Faith & SCIENCE

BY THE REV. DANA HENDERSHOT
REASONING FOR THE CURRICULUM

When I was working as a youth minister, I realized that the youth were in class all day. They were learning a lot, and then they would come to youth group in the evening. I didn't want to present the young people with one more classroom. I struggled to keep their interest and still expand their understanding of God's presence in everything.

What really bothered me was that there was no carryover. School classes and youth group were two different things. There was no obvious link. School belonged at school, and God belonged at worship and in youth group.

So, here is a link: a way to recognize God's presence even at school. This is a curriculum on science and faith that is full of information, so you don't have to find it on your own or even know it yourself. It is flexible and easy to follow. It can be used for different group sizes, in the parish or at conferences and retreats.

HOW THE CURRICULUM CAN BE USED

As presented here, the curriculum has a retreat- or conference-style opening and closing, including worship. This design points to God's presence with us as we enter into discussion of faith and science. Youth most often experience God in a worship setting. Therefore, whether the event is a one-day youth conference, retreat, small-group session, or local youth group meeting, surrounding it with worship is important. The design has enough flexibility to be used on separate days. However, as a model for its use, let me suggest the following retreat schedule:

Faith & Science Retreat Schedule

9:00 a.m.	Arrival and registration
9:30 a.m.	Worship
10:00 a.m.	Faith & Science in Dialogue: Can it Happen?
12:00 p.m.	Lunch
12:30 p.m.	Breakout sessions: Brain Connections! Are There Others?
2:00 p.m.	Break
2:30 p.m.	Breakout sessions: Brain Connections! Are There Others?
4:00 p.m.	Worship
5:00 p.m.	Homeward bound

WHY DISCUSS SCIENCE AND FAITH?

Discussion of science and religion can take on different forms. This curriculum has been titled "Faith & Science." This may be confusing at first glance. What is the difference between faith and religion? Faith is one's stance toward life and a belief in a truth. It is how one views the world. For Christians, it includes an experience of love that is beyond the physical world. It is personal. Religion, by contrast, is how we put our faith into practice. It is a system of practices, values, institutions and rituals associated with faith that is worked out in a community. Theologically, we reflect on a belief system to help address the question: why? Theology is reflection on our faith and religion.

This curriculum is titled "Faith & Science" because the reflection here is not about a system of practices or values. Instead, it aims to relate personal faith with this age of science. Science is a modern invention, an experimental method of testing which involves forming and modifying theories. This curriculum helps young people engage their own beliefs in relation to science.

The truth of faith has been carried down through generations of traditions and writings. This observation leads to the question: what is truth? There is truth – lowercase t – and there is Truth – capital T. We are in search of Truth with a capital T, but currently we find ourselves with many truths – lowercase t. Our times are so profoundly impacted by science, and faith's dialogue with it is important for Christians' search for Truth.

As Christians, we confess in the first article of the Creed, "I believe in God, the Father almighty, Creator of heaven and earth." God created the universe in which we live, and as caretakers of the earth, it is important for us to understand how it works. God came to earth through Jesus Christ and lived among us as the Word made flesh. God is active today through Christ Jesus and the Holy Spirit. In response to God's love, we too love and care for the gift we have been given in the world. Science is a means by which we are able to learn how to better care for this world and learn what the universe has to offer.

Theologians throughout history have brought observations of the physical world into theological and philosophical discussions. Science has opened an even larger understanding of the world God created. William Burger writes:

> …it is only in an "older" universe that complex life forms can come into being. Based on the analysis of minute grains found associated with meteorites, Armand Delsemme suggests that our solar system was enriched by "at least four different stars. A star rich in carbon, a star rich in oxygen, a star rich in magnesium and silicon, and a star rich in iron."[1] Clearly, our glorious star was generously endowed with the materials needed to build living things. Together with a liquid medium such as water, complex life forms built largely by the common and versatile carbon atom also require a variety of heavy elements to act as the energy centers of their most critical enzymes … Humankind is the product of that history; hydrogen, the original stuff of the universe, makes up about 8 percent of our body weight – all the rest of us is stardust.[2]

We are stardust! All of the living things on this earth are a product of the elements Burger describes. When things that were very different from one another, things that had different characteristics, different goals, and different properties came together, something new and beautiful was brought into being. Various materials along with energy and a "liquid medium" went into our origins, and they might very well not have seemed to "belong" together. But look at the product!

Faith and science have different characteristics, different properties and different goals. At first, they don't seem to belong together. However, it is important to recognize how significantly science has

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[1] Armand H. Delsemme, *Our Cosmic Origins: From the Big Bang to the Emergence of Life and Intelligence* (Cambridge: Cambridge University Press, 2001), 78

[2] William C. Burger, *Perfect Planet, Clever Species: How Unique Are We?* (New York: Prometheus Books, 2002), 23-24.

affected the ways we understand our role in the world. It is also important to recognize the impact of faith on our views of our place in the world. In this way, science and faith join in meeting our common human hungers. What will this collaboration create? What does the human future hold? We can hope that our understanding of the world will enhance our understanding of God who created the world.

THE REASONS FOR THE SESSIONS CHOSEN

Those who hear of religion and science dialogue are confused and skeptical. The mind jumps to the hot topics of creation, evolution and intelligent design. However, the sessions in this curriculum do not deal with creation, even though I would not be surprised if the topic comes up frequently. We hope to help people realize that in fact there are many discussion topics involving faith and science. The topics we cover here – *Faith & Science Dialogue: Can it Happen?, Brain Connections!,* and *Are There Others?* – are only a few being discussed in faith and science today.

The first session was created to help the group gain a better understanding of what it means to have faith and science in dialogue. It will give the group foundation before going into specific topics. The other two sessions were chosen after I met with young people, from freshmen to seniors in high school, from several congregations at a youth gathering in Michigan. I explained the idea behind the curriculum and asked what they would find interesting. Of course, they were each interested in various topics, but I received very positive feedback from almost everyone about discussions of the brain and extraterrestrials.

FAITH & SCIENCE DIALOGUE: CAN IT HAPPEN?

This opening session provides background and tools for discussing science and religion, including Ian Barbour's four different ways of relating the two: *conflict*, *independence*, *dialogue* and *integration*. It is sometimes argued that Barbour's four ways of relating science and religion are too simple. There are authors who argue that there are six or seven different ways. However, for the purpose of this curriculum I have chosen to stick to four. They will be simple for young people to understand and good for creating a basic knowledge of the ways in which religion and science may relate.

