




A Shared Responsibility

A Joyful Approach to
Assessing Language

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10 Student Proficiency in the Language of Instruction (SPLI)

10.1.1 Language proficiency is the ability to write, read, speak, and listen in order to communicate effectively at the college level, within and across disciplines. **To develop the proficiency of students in English is a shared responsibility; it is not solely the responsibility of English as a discipline, but of all College disciplines and of various supporting services.** It requires discipline-specific communication styles and format, vocabulary, documentation, conventions, and presentation skills.





Assessment of
language does not
exist in a vacuum



Writing is part of a
complex web of
thinking processes



Assessment is one
part of good
assignment
design that can
empower students
to produce rich
writing



Considering all parts of
this process from an
evidence-based
perspective can greatly
increase chances of
meaningful linguistic
and critical thinking
gains

All of this
can lead to

Students enjoying writing more

Teachers enjoying reading student writing more

Clearer and more concrete learning and assessment goals

Grading that is more efficient and takes less time

Students attaining tools and strategies to continue improving language skills

Richer, more professional-calibre writing



Can we
reframe?



A shared **responsibility** to
develop the proficiency of
students in English

Becomes...

A shared **joy** at inspiring
students to produce work that is
polished and rich in critical
thinking

Writing in any discipline



The process of teaching and evaluating writing in any discipline ***cannot be separated from*** the process of teaching and evaluating content and skills



Writing = thinking on paper

How to bake language proficiency assessment into assignment design

A step-by-step guide



Effective Assignment Design Strategies



1) Set clear objectives



2) Make writing meaningful



3) Emphasize writing as process



4) Provide timely & actionable feedback



5) Adopt a bigger picture view of grammar & correctness

1) Set Clear Learning Objectives

“Prior to designing assignments, teachers can develop their learning goals by considering answers to the following questions:

- What are my main learning objectives?
- What thinking skill am I trying to develop?
- What are the most difficult aspects of my course for students?
- If I could change my students' study habits, what would I change?
- What difference do I want my course to make in my students' lives?”
 - (Bean & Melzer 62-63)

What are
my main
learning
objectives?

In addition to course specific content & skills objectives:

Students
must produce
polished,
professional-
calibre
writing

Students are
responsible
to proofread
their work

Students are
responsible
to consult
Academic
Skills Centre
for help with
grammar and
expression

Shift
responsibility
to students. **A
shared
responsibility!**

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proofread their work

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expression

Align language proficiency goals with critical thinking goals

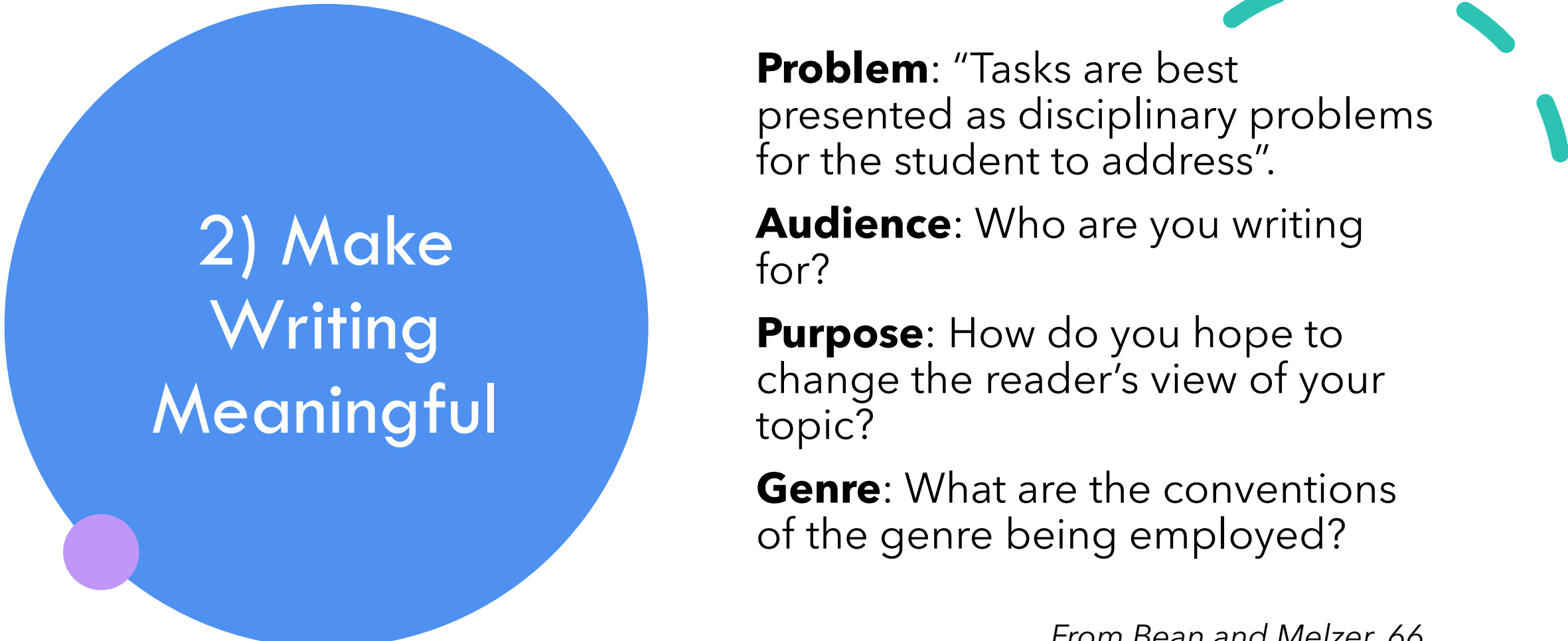
Students must adhere to the conventions of a professional engineering report....



