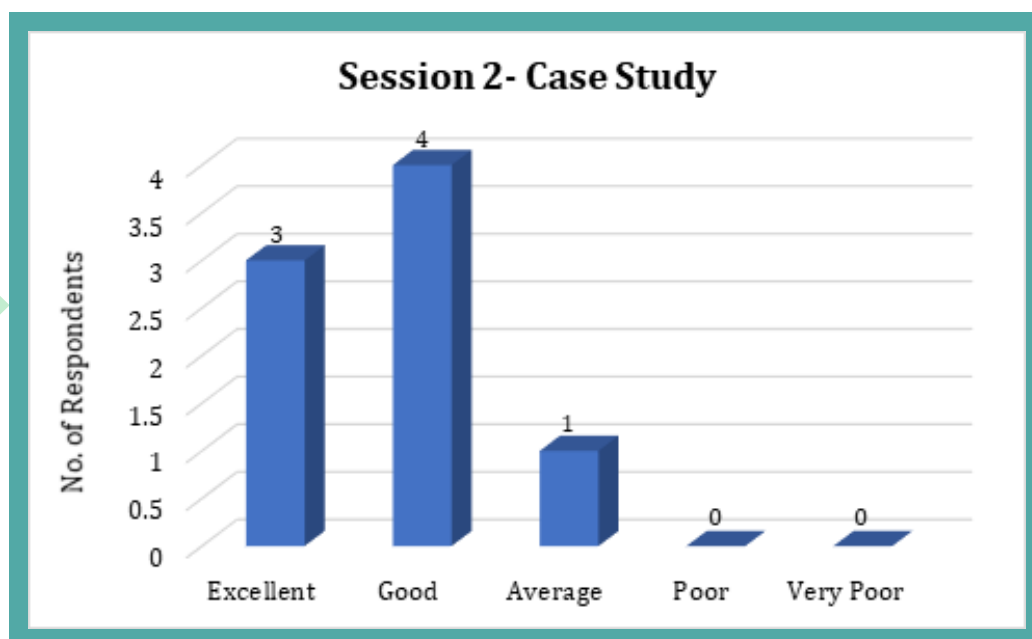
*Figure 3: IP Mentoring*

Figure 3 is about participant satisfaction on IP Mentoring. All the 8 participants rated excellent for the IP session mentoring.



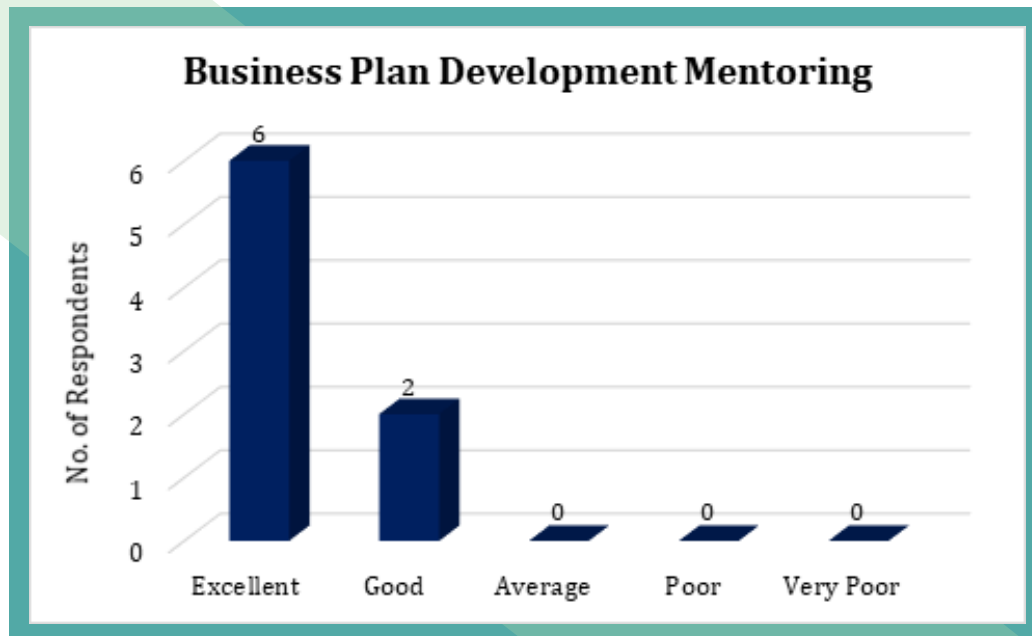
**Figure 4: Session 2 – Commercialisation strategies for novel technologies (Training)**

Session 2 training in the afternoon was on business development. From Figure 4, 50% of the participants that answered the survey rated the training excellent. While 37.5% and 12.5% of participants rated good and average respectively.



**Figure 5: Session 2 – Case Study**

Figure 5 explains about participant satisfaction for case study for Session 2. The figure shows that 37.5% of the participants found the case study to be excellent and 50% of the participants rated as good. The remaining 12.5% of the participants mentioned that the case study session was just average.



**Figure 6: Business Plan Development Mentoring**

Figure 6 is on participant rating on the business plan development mentoring session. For this session, 100% of the participants were satisfied because they have all rated excellent and good.

