

The teachFASTly.com resources are not intended as a complete curriculum. The activities are designed to be woven into your existing teaching. This Quick Stop Lesson Plan is therefore not a single lesson plan, but rather a quick way of exploring the themes of an activity map. It includes one Discover activity, one Delve activity, and one Debrief activity. Together, these may take more than a class period, and you may want to add other activities between them. For more information visit www.teachfastly.com.

Engaging Parents and the Wider Community

We often see faith and science primarily in terms of individual convictions and intellectual challenges. But thinking takes place within a wider set of relationships. As students' perspectives on faith and science develop, the process may strengthen relationships, but it may create tensions with parents, grandparents, siblings, pastors, or others in the community. There is more at stake for students than just ideas. Clarifying our convictions can affect our sense of where we belong. The way we teach about faith and science in school has consequences for our communities.

Parental anxiety about issues at the intersection of faith and science can create a difficult context when education explores challenging questions. It may even restrict what the teacher feels able to address in class. Yet relationships with parents should not be approached just as a potential source of stress. What if we see faith and science learning as a chance to strengthen relationships? Parental support and involvement can greatly enhance learning. Shaping our practices to strengthen family relationships and foster respect and reconciliation are consistent with the beliefs and commitments of Christian educators. Teaching FASTly means honoring the web of relationships within which we teach and learn as we pursue love as well as truth.

This Quick Stop Lesson Plan on **Engaging Parents and the Wider Community** contains the following activities and attachments from www.teachfastly.com, which are combined for your ease of use in a downloadable ZIP file:

DISCOVER Activity: The Week of Wonder Activity Attachment

- Week of Wonder
 - Week of Wonder Spanish

DELVE Activity: How To Disagree
Activity Attachment

- How To Disagree PowerPoint
- How To Disagree Handout

DEBRIEF Activity: The Parent Podcast Activity Attachment

- The Parent Podcast
- The Parent Podcast Feedback
- The Parent Podcast Feedback Spanish



DISCOVER

Activity: The Week of Wonder

Time: Extended

In Brief

This activity engages students in sharing what they are learning with members of their family, and asks them to consider how to communicate a sense of wonder. It aims to strengthen relationships by using science learning to connect with others. It points to a way of seeing science that goes beyond facts, grades, and utilitarian value.

Goals

Students will practice communicating scientific ideas to their parents, including a focus on how these ideas can relate to wonder and gratitude.

Thinking Ahead

Teaching FASTly includes valuing relationships. School learning can increase distance in family relationships as students' learning goes beyond their parents' and relatives' knowledge. Parental involvement may be reduced to helping monitor homework deadlines. This activity invites students to consider how sharing their learning can strengthen relationships. Exploring the connection between faith and science pushes us to consider how the ways we practice science education can help or harm the relationships in our communities.

The activity also invites students to reflect aloud with others on how science can be a source of wonder. As you set up the activity consider how your own tone might support this. Do any of your ways of talking about learning evoke a sense of simply checking off tasks? The intent is for you to communicate through your teaching practices both your own sense of wonder in relation to science and your valuing of students' relationships with others outside of class.

Preparing the Activity

This activity is likely to go better for students if you communicate its goals to parents from the start. Communication will be more effective if you help parents and students to see beyond the school task to its broader purpose. A sample letter is provided in the **Week of Wonder Handout** and, if needed for Spanish-speaking parents, **Week of Wonder Handout Spanish**. Send it a day or two before students begin taking their examples home to share.

Prepare and give to students a list of websites where they will find reliable science reporting so as to reduce the amount of time wasted in random searching.



Teaching the Activity

Begin by sharing something scientific that you have recently learned, perhaps from science news. Seek to model a sense of wonder as you do so. Tell students that they are going to work on sharing science learning with others. Ask students to draw upon what they have learned in science during the semester and/or to access online resources that provide science news. Ask students to find at least two examples of scientific findings that provoke in them a sense of wonder at the complexity, beauty, or surprising nature of creation.

