Challenges in Establishing an ASA Homeschool Science Resources Website

Douglas Hayworth

http://asa3online.org/homeschool/
Unique Opportunity

• The need is great within the Christian community!
  – The harvest is plentiful but the workers are few!
  – No statistics needed to support that claim
  – We can’t compete by marketing; it must be with content

• The ASA is uniquely qualified and positioned to serve:
  – We have no commercial interests (i.e., do not sell curricula or advertising).
  – We do not promote only one specific position on science and faith topics.
  – Our membership includes highly qualified scientists (and theologians concerned with science issues) in a variety of fields.
  – We have a desire to edify.
Welcome Message
http://asa3online.org/homeschool/

• Welcome to the ASA Homeschool Science Resources website!
• The American Scientific Affiliation (ASA) is an association of Christians who are professional scientists. Our purpose is to investigate the relationship of Christian theology and natural science and thereby to edify both Christian and scientific communities.
• This Homeschool Science Resources (HSR) Project is intended to fulfill these purposes for the Christian homeschooling community. By reviewing and providing information about available curricula, textbooks and other science education resources, we hope to assist parents in choosing tools to effectively teach science subjects to their children.
• We are devout Christians who delight in studying the physical properties and theological meaning of creation. May the resources offered here facilitate you in your endeavor to instill in your children that same sense of wonder and faith.
How to do it effectively?

• How NOT to do it:
  – Unsure and unclear about our purpose and standards
    • The curse and blessing of ASA “ecumenicism”
    • How to be rigorous yet objective and charitable?
  – No clear comments policy
    • We do want user feedback (ability to comment)
    • We don’t want endless debate (bloggy-forum discussion)
  – No help integrating resources into standard curricula
  – No particular format (page-to-page style consistency)
  – No way to search and compare (sorting, filtering)

• Avoid these things by designing well
  – Intelligently designed so it can grow and evolve ; )
  – And run itself whether I’m there or not
  – This takes/took time
Good design means...

• Intuitive content structure
  – Kinds of content
  – How they’re organized (menus)

• Readable page layouts
  – Provide the information people need/want
  – Consistent style; easy to scan

• State-of-the-art web functionality
  – Meet current expectations for usability
  – Ensure easy search, sorting, filtering, etc.
  – But don’t spend millions of dollars doing it
Good Design: content structure

• Curriculum Reviews
  – Publisher Profiles
  – (Author Profiles)
  – Textbook Reviews
  – Resource Reviews

• Curriculum Supplements
  – Teacher Training
  – Lesson Plans
  – Textbook Guides
  – Syllabus Ideas

• About
  – About the ASA
  – About this Project
  – Website Guide
  – (Contributor Bios)

• Contact Us
• Blog
• Others
  – Glossary
Good Design: page layout

• Plugged In Movie Reviews (www.pluggedin.com)

**MOVIE REVIEWS**

**The Tree of Life**

"There are two ways to go through life," we're told in *The Tree of Life*. "The way of nature, and the way of grace. You have to choose which one to follow."

We are born into worlds of science and wonder. Our bodies are built of DNA and protoplasm, molded from clay and dust and the breath of God. We're torn by random tragedy, healed through purposeful transformation. Ours is a place where the strong survive and the meek are blessed. It is a place of paradox.

Jack was born into a world of enchantment and light. Sunshine cascades through green canopies to the grass below, bounces off water like rippling gold. It's a land of discovery, of soap bubbles and sprinklers. And at the heart of it all, Jack sees..."
Good Design: page layout

POSITIVE ELEMENTS
In *The Tree of Life*, Jack is looking for salvation—both as a young boy growing up in the 1950s and as a middle-aged man. And here's the good news:

CRUDE OR PROFANE LANGUAGE
Father says "h---" once.

DRUG AND ALCOHOL CONTENT
None.

OTHER NEGATIVE ELEMENTS
Jack and his brothers are disrespectful to both of their parents. And they often treat their mother more as a fellow child than a mother. The brothers also mock others for the way they walk or look.

CONCLUSION
In 1859, Charles Darwin introduced his concept of "The Tree of Life," an abstract

SEXUAL CONTENT
The version of Jack we spend the most time with is perhaps the most sexually ambiguous child in his class. He makes no mention of a sexual identity or orientation.

VIOLENT CONTENT
Malick's natural world is a violent one. Rarely do we see it explicitly played out, but it seems to hang in the air—a menace, a coming storm. And it's embodied in the two bullies, rather frightening...
The HSR Site: page layout

• Main Body Components:
  – [Citation-curriculum stats]
  – Introduction-summary
  – Features of interest
  – Science content
  – Worldview content
  – Homeschool suitability
Good Design: web functionality
Filtering requires classification a set list of categories

We have been working to develop a useful list
  – i.e., not too long or short

Subjects:
  – Science and Christianity, Science as Study, General Science, Body and Health, Astronomy, Life Science (K-8), Physical Science (K-8), Earth Science, Biology (9-12), Chemistry (9-12), Physics (9-12)

Science and Christianity Topics:
  – Science and Belief in God
  – Science and the Bible
  – Science and Christian Theology
  – Science and Christian Practice
Citation “Parameters”

- Title
- Format (book, DVD, etc.)
- Authors
- Year, Edition, etc.
- Publisher
- ISBN#
- Website
- Length (page or time)
- No. of lessons (chapters)
- Item includes
- List price
- Target grade level/range
- Curriculum scope
  - Text, lab, supplement
- Curriculum duration
  - Year, sem., mo., wk, day
- Curriculum includes
  - Questions, answers, tests, teacher guides, etc.
- Intended setting
  - Class, homeschool, small group, individual study
- Target audience