In addition, the participants were requested to give general comments for the 1st day of the workshop. The comments by participants are as below:

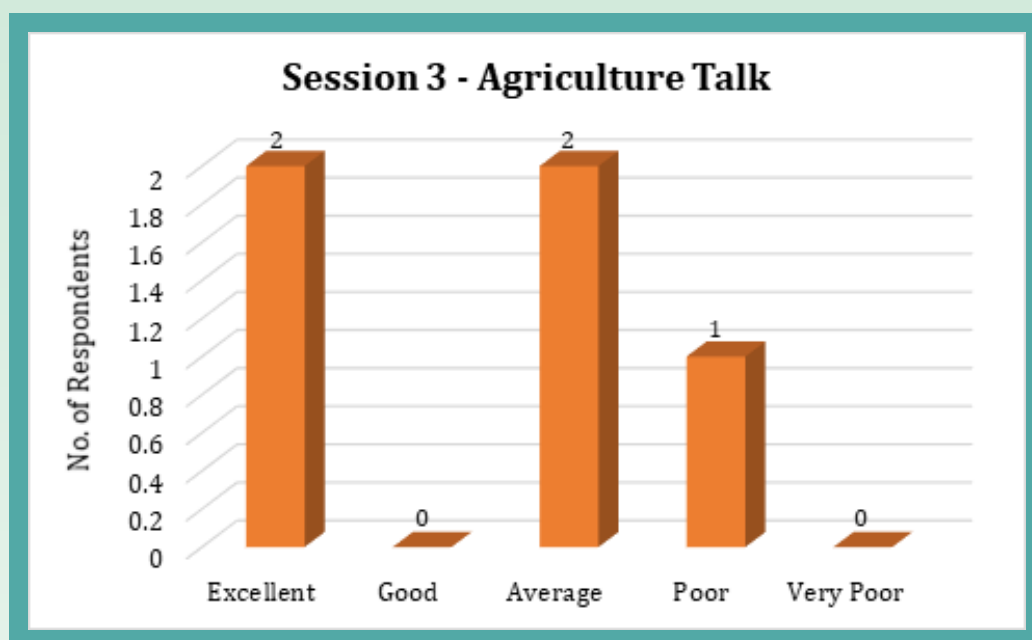
General comments:

- Overall, it was a great opportunity to get in touch with great people all over different field and get them to share their experiences. Good job and well done to the organising committee and ASTI.
- I'm really grateful to be mentored by inspiring and energetic people.
- The trainings and case study are informative and the mentors are very kind and helpful.
- Mentoring session was very good to understand our issues and get recommendations from mentor.



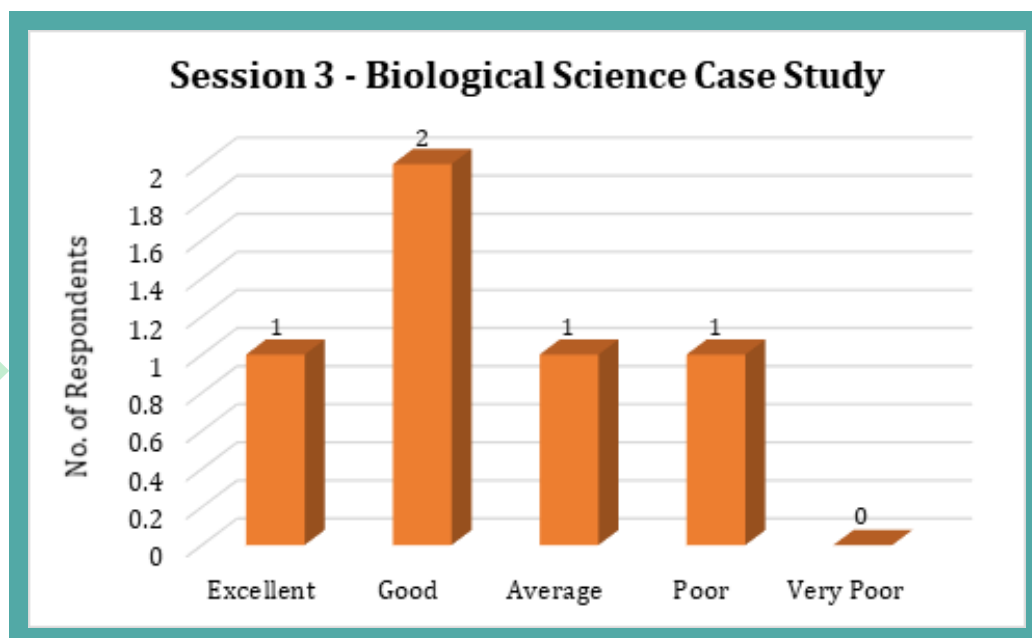
## Day 2

There were 2 morning sessions held on the second day of the workshop. There was 1 session for Biological Science stream participants and another session for Physical Science stream participants.



