Lesson: Meet the crayfish lesson
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Video URL: http://education.ucsc.edu/ellisa/case_studies/crayfish-lesson-1a.html
Clip: Part 1: Launch

Abbreviations:
T = Teacher  S = Student  Ss = Students

1 [00:05]
2 T: We are going to be investigating a special organism today called a crayfish. I know it is a somewhat small picture. But I also know some of you have observed them on Monday or Tuesday when they were delivered to our class.
3
4 [00:00:24]
5 Let's talk about our schema for crayfish. What are some things you already know about crayfish? Who wants to start us off?
6
7 [00:00:38]
8 S: Well, crayfish have protective shells.
9
10 T: Did anyone want to add on or comment to what he ... about the shell? If you do, you can just speak out ... if it is about the shell
11
12 [00:01:02]
13 S1: I also noticed that the shell can be different colors.
14 S2: The shell is also armor and also the shell [???] surrounding it can be camouflage.
15 S3: The shell sometimes, when it ... the shell is the part that keeps it from being hurt by other animals, if it lives ... 
16 S4: I noticed that the crayfish that some are grey and some are really red.
17
18 [00:01:48]
19 T: So may be it, adding on to what J.J. said about colorful, or many different colors, right? What else might you know? We have a whole lot of schema for the shell, huh?
20 S: I know it can swim in the water
21 T: Did anyone have anything to add on about where they swim or where they might live?
22
23 [00:02:29]
24 S: They swim faster in different ways like backwards.
25 T: Angelo, can I ask you, can you explain a little more, how did you ... where have you seen that before?
26 S1: Watching the crayfish, I saw one, the one that was missing a claw [???] was going fast than the one [???]
S2: Here's an add-on to that. I think they live in tide pool in Africa. And also the one with the missing claw ... I think it might have been in the wild ... the claw might have been eaten by a platypus in Africa.

T: So can you tell a little bit ... why are you thinking Africa or tide pools?

[00:03:38]

S: Because I watched a show and it showed like it was in Africa.

T: Did it say it was in Africa, or where ...

S1: I forgot ... but I think the missing claw might have been in the wild and bitten by a platypus and eaten.

S2: I want to add on. [???] Maybe it hasn't grown it yet.

[00:04:07]

T: So, interesting ... yours is actually a different opinion or hypothesis. His was that it was eaten off. Yours is that might have not grown yet, huh?

S: Maybe it was fighting with another crayfish.

T: Maybe, huh. Christian.

[00:04:27]

S: I agree with Angelo because I saw one of the gray ones swim fast backwards.

T: So I have a question also about ... we have a lot of schema it seems like already about crayfish ... what about any other organisms or animals that are similar to a crayfish?

T: Jesse, why don't you start us off?

[00:04:55]

S: A lobster.

T: Can you say that again?

S1: A lobster, 'cause it's [???]

S2: Lobsters also have claws.

T: Ulysses, were you going to say the same thing or something different?

S: Lobsters are like oversized crayfish.

T: They look very similar, huh? Alexia.

S: Crabs.

[00:05:25]

T: And what makes it look similar to a crab?

S: Because it has the claws.
T: Yeah.
Ss: [??]
T: Marissa.
S: It sorta looks like a crab because like it has a shell. Like how Calvin was saying.
T: The shell ... thank you ... connecting back to what Calvin was saying. The shell, the crab has a shell, and same with a lobster, huh.
[00:05:58]
S: Also an armadillo has one.
T: You're right. [Laughs] Lot's of organisms have shells, huh?
T: Britney or Marisol, have either one of you eaten anything like this before?
S1: I've eaten squid
S2: [??]
T: You've eaten crab.
T: Jasmine.
S: I know that they carry eggs in their [??].
T: And how do you know that? What's your schema for that?
[00:06:32]
T: Just like scientists do. Researching, huh? Absolutely.
T: Have any of you eaten shrimp before?
T: There's Britney's hand. Do they look somewhat similar to ... what's kind of the same Britney?
[00:06:52]
S: [??]
T: And that shell off, huh.
[00:07:05]
T: Someone had mentioned before about having ... I'll wait
S: [??] Roly poly [??]
T: Can you expand on, not the roly poly, what was that word you just used?
S: Crustacean.
T: And what's a crustacean?
S: A crustacean is like an animal with a hard shell. A roly poly has a hard shell. Because a blue roly poly, some blue roly polys live under water, and get really big. [???] And it's a crustacean even though roly polys live on land, they're crustaceans.

T: Lots of schema.

[00:07:53]

T: A few of you have mentioned ... I heard swimming, they swim in water. Brianna, was that you that mentioned water? ... Besides on Tuesday when they were in our classroom, where have you seen crayfish before? Has anyone seen crayfish before, besides our classroom? Natalie.

S: My mom has this friend who has like this big pool of, like has water, and there is a lot of crayfish in it. And I looked at one of them. And they almost like pinched my finger.

[00:08:34]

T: So can you describe the ... what do you mean by pool of water?

S: It was like a really big ... yeah like a pond.

T: A pond. So not a container that someone bought at a store. But your mom's friend had a pond in the back yard?

[00:08:55]

T: Has anyone seen them in any rivers or creeks? Christian.

S: When we went to my birthday party I saw ... I saw about fifty crayfish in pond.

T: In a pond? Where was your birthday?

S: My birthday was at Lake Tahoe.

T: Mmmm. At Lake Tahoe, huh?

[00:09:21]

T: So it was a pond? That's even pretty far away.

T: I will give you a little bit of my schema. You know that I went to Lincoln. Well I lived over here right on Tozier. And because I went to Lincoln, I had to cross the railroad tracks and that creek every day, to and from school. There's a creek that goes right along the railroad tracks right there. And in that creek, every day ... I would be able to just ... I loved to just standing there and watching and observing the crayfish through the fence. So if you've ever seen them or ... perfect, spring break is coming up ... Now I don't want you to go there by yourself, but if you had an adult to go with you, see if they're still over there.

[00:10:18]

I've also seen them at Lake Elizabeth. There is a creek that kind of goes parallel to Lake Elizabeth, lots of crayfish in there. So we have a little bit of schema for where crayfish might live in our environment, right?

[00:10:37]
T: So let me just try ... we have so much, so many ideas you were able to share. So much schema already. I wanted to capture or collect some of these ideas. This chart is very similar to our inquiry chart that we do all the time with G.L.A.D. [Guided Language Acquisition Design].

What do we think we know about crayfish? So, I heard ... we spent a lot of time, we have lots of schema about the shell.

[00:11:08]

T: So one of the ideas that I definitely want to capture is it has a protective shell.

T: I also heard that that shell, the shells, are different colors.

T: I also heard that they swim or live in water. We now know that ponds, rivers, creeks, with fish we might see them.

[00:11:39]

T: They swim or live in water. I will also put down they live in creeks, ponds, and rivers.

T: I also heard that a crayfish - you were making the comparison that a crayfish is a crustacean? Is that correct?

S: Yeah. Also [???] to a roly poly.

T: Okay. So do you want me to put down that we think a crayfish is a crustacean, or just the roly poly? What do we think?

[00:12:30]

T: So, they are crustaceans. Okay. It's okay. I think that was the last one. I know there was some movement about backward, about how they swim. We'll add that part Angelo about swimming backward. I'll also add the part right here about different colors. I'll write the word camouflage in parenthesis, okay.