# Responding to the readings

This proforma is one way of actively engaging with your reading. If you have other ways of getting the most from your reading let your colleagues know in the readings discussion folder where you can also attach your reading responses.

Choose *one* idea from your readings:

* 1. articulate the idea, clearly and simply;
  2. analyse its relationship to your practice as a teacher; and
  3. describe an implication for your future practice as a teacher.

It helps your learning to be creative: draw a concept map (<http://cmap.ihmc.us/> ), draw a picture, insert a video

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| Idea | It is important to ensure there’s strong student agency when it comes to the orienting, establishing, evaluating, and refining of representations. This will support and challenge students to coordinate and refine their representations of scientific concepts, in turn leading to increased understanding and coherence in scientific understanding (Hubber 2010:24-25). |
| Relationship | Student agency and control over their own understanding scientific phenomena is critical to identifying and assessing their progress through a lesson sequence. I aim to encourage students to have freedom in how they express their understanding, and encourage them to represent their understanding, which translates to scientific understanding. Representation of their progress through a task, and being able to display assumptions, results, predictions effectively creates a piece of assessment that I can use, and that can effectively display data. |
| Implications | An implication for my teaching is I plan to incorporate representation as a priority for science teaching, and planning lessons. Having a structure based around representation of scientific concepts and working backwards or from that point in planning will guarantee the chance for students to represent their data, or for data to be represented as a class to embed the knowledge they have gained. |

**References:**

Hubber P, Tytler R and Haslam F (2010) ‘Teaching and Learning about Force with a Representational Focus: Pedagogy and Teacher Change’, *Research in Science Education,* 40(1):5-28, doi:10.1007/s11165-009-9154-9