Barbour favors some versions of the dialogue and integration models. He argues that conflict and independence leave too many unanswered questions. I agree with Barbour's basic idea here. Science is able to answer some important questions, but it also leaves some basic issues unanswered. The same can be said of religion standing alone. Barbour, a physicist, summarizes:

> …scientific materialism and biblical literalism both represent a misuse of science. The scientific materialist starts from science but ends by making broad philosophical claims. The biblical literalist moves from theology to make claims about scientific matters. In both schools of thought, the differences between the two disciplines are not adequately respected.[3]

I support Barbour's argument: although we need dialogue between science and religion, we cannot carry it too far. There are differences between them. We need to continue to struggle with ways to identify and accept the limitations of both science and religion while uplifting each of their strengths.

There are several methods in which this curriculum teaches the four ways science and religion relate. First, they simply form the basis of the presentation. Second, George Tsakiridis and I created a metaphor involving a basketball court to illustrate them: in each mode, the basketball game would be played differently. For the visual learner, we included four drawings by Josh Ebner. Third, Roger Timm

[3] Ian Barbour, *Religion and Science: Historical and Contemporary Issues* (San Francisco: Harper Collins Publishers, 1997), 78.

has provided four metaphors that will help young people understand each of these four ways in which science and religion relate:

Conflict	*Oil and Water*
Independence	*Apples and Oranges*
Dialogue	*Fruit Salad*
Integration	*Tossed Salad* – though I argue that it's *Stew.*

BRAIN CONNECTION!

How we may experience God through our brain has been a subject of discussion and research. For example, brain imaging has shown how the brain's blood flow changes during peak spiritual experiences.[4] These studies have led to the conclusion that it is possible to scientifically observe mystical/spiritual experiences.

However, our day-to-day life is not a peak spiritual experience. We may have experienced a moment when we lost our sense of self and felt at peace and truly in the presence of God. Peak experiences often lead us on our faith journey. Yet, most of us do not experience them every day.[5] Our faith journey includes love, service and learning, as well as both discouragement and encouragement. Worship focuses our life of faith.

This session addresses the effect of drugs on brain function. Drugs are a reality young people are dealing with today. We will ponder together about what it means for us to use cocaine to fool our bodies into feeling good. Does it matter if we fool our bodies for a couple of hours? Are people of faith less likely to use drugs? How can we instead use our gifts to change our brain structure to enhance our daily experience of life?

During this session we are also looking at brain plasticity. Brian plasticity means that our brain is always learning as we continue to grow and experience life. This learning actually means that the brain physically reshapes its internal connections. We will discuss the reality that our actions of faith throughout our day-to-day lives create changes in our brain structure. In this way and through other actions we begin to form our identity and our calling in life. God calls each of us by name with love. God interacts with us and has given us abundant life and the ability to make choices for ourselves. How has our faith journey so far begun to shape the gifts that we have?

ARE THERE OTHERS?

Many assume that the Christian faith is fragile. They fear that a Christian's beliefs might be shattered if extraterrestrial life were found, because they might think Christ came to only save those on Earth. However, the Christian faith is much stronger than that. Ted Peters, a theologian, observes:

> Despite St. Thomas's use of Aristotelian arguments against many worlds, however, Christian theologians have routinely found ways to address the issue of Jesus Christ as God incarnate and to conceive of God's creative and saving power exerted in other worlds.[6]

Is our God earth-centered, or does our God embrace the universe? The Bubble Nebula photograph by the Hubble Space Telescope is from 72 million light-years away. A light-year is the distance that a

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[4] Andrew Newberg and Eugene D'Aquili, *Why God Won't Go Away: Brain Science and the Biology of Belief* (New York: Ballantine Books, 2001).

[5] James B. Ashbrook and Carol Rausch Albright, *The Humanizing Brain: Where Religion and Neuroscience Meet* (Cleveland: The Pilgrim Press, 1997).

[6] Ted Peters, *Science, Theology and Ethics* (Burlington: Ashgate Publishing Limited, 2003), 13.

particle of light, or *photon*, will travel in one year. The distance light travels in one year is about 9.461 x 10^{15} meters (9.461 petrameters) or about 5.879 x 10^{12} (nearly six trillion) miles. This means that a picture of something 72 million light-years away is showing the way things were 72 million years ago. The Bubble Nebula has probably changed since then. It may not even be in existence anymore. Understanding the vastness of our universe is becoming possible because of advancements in science. It is important to begin to recognize that we are a unique species with special gifts even while we wonder how unique we really are.[7] But in fact, exploring new ideas of space and time may expand our ideas of God's power.

[7] Burger, *Perfect Planet, Clever Species: How Unique Are We?*

THANK YOU

I must give thanks to those who contributed to writing this curriculum. It was not by my hand alone. This curriculum was a hope and dream of mine that only came to be through the support and guidance of others. My gratitude is to scholars and supporters who have made this possible!

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Dana Hendershot, 2006

FURTHER READING

This list contains some of the books that were used as references in creating this curriculum. They are highly recommended for those who are eager to learn more about the dialogue between faith and science or to further explore the main topics covered in the curriculum.

James B. Ashbrook and Carol Rausch Albright, *The Humanizing Brain: Where Religion and Neuroscience Meet*

> Carol Rausch Albright has been the inspiration for pointing out the importance that faith is more than a peak experience. Faith is something that we live and breathe every day. This book is useful to further understand the meeting between religion and neuroscience.

Ian Barbour, *Religion and Science*

> This book provides a solid resource for the history of science and faith dialogue.

Ian Barbour, *When Science Meets Religion*

> This is a condensed version of *Religion and Science* that was released more recently.

William C. Burger, *Perfect Planet, Clever Species: How Unique Are We?*

> This book deals with the question of how unique we are through the history of the universe and of evolution.

Andrew Newberg and Eugene D'Aquili, *Why God Won't Go Away*

> This book is a resource for learning about the studies that have been done on peak experiences of Buddhist monks and Franciscan nuns.

Ted Peters, *Science, Theology, and Ethics*

> Peters has a whole chapter dedicated to "Exotheology: Speculations on Extraterrestrial Life." Peters argues that this subject poses no threat to the Christian faith, but we do need to be in discussion about extraterrestrial life.

Faith & SCIENCE

WORSHIP
BY THE REV. SCOTT A. MOORE
Leader's Guide

Notes for the worship/retreat leaders:

- In preparation for a day of potentially challenging or difficult conversations, it might be beneficial to worship in a setting and physical configuration that is conducive to a feeling of community. Antiphonal, circular or semi-circular seating are ways to achieve such a feeling.
- Any parts marked with "Leader" or "L" may be read by young people.
- Musical choices are not printed in the participant's version. This allows for more flexibility and ease of preparation.
- The musical suggestions are taken from current resources in use by the Evangelical Lutheran Church in America (ELCA).
    - ELW – Evangelical Lutheran Worship
    - WOV – With One Voice
    - W&P – Worship and Praise
    - TFF – This Far by Faith
    - RWS – Renewing Worship Songbook

GATHERING INVOCATION

Leader: We worship in the name of God the creator, the wellspring of life.