Have students practice a variety of writing for a variety of purposes

- Informal, lower-stakes writing: Grammar doesn't matter. Focus on ideas, etc.
- Formal assignments: It is your responsibility to proofread for grammar and correctness, etc.





2) Make Writing Meaningful


Problem: “Tasks are best presented as disciplinary problems for the student to address”.

Audience: Who are you writing for?

Purpose: How do you hope to change the reader’s view of your topic?

Genre: What are the conventions of the genre being employed?

*From Bean and Melzer, 66
& Bazerman, 1*



When
students are
invested,
their writing
naturally
improves

“Problems...evoke students’ natural curiosity and stimulate both learning and critical thought...Well-designed problems...awaken and stimulate the passive and unmotivated student” (*Bean & Melzer 2-3*).

“When you draw people’s attention to the gap between their current state of knowledge and what they perceive as knowable, both interest and curiosity are generated” (Cavanagh 124)

Make writing public when possible



Knowing other people might see their work adds social pressure to produce the best version of your work.



Students can publish on blogs, forums, LMS, etc.

Present
writing itself
as a
compelling
problem to
solve

Clear sentence
structure = a
challenging problem
in itself

Model your own
writing practices and
problem-solving
revision processes

3) Emphasize writing as a process

“What our students need to understand is that for expert writers the actual act of writing causes further discovery, development, and modification of ideas...Expert writers do extensive rewriting, the final products often being substantially different from the first drafts” (Bean & Melzer 33)

As ideas
become
crystallized,
grammar
improves

“The early error-laden draft is a necessary step toward the writer’s eventual mastery of the ideas and...once the ideas have become clearer, the sentence structure begins to clear up also” (Bean & Melzer 330)

But I don't
have time to
assign
multiple
drafts!

You can scaffold assignments
with earlier brainstorming and
idea-development work

Hold final drafts to a high
standard: allow for rewrites and
resubmissions if language
proficiency is not met

4) Provide timely & actionable feedback

- Focus on formative feedback early in the process
- “When we comment on papers, we should play the role of a coach providing guidance for revision, because it is through revising that our students learn most deeply what they want to say and what their readers need for ease of comprehension” (Bean & Melzer 301).

Formative assessment:

1. Requires students to take responsibility for their own learning.
2. Communicates clear, specific learning goals.
3. Focuses on goals that represent valuable educational outcomes with applicability beyond the learning context.
4. Identifies the student's current knowledge/skills and the necessary steps for reaching the desired goals.
5. Requires development of plans for attaining the desired goals.
6. Encourages students to self-monitor progress toward the learning goals.
7. Provides examples of learning goals including, when relevant, the specific grading criteria or rubrics that will be used to evaluate the student's work.
8. Provides frequent assessment, including peer and student self-assessment and assessment embedded within learning activities.
9. Includes feedback that is non-evaluative, specific, timely, and related to the learning goals, and that provides opportunities for the student to revise and improve work products and deepen understandings.
10. Promotes metacognition and reflection by students on their work.

