



THE UNIVERSITY
OF BRITISH COLUMBIA

The Three S's: Students + Skills = Success

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My philosophy!

We as “Professors” need to constantly remind ourselves that, regardless of whether we are in the same physical room as our students or in a virtual one, we have a privilege and obligation that comes with being facilitators of learning. It is part of our job to encourage dialogue with, and between, our students, including giving time to ask *“how are you today?”*

Reflexivity statement

Creating a trusting atmosphere

- Always be transparent about expectations and 'STICK' to them (if you fail here you risk losing the students trust).
- Professionalism goes both ways
- I never penalize students for handing something in late: most will hit the mark and those that don't usually have legitimate reasons for doing so (my ask to them is that they try and inform me before the due date)
- My role is not to be a gate keeper but rather remove barriers to enable students to succeed.

Learning outcomes as competencies

- Historically many university courses have been 'content' outcome based
- The BC High School curriculum has moved (initiated ~ 2018) to skills (competences) based outcomes
- <https://curriculum.gov.bc.ca/curriculum/science/12/anatomy-and-physiology>

Learning: outcomes vs competences

Respiration

- Memorize and understand the 'bits'– assumed they would learn to interpret and communicate this information
- Now the focus is on teaching how to interpret and communicate using the concepts of respiration

NOTE: Both approaches should result in learning about respiration but the latter should result in learning life long skills that can be applied to any science

Engaging the student

- Finding the hooks that allow students to connect with the material
- Biology – teaching invertebrates – using the weird and wonderful that surprise the student – self decapitating nudibranchs (sea slugs)

These self-decapitating sea slugs can grow new bodies, scientists find

By Ben Cost

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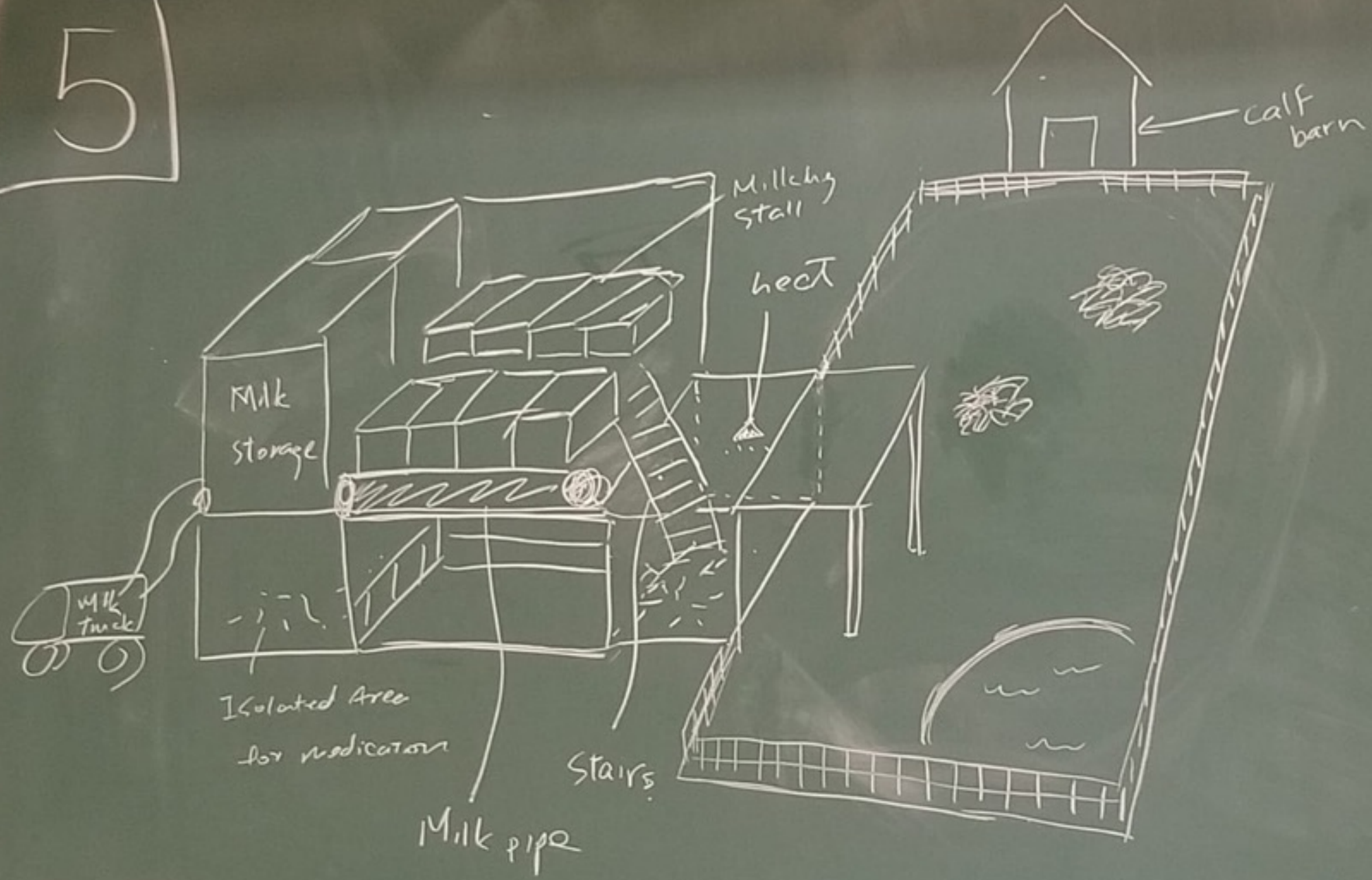


