

How do I launch the unit and its anchoring phenomenon?

The routine for launching an IQWST unit is the same for every unit.

But before we review the steps, let's take a couple of minutes to consider why a "unit launch" and an "anchoring phenomenon" are important.

There are many important reasons that IQWST uses an anchoring phenomenon and a Driving Question.

What do you think might be the *most* important?

Most important is ...

piquing student interest.

Student interest is key to learning, so it is key to IQWST's use of an anchoring phenomenon, a Driving Question, several instructional routines, and launching IQWST units.

Historically... we have thought of the *content* as the most important thing about learning science.

More recently... we have come to understand the importance of *three-dimensional learning*.

But if we back up a step, think about your own teaching experience.

Do any of these sound familiar?

- Students who act uninterested in class, no matter what you do?
- Students who won't engage?
- Who constantly act out or tell you they're bored?
- Who won't invest?
- Who won't participate?
- Who won't do the work, even though they can do the work?

Why is the unit launch so important?

Interested students are more motivated to engage in a thoughtful, minds-on way.

Even if students come to school and are not interested in something, they might *become* interested if we provide them with student-centered routines from Day 1.

Think about your own experience as a student:

Did you ever have to sit through a class that you found boring because you weren't interested in the subject matter?

Were you ever expected to learn material that you couldn't get interested in enough to put effort into studying?

Did you ever decide not to attend a class—in part, at least—because the class (or topic) was uninteresting to you?

Conversely,

Did you ever take a class that you were uninterested in, but were required to take? And then eventually, you changed your mind about the content?

Did you ever take a second class in something you started out uninterested in? Maybe because you didn't know enough about the subject to be interested in the first place, but once you learned more, you became interested?

Did you ever change majors? Change program emphasis? Change grade level you wanted to teach? Change careers entirely by choice?

Were any of your choices related to interest and your motivation to engage with the subject?

Interest and motivation and engagement are interrelated. Interest leads to motivation to learn.

Motivation to learn leads to engagement.

All three lead to achievement.

Interest \rightarrow Engagement \rightarrow Motivation \rightarrow Achievement

When you launch an IQWST unit,

and you use the anchoring phenomenon and the Driving Question in ways that pique student interest,

you stand the best chance that students will become motivated to engage in learning.

The IQWST curriculum aims to do this.

But the curriculum is only one part of the equation.

You are the rest.

So what do you need to do?

How do *I* launch a unit successfully?

1. Prepare to launch by understanding where the unit is going.

- Review the IQWST Overview, the TE, and the Storyline. When the lessons are new to you, there's a lot to digest, but these resources are designed to provide you with support—maybe even more support than you need.
- Read the Student Edition all the way through. When you do, you'll see what students will be expected to do, and you'll have a sense of where students will land over time, and the steps it's going to take to get them there.

2. Do the activity as written.

- If remote learning alters the way you are able to launch the unit, use the alternative lesson plan.
- Typically, the anchoring activity has students doing something active, observing something, puzzling over something, trying to figure something out.

3. Encourage questions—any questions—all questions!

- To launch the unit and throughout the unit. More about this in a minute.
- 4. Explicitly link the initial activities—often an anchoring phenomenon in the first lesson or two—to the Driving Question and to students' own everyday experiences.





What else do *I* do to launch a unit successfully?

Establish instructional routines from the start.

- Student questions and student discourse are at IQWST's core—asking questions, talking to one another, sharing ideas, and collaborating.
- In IQWST, students do science, and read, write, and talk about science in every lesson.
- Set expectations from the beginning. Use wait time to the nth degree.
 Students will talk. Students will ask questions. But these routines are new, and they'll need assurance that it's safe to express ideas that may be wrong, or to reveal what they know and don't know.

How does the anchoring phenomenon help?

- In each IQWST unit, the initial phenomena students encounter—in the first couple of lessons—are designed to generate interest.
- Interest might not be "excitement." Not every phenomenon in IQWST generates a "Wow!" Some are hands-on but simple. Some involve photographs or video.
- What some students describe as boring or repetitious is exactly the thing that will help others build understanding. As you focus on providing *all students* with opportunities to learn, remember that not every student will connect with every phenomenon or with every Driving Question. But, across a unit, every student will have moments of connection that pique interest and keep them engaged.

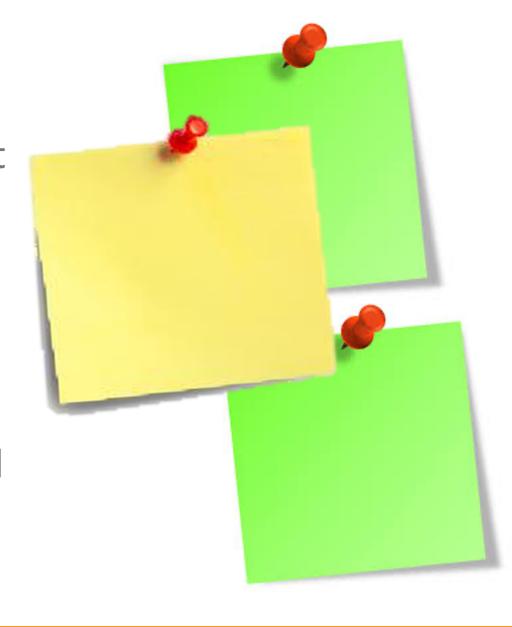
One more thing ...

...the Driving Question and Driving Question Board routines are designed with diverse learners in mind.

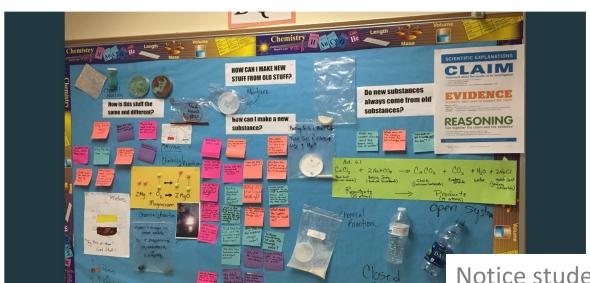
Initially, the anchoring phenomenon prompts students to ask questions about things they wonder about.

Even their most offbeat questions show interest in *something*. So, encourage all questions. Even those offbeat ones.

Post them to a space in your room called the Driving Question Board.



What does a Driving Question Board look like?



Notice students' own original questions hand-

written on sticky notes.
They are added and removed as they are answered. Here, they provide visual evidence of engagement, learning and student-centeredness.

Photo courtesy of Holly Hereau



It's about student-centeredness.

About interest.

About ownership.

Research on student-centered instruction is consistent. IQWST is designed to elicit, encourage, and support student interest and to keep ownership of learning front and center.

So, back to: How do *I* launch a unit successfully?

Consult all of your IQWST resources.

- Read the IQWST Overview, the TE, and the Storyline.
- Read through the Student Edition.

Do the anchoring activity as written.

• If remote learning alters what you can do, the remote learning lesson plan will guide you.

Encourage questions—any questions—all questions!

Explicitly link the initial activities—and all activities—to the Driving Question and to students' everyday experiences.

And keep in mind:

Interest -> Engagement -> Motivation -> Achievement

It's the magic of IQWST plus

the magic that only you can bring to the classroom that keeps students at the center of learning.

To learn more about the Driving Question Board and using it effectively, check out:

<add title or link of other preso>