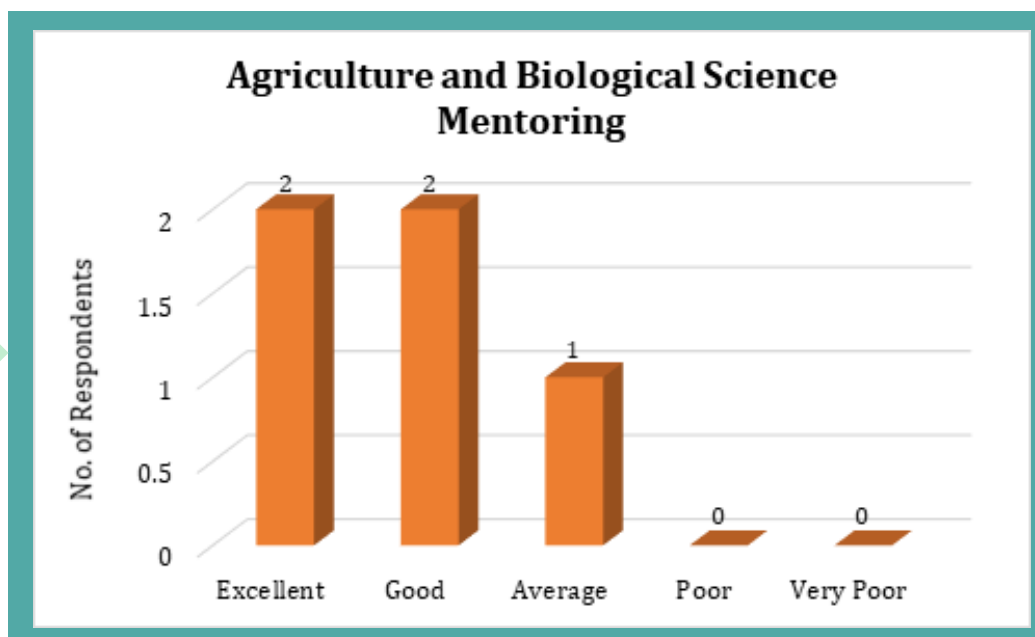
*Figure 7: Session 3 – Agriculture Talk*

For Biological Science stream, a total of 5 participants took part in the survey held. Figure 7 shows that 40% of the participants rated excellent and another 40% of the participants rated the agriculture talk for Session 3 average. The remaining 20% of the participants rated the session as poor.



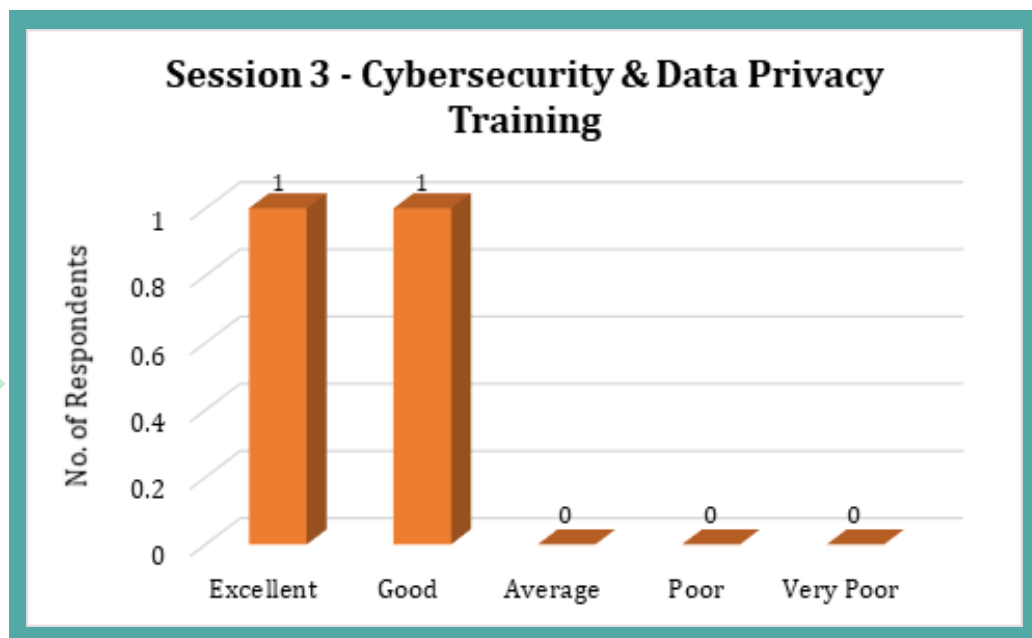
*Figure 8: Biological Science Case Study*

Figure 8 is about participant satisfaction on case study for Biological Science stream. About 40% of participants have rated the session as good. The remaining participants rated excellent (10%), average (10%) and poor (10%).



