

10. Education in Arts and Sciences (4Q 2020—Education)

Biblical Material: Rom. 1:18–21, Ps. 19:1–6, 96:9, Gen. 3:6, 1 Timothy 6, Proverbs 1, Job 38.

Quotes

- Science without religion is lame, religion without science is blind. *Albert Einstein*
- Communication of science as subject-matter has so far outrun in education the construction of a scientific habit of mind that to some extent the natural common sense of mankind has been interfered with to its detriment. *John Dewey*
- Education is useless without the Bible. The Bible was America’s basic text book in all fields. God’s Word, contained in the Bible, has furnished all necessary rules to direct our conduct. *Noah Webster*
- Instruction ends in the schoolroom, but education ends only with life. A child is given to the universe to be educated. *Frederick W. Robertson*
- In science it often happens that scientists say, ‘You know that’s a really good argument; my position is mistaken,’ and then they would actually change their minds and you never hear that old view from them again. They really do it. It doesn’t happen as often as it should, because scientists are human and change is sometimes painful. But it happens every day. I cannot recall the last time something like that happened in politics or religion. *Carl Sagan*
- It is in scientific honesty that I endorse the presentation of alternative theories for the origin of the universe, life and man in the science classroom. It would be an error to overlook the possibility that the universe was planned rather than happening by chance. *Wernher von Braun*

Questions

How are we to relate to what some call “secular education”? Are the facts of science and the beauty of art really “secular”? How can we integrate what we know of our world and our expression of it in art into our Biblical worldview? How do we define “science falsely so-called”? What are the pros and cons of esthetic beauty and art forms?

Bible summary

“God’s hostility is revealed from heaven against those who are godless and are not right, those who suppress the truth through the evil that they do. What can be known about God is obvious, because he has made it very clear to them. Ever since the creation of the world, the invisible aspects of God—his eternal power and divinity—are clearly visible in what he has made. Such people have no excuse, because even though they knew God, they did not praise him or thank him, but instead their thinking about God turned into complete foolishness, and darkness filled their empty minds.” Romans 1:18-21 FBV. The natural world declares the glory of God. (Ps. 19:1–6). This gives one significant reason for worship (Ps. 96:9). Gen. 3:6 records the temptation of Eve. We are to stay away from false doctrines (1 Timothy 6). Proverbs 1 is the call to wisdom. Job 38 is God’s answer to Job, pointing to his creative power.

Comment

Relatively early in my career as a child I had developed a fondness for experiments. It seemed I could do just about whatever I liked as long as my parents were assured it was “An

Experiment.” It sounded important and scientific, and what parents would wish to interfere with their child’s educational development? So Experiments (notice the capital “E”) they were. Many of them. The more spectacular were the early forays into chemistry, or at least things that foamed and fizzed and actually *did* something. All the stuff about how interesting it was to notice how iron oxidized or how you could make Epsom salts was certainly not interesting to this budding chemist.

The best Experiments were those that ended in some kind of explosion. From the “popping” of hydrogen made by dissolving magnesium in acid to the actual formulation of low-cost explosives (no recipes here!), I was out to get plenty of *bang* for my bucks. I particularly enjoyed the reaction of passers-by...

I had successfully blown a good sized crater in my long-suffering parents’ lawn, experimented with a reasonably effective rocket fuel (though its trajectory was always unpredictable...), and managed to make a miniature underwater torpedo that had quite upset the ducks on the nearby pond.

But my educational Experiments came to an end with my investigation into the chemicals contained in fireworks. What was it that made some sparks red, and some orange, and some blue and green? I had read that you could do a little bit of flame analysis to find out. Something about cobalt making things burn red and copper green, I seem to vaguely remember.

I took a few fireworks apart. Like a good educational scientist I dipped a spatula into the powder and lifted out a small amount. Carefully I put the end of the spatula in a flame, and noted the color of the burning powder. I wasn’t quite sure, so I decided to try again. What I hadn’t reckoned on was that the spatula end would be quite hot. When it touched the powder: *fizz, bang, whoosh!* A jet of flaming fire came roaring out of the test tube and hit the back of my hand, searing it instantly. I dropped the tube and yelped in pain. I rushed inside in agony, and after a quick inspection by mother of the damage, was taken off to hospital.

Educational can be dangerous I suppose! But even in that experience I learned something, and my parents certainly took the opportunity to lecture me, seeing this as a teachable moment.

What we’re saying here is that learning is important, but it needs to be set against firm principles—in my case here knowledge of safety! When it comes to lessons in life, we need that belief framework. Science deals with factual information. How we interpret it is another thing. Similarly art can be used to glorify God or to indulge our human desires. It all depends on how we “frame” the world, and that’s where the spiritual aspect must be involved.

Ellen White comments

In educational lines many ideas are advanced which proceed not from the High and Holy One who inhabiteth eternity, but from those who make scholastic studies an idol and worship a science that divorces God from the education. Yet because these errors are clothed in an attractive garb, they are widely received... It is well to gain a knowledge of the sciences. But the acquirement of this knowledge is the ambition of a large class who are unconsecrated, and who have no thought as to the use they will make of their attainments. The world is full of men and women who manifest no sense of obligation to God for their entrusted gifts. {CTr 23.4}

You ought to make it your business while here [at college] to obtain an education in the things of God, as well as in the arts and sciences. To learn your duty to God and to your fellow-men, should be your highest aim. I can see a broad field open before you. Take hold intelligently and understandingly, working with your whole soul, mind, and strength, and you will see the work go forward. {RH, April 1, 1880 par. 12}