chumbaka
STAY CURIOUS

IMPACT REPORT 2021

Your support drives national agenda on STEM

2021 IN A GLANCE

The year 2021 has not been kind to anyone. As we work together to stay safe, the millions of students and teachers who were stranded at home have shown us that **Learning Must Not Stop**.

Throughout this whole year, we have stumbled over many obstacles and challenges, but the aha-moments of the students and the beaming faces from the teachers are the ones who kept us going.

We have learnt a great deal from the students, teachers, and our community partners. COVID-19, lockdown, and school closure have crippled our ability to reach out to students in Malaysia. But we Chumbaka didn't give up. We learnt to use Discord, Zoom, Telegram, and LMS to run our training for teachers and webinars for students over the internet. **Ultimately. we learnt to let go and allow the space and time for our students to think, tinker, and create.** While we advocate for the future where all children can navigate through the changing future, we got to learn to do it ourselves first hand.

This is our first annual report, and we would like to take this chance to share with you - our strong supporters on:

1. **Our Purpose,**
2. **Our Impact,** and
3. **Our Way Forward.**

1. Our Purpose

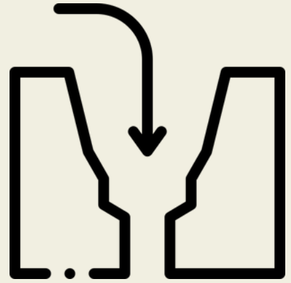
DIGITAL SKILLS GAP IS WIDENING FAST IN MALAYSIA

Digital job vacancies tripled in Malaysia

(The Edge, 2021)

About 3% yearly decline on students' interest in STEM

(APEC, 2020)



10% of Malaysia talent market are fulfilled by foreign digital workers

(Mida, 2021)

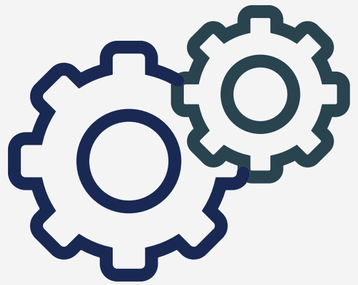
1. Our Purpose

OUR VISION
All children will have the right skill sets and values to navigate the changing future

How our 3 pillars prepare kids for the future

Mentor
passionate in children education.

Curriculum
developed by expert engineers and educators.



Technology
to deliver learning similar to world-class universities.

2. Our Impact

WE WORK CLOSELY WITH VARIOUS COMMUNITY PARTNERS TOWARDS A COMMON VISION

Strategic partnerships with our community partners and schools enable Chumbaka to drive STEM at various levels, pushing towards the common goal of national agenda in STEM.

Schools

KEMENTERIAN PENDIDIKAN MALAYSIA

Corporate Partners

Sime Darby YAYASAN

SDEC Digitalising Sarawak

Ministry of Education, Science and Technological Research Sarawak

OSK FOUNDATION

ViTrox

Malaysian Collective Impact Initiative

Hap Seng Group

flex

YAYASAN HASANAH
A foundation of Khazanah Nasional

Local Networks

USIM

UTeM
Universiti Teknikal Malaysia Melaka

Universiti Malaysia Sabah

Universiti Pendidikan Sultan Idris

Universiti Malaysia Pahang
Engineering • Technology • Creativity

Universiti Teknologi MARA

SWINBURNE UNIVERSITY OF TECHNOLOGY

Universiti Kebangsaan Malaysia
The National University of Malaysia

TARC
Tunku Abdul Rahman University College

MMU
Multimedia University

University College of Technology Sarawak

University of Southampton

Scholar Enrichment Programme

Curtin University
Sarawak Malaysia

AIESEC

IET
The Institution of Engineering and Technology

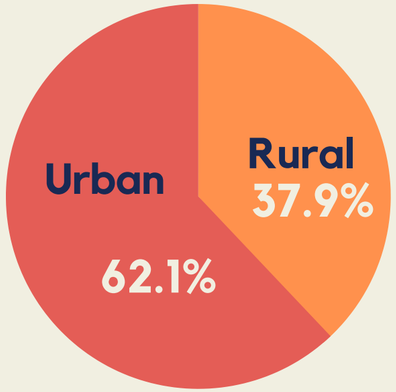
National Camps

Junior Innovate

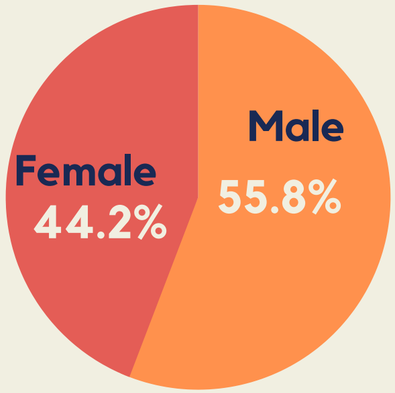
Young Innovators Challenge

2. Our Impact

OUR DATA ACROSS THE YEAR 2021



In 2020, 42% of schools in Malaysia are considered as rural. Close to 40% of schools under our programs are rural.



