

BLOGGING BIOLOGY IN FIJI

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This learning activity was done as part of a Biology in Fiji program. Forty high school students from Ontario travelled to Fiji to complete the SBI3U course. While in this case the blogging activity spanned the entire course as a major form of assessment, I have also done it as a smaller project within a course. For example as part of an ecosystem activity in Grade 9 Science (<http://connex.stao.ca/classroom-catalyst/home-blogging-ecosystems-in-gr-9-science>).

BLOGGING AND ASSESSMENT IN FIJI - HOW DID IT WORK?

Before we left for Fiji students were provided with a course book (physical or digital, their choice - we were not 100% sure about what our Internet access would look like in Fiji), access to the class Moodle, class blog and Facebook page. When we got to Fiji we used a computer lab on the University of the South Pacific campus and each student created a blog on Edublogs. They were asked to use Edublogs if they didn't mind because I could connect them to our class within Edublogs and provide them with access to the ability to embed Flash and increased storage space for media. Once students were connected they were encouraged to write an introductory post explaining their trip, what they hope to learn and explaining to readers what the blog was about. Students were also encouraged to share their blog links to family members and friends back home.

In addition to the 10 formal "prompts" I provided, students were encouraged to share any images or thoughts they had throughout the trip. As it turned out, we didn't have the best access to internet, so this couldn't always happen.

Students had the following 10 blog post prompts, labs and activities ahead of time. These are just snapshots of our online class.

Blog Post Prompts

-  [Blog-01 Monocot or Dicot?](#)
-  [Blog-02: Koroniva Research Station \(plant propagation\)](#)
-  [Blog-03: Biotechnology Lab Visit](#)
-  [Blog-04: Comparative Anatomy \(dolphin, shark, etc.\)](#)
-  [Blog-05: Lactase Evolution \(natural selection\)](#)
-  [Blog-06: Ecosystem Restoration](#)
-  [Blog-07: Prokaryotes](#)
-  [Blog-08: Mechanisms of Speciation \(Iguana or plant species\)](#)
-  [Blog-09: Antibiotic Resistance](#)
-  [Blog-10: Plant Study](#)

Graphic Organizers

-  [Organizer-01- Monocot vs. Dicot](#)
-  [Organizer-02: Six Kingdoms](#)

(<https://sites.google.com/a/scdsb.on.ca/science/biology-in->

Labs

-  [Lab-01: Fiji School of Medicine](#)
-  [Lab-02: Enzyme Activity in Fruit](#)
-  [Lab-03: Examining Plant Tissue and Water Transport](#)
-  [Lab-04: DNA Extraction](#)
-  [Lab-05: Prepping and Observing Stained Bacteria](#)
-  [Lab-06: Smarties Evolution](#)
-  [Lab-07: Using a Dichotomous Key](#)
-  [Lab-08: Making a Dichotomous Key](#)

Assignments

-  [Assignment-01: Meiosis Stop Motion](#)
-  [Assignment-02: Human Structure and Function Case Study](#)
-  [Case Studies](#)
-  [Animal Structure and Function: Textbook Material](#)
-  [Animal Structure and Function Video](#)
-  [Assignment-03: Genetic Problems](#)

fiji/Screen%20Shot%202014-06-08%20at%203.45.41%20PM.png?attredirects=0)

Each blog post had a rubric, learning goals and success criteria already created for them. In Fiji, we did an activity to co-create the success criteria of a good blog post and for commenting on other blogs, however I created the criteria for each post myself ahead of time. If doing this in a classroom, where we were all together in one place with less distraction more often, I would co-create these. As it turned out, we didn't get a classroom as we planned very often and so we did lessons and diagrams in the sand. I was very happy that I had archived the four lessons I planned on doing in video format. It provided students with the opportunity to watch it in their own room, or on a bus as worked best for them.

Each day before field trips and activities for the day, I would let them know where they should be, speak with those who were falling behind and offer short concept-tutorials on busses, over lunch, etc. Every evening or afternoon students had time to work. We had planned on being all together for these work periods, but in order to get functional Internet, we ended up dispersed with myself in a central location for student conferences and help. As students completed blog posts or assignments they submitted the link in our course Moodle. There I could fill out the rubric and provide feedback. I always explained what they did well and gave them something to improve on. Very often students would fix up or add to their blog post and resubmit for feedback. This happened throughout the course and they were not "cut off" from resubmitting until we got back to Canada.

I learned more about descriptive feedback and the assessment cycle through this than any other activity I have done with students. If the students have the opportunity to improve and resubmit for marks, they really do read feedback and put it into action to improve their work. Not every student all the time, but as it becomes the culture of your class, more and more students buy into fixing and editing their work.