People: We bless you, God, for all you have done!

L: We worship in the name of Jesus the Christ, who renews our life.

P: We praise you, O Christ. Make us whole!

L: We worship in the name of the Spirit, the breath of life.

P: We call upon you, Holy Spirit, be with us now! Amen.

GATHERING SONGS
[choose one from each category]

General Gathering

ELW #876	Let The Whole Creation Cry
ELW #819	Come, All You People
ELW #532, WOV #718	Here in This Place/Gather Us In
TFF #141	Come and Go with Me to My Father's House
TFF #145	Jesus, We Want to Meet
W&P #149	We Bow Down

ELW #530, RWS #R179	Here, O Lord, Your Servants Gather
ELW #528, RWS #R180	Come and Fill Our Hearts
RWS #R211	Sing of the Lord's Goodness

Community in Christ

ELW #359	Where Charity and Love Prevail
ELW #610	O Christ, the Healer, We Have Come
WOV #749	When Love is Found
ELW #651, WOV #750	Oh, Praise the Gracious Power
ELW #650, TFF #214	In Christ There is No East or West
ELW #736, RWS #R255, TFF #222	God the Sculptor of the Mountains
W&P #18	Bind Us Together
W&P #95	Make Me a Channel of Your Peace
ELW #643, RWS #R217	We Are All One in Christ
ELW #641, RWS #R219	All Are Welcome

PRAYER

L: The Lord be with you.

P: And also with you.

L: Let us pray. O God, form the minds of your faithful people into your one will. Make us love what you command and desire what you promise, that amid all the changes of this world, our hearts may be fixed where true joy is found, your Son, Jesus Christ our Lord, whom with you and the Holy Spirit we worship and praise, one God, now and forever.

P: Amen.

VENITE – PSALM 95
[choose one]

ELW #225	Come, Let Us Sing to the Lord
W&P #107	Oh, Come, Let Us Sing
TFF #9	Come, Ring Out Your Joy to the Lord
ELW #208, WOV #790	Praise to You, O God of Mercy

This psalm can also be read aloud as a reading or read responsively by the entire assembly. It can be found as #95 in ELW or page 76 in TFF.

WORD OF GOD, followed by brief reflection

Colossians 3:12-17

After the reading, take some time to reflect on the reading or the theme of the day. A word about the task of openly and honestly engaging in discussion on potentially difficult topics would certainly be appropriate. Or perhaps a word about the strength of the Christian community in faith being able to tackle any topic with Christ in our midst might help encourage a constructive tone for the day's work.

SONG

ELW #679	For the Fruit of All Creation
W&P #51	God has Done Marvelous Things!

PRAYERS
[you may choose any or all of the following petitions]

L: Let us lift up our prayers to the One who called us into being:

Mighty and merciful God, we praise your holy name and rejoice in everything that you have made. All of your creation groans in anticipation of the salvation that comes through you. Bring us day by day ever closer to seeing you up close in all your glory. God of unity…

P: Hear our prayer.

L: We pray that you would give us the wisdom and reverence to use the resources of nature, so that no one may suffer from our abuse of them, and that generations yet to come may continue to praise you for your bounty. God of unity…

P: Hear our prayer.

L: We pray for the world's leaders as they gather at their various summits and forums. Guide them in their decision-making so that they may keep everyone's best interests in mind. God of unity…

P: Hear our prayer.

L: We pray for the relations between the church and the government that rules. Help each to recognize and respect proper boundaries and be able to speak a prophetic word when those boundaries have been overstepped. God of unity…

P: Hear our prayer.

L: We pray for the faithful believers of all of the world's religions and their faithful adherents. Broaden their horizons so that they may learn from one another. May they be strengthened in their own faith while respecting the faiths of those around them. God of unity…

P: Hear our prayer.

L: We pray for our sisters and brothers in Christ in the various churches. Solidify our work together when it glorifies you and show us how to overcome our differences when they become a difficulty for our common witness. God of unity…

P: Hear our prayer.

L: We pray for all those in the Evangelical Lutheran Church in America who are working on various social statements and issues in our world. Support and guide them in their work as they seek your will and ways to proclaim your gospel while tackling some very complicated issues. God of unity…

P: Hear our prayer.

L: We pray for our congregations and congregations everywhere. Give us as Christian communities an overwhelming sense of love and belonging. Make us aware of our strength in Christ to overcome the difficulties our differences may cause. God of unity…

P: Hear our prayer.

L: We pray for those of us who are participating in this retreat. Help us to see each other as sisters and brothers in Christ. Enable us to recognize our mutual love of God in the midst of our differing opinions. Bless our learning and our work today. God of unity…

P: Hear our prayer.

LORD'S PRAYER

P: Our Father in heaven,
hallowed be your name,
your kingdom come,
your will be done,
on earth as in heaven.
Give us today our daily bread.
Forgive us our sins
as we forgive those who sin against us.
Save us from the time of trial
and deliver us from evil.
For the kingdom, the power, and the glory are yours,
now and forever. Amen.

BLESSING

L: You made us, God.

P: Keep making us new.

L: You've shown us your love, Jesus.

P: Keep us loving more and more.

L: You've opened our hearts and minds, Holy Spirit.

P: Keep us compassionate and attentive.

L: May the God who has made you, bless you.
May the God who has loved you, love you even more.
May the God who has opened your hearts and minds keep you focused in God's peace.
In the name of the Father, the Son, and the Holy Spirit.

P: Amen.

SENDING SONG

ELW #731 Earth and All Stars!
ELW #771 God, Who Stretched the Spangled Heavens
(This song, with a traditional American melody, lends itself well to being accompanied in various styles and with various instruments.)

Faith & SCIENCE
YOUTH IN DIALOGUE

WORSHIP

GATHERING INVOCATION

Leader: We worship in the name of God the creator, the wellspring of life.

People: We bless you God for all you have done!

L: We worship in the name of Jesus the Christ, who renews our life.

P: We praise you, O Christ. Make us whole!

L: We worship in the name of the Spirit, the breath of life.

P: We call upon you, Holy Spirit, be with us now! Amen.

GATHERING SONGS

PRAYER

L: The Lord be with you.

P: And also with you.

L: Let us pray. O God, form the minds of your faithful people into your one will. Make us love what you command and desire what you promise, that amid all the changes of this world, our hearts may be fixed where true joy is found, your Son, Jesus Christ our Lord, whom with you and the Holy Spirit we worship and praise, one God, now and forever.