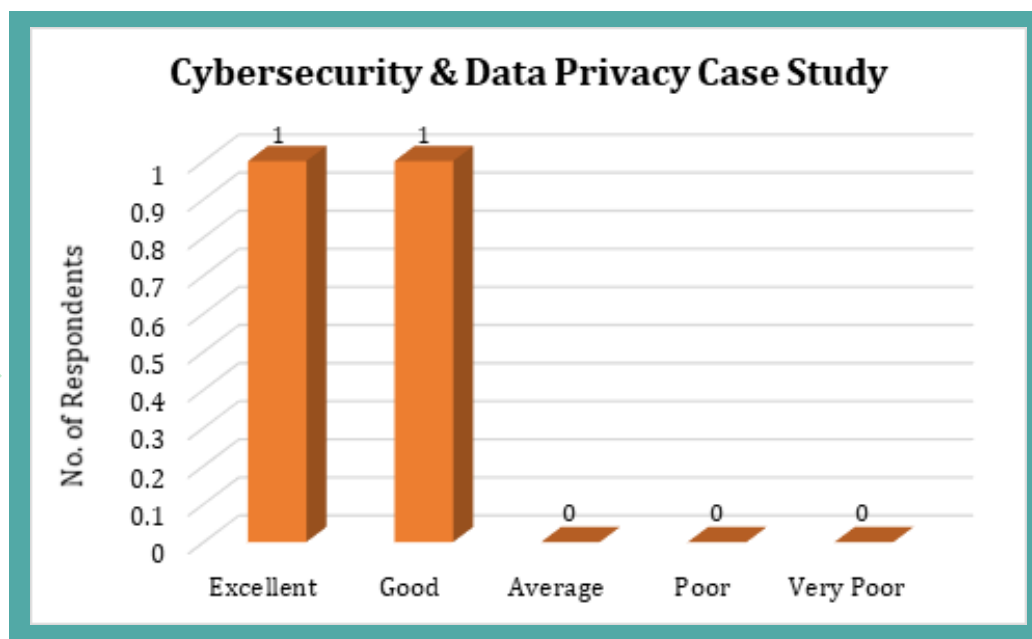
*Figure 9: Agriculture and Biological Science Mentoring*

Participant satisfaction for Agriculture and Biological Science mentoring session is shown in Figure 9. Most of the participants were found to be satisfied with the session because 40% of the participants rated the session excellent and another 40% rated good. While the remaining 20% of the participants rated as average.



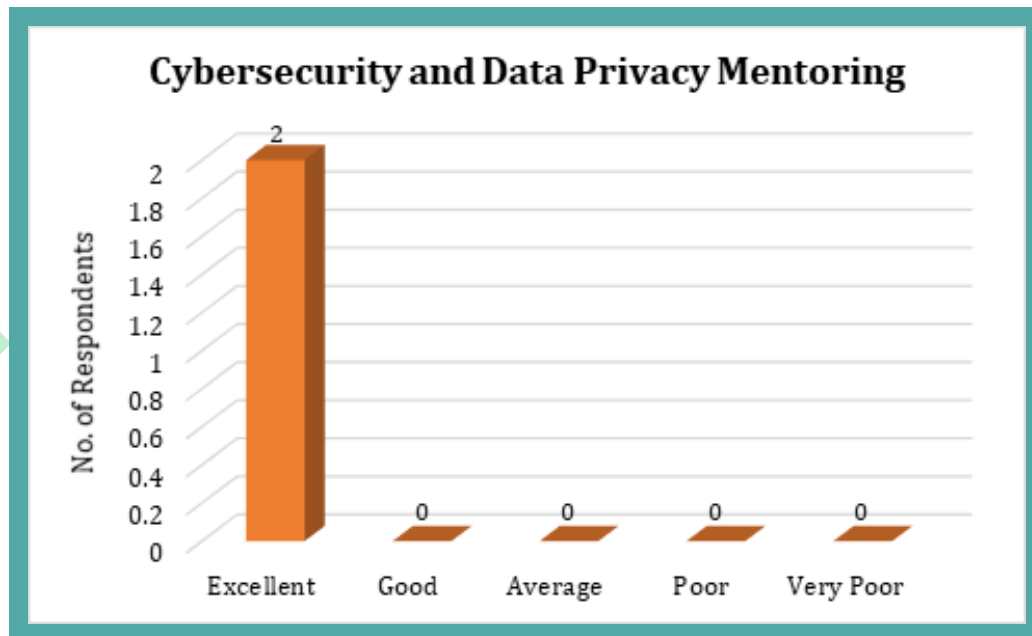
*Figure 10: Session 3 – Cybersecurity & Data Privacy Training*

Only 2 participants took part in the survey from the Physical Science stream. As seen in Figure 10, both the students were satisfied with the Cybersecurity & Data Privacy training. Each of them have rated excellent and good respectively.



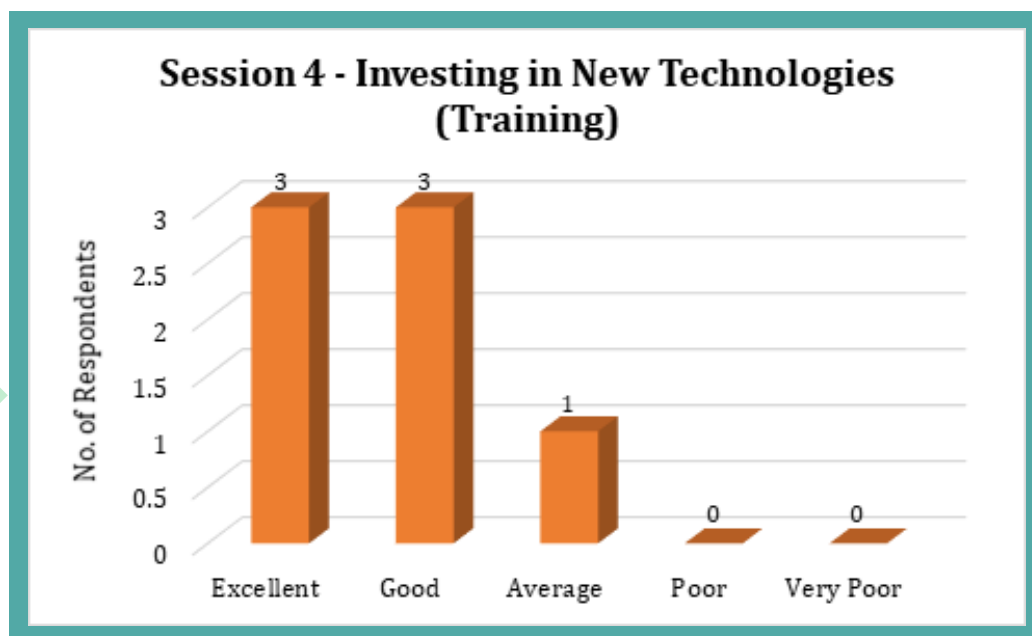
*Figure 11: Cybersecurity & Data Case Study*

