

The Titanic

Kindergarten Project



Google Image

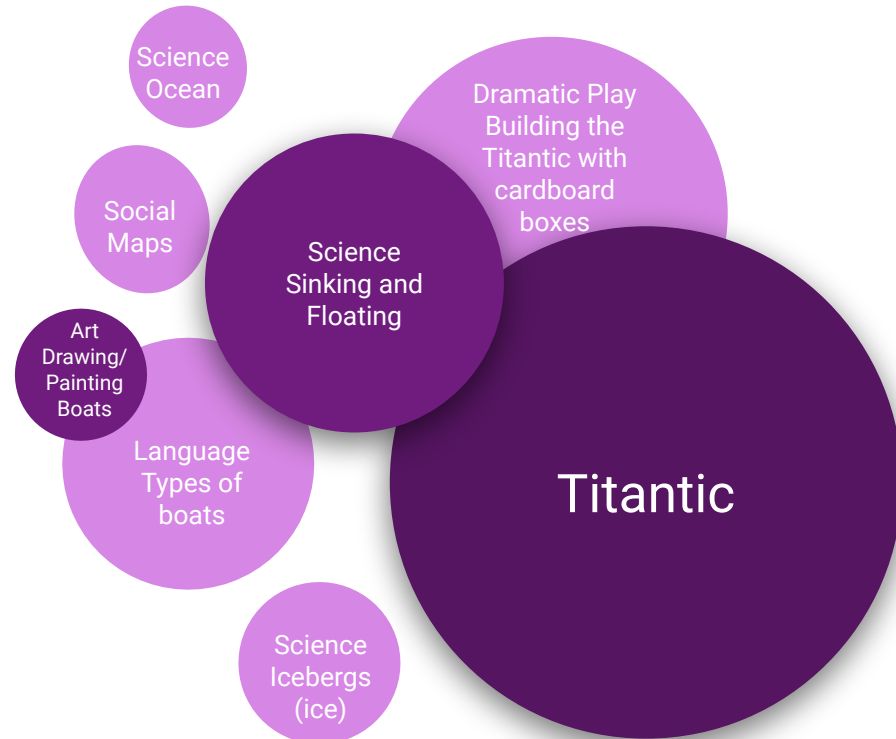
Responding to Children's Interests
March 2021
Trish Maxwell

Phases 1 - The Spark - Observing Students' Interests

One student had a fascination with the Titanic. This started a buzz with most of the other children. This interest was shared with parents. Some parents supported this interest by discussing it at home. One parent sent to school their Titanic Lego kit. The COVID protocols limited how the lego could be shared within the classroom but over many days, all those that wished to be part of that project could be. The teacher brought in Titanic books and most students poured over them every chance they could. The students shared rich vocabulary of the parts of the ship with each other. The Titanic books were full of wonderful pictures with many captions and as time allowed the adults in the room would read those captions allowing for more information about the Titanic to be shared.



Phase 1 - Teacher Anticipatory Web



Complete Anticipator Webs:
-possible questions
-curriculum opportunities
-resources and field-sites available

A project approach, ... usually involves a small group of children who have displayed a common interest. Of course a whole group can be involved in a project (or an individual child for that matter), but it is more likely to be centred around a small group, which allows for more sustained and meaningful learning (Katz & Chard, 1992).

Phase 1 - Invitation to explore and confirm interest in the topic

Materials were presented with labels and pictures on containers.
No instruction was given other than to keep the water on the tray.

↓
Provide focusing activities and common experiences for the group or class
Create 'Invitations' to explore and confirm interest in the topic
↓



Teacher prompts...

What are you seeing?
answers ... This one floats. This one sinks.

What does floating mean? What does sinking mean?
answers ... it goes to the bottom ... it stays at the top.

What are you feeling?
answers ... hard, heavy, soft, fluffy, smooth, plastic, metal.