P: Amen.

VENITE – PSALM 95

WORD OF GOD, followed by brief reflection

Colossians 3:12-17

SONG

PRAYERS OF THE PEOPLE

L: Let us lift up our prayers to the One who called us into being:

After each petition:

L: God of unity…

P: Hear our prayer.

LORD'S PRAYER

P: Our Father in heaven,
hallowed be your name,
your kingdom come,
your will be done,
on earth as in heaven.
Give us today our daily bread.
Forgive us our sins
as we forgive those who sin against us.
Save us from the time of trial
and deliver us from evil.
For the kingdom, the power, and the glory are yours,
now and forever. Amen.

BLESSING

L: You made us, God.

P: Keep making us new.

L: You've shown us your love, Jesus.

P: Keep us loving more and more.

L: You've opened our hearts and minds, Holy Spirit.

P: Keep us compassionate and attentive.

L: May the God who has made you, bless you.
May the God who has loved you, love you even more.
May the God who has opened your hearts and minds keep you focused in his peace.
In the name of the Father, the Son, and the Holy Spirit.

P: Amen.

SENDING SONG

Evangelical Lutheran Church in America
God's work. Our hands.

Faith & SCIENCE
YOUTH IN DIALOGUE

Session One
Faith & Science Dialogue:
Can it Happen?

Faith & SCIENCE

FAITH & SCIENCE DIALOGUE: CAN IT HAPPEN?
REV. DANA HENDERSHOT

Why are we here today? What do we really mean by dialogue between science and faith or between science and religion? Why it is important for us to discuss?

This session is designed for an hour and forty-five minutes.

GOALS FOR THE SESSION

- To understand the importance of both science and faith.
- To gain a basic understanding of the similarities and differences between science and faith.
- To learn ways that science and faith relate to one another.
- To begin to understand how one can personally relate faith and scientific knowledge together.
- To open discussion on how faith may be affected by science.

SUPPLIES NEEDED

Chairs
Paper
Pencils
Bucket
TV & DVD player
The movie *Cosmic Voyage*

Copies of the quotes provided
Copies of the four "Session One" handouts
Copies of the four "Session One" illustrations

Printable copies of all documents are in the back of the book or online.

Note: *Cosmic Voyage* is now available on YouTube. It can be found here: http://www.youtube.com/watch?v=qxXf7AJZ73A

SET-UP

Arrange circles of chairs in each of the four corners of your space. At each corner, provide the handouts and illustrations for a different one of Barbour's four ways to relate religion and science. Also, place the quotes around the room so the participants are able to read them.

IDENTIFYING THE QUESTIONS

Hand out the pencils and paper. Ask each participant to write down a question they have about science and faith. Why did they come to this conference? What were they hoping to experience or discuss? Collect the papers in the bucket and set it aside.

BEGINNING THE DIALOGUE

Start the session by watching *Cosmic Voyage*. Afterward, have participants form four small groups – one in each corner – and discuss the following questions:

- Describe something new you learned or thought about as a result of the video.
- Does the video relate to your understanding of God? How?
- As humans, we are part of a universe much larger than we are, and it is made up of things much smaller than we are. Do you have any new ideas about God's presence in the universe?
- How have you experienced this?

WAYS RELIGION AND SCIENCE RELATE

Have the groups read through the descriptions of their model and discuss the questions. After seven to ten minutes, send groups to the next corner, and continue until everyone has discussed each description.

After these discussions, bring the whole group together again. Have each participant walk to the corner that best represents the way he or she feels science and faith relate. Let them know that each person is able to choose more than one of the models presented if he or she finds their views are represented with more than one model. Help them to understand that none of the models is the only way to consider faith and science, and people who see things differently need to be respectful of one another to continue constructive interaction. However, for the sake of discussion, have each participant pick only one category.

Discuss how the formation turns out, and see if anyone is surprised by where most of the people are gathered.

THOUGHT-PROVOKING QUOTATIONS

A few thought-provoking quotations are listed below. The printable versions should be placed around the room. Read through them together with the group, and ask participants to pick a quote that they find striking. Then ask them to split into groups with the others who chose the same quote. Give time for each group to discuss the following questions.

- Why do you think this statement might have been made?
- Why did you pick this quote?
- What does this quote have to do with religion and science dialogue?
- How do you think the author of this quote saw the science and faith relationship?
- What do you agree with or disagree with in this quote?

"Science without religion is lame, religion without science is blind."
Albert Einstein, German-born U.S. physicist, 1879-1955, from *Science, Philosophy, and Religion: A Symposium*, 1941.

"Science may set limits to knowledge, but should not set limits to imagination."
Bertrand Russell, British author, mathematician, and philosopher, 1872-1970

"Science is facts; just as houses are made of stones, so is science made of facts; but a pile of stones is not a house and a collection of facts is not necessarily science."
Henri Poincare, French mathematician and physicist, 1842-1912

"For in much wisdom is much vexation, and those who increase knowledge increase sorrow."
Ecclesiastes 1:18

"Science investigates, religion interprets. Science gives man knowledge, which is power; religion gives man wisdom, which is control."
Martin Luther King Jr., American civil rights leader, 1929-1968

"Science can purify religion from error and superstition; religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish."
Pope John Paul II, 1920-2005, from *Message to George Coyne S.J., Director of the Vatican Observatory,* 1988.

ADDRESSING NEW QUESTIONS

Ask the group whether they have any new questions regarding faith and science. If they do, then explain that they have learned something new, because new knowledge always brings out additional questions. If you feel comfortable answering any of these questions, do so, or ask if anyone else in the group has an answer. Unfortunately, the answer to many of their questions may not be known yet or is too complicated to provide here. But discussion will open the door to further understanding. If no one feels confident giving an answer, say that you don't know the answer. If you are able, suggest places that the answer might be found. Use the remaining time to go through the questions they wrote at the beginning of the session. See if some of the questions have been addressed or changed.

CLOSING

Split the participants into two groups, roughly equal in size. Gather the group members together.

Ask the individuals of one group to summarize something important that they learned during this session and how that might relate to the good news that God's love was revealed to us in Jesus Christ. Let them know that these insights will be shared during the homily at the worship service at the end of the day. Have them appoint someone to write down and present these conclusions during the homily.

Then ask the other group to discuss whether the discussion inspired hope for their lives. If so, they should write a prayer of hope. If not, they should write a prayer requesting hope. Have them appoint someone to read it during the Prayers of the People during the worship service at the end of the day.

Explain that they will remain in these two groups for the rest of the day. The group that wrote the summary will go to "Are There Others?" first. The group that wrote the prayer will attend "Brain Connections!" first.