Small group discussion – breakout rooms

- Have a clear set of instructions before beginning any group work and stick to it
- Ideal Dairy Farm example – in class vs on line

What do you consider to be an ideal dairy farm and why are these characteristics important to you?

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Breakout rooms

- Assign a chair
- Assign a note taker
- Discuss your views on the ideal dairy farm and as a group try to reach consensus three characteristics that your group wish to carry forward
- The Chair should be prepared to convey these to the class
- The note taker should up load to a new 'in class' survey on canvas entitled IN CLASS Ideal dairy farm as soon as consensus has been reached



Supporting the student

- Acknowledging that they have things going on in their life that is out of their control and we rarely know about
- Real world verses our world!

Supporting the student

- Traditionally we give the information and then test the students (most learning was done by the student at home!)
- Now we give the information, give a thorough example and then ideally get them to come to class with examples of how they applied the information (flipped classroom concept).



APBI 398 Term paper: Rapid systematic review

- Step 1 – what question do they want to answer (introduced 4th week)
- Step 2 – workshop on using web of science
- Step 3 – Feed back on refining their question
- Step 4 – Preparing the Prisma table (summarizes the steps taken to identify the papers to include in their review) and their results table
- Step 5 – feed back on Prisma and results tables and methods
- Step 6 – first draft handed in and detailed feed back given
- Step 7 – final paper handed in (end of term)

Assessing the student

- Take home exams – assignment based on and are an extension of previous assignments (again no surprises)
- Give them as much agency as I can: for instance, they are asked to give a 3 min presentation on any subject that includes animals (totally flexible)
- Always open to take their questions...e.g. on line log in 15 min before class – stay after class (making connections).
- Make them feel comfortable – I have a very complicated last name - to avoid them worrying about how to pronounce my name I encourage them to use my first name.

Constant reflection on how to remove barriers to our success

- I didn't get to where I am overnight – it's a process that is ever evolving
 - Key to getting better is critically assess how the class went and then take detailed notes to make sure that you implement any changes – includes integrating student feedback in a meaningfully and respectful manner
- Will take courage to risk going down this path – as it is so different – will be bumpy and you will need to have patience
- You will likely need to give up some content (tough for us as scientists) but the students will gain transferable skills
- Are we teaching them about stuff or the ability to learn?

What are your barriers preventing improvement?

Where do I need to go next?

- Threading in the ways of knowing and place
- Interconnectedness and reciprocity (give and take)
- Respect for life