Invitation Materials:
containers of water, container of materials (rock, coin, key, marble, buttons, shell, feather, popsicle sticks, wooden clothes pin)

Phase 1 - Clarifying and Confirming the Topic



"This is like an experiment!"

"What!? Why does one button sink and the other float?"

"Why does that button float? Did you put something in the water to make things float?" (Looking at teacher accusingly.)

"Look! If I put the button that sinks on the popsicle stick, it will float too!"

"I can't believe that the feather floats?!"

"What if I pour more water into this dish? Will more water on top of the feather make it sink?"

"Look I made a boat using the two popsicle sticks and the clothespin."

"Something lived inside this shell, but it died."

"These coloured popsicle sticks make the water coloured."
(this was really fascinating to some students)



Teacher question: "Tell me what is happening in this container?"
Answer "I am mixing these together for soup!"

Phase 1 - Selecting the Topic

Reflection Questions	Topic – The Titanic
How interesting is the topic for the children?	Very interesting to 8/10 children in this kindergarten classroom.
Is it a real-world topic?	yes
Is there a certain amount of personal experience they already have with the topic?	Books have been brought into the classroom.
How easy will it be for them to have hands on, first-hand experience (field work)?	Not very easy. Titanic experts?? Boat experts maybe. Virtual museum tour? Boat expert virtual visit?
How dependent will they be on adults or books for information?	Information about Titanic the students will be very dependent. Information about what makes a boat float will be investigated by them.
Who can come in and tell about their first-hand experience with the topic?	Virtual
Will there be many different questions the children will want to ask about the topic?	Some of the children are adamant they know everything about the Titanic at this point.
Will there be opportunities for the children to investigate their own questions actively?	Materials that will float will be actively investigated. How to make things float that generally sink will also be investigated.
Will there be many different ways the children can be helped to represent their findings?	Represent their findings. Materials that sink and float (sort).
Will there be opportunities to take roles in dramatic play?	Titanic boat building. Some students knew boat terminology – bow, stern, starboard,
Will there be any large constructions for the children to build and play with or in?	Box Titanic. Building their own boats.
What will there be to count, measure, and compare?	Count the materials they use to build boat, corks, popsicle sticks, elastics, cardboard, plasticine, paper,
How are shape, colour, texture, or size significant variables in a study of this topic?	What materials float and what materials sink. Can we make materials that sink, float?
What expertise can I draw on from among the parents of the children?	Not sure??
If the topic is of short-lived interest is there a natural follow on for a new project?	March – St Patrick's Day activities – running rainbow -



Discovered that one teacher on staff had visited the Maritime Museum of the Atlantic in Halifax. She was willing to be a guest speaker and share her many pictures.

<https://maritimemuseum.novascotia.ca/what-see-do/titanic-unsinkable-ship-and-halifax>

