New Teacher Induction
Getting Started in Science

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3rd Grade

Being A Successful Science Teacher

Effective planning, organization, preparation and management will enable success in science instruction.

- Know your science core
- Plan out your year
- Organize your materials
- Having great science lesson plans
- Know how to set up experiments
- Managing students during experiments
- Having good science books to read

What Are You Teaching?

- 3rd Grade
  1. Moon and Earth
  2. Living and Non-living in the Environment
  3. Forces and Motion
  4. Force of Gravity
  5. Heat and Light for Living Things

3rd Grade State Science Core

- The 3rd Grade State Science Core was written in 2002 for the teaching of the 3rd Grade Science Core.
- For each standard, this booklet has the Intended Learning Outcomes, Objectives and Indictors of what to teach and the Vocabulary needed use to teach each standard.
- The 3rd Grade State Science Core is found at:
  - http://elemscience.jordandistrict.org/files/3rd-Sci-Core.pdf
- A PowerPoint of how to use this book is found at:
  - http://elemscience.jordandistrict.org/teachers/newteacher/

Where Do I Get Lesson Plans?

- There are three ways to access the lesson plans:
- The Science Lesson Plans are found on the New Teacher Induction page on the Elementary Science Website: http://elemscience.jordandistrict.org/teachers/newteacher/
- For random lesson plans alphabetically for your grade of your science core: http://www.uen.org/k12educator/corelessonplans.shtml
- For specific lesson plans for your grade in each individual standard and objective of your science core: http://www.uen.org/core/

Planning for the Year

- Your grade team will help you with the order you will teach science.
- Ask your mentor for suggestions
- Call Paul Nance (801-244-6479)

Organization

- Dedicate a file section for each standard
  - Some use hanging files
  - Some use 3-ring binders
- Dedicate a storage box/container for hands-on supplies for each standard

How Do I Make an Activity Happen?

- Have a question to answer
- Set up an experiment
  - Materials, Plan, Variables, Written Data
- Analyze that data
  - Graph and explanation of what happened
- Come up with a conclusion
  - Write-up of student thoughts of why the experiment did what it did with a real world connection

Managing Groups During Lab Work

- Practice group work before doing science
- Keep groups small (2-4) is best
- Assign each group member a job
- One member should be the leader
- Give specific and detailed instructions
- Model as much as possible
- Forecast and plan for “glitches”
- Use graphic organizers
- Always have enough time for clean-up
- Always stress safety

Rules During Lab Work

- Follow the directions
- Don't work ahead
- Everyone stays on task
- No talking within the group about other things
- No group member bothers a member of another group
- No goofing around
- Work on a timely basis--keep things going
- Students assigned to a certain task are the ones who do that task
- Keep it safe all the time--no exceptions

Safety First!

- Safety First - ALWAYS!
- Be aware of dangers
- Plan to avoid them
- Keep expectations high and firm
- Be consistent with consequences

Journaling Ideas

- Have students use a journal as much as possible when doing experiments
- Use of journal during an experiment:
  - Writing down measurable data
  - Explaining what they saw happen
  - Making a graph
  - Explaining their thoughts on why it happened
  - Writing a conclusion

Videos

- Research has shown educational media used correctly can be an effective instructional tool and help close the achievement gap.
- Use ONLY for reinforcement and review
- Don't overuse ~ once every one or two weeks is good

3rd Grade Science Literacy

- 3rd grade has literacy books that can be used during shared reading and during science time. Your grade colleagues can help you know which books are the best
- Science not only needs to be read about, it also needs experimental investigation. During science investigation time you can do more reading for background knowledge, watch science videos, do experiments, have discussions, and do journaling.
- Try to do science as much as you can every week. As a rule of thumb, one-half hour a day should be set apart for science investigation not including the science reading you do during your language block.
- Here is a webpage for 3rd grade best books:

  http://elemscience.jordandistrict.org/3rd-grade-science-seed-resources/

3rd Grade Science and Literacy OER Books

- There are science textbooks that Utah State Office of Education have written called Open Education Resource Books (OER). These books are written specifically for the respective grade levels.
- These OER books are tweaked each year to make them better. They only cost around $3.00 each. You can review them, download them, or purchase them by going here:
  - https://utah-science.myshopify.com/
- Ask your colleagues or principal about purchasing them for they will really enhance your science class instruction and help raise your science scores.

Science Specialist Help

- Paul Nance can do the following with a scheduled appointment:
  - Individual or or grade team help to discuss the science order.
  - How to teach science concepts
  - Understanding science concepts
  - Strategy ideas for teaching science
  - Do model teaching of the activities
  - Act as a mentor to improve your teaching
  - Help in your classrooms (during science)
  - Meet in your PLCs.

First Week Science Activities

There are 5 science activities that you can do the first week of school:

- A fun PowerPoint to show (Introduction to Science)
- 2 Literacy Lessons
- 2 Content Lessons

http://elemscience.jordandistrict.org/teachers/newteacher/

- They are found at the bottom of the webpage.

This PowerPoint is also found on the Elementary Webpage under: Getting Started at the bottom of the New Teacher Induction webpage.

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Have Fun!

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