

The Kembara #mydigitalmaker Bersama PINTAR Story by programme facilitators Izzat & Fritz

The bus visited the last school on 24th May, signifying the end of the partnership between MDEC's Talent & Digital Entrepreneurship Division and the PINTAR Mobile Learning Unit (PMLU) programme for 2019. Almost seems unreal that just 2 years ago we were working round the clock



Discussion during the pre-modification stage

with Moja (Mohamad Zufadli bin Mohd Amin) and Victor (Lam Hin Choong) of the #mydigitalmaker movement team, to turn a normal passenger bus into an awesome mobile learning space filled with fun and interactive activity stations within 20 days. It was a welcome relief to successfully launch it at SMK KLIA on 23rd May 2017. We then started our journey to visit chosen schools with pride and delight because this bus contains the most interesting contents since the pioneer in 2008. We feel that the #mydigitalmaker content really suits the Science, Technology, Engineering & Mathematics (STEM) theme and concept.

There are a lot of unforgettable memories that we want to share, but we can tell you only the most significant ones for us. Fritz and I, as the facilitators cum coordinators for this programme, have seen a lot of things, hear a lot of feedbacks and experience a lot of whims from visitors that come from all walks of life. I still remember one student who kept hugging me while saying "it is fun" repeatedly when he was in the bus. I can see that he really enjoyed just looking towards the activity areas on the bus and he got even happier when he tried the Creative Animation segment where the cartoon in the animation screen follows our real movement.

On another occasion, we saw how most students were so amazed when they tried the Virtual Reality (VR). In fact, some of them have never heard about VR or 3D Printer before. As more than 50% of the total schools we visit are not urban schools – mostly needy ones – where most of the students are from disadvantaged families, we therefore can summarise that more than 85%¹ of



Creative Animation



underprivileged students accept and enjoy our programme very much. This is in line with our objective to bring them fun learning through this bus. Not only students enjoy activities in the bus, the teachers who come to visit also have a chance to try and play the activities. Among segments that have amazed teachers are Robotics, 3D Printer, Creative Animation and Microcontrollers. For them, these are the segment that relates best to STEM subjects like *Teknologi*

¹ Results acquired from the PMLU programme Feedback Form, collected from more than 10,000 student respondents from 2017 to 2019

Maklumat & Komunikasi (Information Technology & Communications) and *Reka Bentuk & Teknologi* (Design & Technology). At some point, these have helped teachers who teach STEM subjects to understand better about STEM.



Indirectly, we as facilitators have also learnt quite a lot from the segments. For example, we learnt how to design 3D objects using a simple 3D Design software and yes, we managed to design a 'Terima Kasih' keychain before printing it out using the 3D Printer to be given to lucky Headmasters and Principals. Moreover, we learnt how to write python programming in the Raspberry Pie at the Microcontroller segment and solved a Selfie-cam problem.

In terms of technical experience, we have gone through and gained a lot throughout our journey. There was one moment during the NBOS 3.0 event at Paloh, Johor, where we had to close our bus because our inverter system suddenly shut down, although the VIP visitors were already walking us! When we traced the source of the problem, we found that it was due to overheating in the inverter that comes from the tapered space in front of its ventilation fan.



We faced quite similar experiences at schools we visited where a few would suddenly blackout. It was quite overwhelming to deal with this kind of problem especially when we are running out of time to start the visit session. However, most of the schools understand our situation and gave the best help they could. Thank you, teacher! Even

though we encountered some teachers who did not give good cooperation towards our programme, the kids still love it. We always believe, children are pure, and they accept our bus visiting their schools with open hearts.

Speaking about the bus, there is one thing that we want to share - the difficulty to park the bus in the school compound. Urban schools located in the centre of the city are among the most challenging. Sometimes, the bus needed to step in the bush, break the tree branches, 'kiss' the fence or gate and leave some scratches in order to enter the school compound and park inside. The most important thing is, we run the program within the school compound only.

Besides visiting schools, we also accept event invitations whenever possible and we also engaged with every *Jabatan Pendidikan Negeri* (JPN). We would like to give special thanks to JPN Pulau Pinang, JPN Kedah, JPN Negeri Sembilan, JPN Johor, JPN Perak, JPN Pahang, JPN Selangor and JPN Perlis for their willingness to receive our bus either for their *Sehari*



With JPN Pulau Pinang

Bersama JPN Programme or in carnivals/events organized by JPNs. Big thanks also to JPN Kelantan, JPN Terengganu, JPN Melaka, and JPN W.P. Kuala Lumpur for always supporting us and giving permission to run the programme in their states respectively. This type of collaboration has not only helped us in achieving the total target of students engaged via the PMLU programme, but also to broaden our network and increase cooperation between PINTAR Foundation and government sectors.

In conclusion, we are very thankful that we managed to achieve our target, and in fact exceeding it with a total of 109,758 students from 191 schools by the end of the programme. We had 2,607 teachers come aboard our bus during all occasions, and not just during the school visits. We collected more than 10,000 feedback forms from student respondents.



From this story, you may notice that we have shared mostly good experiences but let's put aside the unpleasant things, which we can look into, to improve our service in the future. With the implementation of the Kembara #mydigitalmaker Bersama PINTAR Programme, our utmost hope is, we have brought the students and teachers a difference in their learning and teaching every day. We may not be able to see the tangible impact of this programme but today we can at least confirm that we have shared meaningful knowledge and exposed them to STEM knowledge, which hopefully will mean the betterment of their future.

Handwritten signature of Muhammad Fakhri Izzat Nazmi. The signature is written in black ink and is quite stylized. Below the signature, the name "Izzat" is written in a smaller, simpler font.

Handwritten signature of Nur Friziana Sahadan. The signature is written in black ink and is quite stylized. Below the signature, the name "NUR FRIZIANA" is written in a smaller, simpler font, followed by a small heart symbol.

Muhammad Fakhri Izzat Nazmi

&

Nur Friziana Sahadan