**Wonder Leads to Worship**

**SCL 2016 Summer Conference**

**John D. Mays, Novare Science & Math/Regents School of Austin**

1. What is wonder? "Wonder is that possession of the mind that enchants the emotions while never surrendering reason... It sees in the ordinary the extraordinary..." (Ravi Zacharias)
2. Why wonder matters
	1. Humans (who bear the *imago dei*) are designed to contemplate the wonders produced by the divine hand and worship the creator in response: *wonder leads to worship*. (Job 38–42, Ps 8, Ps 19, Ps 104, Ps 139, Rom 1:20)
	2. Wonder at creation plays a key role in the process of discipleship—discipleship entails learning more fully what worship is. (Matt 6:26–30)
	3. Wonder at nature is the opposite of boredom and apathy. If children are bored or jaded, it is because their culture—and perhaps their parents and teachers—have failed them.
	4. If you look closely enough, everything in God's world is stupefying. God's world speaks to us. We need to encounter it in a way that enables us to hear what it is saying.
	5. Wonder at creation helps to put science in its place. Despite all the discoveries in our scientific era, we still know relatively little about the processes in creation.
3. The loss of wonder
	1. "Nature-deficit disorder" is a serious issue in our day. (See *Last Child in the Woods*, Richard Louv)
	2. The consequences of this loss are huge—beyond telling: lower creativity, less independence, fear, apathy, overstimulation (lack of contemplation and stillness), indifference toward the need for stewardship.
4. Teaching strategies
	1. Distinguish between *nature* and *creation*. *Creation* entails the meaning and redemption of nature, its fulfillment and consummation, its role in declaring God's glory.
	2. Let your own fascination be evident; young children are naturally fascinated by creation; all the adult has to do is be fascinated.
	3. Assume your students have not experienced or seen many of the phenomena adults consider basic. Reach out to them.
	4. Show students the real thing whenever possible.
	5. Make your class as hands-on as possible; fill your classroom with stuff.
	6. Become a collector of stupefying nature facts.
	7. Don't let wonder devolve into spectacle. Encourage your students not to say, "Do it again." Encourage them to say, "Why does it do that?" Emphasize *formal* and *final* causes in addition to *material* and *efficient* causes.
	8. Beginning in 4th grade, emphasize science as modeling nature, not simply fact finding. Our inability to know nature *as it is* is itself wonderful.
	9. When stumped, say, "Great question! I don't know the answer, but let's find out!"
	10. Avoid boring demos and experiments; do the cool ones.
	11. Acquire and use these tools:
		1. camera with macro lens
		2. microscope with digital projector output
		3. projector
		4. magnifying glass
		5. binoculars
5. Resources
	1. Tap into the wealth of YouTube videos.
	2. See the coming Wonder Resource Center at NovareScienceandMath.com.
6. Consider: Why is infancy and childhood so protracted in humans?