

Science, Motivation, and Faith

24 Minutes

If you are using this as your first training activity, use **slides 1 and 2** of **Introduction to Thinking FASTly.pptx** to introduce the teachFASTly resources, and make copies of **What is Teaching FASTly.pdf** available for participants. Explain that participants are going to learn about an approach to teaching faith and science that informs the resources available at www.teachfastly.com. Explain that this website is a Christian resource for high school science and Bible teachers.

If you already used the **Introduction to Seeing FASTly** session with your group, you can begin with **slide 3** of **Introduction to Thinking FASTly.pptx**. Briefly review the idea of multiple connections between faith and science. The teachFASTly resources explore connections between faith and science teaching not only in terms of questions of truth, but also in connection with the virtues, motivations, practices, and social contexts of science. Explain that this is going to be an interactive session in which participants will explore several different ways of making connections, with the goal of seeing fresh possibilities.

Use **slide 4** to explain that participants will be thinking about connections between Christian faith and motives for science, connections between teaching activities and various aspects of Christian faith, and connections between the Bible and science classroom.

Show **slide 5**. Ask participants to work with a partner. Give each pair a copy of the first page of the handout **Science, Motivation, and Faith.pdf** and two sets of cards cut up from the second and third pages. (Keep the two sets separate – using envelopes is helpful. It is also helpful to copy these on paper or card of different colors to keep the two sets distinct). Ask each pair to first sort the cards from page 2 by placing them at the appropriate spot on the handout from page 1 – are these activities basic science, applied science, or technology? Then have each pair add the motivation cards where they think they fit best – which kind of motivation could most easily connect to basic science, applied science, or technology?

Once this is complete (allow about 8-10 minutes), discuss the results with the group. Ask the group:

- Do you think your students would be able to articulate these connections between motivations grounded in Christian faith and involvement in science and technology?
- Have you ever been asked to explore your own motivations for learning about science, and how these might relate to faith?

- What sense do you get from your participation in science class about why you should learn about science and technology? Are any of the motives that we just looked at more visible or neglected within the curriculum?

Consider: What ideas do students bring with them from outside the classroom about why science and technology might be worth studying? How might we go about expanding their vision and helping them to see the possible connection to faith?

Keep the discussion brisk; once a range of things to think about have emerged, tell participants that this activity drew directly on one of the collections of teaching activities at www.teachFASTly.com, and that they can explore more concrete ideas there for exploring these connections with students in connection with science topics.

Now move on to **Bible Class and Science Class**.

Bible Class and Science Class

30 Minutes

Show **slide 6** of **Introduction to Thinking FASTly.pptx** and tell participants that they are going to think about another set of connections – connections between science class and Bible class. Sometimes debates about faith and science can leave the impression that the connection between the Bible and science has mostly to do with conflicts over how to interpret the early chapters of Genesis in relation to evolution and the age of the earth. This activity will challenge us to think more broadly and recognize a wider range of possible connections and opportunities for cross-curricular collaboration.

Organize participants into groups of three. (If the numbers don't quite work, some groups of two or four are fine). If it is possible to have both science teachers and Bible teachers in each group, that would be ideal, but it is not essential.

Show **slide 7** and ask groups to discuss whether each question should be learned about in science class, in Bible class, or both. Ask them to think about where students are currently likely to learn about each question and also about where the best place might be to learn about each question. After 4-5 minutes gather ideas from the whole group. For the moment just allow ideas to be shared rather than moving to conclusions.

Next, hand out a copy of **Bible Class and Science Class** for each group. Explain that the left hand column has a list of seven Bible passages, the right hand column has a list of seven science topics, and the middle column has the familiar list of seven questions. Point out that the lists do not correspond to one another – they are in random order.

Show **slide 8**. Ask each group to choose a question from the middle column and discuss how it might connect to a Bible passage from the left column and a science topic from the right column on the handout. When they have found a match on each side they should draw a line connecting the three items. Emphasize that there may be more than one way of combining the items. The group should then discuss:

- How are the three items related?
- How might students learn about the question in the middle in science class or in Bible class? (What would be a good learning activity?)
- How might student learning be weakened if they only learned about the question in Bible class or science class and not in both?

Tell groups that they will be asked to share their responses with the wider group. If groups have finished discussing their first set of connections before the time is up they can work on a second set.

After allowing 8-10 minutes for discussion, draw participants back into the whole-group setting and have at least four or five groups report their ideas. After various groups have reported, if there are questions from the list that were not chosen by any group, have the whole group suggest connections for one of them.

Finally, explain that all of the topics in the lists are part of learning activities in the teachFASTly resources, and that these resources promote cross-curricular connections between science class and Bible class in order to make student learning deeper and more coherent. If you are conducting this session within a single school setting you could conclude with some discussion of concrete benefits of and obstacles to increased collaboration between science and Bible teachers in the school.

Now move on to **Aspects of Faith and Teaching**.

Aspects of Faith and Teaching

20 Minutes

Show **slide 9** of **Introduction to Thinking FASTly.pptx**. Explain to participants that this activity will look at how the teachFASTly resources make connections between faith and teaching about science. Note that it is sometimes assumed that these connections only happen if we are explicitly talking about faith concepts, but that the teachFASTly resources include a broader set of connections.

Organize participants into groups of three. (If the numbers don't quite work, some groups of two or four are fine). If it is possible to have both science teachers and Bible teachers in each group, that would be ideal, but it is not essential.

Show **slide 10**, which shows an image of the handout. Give each group a copy of the first page of **Aspects of Faith and Teaching.pdf** and also a set of the cards on the second page (these should be cut up ahead of time and clipped to the first page or provided in an envelope). Explain that the circles on the sheet show a range of themes that are important values for Christian faith, and that each card offers a brief summary of a teaching activity. Emphasize that these are just example activities.

Ask groups to take each card, read it, and decide which aspect of faith it best fits with from those listed on the sheet. They should then place the card on the appropriate circle (if the card is folded in half like a greetings card it is easy to stand it on the circle and leave room for other cards).

Once participants have completed this step, conduct a whole group discussion that includes the following questions:

- Do the activities only connect to one aspect of faith or might they make multiple connections?
- Which combinations were new ideas or connections that might not have occurred to you?
- Which of these connections are already made regularly in your classroom?
- Is there a connection made here that could usefully be made more often in your classroom?
- The whole collection of teachFASTly resources includes multiple activities that connect to all of these aspects of faith. Which connections did you not make during this exercise? Can you think of a teaching activity that might connect to one of those remaining circles?

Finally, reiterate that teachFASTly.com is about making rich and varied connections between faith and science within our teaching. The goal is not to answer all questions but to show possibilities for exploration. Show **slides 11 and 12** (or use a live demonstration of www.teachfastly.com) to show participants:

- that the activities on the site can be **browsed** not only by subject area, but by the kind of connection to faith that they foreground; and
- that there are short supporting essays in the **Insights section** that explain how each faith aspect fits into the whole. Invite participants to explore the site further at their leisure.