Figure 11 is on participant satisfaction for physical science stream session case study. Both students were satisfied because they have rated good and above for the case study.



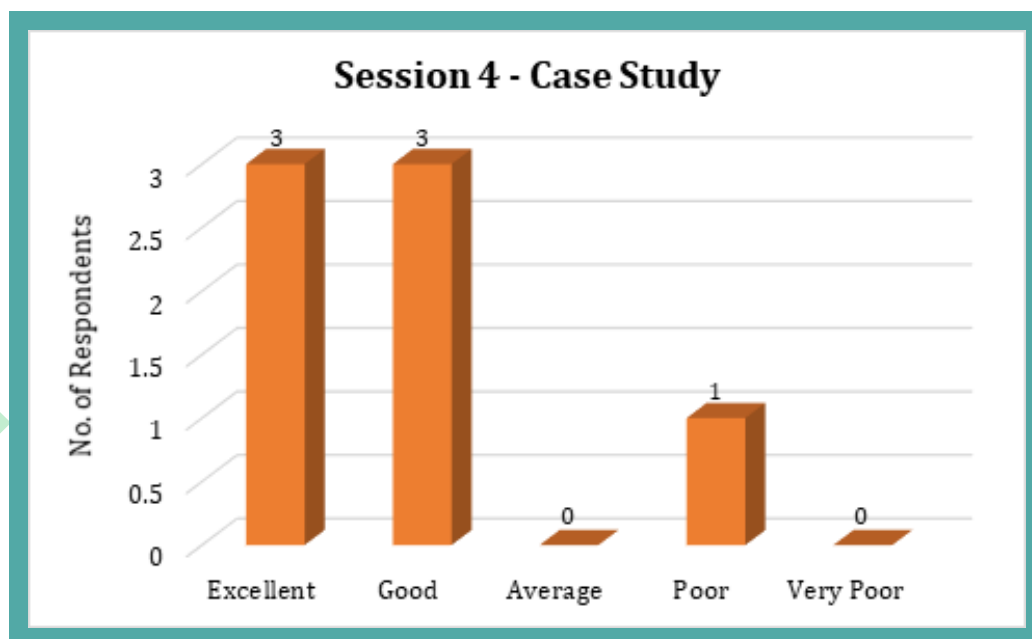
*Figure 12: Cybersecurity and Data Privacy Mentoring*

Figure 12 shows that both the participants rated as excellent and were satisfied with the mentoring session.



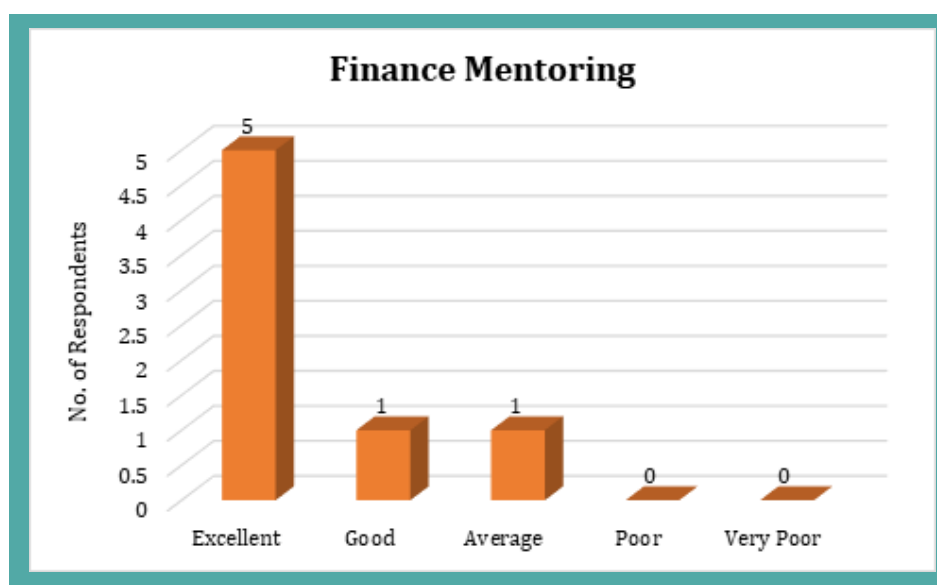
*Figure 13: Session 4- Investing in New Technologies (Training)*

Session 4 that was held in the afternoon was on finance. A total of 7 participants have rated the afternoon session. Most participants were satisfied with the training session for finance because about 43% of the participants rated excellent and another 43% of the participants rated good although 14% of the participants rated the session as average.