In 2018, 49% of students in Malaysia are female. We aim to have a healthy mix of male and female students under our programs.

Through our programs, this year we have reach:

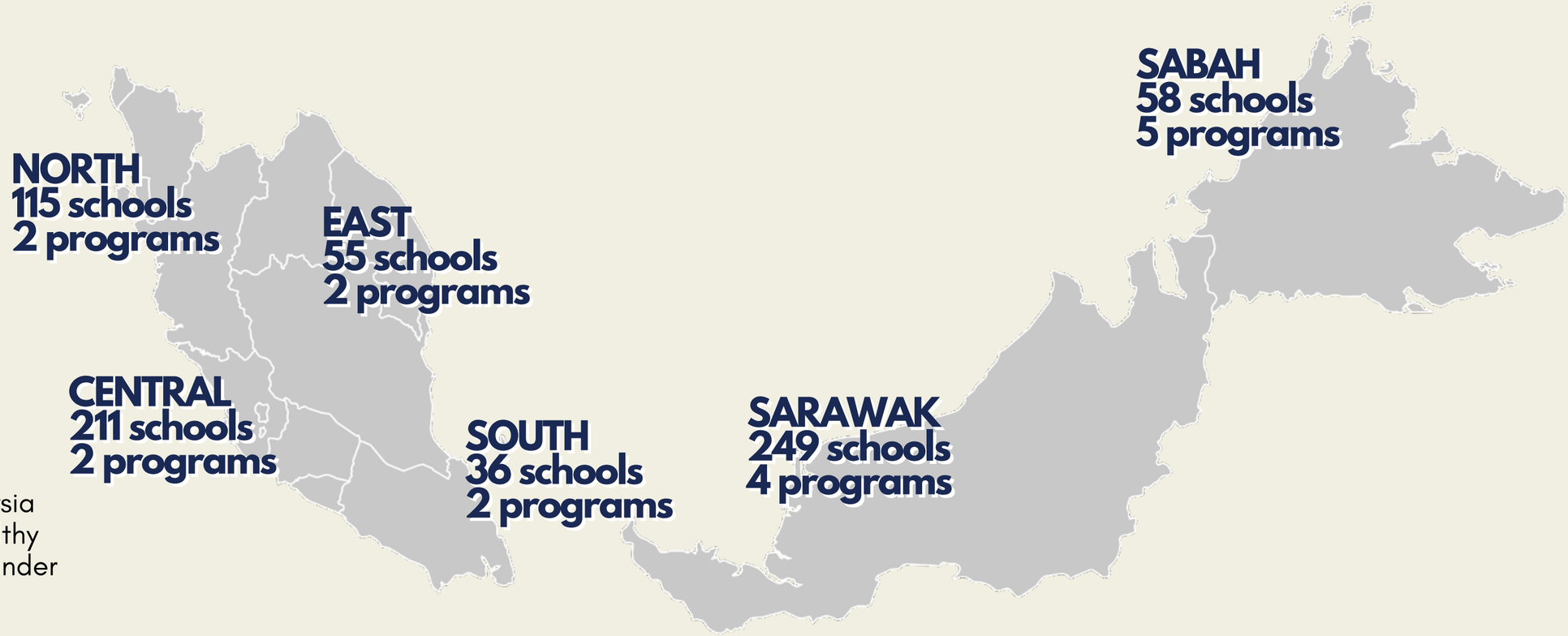
297 primary schools

427 secondary schools

5323 students

653 teachers

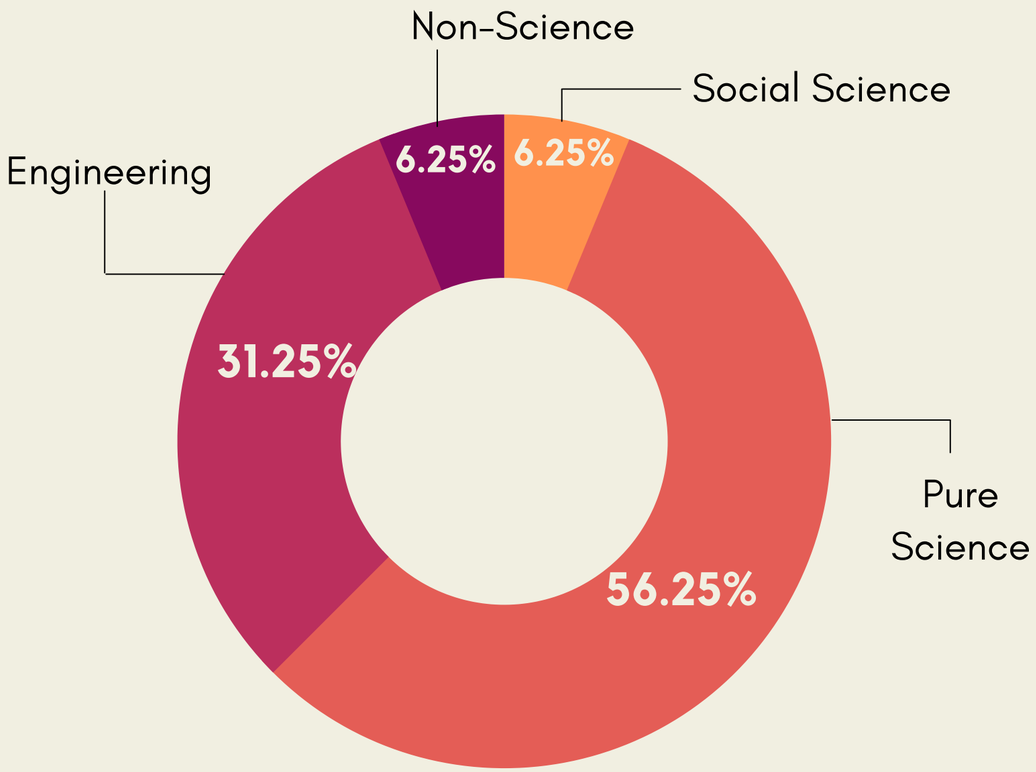
701 university students



2. Our Impact

CONTINUOUS LEARNING AFTER CHUMBAKA PROGRAM

Our alumni (including students, mentors, and teachers) have been leveraging on our education programs and support networks for their personal and professional development.

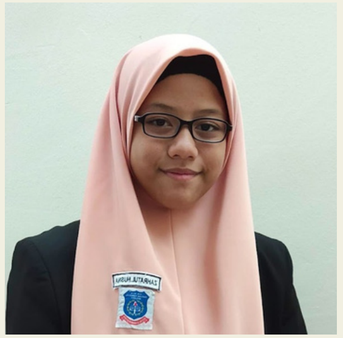


Close to 90% of YIC Alumni are now in college/university pursuing a study in STEM field.

*Based on a survey conducted in early 2021.

KOK WEI STUDIES IN PRINCETON

Pua Kok Wei, a YIC alumni is now studying in Princeton University. He has actively involved himself in various programs revolving the use of technology to build up his hometown community in Sekinchan. Despite his busy schedule, Pua has been contributing back by providing advises and guiding our students. See his portfolio here.



ZAHRATUL HUSNA IS THE "IKON MURID DIGITAL" OF MELAKA

Zahratul Husna started her STEM journey back in 2020 with Junior Innovate. Her first-time experience in the competition placed her and her partner as the Champion for JI2020. Finding learning exhilarating for herself, she continued her journey and was recently awarded as the Ikon Murid Digital and with the Digital Utilisation Technology award

CIKGU ANUTHRA BUILDS STRONG COMMUNITY IN SABAH

Anuthra Sirisena, a chemistry teacher with no prior knowledge of technology learning in Tenom, Sabah. She started her innovation journey through a teacher training with Chumbaka back in 2017. Now, she is a passionate community builder that had setup Tenom Innovation Centre (TIC) to encourage makerspace culture within the community.

2. Our Impact

STUDENT PROJECTS ADOPTED IN COMMUNITIES