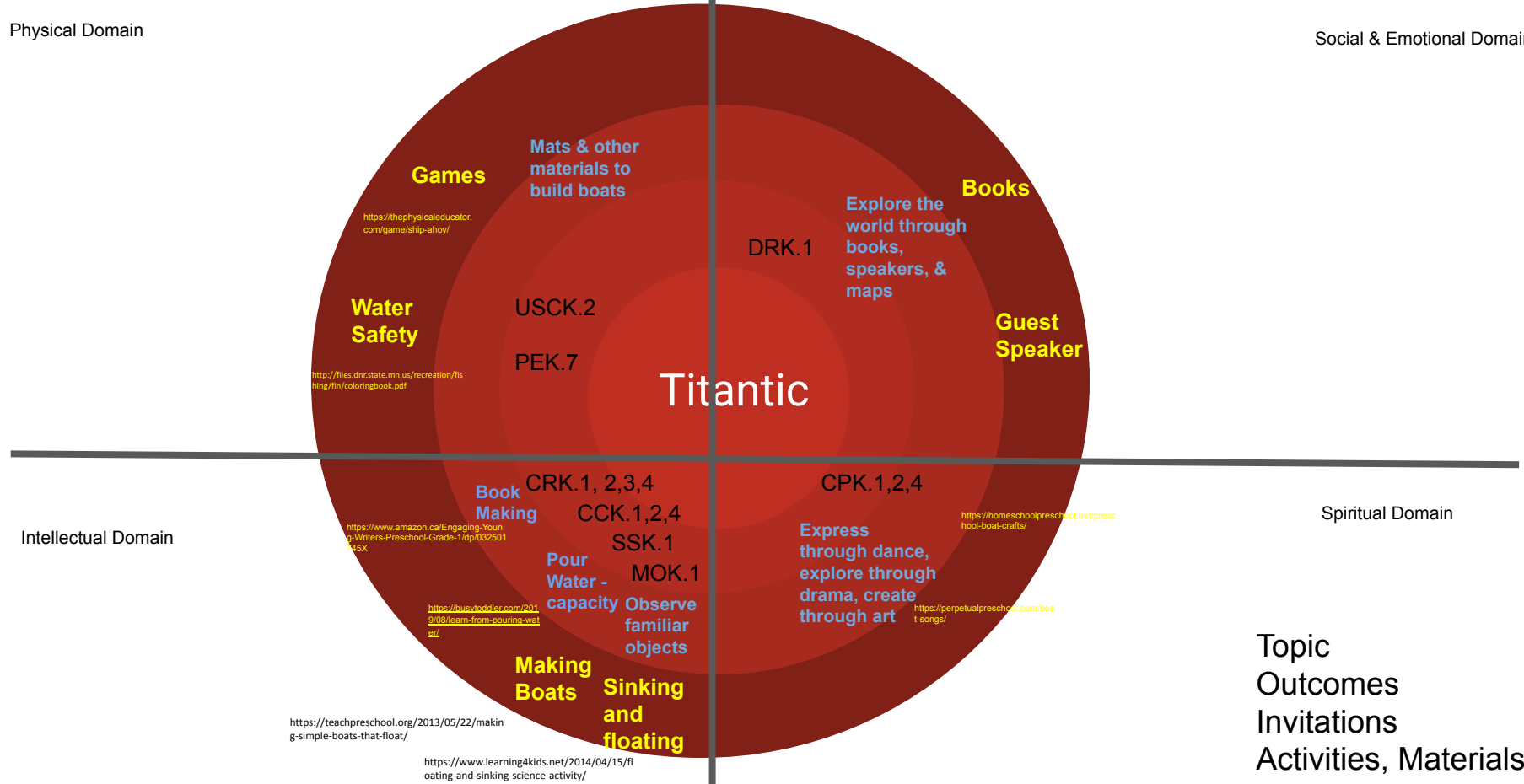
Discovered that many families had boats and were willing to share their information about boats, maintenance of a boat, boat licenses, and boat safety.

Phase 1 - Webbing - teacher

Projects give autonomy back to the learner and allow for them to follow their stream of consciousness. It is important not to get too caught up in the 'child led' of it all, ...curriculum should always balance children's interests with intentional thinking, planning and scaffolding from educators.