**Figure 14: Session 4 – Case Study**

Even though most participants rated the case study for Session 4 as excellent and good, there were about 14% of the participants who were not satisfied and rated poor. This is shown in Figure 14.



**Figure 15: Finance Mentoring**

Figure 15 shows participant satisfaction for finance mentoring session. For this session, the participants have rated excellent (72%), good (14%) and average (14%).

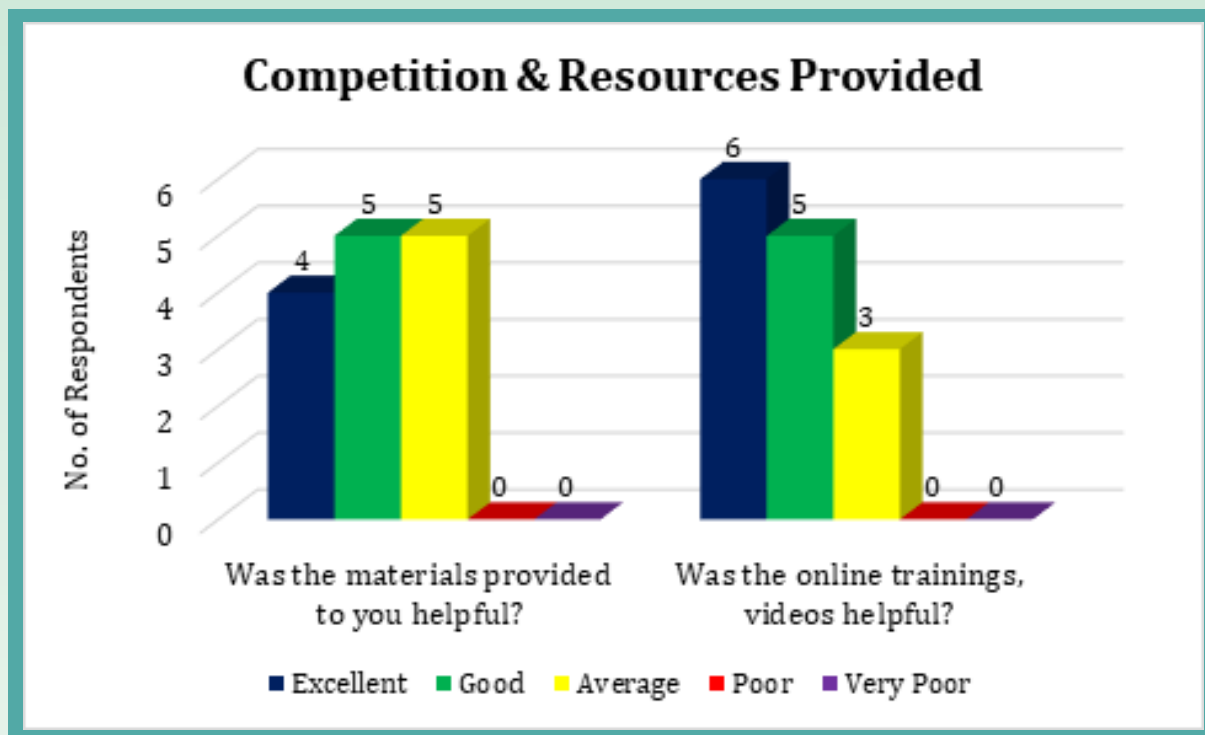
General comments:

- Mentoring sessions are helpful.
- The mentoring session was really an eye-opening session. Glad took part in the programme.
- Overall is good.
- Workshop and competition should be done in different week so that after workshop we still have time to edit the business plan.