From "Formative Assessment That Truly Informs Instruction," by the National Council of Teachers of English.

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“You might discover that commenting to prompt revision, as opposed to pointing out errors or justifying a grade, can change your whole orientation toward reading student writing. You begin looking for the *promise* of a draft rather than its mistakes. ... **You think of limiting your comments to the two or three things that the writer should work on for the next draft**...You think of coaching rather than judging” (Bean & Melzer 302).



Sample
comment:
Student with
weak writing

“There’s something about your language and the way you’re expressing yourself that is getting in the way of your ideas being communicated effectively. Please revise for clarity and resubmit. If you’re having difficulty recognizing how to make your sentences more understandable, please see...”



Feedback is a conversation

- Decenter your voice: Peer reviews
- Promote self-regulation:
 - What did you do well on this assignment?
 - If you were to make another draft, what would you improve?
 - Were you able spend enough time on the assignment? Reflect on your process.

5) Adopt a
bigger
picture view
of grammar
&
correctness

Grammar is often a political
issue

Correcting grammar mistakes
on a paper is not effective

Even weaker writers write
mostly correctly

Most grammar errors fix
themselves through drafting

Politics of grammar

“The common meaning of...‘bad grammar’ has nothing to do with grammar itself; rather, it is concerned with conformity to social conventions and is properly called a use or dialect matter rather than a grammar matter...The need to add Standard English to their repertoire of linguistic resources is a sociological and political issue, not an issue of intelligence or verbal skill” (Bean and Melzer 322-23)





**Teaching and
correcting grammar
is not effective.
Phew!**

“The teaching of formal grammar has a negligible or, because it usually displaces some instruction and practice in composition, even a harmful effect on the improvement of writing” (Bean & Melzer 320).

Focus on what student is doing well

“Even in an essay that instructors might consider ‘error laden’ an actual count of the errors reveals that there are many more correct sentences than flawed ones...We are less apt to notice errors if we are not looking for them” (Bean & Melzer 327).



Approaching writing as a process solves most grammar issues

“The appropriate intervention for teachers across the curriculum...is to design good assignments that engage students with the course’s ideas and ways of thinking, build a process approach into the requirements, and coach that process so that students submit thoroughly revised and edited work” (Bean & Melzer).



Rather than “teaching” and “correcting” grammar, teach the process by which professionals in your field produce work.

Examples of writing in science



Make them write often



Make writing authentic



Provide scaffolds and models



Assessing strategies

Make them
write often!

Add low-stake
informal writing
assignments

Reflective writing

- Pre-instruction free writing focused on sticky points.
- Opens a personal channel with the students.
- Awesome tool to draw out misconceptions

One-minute paper

- Short writing from a prompt done live.
- Overview of state of mind of students.

Rationale explanations myDALITE

- Explaining conceptual understanding.
- Practice of convincing writing.

Reflective writing example

(adapted from C. Whittaker who adapted it from C. Kalman)

Instructions:

- Free-write about what you've read.
- Write whatever comes into your mind. Focus on any question you might have or anything you didn't understand. Try to figure it out by writing. Ramble.
- Don't pay attention to sentence structure or grammar.
- If you say something that you realize is wrong, **don't erase it, correct it** with another sentence.
- If you get stuck, do not stop writing. Just write, nonsense until you get unstuck.

• Example

Ok, so this reading was about free-fall (gravity). So when an object falls it has a constant acceleration down. But how can the acceleration be constant if the object speeds up???? I don't get that. I will need to ask in class.

And also, why isn't $a=0$ at the highest point. The textbook says that, but I really don't understand it. If the object is at rest at the top, shouldn't the acceleration be 0? physics, physics, mechanics, moving... Or maybe that's the velocity that is zero? That has to be. Aren't speed and acceleration linked???

One minute paper (adapted from the SALTISE website)

Instructions:

- **STEP 1:** Instructor asks students to write a **brief** reflection on their understanding of a lesson/activity in a few minutes.
- Typical prompts:
 - *What is the most important thing you have learned during this class?*
 - *What important question(s) still remains unanswered?*
 - *What did you find most difficult during today's class?*
- **STEP 2:** Individually, students provide a written response(s)/reflection(s). Reflection(s) can address issues such as:
- **STEP 3:** Instructor collects written reflections and uses them to the next class.
- Adapted from: <https://www.saltise.ca/teaching-resources/strategies/one-minute-paper/>

Rationale explanations on myDALITE (question shown from Jason Lapointe)

Process:

- **STEP 1:** Students answer a conceptual multiple-choice question. They have to provide an explanation for their choice.
- **STEP 2:** Students are presented with explanations from other students. They can change their answer.
- **STEP 3 (optional):** Students see the right answer and an expert rationale.
- myDALITE: <https://mydalite.org/en/>

myDALITE

Step 1:
Students answer a
conceptual multiple-
choice question.