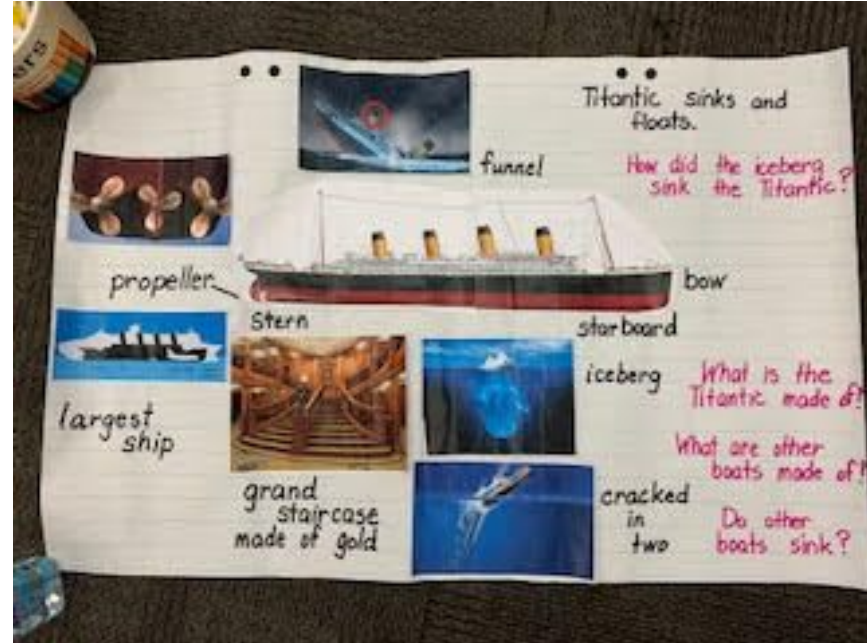
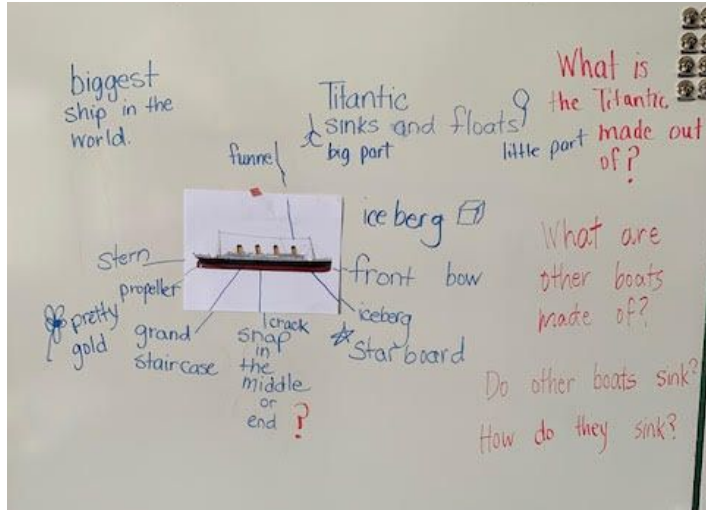
Physical Domain

Social & Emotional Domain



Phase 1 - Webbing - students

The idea of a project is to follow the child's line of enquiry, to observe the human narrative. In projects, children will determine the questions to be answered (Katz & Chard, 1992).



Messy Web with students

Publishing the students' web, then sharing it with the students the following day

Phase 2 - Answering the students questions

Guest speaker - Teacher on staff that had visited Maritime Museum of the Atlantic in Halifax

