

TEACHER WORK ATTACHMENT



Wonder what it is like to be a
Science Catalyst, Digital Ninja or Imaginator?
Join us to find out.

WHAT?



4-week attachment to
Science Centre Singapore

Authentic and engaging
hands-on experiences

Opportunity to **network** with
experts, like-minded
educators and partners

WHY?



Through insights into
creating the **Science Centre
experience**

Discover new ways to bring
Joy of Learning to students

Spark their curiosity and
sense of wonder

WHEN?



Period is negotiable.

17 May - 11 Jun 2021

25 Oct - 19 Nov 2021

Longer-term secondment
opportunities are also
available. Keep a look out
during APEX!

WHO?

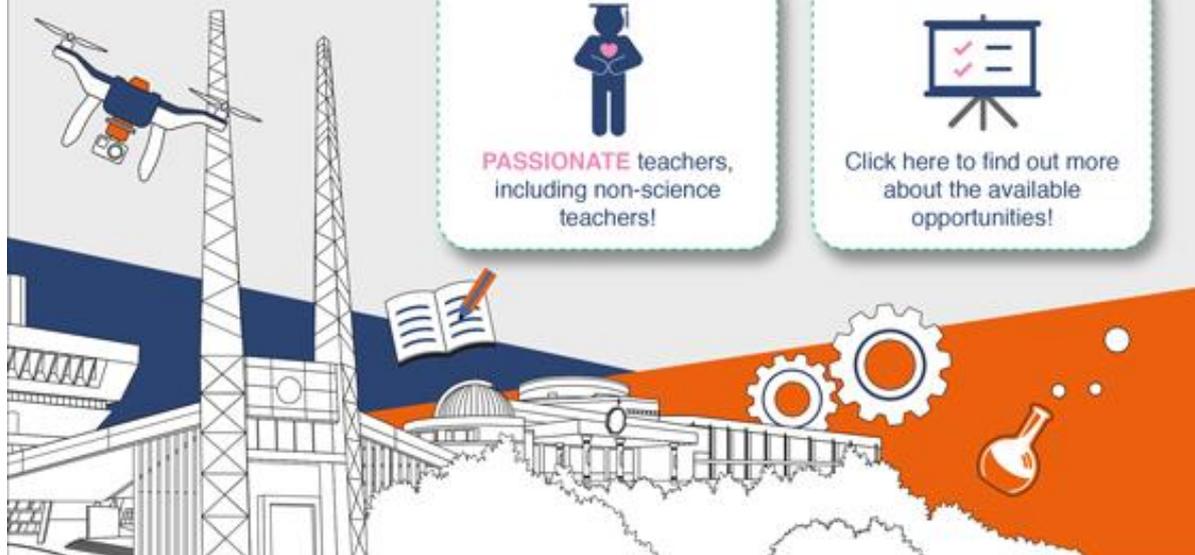


PASSIONATE teachers,
including non-science
teachers!

HOW?



Click here to find out more
about the available
opportunities!



Reflections from EOs in Science Centre Singapore



Loh Yih Huey



“ At the Science Centre, there is more thinking space to explore. We take a step back from school and look at the bigger picture, how to bridge the gaps between syllabus and real-life applications, how to enhance students learning from beyond textbooks, how to provide experiential learning and bring about applied learning. ”



Yeo Woei Ter



“ I learned how to build electronic circuits, and even made prototypes of electronic devices which I never thought I was capable of. I gained a deeper understanding on how dataloggers work and have even prototyped my own electronic instruments that can be used in Chemistry experiments. ”



Wendell Wong



“ The secondment at SCS has given me the space and time to reflect on my teaching and learning in general. It has also provided an opportunity for me to learn about the entire mechanism of development, costing, marketing and delivery of the programs. ”



Cindy Tiong



“ There were opportunities to interact with STEM curriculum specialists, MOE CPDD, schools and industrial partners through various project collaborations and thus gleaning from their experience and knowledge. ”



Vincent Ng



“ During my stint in Science Centre Singapore, STEM Inc has broadened my horizon in terms of relating to what I know and what I understand of the current trends in the working world. ”



Edmund Khee

“ One of the most memorable experiences that I had was when I was able to create my first DIY drone at the Digital Fabrication Space (DFS). Though there were a number of challenges that I had to overcome in building the drone. It was a satisfying experience to see it come to life. ”



Teacher Work Attachment at Science Centre Singapore 2021



Duration: 4 weeks

Period: a) 17 May - 11 June 2021 OR
b) 25 Oct - 19 Nov 2021
c) TWAs of different durations need to be discussed on a case-by-case basis.

Number of attachments: Maximum of 20 attachments in total for each attachment period

Application

For MOE officers, please visit <http://intranet.moe.gov.sg/academy/TWA/Pages/TWA.aspx>.
Academy of Singapore Teachers (AST) will facilitate the application.

For non-MOE officers (e.g. teachers from independent schools), please submit your application here: <https://form.gov.sg/#!/5fe99cdc315aec001150e61e>

Deadline

The application deadline for May's attachment is 15 January 2021.
The application deadline for October's attachment is 15 September 2021.

Enquiries

For enquiries, please email to teachers@science.edu.sg.

Teachers from all backgrounds, including non-science teachers, are welcome. You will have the opportunity to work alongside staff of the Science Centre and to broaden your experience beyond the school environment. The Science Centre experience focuses on having fun while developing skills and complements the formal curricula in schools. The attachment will give you different perspectives and let you gain experience and skills in developing experiential and engaging programmes.