Alternatively, or as a second variation of this activity later in the year, place the focus on scientific findings for which we should be grateful. Ask students to bring three copies of a short written explanation of their examples to class. In class, have students work in groups of three to share their examples, explaining the science, why they chose the example, and why it might appropriately evoke a sense of wonder.

Explain to students that this activity will engage them in communicating about science outside the classroom. They will be asked to share one example each day with one or more members of their family at home for one week, Monday through Saturday, drawing upon all of the examples found by the group. Ask the groups to make a plan for the week, assigning one of their examples to each day, and making sure that each member of the group understands all of the examples well enough to share them with someone outside the group. Also ask the groups to spend a few minutes discussing how to graciously present the new information to someone else, showing interest in the listener and openness to their questions. Explain clearly to students why they are doing this. Explain that the purposes of the activity include:

- extending our interest in science
- practicing communicating scientific ideas
- sharing our learning to strengthen our key relationships
- making space for wonder and gratitude

When the week is complete, spend time debriefing with students about how the conversations went, what they learned about talking to others about science, and how their families responded to what they shared. If you wish to track completion of the task you can have family members sign and return the simple response form provided in **Week of Wonder Handout**, and, if needed for Spanish-speaking parents, **Week of Wonder Handout Spanish**.



DELVE

Activity: How to Disagree

Time: 10 Minutes

In Brief

Learning more about how faith relates to science is not just a cognitive task; teaching and learning FASTly can affect important relationships. Students may be concerned about what may happen to their relationship with a parent, youth pastor, or friend if their views on a contentious faith and science issue change. This activity offers space for students to see disagreements in a new light and to think through how to address them graciously.

Goals

Students will understand that various modes of engagement are possible when engaging across disagreements.

Students will gain tools for engaging graciously with those with whom they disagree about faith and science.

Thinking Ahead

The goal is to prepare students to engage in gracious discussion with those who disagree with them, instead of experiencing argument as an inevitable kind of warfare. This may evoke specific areas of concern for students, including issues on which they no longer share some of their parents' beliefs. However, the goal here is not to air these specific issues in class. Instead the activity works with a hypothetical case to establish a framework for constructively facing disagreements. Consider whether there might be other opportunities through the year to reinforce and model this framework through your teaching practices.

Preparing the Activity

You will need the presentation file **How to Disagree PowerPoint**. If you prefer, you can adapt it to focus on a different controversy. Choose one that fits your learning goals and is likely to echo disagreements in your community. You will also need copies of **How to Disagree Handout**.

Teaching the Activity

Display the global warming argument slide from the **How to Disagree PowerPoint**. Point out that one possible way in which this conversation could continue is as a form of warfare in which each attacks the other's position, hostility is expressed, tactics include insults and shouting the other down, and the only satisfactory outcome is for



one person to win. Ask students to brainstorm in pairs for 2–3 minutes on other ways in which the conversation could develop. Gather their ideas, making sure the whole class has recognized other possibilities that include:

- Avoidance, in which the participants quickly move on to other topics to avoid conflict, wishing to continue their interaction without fighting, yet secretly resenting each others' positions. This option could also be a sign of apathy, treating the issue as of little consequence and not being concerned about the truth of the matter.
- Dismissal, in which one party dismisses the other's viewpoint outright and withdraws from the conversation.
- Debate, in which each gives space for the other to develop their views, the goal is for each view to be developed as clearly and fully as possible, and there is a focus on rational argument.
- Dialogue, in which the main focus is on coming to understand why the other thinks the way they do, and there is give-and-take as the conversation progresses.

Discuss the strengths and weaknesses of each approach. What does each achieve? Which are best able to both honor truth and value other people? How can we avoid an apathetic disengagement while still respecting others? Ask students to consider that pursuing truth might involve not only being correct, but living in right ways with those around us.

Next give students a copy of **How to Disagree Handout** and have them work in pairs to complete it, allowing 5–8 minutes. Alternatively, this could be used as a homework activity. The focus here is on what resources are needed for the conversation to go well. The activity offers students a model for approaching contentious issues that can be applied to other questions in the future. Specifically, have students consider:

- What scientific knowledge would be needed to have an informed conversation?
- What range of sources of information should be consulted to have an informed conversation?
- What virtues might be needed to have a healthy discussion?
- What are possible good outcomes from the discussion aside from one person winning?



