STUCK ON HOW TO RUN THE OLIPHANT SCIENCE AWARDS IN 2020?



SASTA has asked some of our experienced OSA Coordinators to share their ideas and plans for utilising the competition under current circumstances so have a read and see if you can help get your school involved!

Stirling East Primary School

The Stirling East Science Specialist Teacher/Oliphant Science Awards School Coordinator has set students up for completing a Scientific Inquiry over the Term 1/2 holidays.

This involves explicitly teaching about the scientific method using some lessons from Primary Connections - the dress up race for teaching variables, mixed with some of Kate Dilger's (from SASTA) ideas for planning a scientific inquiry. The teacher will use You tube videos (<u>https://youtu.be/cDA3_5982h8</u>) and some power point lessons from "The skills of Science - Scientific Inquiry Book 1" by Blake education.

From here Students will be guided to think about what they are interested in and then design an inquiry.

Students at home will collect data and the teacher will explicitly teach them about how to draw a graph and interpret results to draw a conclusion.

All information will be hosted on Google Classroom, and the students write a report following the completion of the inquiry. The teacher will post a rubric for assessment on Google classroom and discuss what they are looking for.

Following this, the class will turn their investigations into a poster and use this in a 'tour of learning' where we showcase the children's learning to scientists, who offer feedback.

Glen Osmond Primary School

For the Oliphant Science Awards the Glen Osmond Primary School community will be using Microsoft Teams with their senior students. The Oliphant Science Awards Coordinator has created an OSA channel and uploaded all Oliphant Science Award information to this so that it is accessible to students.

The specialist teachers are investigating the use of an Edublog to connect with R-7 students. The OSA Coordinator has made the same information accessible to the Science teacher through the staff Teams Science Channel.

One of the off-site tasks designed is for students to create a 30 Second Science Video clearly outlining the science involved and upload it to our Teams science channel.

Aldgate Primary School

Aldgate Primary School use The Oliphant Science Awards annually as an extracurricular activity, with a long history of participation (over 300 students in the last 5 years).

Using platforms such as Seesaw to reach the students and their families, the Oliphant Science Awards School Coordinator has started 'the recruitment phase' of the competition, highlighting to the school community the positives it can bring as a home learning opportunity.

During Term 2 the Coordinator will look to support, and guide interested students via platforms such as Seesaw, Zoom and face-to-face for those still needing to attend school.

Coromandel Valley Primary School

This will be the first year that Coromandel Valley Primary School has been involved in The Oliphant Science Awards, however their OSA School Coordinator has participated in the competition at a previous school.

In 2019 the Coordinator introduced the poster at their previous school as a summative task for 4/5/6/7s as the final piece for Term 1. To undertake this the school had two science lessons researching and planning and then the students worked independently.

However, in this new school environment, the goal will for 2020 will be to introduce the poster project again, but as an interest task.

In addition to this the Coordinator will have the Year 3 students develop and submit a board game to show their learning in biology. This was introduced during lesson in Term 1, with two lessons in science class allocated. After this it has been taken home for homework, with the view to return it during Term 2 for assessment (before Oliphant Science Awards submission deadline).

Oliphant Science Awards information is to be communicated via Seesaw platform to parents and students.

Woomera Area School

This remote school joined The Oliphant Science Awards in 2019, with amazing enthusiasm, which is flowing into 2020! The OSA School Coordinator was early to get information and initial project conversations going in Term 1, therefore has had the ability to guide initial student learning and conceptual discussions.

A Google site has been created to provide students with scaffolding for planning projects that the school feel they can support, such as assisting accessing chemicals for crystals entries. For entries such as Models & Inventions the students will be able to request any materials that the school would normally provide, and it will be sent out to them.

The OSA Coordinator is in the process of creating and/or sourcing videos & screencasts to assist students with difficult things (e.g. using Adobe Illustrator: https://www.youtube.com/playlist?list=PLC2piXy0fdb8ibV9cSMLFrpv7XVxDCXwy)

The students have been encouraged where possible to use digital tools that can allow for the online learning approach, including the following:

- Scratch block coding to make animations/games
- TinkerCAD to design 3D model/parts for games and models which will be printed at school and sent out to them (students need to write out instructions & sizing etc. if school is printing for them)
- Google Sites Website construction
- Digital research scaffolding/records - <u>https://www.teacherspayteachers.com/Product/Easy-Research-Notes-Sheet-</u> <u>5294108</u> | <u>https://www.teacherspayteachers.com/Product/Easy-Multi-View-Image-</u> <u>Record-Sheet-5330931</u>
- Corel Draw & Adobe Illustrator to create files that can be laser cut at school and sent out (students need to write out instructions & settings etc. if school is cutting for them)

As Woomera Area School is a remote school, many of the project submission formats used last year will be suitable for this year's competition, with guidance towards project creation such as Electronic Games (instead of physical Board Games) and the delivery of Posters/Photography/Crystal Investigations via Post.

Salisbury Park Primary School

The Oliphant Science Awards School Coordinator/Science Specialist Teacher at Salisbury Park Primary School has credited the support of the students and their families as the driver of continuing this year's Oliphant Science Awards competition within their school.

For the year 4/5 students the Coordinator has used Seesaw as the platform for OSA support, by ensuring that short videos, pictures, and images are uploaded to student portfolios. Emails are also used to maintain further communication.

