Hydroponic Experiment for SIREN teachers

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Experience with performing the experiment…

* While the set up and maintenance of this experiment were somewhat complex and labor-intensive, I found it valuable in that I was able to pinpoint potential unavoidable problems, and share trouble shooting tips and ways to avoid those set-backs with the teachers.
* While caring for the plants, I could see several advantages to be able to duplicate a long-term experiment in the classroom:
  + Practice of caring for an experiment for an extended time period
  + Observation and note-taking over an extended time period
  + Generation of interest and excitement; students look forward to class time and become excited to see how their treated plants are doing on a daily basis

Experience with the participating teachers…

* This experiment proved to be a good jumping off point for the participating teachers to amend the protocol to “fit” the age of the students that they are responsible for teaching. There was good discussion about manipulating other environmental factors rather than studying nutrient deficiency rather than altering the solution the plants were grown in.
* I found it very helpful to be able to go through the steps of the experiment with the teachers using actual hands-on activities. It generated questions and discussion among them about ways to adapt a system meant for greenhouse environment to one which could work in a classroom.