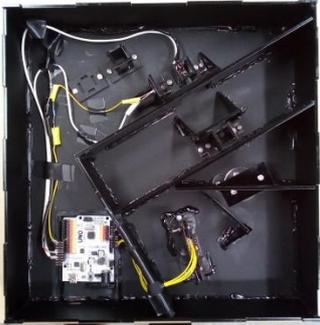
The attachments will be coordinated by our Education Programmes division but depending on the area of attachment, teachers may be attached to various departments within Science Centre and will have the opportunity to observe and assist in developing and conducting programmes.

All teachers will undergo an orientation programme before starting specific attachments.

Time	Activity	Description
Day 1	Logistics, orientation and meeting staff	Arrangement for seating, access into the building, parking, internet access, etc
Day 2 - 3	Overview of Science Centre and education and exhibition programmes	The programme involves both presentations as well as an experiential component of walking the ground, observations and involvement in some activities
Day 4	Discussion with department Head and staff in the planned area of attachment	Introduction to the department staff during the attachment
Day 5	Reflection on the week	Teachers give feedback on their views and observations of what they have experienced
Weeks 2 - 3	Attachment to the department	The attachment allows teachers to also participate in any other activities that may be taking place at Science Centre. For example, staff sharing sessions, public talks, etc.
Week 4	Wrap-up, submission of report/reflections/project follow-up in school	Finalise report, share prototype/project, any HR matters (return staff passes, etc)

Types of TWAs at Science Centre

Attachment	Audience	Area of programming	Outcome
Science Catalyst @Education Programmes	Primary and Secondary	Topics in STELLAR, general science topics, DNA, Chemistry, Food Science, Physics, Gaming, Math, Teacher PD	Prototype activity e.g. development of pre- and post-programme activities and alignment with school curricula.
EduMentor @CRADLΣ Lab	Secondary and higher levels	Physics and engineering experimentation and project mentorship	Observe and assist with mentoring of students in research projects; available 1 st half of June

		<p>Signature programme - R&D Experience Programme, Teacher PD</p>  <p>(Picture: computerised VIS fluorescence/absorbance photospectrometer designed & built by students at CRADLΣ)</p>	<p>(Student Mentorship Programme) and mid-November to mid-December (R&D Experience Programme).</p> <p>or</p> <p>Mini R&D project (specific topics to be discussed and arranged in advance). A common theme is the design and prototyping of low-cost scientific apparatus and experiments for educational use (involving practical and trans-subject application of STEM disciplines). Non-prototyping investigative projects making use of available facilities are also possible.</p>
<p>STEM Resource Developer @STEM Inc</p>	<p>Primary and Secondary</p>	<p>Development of STEM resources such as exemplar modules, online courses, educational kits, social media content to engage youth, etc</p>  <p><i>Teachers receiving training from STEM Educators in Science Centre</i></p>  <p><i>Sample project prototype: Impeller and Gear pumps</i></p>	<p>Propose a STEM resource to be developed alongside Science Centre staff.</p> <p>Teachers are expected to pilot the STEM resource in their schools. The resource may then be shared with the larger education fraternity.</p>

Tinkerer @Tinkering Studio	Primary and Families	Activities related to tinkering Teacher PD	Develop tinkering activities that complement the school curricula
Imaginator @KidsSTOP	Preschool	Activities and workshops for children 2 - 8 years old. Outreach programmes, gallery trails, KidsSTOP Academy on-ground activities and Teacher PD	Prototype activity
EduExplainer @Scientist for a Day	Primary, Secondary and Public	Understand SFAD works and methods; and develop programmes that improve engagement and learning	Prototype activity
Science Catalyst @Gallery Programmes	Primary, Secondary and Public	Worksheets and guided tours for students and public; Signature shows 	Create teacher resources for selected exhibition Curate inquiry-based demonstrations for visitors of all ages.

TWAs suitable for non-Science teachers

Attachment	Audience	Area of programming	Outcome
Transmedia Writer @Editorial and Transmedia	All	Conduct research, edit and create engaging content on scientific topics that are used for exhibition, publications (print/on-line), videos, science shows, and transmedia communication.	Translating initiatives into compelling story ideas with useful messages, elevating awareness of Science Centre's impact among strategically important audiences

Digital Ninja @Digital Learning Instructional Design	All	Sourcing for adventurous ways to excite and engage learners across digital learning, enabling technologies, social media, gamification, mobile, VR, 3D and other modes of learning.	Adapt latest and most appropriate instructional design and learning technology techniques, theories and methodologies to create unique and engaging content.
Science Explorer @Outdoor Learning, Fieldwork and Investigation	All	Bring elements of outdoor adventure, exhibitions and fieldwork into learning for kinaesthetic learners	Working closely with the education programmes team and exhibitions team to curate learning experiences outdoor and within exhibition spaces

Additional Notes

Teachers may choose their area of attachment from the above list to make their experience more meaningful. If requested, teachers may be rotated to work with various project officers in the course of their attachment, so that they will gain greater exposure.

The attachment is not only intended as a learning experience for teachers. It is also intended to help the Science Centre better understand teachers' needs and perspectives, and thereby improve its services. Thus, teachers are expected to share their experience and feedback in a brief report at the end of their attachment.

Teachers who are interested to apply should have a passion for informal learning but need not have a Science background as long as they are able to contribute to the Centre. We also invite teachers to propose new areas for attachment other than those listed.

Thank you. We look forward to you joining us at Science Centre Singapore!