

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

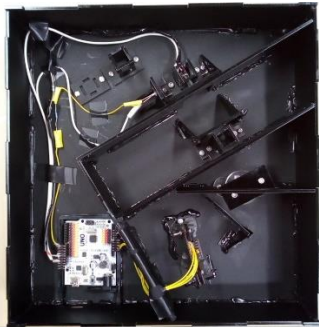
Teachers from all backgrounds, including non-science teachers, are welcome. You will have the opportunity to work alongside staff of the Science Centre and to broaden your experience beyond the school environment. The Science Centre experience focuses on having fun while developing skills and complements 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	<p>Physics and engineering experimentation and project mentorship</p> <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>Observe and assist with mentoring of students in research projects; available 1st half of June (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>
<p>Tinkerer @Tinkering Studio</p>	<p>Primary and Families</p>	<p>Activities related to tinkering Teacher PD</p>	<p>Develop tinkering activities that complement the school curricula</p>
<p>Imaginator @KidsSTOP</p>	<p>Preschool</p>	<p>Activities and workshops for children 2 - 8 years old. Outreach programmes, gallery trails, KidsSTOP Academy on-ground activities and Teacher PD</p>	<p>Prototype activity</p>
<p>EduExplainer @Scientist for a Day</p>	<p>Primary, Secondary and Public</p>	<p>Understand SFAD works and methods; and develop programmes that improve engagement and learning</p>	<p>Prototype activity</p>
<p>Science Catalyst @Gallery Programmes</p>	<p>Primary, Secondary and Public</p>	<p>Worksheets and guided tours for students and public; Signature shows</p> 	<p>Create teacher resources for selected exhibition Curate inquiry-based demonstrations for visitors of all ages.</p>

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!