They provide a
written explanation
for their choice.

Arthur Harris - Diabetes (3 of 6)

Upon receiving Mr. Harris' blood cell count, healthcare workers took the proper steps to control the infection. Throughout this time, Mr. Harris' vital signs were monitored and recorded. Infections commonly cause inflammation, and inflammation is commonly associated with hypertension. Examine Mr. Harris' vital signs below and select the relationship that most ACCURATELY describes his situation. Abbreviations: cardiac output (CO), blood pressure (BP), heart rate (HR), respiratory rate (RR). **(your rationale should follow the criteria set out in the rubric)**

Vital signs

Chart Time	Temp (°C)	Resp (breaths /min)	Pulse (beats/ min)	BP (mmHg)	Sat%	Notes	Entry By
Thu 15:00	37.3	24	103	144/83	94		E Franks, RN
Thu 11:00	37.3	20	99	140/87	95		E Franks, RN
Thu 07:00	37.3	24	99	152/92	93		E Franks, RN
Thu 02:55	37.7	26	109	148/90	94		J Grisman, RN
Wed 23:00	38.0	21	98	137/88	94		J Grisman, RN

Reference range:
Temp: 35.5-37.8 °C
Resp: 12-20 breaths per min for male and female adults
Pulse: 60-100 beats per minute
BP: healthy systolic over diastolic pressure is 120/80 mmHg
Sat%: oxygen saturation at rest ranges between 95-99%

- A. high body temp = low sat% + high HR
- B. high RR = high body temp. + high CO
- C. low sat% = high RR + high CO = high BP
- D. low sat% = high RR + low CO
- E. stress = craniosacral division activation = high BP

← → Ω B I U X₂ X² ≡ ∨ ≡ ∨ I_x

myDALITE

Step 2: Compare to peers

Students are shown rationales from other students. They can change their answer.

You answered **E** and gave this rationale:

Upon receiving Mr. Harris' blood cell count, healthcare workers took the proper steps to control the infection. Throughout this time, Mr. Harris' vital signs were monitored and recorded. Infections commonly cause inflammation, and inflammation is commonly associated with hypertension. Examine Mr. Harris' vital signs below and select the relationship that most ACCURATELY describes his situation. A

Consider the problem again, noting the rationales below that have been provided by other students. They may, or may not, cause you to reconsider your answer. Read them and select your final answer.

- E. Mr. Harris' high blood pressure is likely the result of stress. Parasympathetic activation causes increased cardiac output, which helps compensate for his low oxygen saturation levels.
- Mr. Harris' high blood pressure is likely the result of stress. Parasympathetic activation causes increased cardiac output, which helps compensate for his low oxygen saturation levels.
- + Show more rationales

-
- A. I chose option A. When someone has a high temperature, it's a sign of infection. Thus, when your body temperature is higher than normal (for example if you have a fever), which lowers your saturation levels. This is because is generated by our metabolism or from the time of year lowers Hb's affinity for O2. Additionally, your heart rate is increasing, trying to reducing the high body temperature.
 - I chose option A because high temperatures are associated with low oxygen saturation levels and high respiration rates.
 - I chose option A because Mr. Harris' results indicated an infection. With an infection comes an elevated body temperature, and when the body's temperature is elevated it decreases HB affinity for O2, therefore lowering his O2 saturation, thus increasing HR as the body's response to try and reduce body heat.

myDALITE

Step 3: Wrap up

Summarizing
all answers
and providing
an expert
rationale.

You answered **E** and gave this rationale:

Upon receiving Mr. Harris' blood cell count, healthcare workers took the proper steps to control the infection. Throughout this time, Mr. Harris' vital signs were monitored and recorded. Infections commonly cause inflammation, and inflammation is commonly associated with hypertension. Examine Mr. Harris' vital signs below and select the relationship that most ACCURATELY describes his situation. A

You then changed your answer to **A** and selected this rationale:

i chose option A. When someone has a high temperature, it's a sign of infection. Thus, when your body temperature is higher than normal (for example if you have a fever), which lowers your saturation levels. This is because is generated by our metabolism or from the time of year lowers Hb's affinity for O2. Additionally, your heart rate is increasing, trying to reducing the high body temperature.

