SUSTAINED INQUIRY

Surrey's Inquiry-Based Learning website on Surrey Schools ONE provides students with opportunities to engage in inquiry-based learning over a sustained period of time. Generally, in inquiry-based activities, students: 1) encounter a problem or issue; 2) attempt to understand the problem or issue; and 3) work collaboratively to make sense of what they have discovered. The website guides teachers in giving curriculum-driven inquiry a try by focusing on three phases of the process:

1. A Real Question (Discovering what we care about and developing a real question with students)
2. Chasing the Question (Exploring ideas and information and then making meaning together)
3. Beyond the Question (Reflecting on what will be do with what we've learned)

Overall, Inquiry projects come in many shapes and sizes. The process can last several days or several weeks. It may be project-based, problem-based or design-based. Regardless of the type of inquiry, teachers create active learning opportunities that focus on designing, planning, building, fixing and generally getting students to do something – at times independently and at other times collaborating with a group online. A simple way to think about this is to use the following approach over the course of several days or several weeks for almost any elementary or secondary ADST, science or arts-related project.

- o **DESIGN IT**

    The "it" could be brainstorming and planning possibilities for: an ideal school; a new musical instrument; the plot for a puppet show.

- o **BUILD IT**

    Building an ideal new school; creating a new instrument and performing with it; writing or talking about the puppet story, making the puppets, props, costumes, and then performing it.

- o **FIX IT**

    This is the ongoing revision and editing process – making things better during the building part.

To get elementary students started with design thinking, some helpful resources are identified below:

Independent Use (iPads)
- o Tynker - Coding Game. The initial free levels are great for K-2, with a little initial guidance. No account is needed for those levels. (The app should already be on district iPads.)
- o How to Be an Inventor - Online story with interactive elements (K-2)
- o Code.org - Free coding game framework (Gr. 5-7). Use the app if students have a district iPad or they can go to www.code.org through a browser. No account is necessary.
- o TinkerCad - Online design tool (Gr. 5-7). No account is necessary, but if students have one already, they can continue their learning.

Website
- o Five EASY Design Challenge Activities That You Can Start Right Away - DIY Classroom

Challenges (PDFs)
- o PBSkids ASDT Challenges
    First Nations ADST Primary Challenges