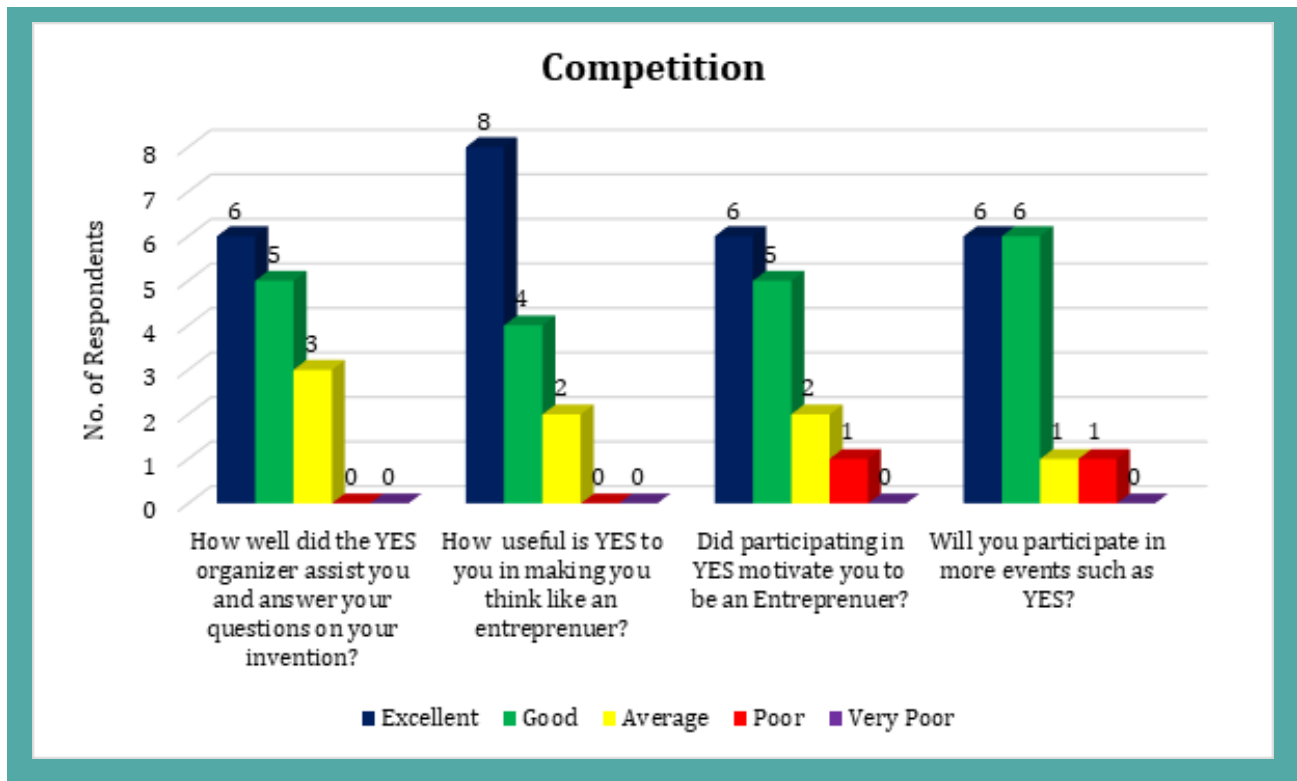
## Day 3

Day 3 of the programme was the competition day. A total of 14 participants took part in the survey.



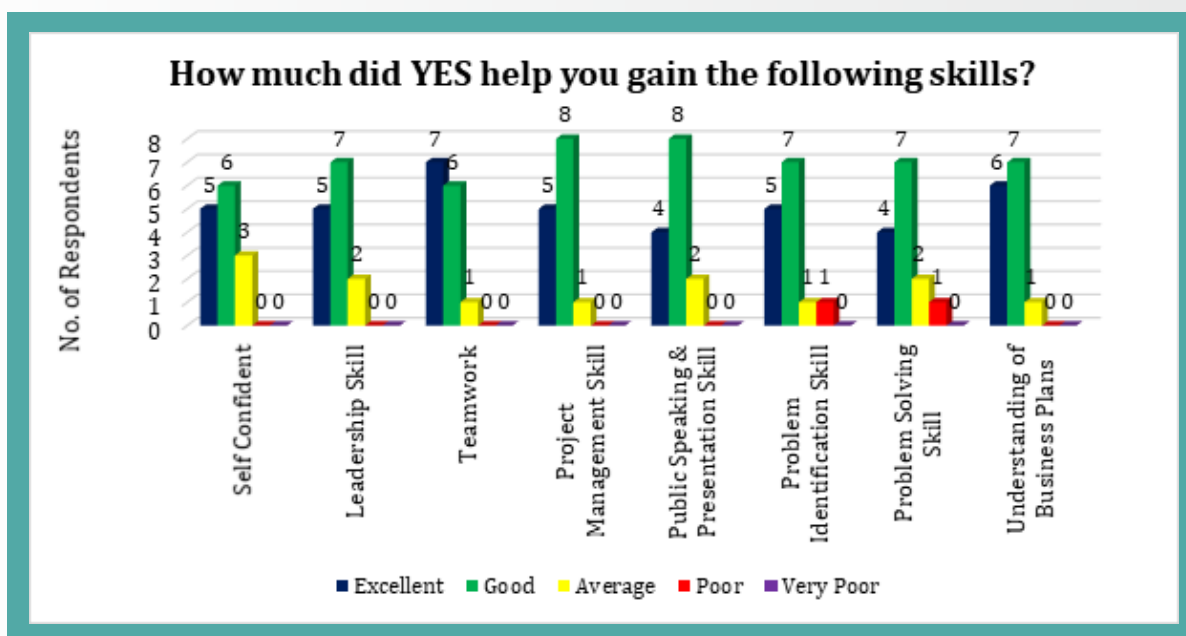
*Figure 16: Competition & Resources Provided*

Participant satisfaction on competition and resources provided is shown in Figure 16. To know participant satisfaction on competition and resources provided, participants were asked if the materials, online trainings and videos provided were helpful for them. About 36% and 64% of the participants rated the materials provided to them to be average and, good and above respectively. When the participants were asked if the online trainings and videos provided was helpful, about 79% of the participants rated good and above and about 21% of the participants rated average.



