



Lesson Topic : Candling Eggs in Lockdown	
Year Group : Year 3-4	
Learning Outcome	<ul style="list-style-type: none"> • Research current events that are important to them • Create a script to tell others about this current event • Record and upload their Awa news Update
Links with the New Zealand Curriculum 	<p>English - Speaking, Writing & Presenting Processes and strategies</p> <ul style="list-style-type: none"> • Select and use sources of information, processes, and strategies with some confidence to identify, form, and express ideas. <p>Ideas</p> <ul style="list-style-type: none"> • Select, form, and express ideas on a range of topics. <p>Science Nature of Science - Investigating in science</p> <ul style="list-style-type: none"> • Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple models. <p>Nature of Science - Communicating in science</p> <ul style="list-style-type: none"> • Build their language and develop their understanding of the many ways the natural world can be represented. <p>Living World - Life processes</p> <ul style="list-style-type: none"> • Recognise that all living things have certain requirements so they can stay alive. <p>Living World - Evolution</p> <ul style="list-style-type: none"> • Recognise that there are lots of different living things in the world and that they can be grouped in different ways.
Key Competencies 	<p>Thinking Students are encouraged to look for clues when candling eggs to come up with their own thinking on if an egg has a chicken growing inside it or not.</p> <p>Relating to others Students are completing this activity via google meet due to COVID lockdown. Students need to know how to relate to others and to express their ideas and to support others in this very different digital learning environment.</p> <p>Using language, symbols, and texts Students use the science language associated with candling eggs. They also look through slides sharing information which contains pictures and clues which they need to then look for when candling the eggs.</p> <p>Managing self Students need to manage themselves in this digital environment. This also includes knowing how and when to share their ideas best within the google meet and when they have questions outside the google meet. They also need to manage themselves when completing work.</p> <p>Participating and contributing Students participate and contribute to the discussion during the google meet and also show their participation and contribution within their weekly writing slide where they record their findings.</p>
Prior knowledge	<p>As part of the lead up to this session students have researched how to incubate eggs including temperature, humidity, days of incubation and other useful tips. This was started as a topic to captivate our students during lockdown. It was chosen as we had resources that could be adapted to suit our current students and could give a real context to their learning.</p>



This session was held after students had completed research on the topic and on about day 8 of the incubation process. This was to give time for the eggs to start developing so that they could be candled to show the development within the egg.

A few children within the class had seen this process last year (but only 1 of these were online students). Other students had seen my previous class having chickens hatch in it but had not been involved in this process but had shown great interest in it.

Lesson Sequence



Session Outline

This session shows students learning about what to look for when candling eggs. This was by way of sharing slides and videos that detail what to look for. It also showed the tools and explained the process and method of candling eggs (this is because candling itself needed to be done in a dark room so would be difficult for students to see).

This session then continues to share the process of candling of eggs and allows for students' questions and some discussion (within a digital meet environment).

Student Activity

Learn:

Students are learning how to look after eggs in an incubator and how to work out if embryos are developing within the eggs. They will look for clues/evidence such as veins, and embryo eyes as well as air pockets and movement within the developing eggs.

Create:

Students will write to explain the process of candling eggs.

Share

Students will work in a document that has been shared by the teacher via Hapara. This means that as soon as students start to work on it they are sharing it with teachers and can gain feedback via this method.

Teacher Activity

Session starts with a teacher-led discussion on candling eggs. This included showing the equipment needed and the process. It also included working through a slide deck that had videos and images to help students to 'know what to look for' when we candled our own eggs.

Students enjoyed learning new words as we went and the language was very much science and topic specific.

Following this discussion students were then encouraged to record their own findings as they went (and a buddy teacher recorded our findings for everyone within the slidedeck that students had just worked through.

Eggs had been numbered from 1 to 24 and we started with egg number 1. We candled this within the dark space and talked about what we could see. These were recorded by teachers and students.

We then moved through eggs in batches of 3 - 4 asking questions between each batch (while more eggs were being brought down to the dark room. When we go to about egg 12, the writing task was explained to students including the helpful links to the side of the slide and students could then choose

	<div>Some students will also choose to share this work on their blog.</div> <div>to either stay in the google meet to see the remainder of the eggs being candled or they could move off and begin/continue their learning for the day.</div> <div>Majority of the students remained in the google meet to see the rest of the eggs being candled.</div>
Resources	<ul style="list-style-type: none"> • Incubator • Eggs • Dark room • Candling torch • Chromebook - For Meet and recording
Reflection and Analysis	
	<p>This was such a fun lesson to take. Although doing this in person is always better as it is easier to see the veins and embryo eyes the google meet allowed for students to be a part of this.</p> <p>Sharing the slide show before candling the eggs allowed students to 'know' what to look for when we went to candle eggs and was also something they could refer back to after the teaching session.</p> <p>Students were really captivated with looking for clues to see if an embryo was developing or not. Most students stayed to see all the eggs being candled.</p> <p>Due to the amount of eggs this process took a reasonable amount of time. Having questions between each batch helped students to stay focused and to share their thinking as they went. Stopping and sharing the main task for writing halfway through the lesson worked well as it gave students choice as to if they would continue to watch or if they would continue with their work.</p> <p>Within the google meet it was really hard to share/see all the veins and embryo eyes - Easier with the naked eye, but the bonus was that all students were able to see what was happening at the same time.</p>