BEDTIME STORIES

Every evening before bed, I would have the students come down to a gazebo, or to the beach and I would read a 'story' to them. These stories came from books I found in Fiji, online or were told from people we met along the way. All of these stories were about biological phenomena in Fiji. Some were about invasive species, evolution, biodiversity, etc. These stories reviewed concepts in an engaging manner and also provided ideas for topics to write about in their blogs. Often the blog posts were to find examples of specific concepts in Fiji and use their example to explain the concept. Luckily, our field trips matched up to these and they often had multiple to choose from, images, interviews or video to add.

SAMPLES FROM STUDENT BLOGS

- Nicole's Lactose Intolerance post (<http://nicoledoran5.edublogs.org/2013/07/18/lactase-evolution/>)
 - this post brings together topics from evolution and animal structure and function
- Desmond's Comparing Dolphin and Human Anatomy (<http://biologywithdesmond.edublogs.org/2013/07/11/dolphin-anatomy/>)
- Plants of Fiji - Kava (<http://southpacificbiology.edublogs.org/2013/07/11/plants-of-fiji/>)
- Comparative Anatomy (<http://southpacificbiology.edublogs.org/2013/07/11/comparative-anatomy/>)
- Biology in Thurston Gardens (<http://southpacificbiology.edublogs.org/2013/07/11/biology-in-thurston-gardens/>)
- Ecosystem Restoration (<http://erikaoolup.edublogs.org/2013/07/27/ecosystem-restoration/>)
- Ecosystem Restoration Project (<http://sdhmacleod.edublogs.org/2013/07/24/ecosystem-restoration-project/>)
- Prokaryotic Cells: A World of Variety (<http://sdhmacleod.edublogs.org/2013/07/13/prokaryotic-cells-a-world-full-of-variety/>)
- Prevention and Control of the Dalo Beetle (<http://liaminifiji.edublogs.org/2013/07/18/prevention-and-control-of-the-dalo-beetle/>)
- Bula Friends (<http://spectacularscience.edublogs.org/2013/07/03/bula-friends/#comment-2>)!
- Meiosis Stop Motion Videos (<http://biologyinfiji.edublogs.org/2013/07/16/meiosis-stop-motion-videos/>)

COLE'S UNDERWATER FOOTAGE OF SPINNER DOLPHINS!

Underwater Footage of Dolphins at Moon Reef (by Cole Welter)

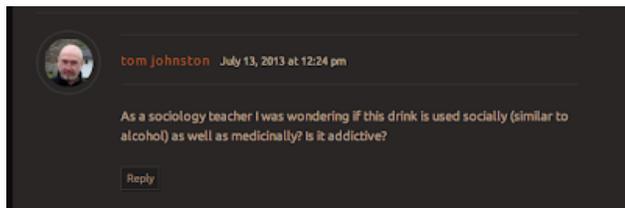


Note: the class blog contains images and video from our field trips. <http://biologyinfiji.edublogs.org/>
(<http://biologyinfiji.edublogs.org/>)

COMMENTS FROM OTHERS ABROAD

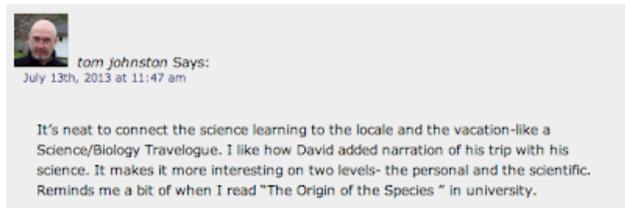
As our course progressed I fell further and further behind in my providing feedback for student blogs. We ran into a bunch of unanticipated issues that kept me running and less focused on the marking and feedback (one student having their appendix out in Fiji, bedbugs, students getting dog bites, sudden itinerary changes, etc. Most things to be expected when travelling through a developing country, but never-the-less prevented me from keeping on top of my feedback. I was incredibly lucky however. Friends, family and educators from all over were providing feedback on student blogs! As we shared our work through Facebook, twitter and blogging, others joined along our journey. These connections were incredibly helpful for all involved. They motivated students to share more (even though we had wonky and inconsistent Internet connections).

Here are few of the comments:



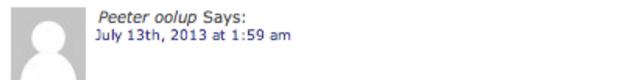
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[fiji/Screen%20Shot%202014-06-08%20at%204.10.20%20PM.png?attredirects=0](https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.10.20%20PM.png?attredirects=0))



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[fiji/Screen%20Shot%202014-06-08%20at%204.39.14%20PM.png?attredirects=0](https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.39.14%20PM.png?attredirects=0))



(<https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.39.53%20PM.png?attredirects=0>)



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[fiji/Screen%20Shot%202014-06-08%20at%204.40.35%20PM.png?attredirects=0](https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.40.35%20PM.png?attredirects=0))

Denise // [Jul 22, 2013 at 3:24 pm](#)

Beautifully written. I learned something new.

