Classroom Aquaponics

Date: [Blank] | Subject: Science
---|---
Grade Level: pK-2 | Lesson Title: Relating Aquaponics to Communities
Standard(s): RL.K.10 Actively engage in group reading activities with purpose and understanding.
NGSS: K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

Objective (cognitive): SWBAT think of something they want to be when they grow up.
Objective (affective): SWBAT ask or answer at least one question during the book.
Objective (psychomotor): SWBAT draw and color a picture.

Book(s) or Supported Reading(s):
What Do People Do All Day? by Richard Scarry

Materials & Supplies LISTED:
- What Do People Do All Day by Richard Scarry
- Jar, rocks, plants, and fish for aquaponics system
- Pencils and crayons for book
- One worksheet for each student (attached at the end of lesson plan) (from https://www.teacherspayteachers.com/Product/When-I-Grow-Up-Class-Book-614838)

Anticipatory Set/ Enticement (Pre-reading & Prerequisite Skills):
I will start the lesson by asking students to name some jobs they know about. If they need help, I will prompt them to think about what the jobs of their parents are. I will then ask them why people have jobs. I expect someone will say to make money, but I also want students to realize that people have jobs to help the people around them. If a town didn’t have a doctor, where would people go when they got sick? We will then come up with a definition for community. Example: People who live and work together.

Modeling/ Explanation (I can):
Next, I will read the book What Do People Do All Day by Richard Scarry. Throughout the book, I will ask questions about different jobs and how they help the community.

Guided Practice/ Engagement & Exploration (We can):
As a class, we will make a community in a jar using fish and plants. We will talk about how they work together and what their jobs are. Plants give food to the fish and fish help the plants grow.

Independent Practice/ Elaboration (You can):
Students will have time to write a page for our class book called When We Grow Up! They will be asked to write, “When I grow up I want to be ________.” and draw a picture of it.

Closure:
We will read our completed book as a class. I will have each student come up and present their page.

Assessment/ Evaluation
Students will be assessed on completing their drawing and sentence. They will be graded using the following checklist.
<table>
<thead>
<tr>
<th>Drawing</th>
<th>Finished = 1 point</th>
<th>Unfinished = 0 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Colorful = 1 point</td>
<td>No color = 0 points</td>
</tr>
<tr>
<td>Writing (if capable)</td>
<td>Complete sentence = 1 point</td>
<td>Not a full sentence = 0 points</td>
</tr>
</tbody>
</table>

**Enrichment/Extension**

In future lessons, we will continue talking about our community made of fish and plants and why we don’t have to feed the fish. We will talk about what humans and animals need for survival.

**Modification/Differentiation:**

If students are not capable of writing the sentence, the teacher can come around and write it for them.
When We Grow Up!