Faith & SCIENCE

SESSION ONE
FAITH & SCIENCE DIALGOUE: CAN IT HAPPEN?

CONFLICT – OIL & WATER

Science and faith may be in **conflict** with each other – like oil and water. No matter how hard one may try, oil and water simply do not mix! They cannot mix, and they will not mix with one another.

The conflict model claims that science and religion must be opposite. For instance, some believe that the scientific method is the *only* way to knowledge. Faith lacks data and therefore cannot be tested to prove its claims.

On the other side, people of faith may believe that anything not in Scripture has no claim to truth. Some hold that every word of the Bible is the inspired word of God, the historical and scientific truth. Because the Bible has no flaws, it must be taken literally.

Imagine that you are on the basketball court of reality. There are two teams. Team one is Faith, and team two is Science. Both teams are on the same court, and both are playing a basketball game. Yet they are not playing basketball together. They have two half-court games going on at the same time. Faith is playing on one side of the court and Science is playing on the other.

As the games continue, Faith begins to watch Science play basketball. Members of the Faith team start yelling at the Science players. "You're not playing basketball, we're playing basketball! GET OFF THE COURT!" Science looks at Faith and says, "You're not playing basketball, we're playing basketball! GET OFF THE COURT!"

QUESTIONS

- Does this way of relating faith and science ring true for you? Explain why or why not.
- Does this way of relating faith and science seem healthy or unhealthy to you? Why?
- Can you think of current situations where faith and science are in conflict with one another?

Faith & SCIENCE

SESSION ONE
FAITH & SCIENCE DIALGOUE: CAN IT HAPPEN?

INDEPENDENCE – APPLES & ORANGES

Science and faith may be **independent** from one another. A metaphor to describe this relationship is using the example of comparing apples and oranges. Apples and oranges both grow on a tree. They are both fruit, but they are not the same fruit, and they come from different trees. They both exist, and they bring benefit to the world, but they are independent from one another.

From this point of view, we cannot expect science to contribute at all to an overall worldview or philosophy for life. That is exclusively the task of the theologians. Moreover, it is not possible to dialog because scientists and theologians speak different languages. This is not surprising since even different kinds of scientists –biologist vs. physicist—can have communication problems, too. For instance, NASA is bringing together groups of astrophysicists and astrobiologists to discuss the definition of life and how they will know life if they find it. They have had difficulty communicating since each group speaks a different language within its respective field. This view holds then that it should not be so strange for science and religion to be unable to communicate. They speak very different languages!

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As the games continue, Faith and Science acknowledge that they are on the same basketball court of reality. However, they simply continue to play basketball only with their team on their half of the court with no interaction between the teams. It is simply two different games of basketball being played at the same time on the same court.

QUESTIONS

- Do you think this model accurately represents the way most people see faith and science relate in the world? Explain why or why not.
- Does this way of relating faith and science seem healthy or unhealthy to you? Why?
- Can you think of current situations where faith and science are independent from one another?

Faith & SCIENCE

SESSION ONE
FAITH & SCIENCE DIALGOUE: CAN IT HAPPEN?

DIALOGUE – FRUIT SALAD

Science and faith may relate **in dialogue** with one another. A metaphor to describe this relationship is using the example of a fruit salad – it's a good mix! The juices from the fruit blend and we find that eating some pineapple with a grape isn't so bad. In fact, the mixture makes a good salad. Pineapples and grapes are not the same things, but they both add a special flavor to the salad.

Dialogue recognizes that there are similarities and differences between science and faith. The model argues that faith and science need to embrace each other's limitations while uplifting their strengths.

Science helps us to understand how much a part of nature we are. Science inspires us to be in awe and wonder at the complexity of creation and helps us to better understand it. On the other hand, through religious rituals and experiences of God we are gratefully able to connect with nature and the world around us in more than a biological level.

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As the games continue, Faith and Science decide that it would be good to practice together. Faith players share a drill with Science that helps with their game. Faith and Science practice the drill together. Then Science players share a drill with Faith and they follow the drill together. They are beginning to know and understand one another, watching and experiencing what the other has to add to the game of basketball. They are not playing basketball together or against each other, but they are practicing and learning from each other.

QUESTIONS

- Does this way of relating faith and science ring true for you? Explain why or why not.
- Does this way of relating faith and science seem healthy or unhealthy to you? Why?
- Can you think of current situations where faith and science are in dialogue with one another?

Faith & SCIENCE

SESSION ONE
FAITH & SCIENCE DIALGOUE: CAN IT HAPPEN?

INTEGRATION – STEW

Science and faith may become **integrated** with one another. A metaphor to describe this relationship is the example of stew. A good stew simmers all day before it is eaten. Different vegetables are put in the same pot with meat, and they cook together. The juice of a good stew is a mix of all the flavors that are cooking in the pot. You do not taste the individual vegetables – they have become one.

Integration brings science and faith together. According to this model, science proves that there is a God, and faith needs science to better understand God's creation and our role in it.

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As the games continue, Faith and Science decide that it would be better to use the whole court. Not only do they begin to play a full-court game, but, in addition, members from Faith join the Science team, and members of Science join the Faith team. Now the teams are mixed, using the whole court in a game of basketball.

QUESTIONS

- Does this way of relating faith and science ring true for you? Explain why or why not.
- Does this way of relating faith and science seem healthy or unhealthy to you? Why?
- Can you think of current situations where faith and science are integrated with one another?

Sombrero Galaxy

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Sombrero Galaxy

This galaxy is 28 million light-years away. For comparison, it takes sunlight 8.3 minutes to reach the earth.

Sombrero Galaxy

We live in the Milky Way Galaxy.

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A galaxy is any of the very large groups of stars and associated matter that are found throughout the universe.

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Bubble Nebula

This NASA Hubble Space Telescope image reveals an expanding shell of glowing gas surrounding a hot, massive star in our Milky Way Galaxy.

Bubble Nebula

This shell is being shaped by strong stellar winds of material and radiation produced by a bright star nearby, which is 10 to 20 times more massive than our sun.

Bubble Nebula

Fierce winds are sculpting the surrounding material – composed of gas and dust – into the curve-shaped bubble.

Bubble Nebula

A nebula is an interstellar cloud of dust, gas and plasma.

Bubble Nebula

The glowing gas in the lower right-hand corner is a dense region of material that is getting blasted by radiation from the Bubble Nebula's massive start.

Bubble Nebula

This nebula can be found in the Pegasus Constellation. It is 72 million light-years away.

Saturn

Saturn is the sixth planet from the sun and is the second largest, after Jupiter. More than nine earths would fit across Saturn!

Saturn

In Roman mythology, Saturn is the god of agriculture.