Guest Speaker - a volunteer from one family that owns a boat

Invitations to Discover floating and sinking

First Day of the Project

1. Review of the float and sink invitation



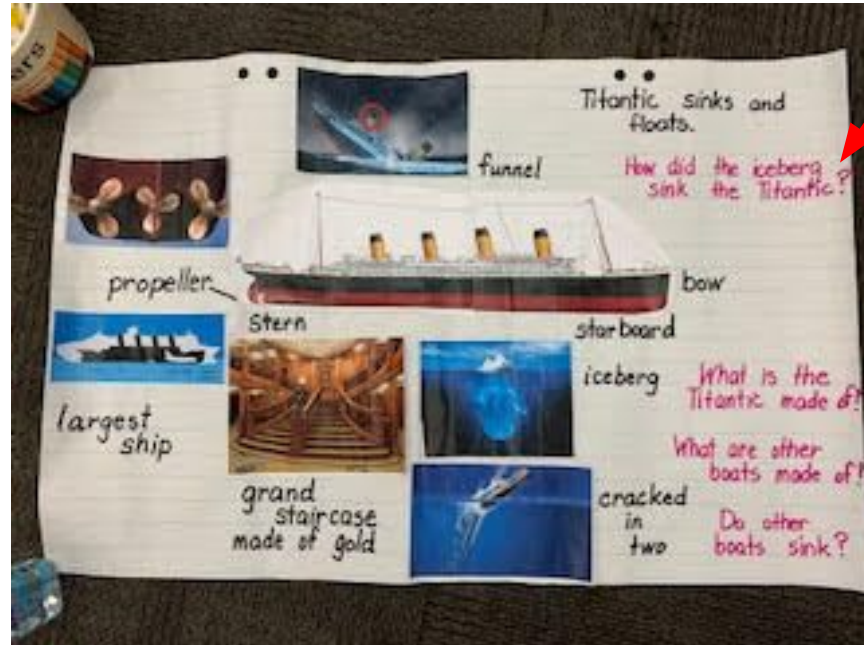
Learning

Things made from wood and plastic float.

Things that are heavy like rocks and metal sink.

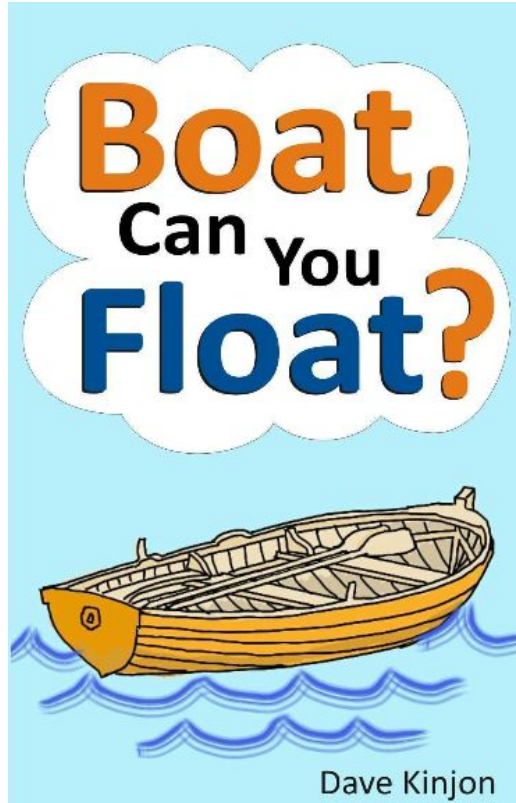
Some things float and sink like a shell and button.

2. Revealed the Published Students' Web



Focused on this question.

Read Aloud: Boat, Can You Float? By Dave Kinjon



Boat, Can You Float?

It is a fun rhyming fully illustrated story for kids fascinated with all the amazing (floating and non-floating) boats in the world!



Inspiration for boat making

Could we make a boat that floats?



Invitation Boat Materials



Styrofoam, toothpicks,
markers



Corks, elastics, craft
foam, popsicle sticks



Clothespins, egg carton
sections, clay

Children at work building boats



Children at work building boats



Children at work building boats







Representation

Next, students were asked to reflect on their boat and its ability to float, as well as to sketch their boat.

Name: _____

I think that my ship will float for _____ minutes before sinking.



Did your boat  or  ?

Sketch of my ship. (Label materials)

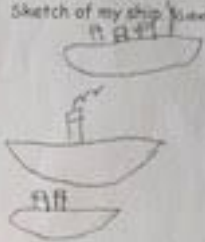
Using discoveries made in your first shipbuilding experience, use different materials, shapes, and weights to build another ship.

Name:

I think that my ship will float for 10 minutes before sinking.

Did your boat  or  ? one sink
one float

Sketch of my ship. (Label materials)



Using discoveries made in your first shipbuilding experience, use different materials, shapes, and weights to build another ship.

Testing out their boat



Invitation to Play: How many 'passengers' can your boat carry?



Extension: Clay Boats



Inviting students to read in the 'boat'.