Students who won the community adoption grant through Sime Darby Young Innovators Challenge 2020 have worked relentlessly this year to deliver their promise to the communities.
SDYIC2021 Grant Recipients will implement 7 community projects in 2022, double the amount of previous years.

BRAIN CIRCUIT

Brain Circuit from SMK Mulong (Kelantan) delivered 15 units of Height Auto Measuring Device, a device to help teachers and nurses to measure height of primary school students contactless. The demand for their device from other nearby schools in Kelantan and Klinik Kesihatan was overwhelming that the team decided to build additional 15 units more!

INDAHPURA

Team Indahpura from SMK Indahpura (1) (Johor) invented “Washroom Auto Counter Device”, a device to detect the number of occupants entering a building in adherence to the COVID-19 SOP in school. They managed to build and install 20 units in the 20 schools nearby.

ACES

Aces from SMK Tiong Hin (Sarawak) produced 10 units of STC (Safety Traffic Control) Kit to the surrounding schools in Sibu. This innovative device comprised of an LED safety vest and a controller glove to aid the school traffic warden by providing a better indication to the traffic outside their school especially during dawn.

3. Our Way Forward

To develop children's life skills by inspiring them to create with technology

In the next 2-3 years, we commit to strengthen our 3 pillars

Mentor

To uncover individual potential and enable empowerment among teachers & university mentors through our capacity building efforts

Curriculum

To curate, build, and constantly update our curriculum with the needs of Industry 4.0, while aligning to the social-emotional development

Technology

To enable and widen the inclusivity of beneficiaries from rural & remote areas through the deliverance of our technology

Develop children's life skills by inspiring them to create with technology

#staycurious