Saturn

The rings of Saturn are composed of ice, dust and rock. Some of these particles are as tiny as grains of sand, but some are much larger than skyscrapers. Actually, some are up to a kilometer across, which is more than half a mile.

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Saturn experiences seasonal tilts away from and toward the sun, much like Earth does.

Saturn

It is quite windy on Saturn. Winds around the planet's equator can reach 1,800 kilometers – or 1,118 miles – per hour. In comparison, the fastest winds on earth only reach about 400 kilometers – or 250 miles – per hour.

Saturn

Saturn goes around the sun very slowly, but spins on its axis extremely fast. A Saturn year lasts for more than 29 earth years, but a Saturn day only lasts 10 hours and 14 minutes.

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Saturn is mainly gas, so it is the only planet in our solar system that is less dense than water. This means that if you could build a ridiculously large bathtub, Saturn would actually float in it.

Kepler

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Kepler

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Kepler

Over a four-year period, Kepler will continuously view an amount of sky about equal to the size of a human hand held at arm's length or about equal to two "scoops" of the sky made with the Big Dipper constellation. In comparison, the Hubble Space Telescope can only view the amount of sky equal to a grain of sand held at arm's length, and then only for about half an hour at a time.

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Faith & SCIENCE
YOUTH IN DIALOGUE

Session Two
Are there others?

Faith & SCIENCE

ARE THERE OTHERS?
REV. DANA HENDERSHOT

It is time to open our minds! To help the participants think about extraterrestrials, the group will first begin to imagine our large universe. Participants will observe photographs of space. We look up at the stars at night, but do we really understand what we see? How much space is really out there? What have we been taught in science class about space?

This session will begin to open our minds to the reality of our universe. From NASA missions we can learn how much we still don't know, and what we hope to know within the next ten years.

Then we will move into a discussion of the ways this knowledge may affect our faith. Astronomers are continually discovering the vastness of our universe and we now know that ours is not the only solar system. What does that mean for us as Christians? Is our God earth-centered or universe-embracing? Would finding extraterrestrial life make a difference in our faith? Dealing with questions like these is what theologian Ted Peters calls *Exotheology*.[1]

This session is designed for an hour and a half.

GOALS FOR THE SESSION

- To open minds to a new understanding of the vastness of space and time.
- To understand that NASA hopes to know whether there is simple life on other planets.
- To begin to explore how new ideas of space and time may expand our understanding of God's power.
- To begin to think about whether God is an earth-centered God or a God of the universe.
- To begin to struggle with questions about how much we, as humans, can matter to God, since space and time are so huge.

SUPPLIES NEEDED

A bucket
Pencils
Small pieces of paper
The movie *Contact*
NASA mission facts
Three or more posters of Hubble Space Telescope images and accompanying facts

Printable copies of all documents and hyperlinks to images are in the back of the book or online.

SET-UP

Place three or more posters of the Hubble Images around the room. Near each poster, display facts about that image and other facts about current NASA missions. *Note*: If you cannot print full-size posters, the images can be displayed on a laptop or iPad, with an LCD projector, or with an overhead projector. Ask your church or retreat center staff if they have any of these resources available. Additionally, you can use smaller images/posters if you have a smaller group.

IDENTIFYING THE QUESTIONS

[1] Ted Peters, *Science, Theology, and Ethics* (Burlington: Ashgate Publishing Limited, 2003), 121.

Hand out the pencils and paper. Ask participants to write down any questions they have about this subject. What interests them about this breakout session? What are they hoping will be answered? What would they like to discuss? Collect the papers in the bucket and set it aside.

ENGAGING IN THE SCIENCE

Encourage participants to look around at the images. Ask them to pick an image that especially fascinates them.

Instruct the participants to go to the image they choose and read the fact cards about the image and related NASA missions. Once they have read the cards, they should pick the facts they would like to present to the group as a whole. By sharing the facts, it will help to bring this poster to life. The facts include information NASA scientists have learned about that part of space, and about current NASA missions. Try to make sure that the group is divided fairly evenly among all the posters.

After participants have spent about ten minutes with the images, bring the group together. Allow time for presentations to the group as a whole.

Make sure they understand that the Bubble Nebula is 72 million light-years away. A light-year is the distance a particle of light – or *photon* – will travel in one year. The distance light travels in one year is about 9.461×10^{15} meters (9.461 petrameters), or about 5.879×10^{12} (nearly six trillion) miles. This means that a picture of something 72 million light-years away shows the way things were 72 million years ago.

TRANSITION

Watch a clip from the movie *Contact*, from 2:12:32 to 2:18:55.[2] This is a clip from the ending where Jodie Foster's character, Dr. Eleanor "Ellie" Arroway, faces a panel that is questioning her claims about her experience with extraterrestrial life. After watching the panel, briefly discuss some of the following questions as a large group:

- As a scientist, does Dr. Arroway hold any beliefs or faith claims?
- Is Dr. Arroway's claim about her experience of another world a faith claim or a scientific claim?
- Is there any evidence to support her claim?
- Are there any ways in which religious people base their beliefs on evidence as scientists do?
- Scientists say that they will eventually abandon a theory if sufficient evidence is discovered that contradicts it, but sometimes they can be conservative and slow to do so. If evidence is discovered that contradicts a religious faith commitment, will religious people abandon that belief?[3]

ENGAGING IN THEOLOGY

Many assume that the Christian faith is fragile. The fear is that Christians' beliefs would be shattered by the discovery of extraterrestrial intelligent life, because Christ came to save only those on earth.

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[2] It may be helpful for you, the leader, to watch the clip beforehand and make sure that your copy is not a director's cut or something else that may change the timeframe.

[3] The Rev. Roger Timm, pastor of Ascension Lutheran Church in Riverside, Ill.

However, some think that the Christian faith is not as fragile as it might seem. Ted Peters summaries this conclusion:

> Despite St. Thomas's use of Aristotelian arguments against many worlds, however, Christian theologians have routinely found ways to address the issue of Jesus Christ as God incarnate and to conceive of God's creative and saving power exerted in other worlds.[4]

Ask the group whether God's saving and redeeming power must be reserved only for those on earth.

Have the group split into smaller groups. Assign these questions to small groups for discussion and see what they come up with.

- What kinds of life do you think might exist?
- If you met an extraterrestrial, what two things would you find out first?
- Would finding extraterrestrials disturb or change your faith? In what ways? What would change or not change with this new finding?
- Is our God an earth-centered God or a God of the universe? What would be your arguments for each idea of God?
- Does this information about the universe expand your understanding of God's creative power?
- God is active in your life. What does it mean that God calls you by name? Does your knowledge of an expanding and vast universe change this?