Phase 2 - Using Documentation and the Student Web to Make Learning Visible

What?	What happened? What did you observe?
What about the What?	How is what happened meaningful? Think deeply about it – go below the surface. What learning occurred? How did what you observe relate to the child's or children's development? How does the experience relate to the child's sense of belonging, well-being? How does it relate to expression and engagement from How Does Learning Happen? What do you think, the child or children were thinking during your observation? How does the experience relate to the view of the child as capable and competent? How does the experience relate to your values and beliefs? How is the experience different from what you expected? What impacts the way you view the situation/experience? What have you learned about your role in the experience? What did you learn from it?
So What?	What intrigues you about the experience that you want to investigate more? What theories do you have about the experience? What other experiences can you provide to test out your theories? What can you share with others to begin the process of seeking the interpretation of children, families, colleagues, etc.?
Now What?	After you have shared and reflected is there a big idea emerging from these other experiences that is worthy of a long-term investigation/inquiry/project?

Documentation is a design process, its purpose is first to make learning visible, which allows for collaborative discussion and interpretation with others to generate new "designs" for further learning and experience. The design of what to do next in one's practice arises from the discussion and interpretation of the documentation; in this way, pedagogical documentation contributes to an emergent curriculum (Wien, 2008).

Culmination

Building the Titanic. Can students identify the stern, bow ... etc?

Project to Celebrate Learning



This was NOT completed in the project, but an idea that could be done.

Creating Walls that Speak



This boat was very tippy. It did float, but on its side.

Boats



This boat floated and did not tip.

A documentation panel is an innovative way to "document with our pens and camera the learning process of our children and adults" (Carter & Curtis, 1996, p. 8). The panels provide an opportunity for parents to become more fully aware of what occurs in their child's learning environment. For staff, creating the panels becomes part of the documentation of children's learning, a process that may lead to more activities that are attuned to each child's interests and skill levels. Finally, the panels promote parent-teacher partnerships by providing a springboard for discussion of best practices, projects or themes, classroom experiences, curriculum, and child development.

Learning

A boat needs a good bottom to float and carry passengers.

Glue does NOT work with water.

Egg carton sections worked, but if they filled with water they sank.

Wood and styrofoam are good for making boats.

Resources

Themes vs projects: Spot the difference <http://thespoke.earlychildhoodaustralia.org.au/themes-vs-projects-spot-difference/>

Saskatchewan Curriculum <https://www.edonline.sk.ca/webapps/moe-curriculum-BB5f208b6da4613/>

Boat Crafts <https://homeschoolpreschool.net/preschool-boat-crafts/>

Boat Songs <https://perpetualpreschool.com/boat-songs/>

Floating and Sinking <https://www.learning4kids.net/2014/04/15/floating-and-sinking-science-activity/>

Making Simple Boats <https://teachpreschool.org/2013/05/22/making-simple-boats-that-float/>

Water Capacity <https://busytoddler.com/2019/08/learn-from-pouring-water/>

Engaging Young Writers PreK - Grade 1 - <https://www.amazon.ca/Engaging-Young-Writers-Preschool-Grade-1/dp/032501745X>

Water Safety <http://files.dnr.state.mn.us/recreation/fishing/fin/coloringbook.pdf>

Physical Education Games <https://thephysicaleducator.com/game/ship-ahoy/>

Boats, Can You Float? Kindle Book <https://www.amazon.ca/Kids-books-Rhyming-Illustrated-Childrens-ebook/dp/B00JV508ES>

Documentation <https://tecribresearch.wordpress.com/2017/01/07/what-about-the-what-finding-the-deeper-meaning-in-pedagogical-documentation/>

Learning to Document in Reggio-inspired Education - <https://stf.instructure.com/courses/174/files/1638>

Using documentation panels to communicate with families http://www.findarticles.com/p/articles/mi_qa3614/is_200107/ai_n8996076