[Reply](#)

jayablake // [Jul 26, 2013 at 1:17 am](#)

thank you very much

[Reply](#)

([https://sites.google.com/a/scdsb.on.ca/science/biology-](https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.41.39%20PM.png?attredirects=0)

Erika Campbell // [Jul 27, 2013 at 5:38 pm](#)

Bula! Jaya, I was doing research for my culminating and your blog came up! Great job!

[Reply](#)

jayablake // [Jul 31, 2013 at 5:12 am](#)

Bula Erika! Vinaka! I am glad you enjoyed it 😊

[in-fiji/Screen%20Shot%202014-06-08%20at%204.41.39%20PM.png?attredirects=0\)](https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.41.39%20PM.png?attredirects=0)



Debbie on 07.18.13 at 11:59 am [Reply](#)

That is great information that more people should know about. Sometimes people are too quick to run the walk-in clinic with that cough or runny nose not realizing that your most likely better off letting it run its course and try to stay away from taking antibiotics as much as possible.



Lori Cooper on 07.18.13 at 7:51 pm [Reply](#)

Hi NERD-Niece. Really interesting and informative blog entries. What a great learning opportunity. The hands-on experience can not be duplicated in the classroom.

Next assignment – HAVE FUN!!

Love. NERD-Aunt!

([https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.42.39%20PM.png?attredirects=0\)](https://sites.google.com/a/scdsb.on.ca/science/biology-in-fiji/Screen%20Shot%202014-06-08%20at%204.42.39%20PM.png?attredirects=0))

IMPORTANT NOTES

- It is important to ensure parents and families are on board. We had parent permission, shared the reasons for blogging our way through Biology in Fiji and created guidelines for sharing images, video and text online.
- We adhered to all board policies regarding online presence and learning
- We used Edublogs (cost \$40 per year for the pro account), but Blogger is another great, free platform
- Students were encouraged to use audio recordings instead of writing if it worked better for them
- Students often interviewed people in Fiji to gather information
- Students used a lot of video to explain concepts
- Parents loved to see what students were learning

SAMPLE BLOG PROMPT

BLOG-06: ECOSYSTEM RESTORATION

We will get to see a few different ecosystem restoration projects in action. I am most excited for the trip where we will get a chance to help replant coral. We will visit a village that has a project where they grow/farm coral and then replant it in the ocean to rebuild the reefs. Part of our job will be to take a few pieces and replant them in the ocean while snorkeling. We will have local guides take us on a snorkeling tour of the reef. Part of our day includes a visit and education piece around their new wetland sewage treatment system. Before this, many villages have not had sewage treatment. All that waste goes into the ground or water. Their new wetland system is groundbreaking and innovative.

For this blog post you should demonstrate your understanding of what biodiversity is. Describe a project that is working towards restoring biodiversity. Use images, video, audio recording (interviews) and/or text. You may discuss any initiative you like, although it may be most interesting to discuss one of the ecosystem restoration projects that we get to see with our own eyes in Fiji. You may also choose to separate this into multiple shorter blog posts.

Success Criteria:

- *I have demonstrated my understanding of what biodiversity is*
- *I have demonstrated my understanding why biodiversity is important*
- *I have described an ecosystem restoration project and how it is working to restore biodiversity*
- *I have described what the ecological problem is that the project is trying to protect from (example: coral bleaching)*
- *I have included an analysis of the project which states what I think they are doing well (effective) and what they could do to improve*
- *I have described what the short term and long term impacts of this project could be on the ecosystem*
- *My blog post is clear and can be understood by the general public (you may need to explain some scientific concepts)*
- *I have included images or media if they help to explain the topic*
- *Any photos or media that I have not taken, are sourced properly*
- *I have used appropriate terminology (scientific language)*
- *I have proof read and spell checked my work*
- *I refrained from using “text speak” (like lol, brb, imho, etc.) unless needed to explain something.*

Helpful Resources:

- http://www.reefresilience.org/Toolkit_Coral/CCR_Fiji.html
(http://www.reefresilience.org/Toolkit_Coral/CCR_Fiji.html)
- <https://www.niwa.co.nz/our-science/pacific-rim/research-projects/development-of-sustainable-water-supply-and-waste-treatment-systems> (<https://www.niwa.co.nz/our-science/pacific-rim/research-projects/development-of-sustainable-water-supply-and-waste-treatment-systems>)
- Video: coral death in Fiji (<http://uk.reuters.com/video/2013/04/16/over-fishing-seen-as-culprit-in-fiji-cor?videoId=242279598>)