ADDRESSING NEW QUESTIONS

Ask the group whether they have any new questions. If they do, remind them again that new knowledge always brings out new questions. If you feel comfortable answering any of these questions, do so, or ask if anyone else in the group has an answer. Unfortunately the answer to many of their questions may not be known yet or is too complicated to provide here. But discussion will open the door to further understanding. If no one feels confident giving an answer, say that you don't know the answer. If you are able, suggest places that the answer might be found. Use the remaining time to go through the questions they wrote at the beginning of the session. See if some of the questions have been addressed or changed.

CLOSING

Gather the group members together. Ask them to summarize something important that they learned during this session and how that might relate to the good news that God's love was revealed to us in Jesus Christ. Let them know that these insights will be shared during the homily. Have them appoint someone to write down and present these conclusions at closing worship. Then ask the group to write a prayer of hope that grew from this discussion. Have them appoint someone to read it during the Prayers of the People.

[4] Peters, *Science, Theology, and Ethics*, 131.

Faith & SCIENCE

SESSION TWO: POSTERS AND FACTS

Listed below are the hyperlinks to the required images of the Sombrero Galaxy, the Bubble Nebula, and the planet Saturn. As was noted in the session two leaders' guide, images can be displayed as printed posters, in a laptop screen, on an iPad, or on an LCD or overhead projector. Use your best judgment, based on your group size, your retreat space, and your available resources. The links below provide several options.

This document also includes facts about the three images and about four NASA missions to find earth-like planets. Use this sheet to select which facts you would like to display. Printable versions of all listed facts are included in the curriculum for you to reproduce and use with your students.

Please feel free to direct curious students to the websites listed below. They contain a wealth of information about the images and the missions.

SOMBRERO GALAXY

Images

Several versions of the image can be found here. Choose the best format for your display:
http://hubblesite.org/newscenter/archive/releases/2003/28/image/a/

Fast Facts
Source: http://hubblesite.org/newscenter/archive/releases/2003/28/fastfacts/

The Sombrero Galaxy is located on the southern edge of the rich Virgo cluster of galaxies.

This galaxy is 28 million light-years away. For comparison, it takes sunlight 8.3 minutes to reach the earth.

We live in the Milky Way Galaxy.

A galaxy is any of the very large groups of stars and associated matter that are found throughout the universe.

A galaxy is a vast gravitationally bound system of stars, interstellar gas and dust, plasma, and possibly unseen dark matter. Typical galaxies contain 10 million to one trillion stars, all orbiting a common center of gravity. In addition to single stars and a tenuous interstellar medium, most galaxies contain a large number of multiple star systems and star clusters as well as various types of nebulae. Most galaxies are several thousand to several hundred light years in diameter and are usually separated from one another by distances up to millions of light years.[1]

[1] http://en.wikipedia.org/wiki/Galaxy

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BUBBLE NEBULA

Images

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http://hubblesite.org/newscenter/archive/releases/1998/28/image/e/

Fast Facts
Source: http://hubblesite.org/newscenter/archive/releases/1998/28/image/e/

This NASA Hubble Space Telescope image reveals an expanding shell of glowing gas surrounding a hot, massive star in our Milky Way Galaxy.

This shell is being shaped by strong stellar winds of material and radiation produced by a bright star nearby, which is 10 to 20 times more massive than our sun.

Fierce winds are sculpting the surrounding material – composed of gas and dust – into the curve-shaped bubble.

A nebula is an interstellar cloud of dust, gas and plasma.

The glowing gas in the lower right-hand corner is a dense region of material that is getting blasted by radiation from the Bubble Nebula's massive start.

This nebula can be found in the Pegasus Constellation. It is 72 million light-years away.

SATURN

Images

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http://hubblesite.org/newscenter/archive/releases/2003/23/image/a/

Fast Facts
Source: http://hubblesite.org/newscenter/archive/releases/2003/23/fastfacts/

Saturn is the sixth planet from the sun and is the second largest, after Jupiter. More than nine earths would fit across Saturn!

In Roman mythology, Saturn is the god of agriculture.

The rings around Saturn are composed of ice, dust and rock. Some of these particles are as tiny as grains of sand, but some are much larger than skyscrapers. Actually, some are up to a kilometer across, which is more than half a mile.

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It is quite windy on Saturn. Winds around the planet's equator can reach 1,800 kilometers – or 1,118 miles – per hour. In comparison, the fastest winds on earth only reach about 400 kilometers – or 250 miles – per hour.

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KEPLER (launched in 2007)
Source: http://kepler.nasa.gov/

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Faith & SCIENCE
YOUTH IN DIALOGUE

Session Three
Brain Connections!

Faith & SCIENCE

BRAIN CONNECTIONS!
REV. DANA HENDERSHOT

The way we experience God through our brains has been a subject of much discussion and research. For example, brain imaging studies have shown how the brain's blood flow changes during peak spiritual experiences.[1] These studies have led to the conclusion that it is possible to scientifically observe mystical/spiritual experiences.

Peak experiences often lead us on our faith journey. However, we do not have peak experiences in our day-to-day life. Some may have had a peak experience, a moment when they have lost their sense of self and felt at peace and truly in the presence of God. Yet, most do not experience this every day.[2] Our faith journey includes love, service and learning, as well as both discouragement and encouragement. Worship focuses our life of faith.

This session begins by viewing a video discussing basic brain functions. A lot of what will be taught will apply to everyone. However, this video focuses on brain growth and development during the teenage years, especially how the various connections among basic brain cells (neurons) may become stronger or wither away, depending on our activities and actions. The group will discuss how their experiences and choices work together with their genes to actually shape our brains, and how this pertains to their faith life.

The video also addresses the effects of drugs on adolescent brain function. Drugs are a reality that young people are dealing with today. The group will ponder together about what it means for us to use cocaine and other drugs to fool our bodies into feeling good. Does it matter if we fool our bodies for a couple of hours? Are people of faith less likely to use drugs? Are there alternatives to drugs that enable us to use our gifts to change our brain structure to enhance our daily experience of life? God calls us by name and loves each of us. God interacts with us and has given us abundant life and the ability to make choices for ourselves. How has our faith journey so far begun to shape the gifts that we have?

This session is designed for an hour and a half.

GOALS FOR THE SESSION

- To begin to understand the basic complexity of the brain.
- To begin to understand that we have some control over the changeability of our brain structure.
- To begin to consider the relationship of drugs to the brain and faith.
- To begin to see that our faith journey and interaction with God can affect our brain structure.