**Figure 17: Competition**

Figure 17 is about participant satisfaction on the competition. Participants were asked how well the YES organizer assisted them and answered their questions on their invention, how useful YES was in making them think like an entrepreneur, if participating in YES motivated them to be an entrepreneur and if they will participate in more events such as YES. Majority of the participants rated average and above for all the questions. Only about 7% of the participants answered the competition did not motivate them to be an entrepreneur and they will not participate in more events such as YES respectively.



**Figure 18: How much did YES help you gain the following skills?**

Figure 18 shows if the YES participants learned some skills by participating in the programme. Some of the skills that the organizer would like the participants to learn from the programme are self-confidence, leadership skill, teamwork, project management skill, public speaking & presentation skill, problem identification skill, problem solving skill and understanding of business plans. Overall, most participants have learned these skills by participating in YES programme.

The participants were also asked some open ended questions and their answers are summarised as below:

1. What was your biggest challenge doing YES online?

- Time constraints.
- There is limited opportunity to interact with others in the online platform.
- To focus on workshop while in office.
- Internet connection.

2. How many hours did you spend preparing for YES 2021?

- 2 months
- 1 month
- 30 hours
- 4-6 hour during starting of the program

3. Any other support or assistance from us that would enable you to be even more effective in YES 2022?

- More time and more tutorial session.
- Separate workshop and competition so that after workshop, we still have enough time to prepare for competition.
- A guide in performing market survey.
- Please emphasize on the objective and criteria of this workshop.
- More workshop on business plan.

4. Any other suggestion?

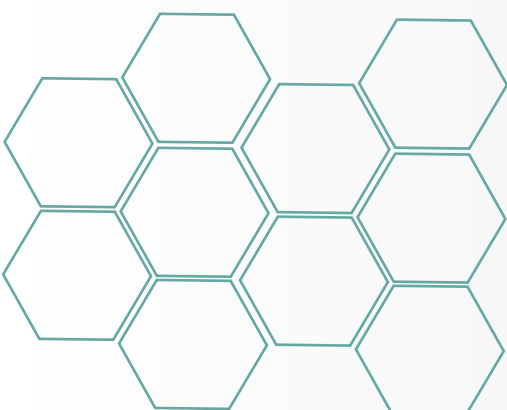
- Kindly provide more time and more tutorial sessions back to back to assist the business plan. Not all the participants are experienced in writing business plan.
- It would be great to have interaction with previous winners and see how they've grown.
- Give our products info early to mentor, so we can get more guide line and information from mentor.



## 7.0 SWOT Analysis

The SWOT analysis and recommendations for YES Malaysia's future improvements that were suggested during the virtual YES working group post-mortem are listed below.

<p><i>Strength:</i></p> <ul style="list-style-type: none"> <li>• ASTI network is good. It helped to get participants for YES Malaysia 2021 in a short time.</li> <li>• Support from University of Nottingham UK was good. It was open to try and explore new zones.</li> <li>• Engagement with the universities was good. Even though it was the first time ASTI organised an event for university students, ASTI managed to engage with universities.</li> <li>• Managed to get volunteers for the programme due to ASTI network.</li> <li>• ASTI had a very dedicated secretariat team.</li> <li>• Was a big plus point to have NAWEM as our partner.</li> </ul>	<p><i>Weakness:</i></p> <ul style="list-style-type: none"> <li>• Engagement from working group was not perfect because of tight work schedule.</li> <li>• Programme organised in a short time frame. Thus, could not get more participants/engagement with potential participants. In the future, spend 2 months or 2 ½ months to get participants.</li> <li>• Could not do training (esp. pre-workshop training). In the future to organise training and give time for participants to improve.</li> </ul>
<p><i>Opportunity:</i></p> <ul style="list-style-type: none"> <li>• Organise training for future entrepreneurs from the research/technology background people.</li> <li>• Organise programme to train future entrepreneurs and provide a platform.</li> <li>• Engage with more corporate companies (opportunity) for funding.</li> </ul>	<p><i>Threats:</i></p> <ul style="list-style-type: none"> <li>• Funding for the programme – look for donors.</li> </ul>



# Recommendations:

- Do pre-training to build up to the workshop.
- Have representative from each university. To work with more universities.
- To have 2 level committee.
  - Bigger level – to help introduce YES to universities.
  - Small group with 3-5 people – to be the operational group, to have quick turn-around time for secretarial to do the work (for approval).
- The companies, Inari & Beckhoff are interested to be involved/engaged next year. Have strong engagement with the private sectors and industry to be more involved in the process and funding.
- Look into post event programmes to help participants commercialise their ideas (raise fund, understand Malaysian landscape).
- Do post event lecture for this year YES, simple lecture.
- Send simple questionnaire for mentors/trainers/judges – in January
- Organise a small dinner with trainers/mentors and working group.
- KPT has funding for entrepreneur programme – for only public university students.
- Extra collaborative with KPT, MOSTI & MDEC (multimedia), MOF, Ministry of Entrepreneurs Development – to engage with them.

## 8.0 Conclusion

This initiative, for ASTI is the natural evolution of its own programming strategy for promoting experiential learning. It was also ASTI's first engagement with postgraduate students. This pilot programme in Malaysia and many lessons were learnt which it hopes to use for improvements in the future.

It is important for high-tech researchers to comprehend the business aspects of their work. We anticipate that by participating in the programme, participants will be able to think about commercialising their research and develop high-value products for the market.



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