Discuss students' findings as a class. Discuss how humility and care for others relate to pursuing truth in discussions. Discuss briefly how these considerations could apply to other conversations with potential for conflict.

If there is time, have students work with a partner and role-play a constructive continuation of the conversation.



DEBRIEF

Activity: The Parent Podcast

Time: 30 Minutes

In Brief

In this activity students create a short podcast to share with parents and relatives. The podcast is intended to invite the wider community into faith-affirming science learning by learning FASTly in terms of both content and the focus on building relationships.

Goals

Students will practice communicating about faith and science to a wider community audience.

Thinking Ahead

This activity extends the audience for classroom work, inviting students to see their learning as opening up possibilities for service to the community and engaging them in connecting the worlds inside and outside the classroom. You may want to set this activity up by assigning students to listen to science podcasts over the days leading up to the day you introduce the activity. The activity asks students to think about how a faith perspective can inform the practice of talking about science in ways other than adding a devotional moment. It will be important for you to have thought about this in relation to your own teaching so that you can guide students as they wrestle with this challenge. Consider how you can relate the activity to your current learning goals in terms of science content.

Preparing the Activity

Students will need access to software to record and edit their podcast. There are various options for this, including the free Audacity http://audacity.sourceforge.net/ Go to http://www.youtube.com/watch?v=-hrBbczS910 to view how to create a podcast using Audacity. You will also need **The Parent Podcast Handout** and copies of **The Parent Podcast Feedback Handout** and, if needed for Spanish-speaking parents, **The Parent Podcast Feedback Spanish Handout**. (One sheet contains three feedback forms per student).

Teaching the Activity

Partway into the year or semester, play students some examples of short science podcasts such as episodes from *A Moment of Science* http://feeds.feedburner.com/WfiuA-MomentOfSciencePodcast series broadcast on NPR. Discuss briefly with students what makes these podcasts effective communication. Discuss also what vision the podcasts



imply of why science is important and how we should view its role in society. Tell students that they will work together to produce a series of podcasts to share with the wider school community. Explain that the goal is to share interesting scientific information and to do so in a way that implicitly affirms the role of faith. Encourage students to think broadly about connections between faith and science. Make it clear that the goal is not just to add a devotional moment to a science talk, but to frame the podcast in a faith-affirming manner, for example:

- fostering a sense of wonder
- communicating a commitment to truth
- modeling a determination to behave towards others with care and humility
- showing a sense of wonder and gratitude for what we can learn from the created world
- relating science to service and compassion

Ask students to work in pairs. Each pair should first complete the following exercise. See the handout The Parent Podcast.

Create at least five different sentences using the following sentence pattern:			
"I would like to tell	_ about	" The grid below shows some examples.	
Students should add their own.			

first blank	second blank
the wider community	how a scientific discovery led me to worship
my family	how to disagree but still love each other
God	my questions about this universe
my parents	how amazing cells are



Once students have completed this activity, have them use it as the starting point to further narrow their focus to:

- 1. A single scientific idea or finding. Make sure that students choose something that is specific, interesting, and capable of being explained within two minutes.
- 2. A single way in which they would like their beliefs and values to be reflected in the podcast. Make clear that the goal is not necessarily to include theological discussion or a devotional moment. Students could focus on a particular virtue, such as humility, patience, or gratitude, or on how what they will share evokes wonder, enables service, calls for gratitude, or gives us insight into truth.

Students will work together in pairs to script and record a two-minute podcast. Full student instructions are in **The Parent Podcast Handout**. Students may enjoy recording a signature sound to start and end their podcast. Once the podcasts are completed, assign a homework task to share them with at least three relatives or other community members and solicit feedback, which should be reported back to you using the feedback form. See **The Parent Podcast Feedback Handout** and, if needed for Spanish-speaking parents, **The Parent Podcast Feedback Spanish Handout**. You could also post the podcasts to a course web page.

You could use this activity at intervals throughout the year to create an ongoing connection between student learning in class and the learning of the wider school community.