D. Hayworth, ASA Meeting, 2011
Target Audience

• Help Christians develop a Christian worldview
  – (Christian-Developmental)
• Help Christians defend their faith
  – (Christian-Apologetic)
• Teach Christians what to believe
  – (Christian-Indoctrinal)
• Promote Christianity to secular audience
  – (Secular-Evangelistic)
• Avoid religious aspects for mixed audience
  – (Secular-Nonreligious)
• Respect general religious belief for mixed audience
  – (Secular-Tolerant)
• Dissuade mixed audience from Christianity, religion or theism
  – (Secular-Antagonistic)
Science Content

• Concept
  – Standard of measure for review and critique?
  – Established or mainstream consensus science
  – National science standards and benchmarks

• Characterization

• Rating
Science Content: Characterization

The stated or apparent view of the authority of Scriptural revelation (with regard to science):

• Literalist (scientifically authoritative in its plain reading)
• Concordist (scientifically accurate when interpreted correctly)
• Accommodationist (not intended to be scientifically authoritative)

• Humanist (contains valid revelations but no miraculous history)
• Materialist (contains no divine truth, i.e., no special revelation)

• Respectfully discusses multiple views
• Unknown, not apparent or not relevant

D. Hayworth, ASA Meeting, 2011
The stated or apparent view of origins:

- YEC (young-earth creationist)
- OEC (old-earth creationist)
- PC-IDM (progressive creationist or ID Movement)
- EC (evolutionary creationist)
- TE (theistic evolutionist)
- Respectfully discusses multiple views
- Unknown, not apparent or not relevant
Science Content: 5-Star Ratings

• Specific Aspects
  – Conformity to mainstream, consensus science?
  – Accuracy and clarity of the scientific content and explanations?
  – Completeness with respect to topics considered and the grade level?

• Overall Science Rating
Worldview Content

• Concept
  – Help reader understand that every curriculum, whether secular or Christian, represents a particular perspective
  – Classify and discuss stated or implied religious views and theological traditions (denominations)

• Characterization

• Rating
Worldview Content: Characterization

- Christian, Secular, Other?
- Evangelical? Y/N
- Church Affiliation (denomination, tradition)?
- Theology (of God’s action in the world)?
  - See next slide...
The stated or apparent theological disposition with regard to the manner of God's activity in the world:

- Classical Theist: Classical Theist (generic)
  - Classical Theist, Calvinist-leaning
  - Classical Theist, Centrist
  - Classical Theist, Arminian-leaning

- Open Theist
- Process Theist
- Panentheist
- Pantheist
- Deist

- Respectfully discusses multiple views
- Unknown, not apparent or not relevant
Worldview: 5-Star Ratings

• Specific Aspects
  – Amount of religious content in the text?
  – Quality of the religious content that is present?
    • Internal consistency in applying its own theology
    • Coherent engagement with science issues
    • Humble vs. dogmatic?

• Overall Worldview Rating
Homeschool Suitability

• Concept
  – Overall assessment of the ease-of-use and adaptability to the homeschooling situation (mostly for resources, not official curricula), whether or not that was the target setting.

• Characterization
  – Price, adequate teacher guides, assessment options, simple to insert into a standard curriculum, etc.

• 5-Star Rating
Review Lists: Curricula/Textbooks

• Now available for review:
  – A Beka Book (K-12 nonhealth)
  – Apologia Ministries, Inc (8-11)
  – Bob Jones University Press (K-12)
  – Sonlight teacher guides (K-6)
  – Homeschool Psych
  – Signs and Seasons (Classical Astronomy)

• Others to obtain:
  – Alpha Omega Publications: Switched on Schoolhouse
  – Center for Essential Education: Knowing Creation Nature Study
  – Classical Conversations, Inc: Challenge Research Skills
  – Cornerstone Curriculum: Science - The Search
  – New Leaf Publishing Group: Master Books
  – Rod and Staff Publishers, Inc: God's World Science Series

D. Hayworth, ASA Meeting, 2011
Review Lists:

Popular Curriculum Additions

• Moody Science Adventures DVDs
• Mount St. Helens (DVD) & other ICR materials
• Refuting Evolution & other AIG materials
• And many others:
  – The Case for a Creator, The Privileged Planet, Icons of Evolution, Darwin on Trial, Darwin’s Black Box, Of Pandas and People, Evolution: A Theory In Crisis, Expelled!, Signature in the Cell
  – Environmental Overkill: Whatever Happened to Common Sense?
Review Lists:
ASA-related or other alternatives

- Test of Faith: Does Science Threaten Belief in God? (DVD)
- Spradley, J. (1994). Visions that Shaped the Universe
- Glover, G.J. (2007). Beyond the Firmament
- What Does it Mean to be Human? [museum exhibit, website and educational resources]
- Kuyer's Mathematics [website]
- The Physics Classroom [website]
- Understanding Evolution [website]
- Understanding Science [website]
Lessons and Other Helps

• Adapt a science-faith lesson for a younger audience (e.g., Ted Davis and Galileo’s *Letter to Madam Christina*, which is available online)

• Write an essay: “What I wish my college students had learned in high school” (help for teachers)

• Write a teacher or student guide to enhance a specific textbook or make a resource easier to use for schooling
Other Things (if time allows)

• Programming the website (WordPress)
• Cultivating good relationships with publishers
• Mobilizing and empowering volunteers
• Importance and unimportance of evolution

Thanks!