For the year 6/7 students, Google classroom will be the key platform, with students asked to email their work for discussion, as well as utilising a number of videos and images to support learning.

Kangaroo Island Community Education

SASTA welcomed this school to The Oliphant Science Awards in 2019 and has been impressed by the interest and passion the teachers and students have shown in the competition. The OSA School Coordinator organised in 2019 for a group of Kangaroo Island Community Education (KICE) students to travel to the Open Day event as a learning opportunity to help those involved gain ideas as to how to develop their projects for 2020! It is also through strong reflection on their 2019 involvement that their plans and ideas for 2020 have been developed.

With the current need for learning from home opportunities, KICE had a meeting during Term 1 with the English and HASS teachers, who are now also keen to incorporate The Awards into their programs through the Science Writing category. The OSA Coordinator has mentioned that this is an exciting step, as it shows how science, and scientific literacy, is acknowledged as a fundamental part of our society.

Currently teachers at KICE will be running the Oliphant Science Awards embedded within the classroom teaching.

Last year, the most successful KICE Oliphant Projects were run in close collaboration with students' families. The students spent the majority of their time working on their projects at home, however the Coordinator was in regular email and phone contact with parents to check on progress, provide advice, arrange equipment and supplies. Teachers ran weekly 'check in' sessions at the school to help guide students. Fortunately, as this format is closely aligned to what will be achievable in the current teaching/learning environment in SA, it will be continued for 2020.

The OSA Coordinator at KICE has suggested that given the current situation, students be encouraged to choose the project category they are most interested in and their families are best able to provide support and expertise in.

KICE are also planning to have mentor teachers to improve the quality of support for students. An example of this is would be for students undertaking photography projects. As a Science specialist may not have knowledge regarding the technical aspects of photography, finding a teacher within the community with this knowledge and connecting them with students will assist the project support.

Currently the school is planning to create an Oliphant Science class in Teams and communicate with students and other teachers using this platform, maybe with Zoom or faceto-face chats. For individual classes who already use the Seesaw Platform may prefer this, with the view for students to upload their work in these spaces for feedback as they progress. To further support student learning the KICE team are looking for more scaffolding and guidance for students in how to better make movies to present their projects. Being a remote school, previously produced projects for Models & Inventions and Computer Programming, Apps and Robotics were sent via video submission, (which will again be required more broadly in 2020) and realised that this can come with additional learning needs.

The OSA Coordinator has mentioned that the feedback received from some of the students last year was that they learnt just as much, if not more, about science from working on their Oliphant Projects as they did during in school science lessons! Certainly, the quality of work produced by some students far exceeded normal expectations in the classroom. For this reason, they have encouraged that teachers should not be too worried about which part of the curriculum students' projects tie in with, so long as it fosters curriculum links in general.

Tips and Ideas for School Coordinators from the SASTA Office

As our community faces many changes to teaching and learning during this time, SASTA would like to again reinforce that as this competition is such a significant driver of science education, therefore will continue to run, even if that should result in some changes to the competition structure.

We believe that now, more so than ever before, this competition will be a special and important tool to assist and motivate students to learn about science. This type of studentcentred learning offers a model for flexible teaching programs. The inquiry and project development skills utilised to create and finish an Oliphant Science Awards project can be easily directed and managed through remote/online learning.

The <u>Oliphant Science Awards Website</u> has lots of information to get you and your school community members going on their projects. Head to the <u>Coordinators Information page</u> to find the following resources to share:

- There are free worksheets from our <u>Teachers Resource Kit</u> that promote self-reflection and give students direction with their project.
- If you are new to the Oliphant Science Awards, take some time to listen to the <u>Navigating the Oliphant Science Awards Webinar</u> as this has a teacher panel section with ideas and tips from many of our most experienced School Coordinators.
- Take some time to download and share with your community members our <u>Oliphant</u> <u>Science Awards Information Booklet</u> with all the rules and details for the competition.
- The <u>Judging Rubrics</u> for all project categories can be found and downloaded via the website, to assist guide self-reflection

As indicated by our OSA School Coordinators, the importance of having and utilising a digital platform for Awards communications to students and their families will be critical during this year's competition.

It would be suggested that teachers should look to start moving towards aspects of the project development early this year. This could be suggesting to students and their families to consider collecting, reusing, or recycling household items to be developed into resources for projects (especially Models & Inventions). Incorporating aspects such as ongoing video diaries, additional photos or digital documentation of projects ready for remote submission (even for traditionally physical only projects) during the project development would also be recommended.

Getting your school community, students and families interested and involved in The Oliphant Science Awards the can also help, so consider sharing the <u>past competition photo galleries</u>, <u>Oliphant Science Awards Video</u> or <u>information about major sponsor prizes</u> to help inspire and motive them!

Finally, for general content and skill development support for projects, we welcome you to consider all the other online digital teaching resources available. Head to <u>the SASTA website</u> to see a list of some of the many digital resources currently available to support teachers.

SASTA would like to thank and acknowledge all the teachers who have contributed and shared their ideas and information!

For further information:

Visit the Oliphant Science Awards Website - <u>www.oliphantscienceawards.com.au</u>

For Oliphant Science Awards Competition enquires: <u>becci@sasta.asn.au</u>

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