Correct answer(s):

C. low sat% = high RR + high CO = high BP

Expert rationale(s):

This option is most accurate because in response to his low Sat%, Mr. Harris' respiratory rate and heart rate are higher. The higher respiratory rate triggers the blood volume reflexes because the respiratory pump returns more blood to the heart. These reflexes trigger a higher HR and SV. These conditions cause an increase in his blood pressure as BP is related to CO.

Make writing worth it! (TIP)

Writing to reinforce critical thinking

Double-blind labs

- Labs for which neither the teachers nor the students know the answer a priori.
- Students must be convincing!

Case studies

- Makes assignment more authentic by providing context.

Inquiry-based learning

- Gives more room for student agency and for critical thinking.

Provide scaffolds and models

Checklists and samples.

- Helps students to meet expectations.

Group grading of sample writings

- Forces students to develop/use grading rubrics.

Peer review

- Share, criticize, re-write!
- Long-term projects with [Jonathon Sumner](#)

Example of checklist for a lab

- Results and Analysis
 - Results are presented clearly in a logical order and it is easy to extract the information;
 - All measurements include uncertainties;
 - Avoid data dump. (Explain your thoughts, do not assume the reader will follow straight from the tables, graphs and equations. Each of these elements should come with a sentence introducing them and showing their purpose.)
 - Graphs
 - Are numbered and have a meaningful caption;
 - Axes are properly labeled with units;
 - Are scattered plots without lines joining the points (in general);
 - Have a proper size of the data point markers to facilitate reading;
 - Include uncertainties when available;
 - Include the equation of the trend line as well as the R-square or rms (if there is a trend line)
 - Only relevant results are presented;
 - Present the calculations required to get the results clearly;
 - Provide explanations for all the information extracted from the results, including graphs, trend lines, and uncertainties (if available);
 - Include units for all final quantities in equations.
 - Respect conventions for significant figures for all final quantities in equations.

Example of peer review using blogs

- Create groups of 2-3 students.
- Create supergroups composed of 3-5 groups.
- Throughout the semester, students have to post progress reports.
 - Each time, they are asked to individually make at least two comments on another group's work.
 - They also need to reply to all comments received.
 - Teacher monitors, but does not intervene too much.
- Assessment is done on task completion.
- Example: [Modelling in science](#)

Peer review of reports

Example of process:

- Works well with groups of 2 or 3.
- Do when groups have their “near-final” report.
- Each student brings a copy of the report.
- Teacher goes over expectations.
- Each student reads and comments one report.
- Members of the groups consult each other during the process.
- Students give back the commented report to the authors.
- Groups must decide on valid comments and address them before final submission.

Benefits

- Expose to work of other groups.
- Mimic the publishing process
- Good opportunities to emphasize importance of writing in science.
- Report graded at a higher quality level.

Tips

- Use guidelines and prompts.
- It will likely take longer than you think.

Assessment strategies

Provide a grading rubric.

- Make it available early in the process.

Break down big projects.

- Multiple deadlines with incremental progress.

Do not evaluate writing separately.

- Make good and clear writing a component of the expectations.

Writing is not just grammar!

- Assess for clarity, conciseness, ability to keep interest.

Make it public!

- Having a real audience can make a big difference!

Useful resources

- Reflective writing
 - <https://www.saltise.ca/teaching-resources/strategies/reflective-writing/>
 - Kalman, C. S. (2011). Enhancing students' conceptual understanding by engaging science text with reflective writing as a hermeneutical circle. *Science & Education*, 20, 159-172.
- One minute paper
 - <https://www.saltise.ca/teaching-resources/strategies/one-minute-paper/>
- myDALITE
 - <https://mydalite.org/>
- Case base study
 - <https://www.saltise.ca/teaching-resources/strategies/case-studies/>
- Inquiry-based learning
 - <https://www.saltise.ca/teaching-resources/strategies/inquiry-based-learning/>
- Peer review
 - <https://modellingindawson2014.wordpress.com/>
 - <https://www.saltise.ca/teaching-resources/strategies/peer-assessment/>

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