SUPPLIES NEEDED

TV and VCR or DVD player
Paper
Pencils
Chalkboard or whiteboard
The video *Secret Life of the Brain – Part 3: The Adolescent Brain* (this PBS special can likely be found at your local library)
Chalk or markers

[1] Andrew Newberg and Eugene D'Aquili, *Why God Won't Go Away: Brain Science and the Biology of Belief* (New York: Ballantine Books, 2001).
[2] James B. Ashbrook and Carol Rausch Albright, *The Humanizing Brain: Where Religion and Neuroscience Meet* (Cleveland: The Pilgrim Press, 1997).

Note: *Secret Life of the Brain* is now available on YouTube. It can be found here: http://www.youtube.com/watch?v=vqr3BvnwKKE&noredirect=1

SET-UP

You, as the leader, should watch the video before the session so that you can bring a basic understanding to the discussion that will follow. You know your group and the needs of the context in which you live. Please feel free to add or change questions to fit the needs of your group.

Have the video player ready and set to the correct time, with chairs set up for viewing.

It is recommended to find resources about local drug rehab centers before entering into this discussion. This may be useful if the young people involved in this discussion are in need of help or have a friend in need of help. A list of resources is included in this session's materials.

IDENTIFYING THE QUESTIONS

Hand out the pencils and paper. Ask participants to write down any questions they have about this subject. What interests them about this breakout session? What are they hoping will be answered? What would they like to discuss? Collect the papers in the bucket and set it aside.

ENGAGING IN THE SCIENCE

Play the video for the group. If time permits, feel free to watch the whole segment. If not, key sections are listed below:

00:55 – 02:45
10:50 – 13:05
27:25 – 40:25
If time allows: 40:25 – 50:57

After viewing the video, have participants break into groups of five and discuss the questions below:

- Describe a new insight about how your brain functions.
- What does it mean to you on your journey of faith that you are able to change your brain structure?
- Why do some young people want to fool their brains and bodies by using drugs? Name both the good and bad reasons.

TRANSITION

Gather the entire group back together. Share the following statements, and have participants discuss their reactions in light of their previous discussion:

> "Highly religious youth living in poor urban neighborhoods are less likely to use illicit drugs than nonreligious youth living in middle-class suburban neighborhoods."[3]

> "While research indicates that religiously active teens are significantly less likely that nonreligious teens to engage in risk behaviors, significant numbers – between 20 and 40 percent – of religiously active teenagers are involved in serious risk behaviors involving alcohol and drugs."[4]

Discuss the following questions:

- Do you believe this research?
- Are people of faith you know less likely to use drugs? Why?
- Describe the need that recreational drug usage fulfills.
- Describe the need that God fulfills in our life.
- Is there a link between the preceding two questions? If so, what are the similarities and differences?
- How can we use our gifts and experiences instead of drugs to change our brain structure to enhance our daily experience of life?

ENGAGING IN THEOLOGY

Write the statement below on a board so that the groups can re-read it as needed during discussion. Participants should be cautioned that this statement is simplistic; there is actually more that goes into creating stronger neuro-connections. However, the simplistic statement does provide an example of how one is able to create stronger neuro-connections, and it will give the group a beginning basis for discussion.

> "Suppose you are born with musical talent (genes), and your parents buy you a violin and encourage you to practice (environment), and you find this rewarding and therefore work hard (choice). You thereby gain the *ability to choose* to pick up the violin and play a sonata."[5]

Explain that there are three things that went into enhancing this gift: genes, environment and choice. We have all been given natural gifts and also have had our parents and others encourage us to use those gifts. In some ways, it is our choice if we work hard to enhance those gifts and create stronger neuro-connections. The person above with a natural gift for music was given a violin. But the person might choose instead to play the drums. Would there be the same outcome in the brain?

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[3] Johnson, Bryon R. "A Better Kind of High: Religious Commitment Reduces Drug Use Among Poor Urban Teens." Baylor Institute for Studies of Religion. www.baylorisr.org/wp-content/uploads/ISR_Better_High.pdf

[4] "Significant Numbers of Religiously Active Teenagers are Involved in Serious Risk Behaviors involving Alcohol and Drugs." National Study of Youth and Religion. http://youthandreligion.org/news/11-18-2002.html

[5] Carol Rausch Albright, "The Emerging Self: Spiritual Growth, Neuroscience, and Self-Organization" (a paper presented at the American Academy of Religion, Philadelphia, Pa., Nov. 19, 2005).

Split the session participants into groups of three to discuss these questions. If time permits, have each group share its insights with the group as a whole.

- What is one gift that your parents or guardians wanted you to enhance? Why did you or didn't you choose to enhance the gift? How can this gift be used on your faith journey?
- How might using different gifts shape the course of the journey for each individual?
- How has your faith journey so far begun to shape the gifts that you have?
- How have your gifts influenced your faith journey? Remember, different people have different journeys.

After the group discussion, explain that God is present in everything we do in life. It is sometimes a challenge to see God in day-to-day life. This is a time for the young people to be challenged with the understanding of how everything they do begins to shape their faith journey. Our experiences and choices begin to shape our brains. We in a sense begin to build ourselves and shape the environment around us, which in turn plays a major role in what we do and become.

ADDRESSING NEW QUESTIONS

Ask the group whether they have any new questions. If they do, then explain that they have learned something new. New knowledge always brings out new questions. If you feel comfortable answering any of these questions, do so, or ask if anyone else in the group has an answer. Unfortunately, the answer to many of their questions may not be known yet or is too complicated to provide here. But discussion will open the door to further understanding. If no one feels confident giving an answer, say that you don't know the answer. If you are able, suggest places that the answer might be found. Use the remaining time to go through the questions they wrote at the beginning of the session. See if some of the questions have been addressed or changed.

CLOSING

Gather the group members together. Ask them to summarize something important that they learned during this session and how that might relate to the good news that God's love was revealed to us in Jesus Christ. Let them know that these insights will be shared during the homily. Have them appoint someone to present these conclusions at closing worship. Then ask the group to write a prayer of hope for their lives that grew from this discussion. Have them appoint someone to read it during the Prayers of the People.

Faith & SCIENCE

SESSION THREE: RESOURCE SHEET

If a member of your group is in need of help or knows someone in need of help, these resources may assist you in guiding them.

Substance Abuse and Mental Health Services Administration
http://store.samhsa.gov/home

The Partnership at DrugFree.Org
www.drugfree.org

Alcoholics Anonymous and Al-Anon Teens
www.al-anon.alateen.org/

American Foundation for Suicide Prevention
www.spanusa.org

Yellow Ribbon – Teen Suicide Prevention
www.yellowribbon.org/
Hotline: 1-800-273-TALK – 1-800-273-8255

Use the lines below to list some local rehab and help centers and their websites and phone numbers to give to members of your group who need them.

Name: _____ ___

Phone: _____

Website: _____

Name: _____

Phone: _____

Website: _____

Name: _____

Phone: _____

Website: _____