

Leaders in Science and Technology from Christian Classical Education

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The Apostle Paul teaches us to do all to the glory of God. Augustine teaches us that nothing is evil—evil is the absence or abuse of things. Luther teaches us that any type of work may be pursued by the Christian as a vocation. Kuyper teaches us that “there is not a square inch in the whole domain of our human existence over which Christ, who is Sovereign over all, does not cry: ‘Mine!’”¹ And, Schaeffer teaches us that “Christianity is not a series of truths in the plural, but rather truth spelled with a capital ‘T.’ Truth about total reality, not just about religious things.”² These lessons persuade us that Christians should be involved in every legitimate field of endeavor.

The biblical accounts of Joseph and Daniel further persuade us that much good can come from Christians holding positions of leadership—even leadership in cultures and institutions which are predominately idolatrous. In today’s world, the science and technology industries are hugely influential and often idolatrous. Yet, some Christians should be prepared to become a Joseph or a Daniel within these industries, and the Christian classical school should play a part in preparing these future leaders.

Doing so will require a commitment to participation for the sake of blessing. It will require a commitment of resources. It will require creativity, thoughtful implementation, and ongoing conversations. In the hope of stimulating these conversations,

we will briefly discuss current requirements for attaining top leadership in the science and technology industries, the role of the Christian classical school in preparing some students for such leadership, and some specific strategies we are implementing at Schaeffer Academy.

Current requirements

The process of attaining a top leadership position within the science and technology industries starts early. Successful organizations select a set of universities that they believe will offer them the strongest employees. They go to those campuses and hire only the top math and science students. They contact professors and ask, “Who are your best and brightest?” Sometimes, they search for top students by bringing them into undergraduate internship programs. *Therefore, being prepared to quickly reach the top of the math and science classes in the universities where industry recruits is a requirement for top leadership in the science and technology industries.*

Once hired, each individual is evaluated for several years. The employee is compared to the other top college graduate employees. There are no overt tests. Rather, supervisors subjectively evaluate each individual’s ability to grow the impact of the organization. Only the top 30–40% will advance. *Therefore, being prepared to flourish in a context of constant and intense competition is a requirement for top leadership in the*

science and technology industries.

Those who advance, move into an even more difficult competition at this point. They are given more responsibilities and assigned to “leading edge” projects. These projects have specific goals but vaguely defined processes and teams. They are expected to invent solutions on a schedule. They are evaluated on their ability to sell their ideas to their peers with minimal management support and to achieve the goals that they have created for their teams. *Therefore, being prepared to motivate others to work beyond merely following established rules and procedures is a requirement for top leadership in the science and technology industries.*

The small fraction that is successful at the previous levels is now well known to senior management and will be evaluated as potential replacements for existing top leaders. Their opportunity to advance is tied to their ability to grow the institution in completely new directions before they retire or die. This constitutes the final level of evaluation. Can the individual propose something new with such salesmanship that the institution is willing to risk its funds to make it happen? Does the person have enough credibility and commitment to the organization that leadership sees his or her proposal as the way of the future? *Therefore, being prepared for risk-taking and salesmanship is a requirement for top leadership in the science and technology industries.*

Institutions within the science and technology industries will not be turned over to the merely well-rounded or the good rule-follower. Top leadership will only be given to those who

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are prepared—and excel—in the ways mentioned above.

The role of the Christian classical school

The Christian classical school should not seek to prepare all of its students for leadership in the science and technology industries. Some should be prepared to become poets, professors, pastors, and plumbers. Some should be prepared to become honorable followers—good leaders need good followers. Nevertheless, the current requirements of the science and technology industries should not cause the Christian classical school to refrain from preparing some students for leadership in these industries.

We have already made our case for the appropriateness of Christian involvement in this field of endeavor. Some readers, who agree with that case in general, may still be skeptical of the role for the classical school in particular. Shouldn't classical schools be about the humanities, not the sciences? Shouldn't they be literary, not mathematical? Shouldn't they offer breadth, not specialization? These questions pose false dilemmas.

Within the Association of Classical and Christian Schools, the insight of Dorothy Sayers in "The Lost Tools of Learning" is generally regarded quite highly. In that essay, when discussing what she called the rhetoric stage of education, she wrote:

Any child who already shows a disposition to specialize

should be given his head: for, when the use of the tools has been well and truly learned, it is available for any study whatever. It would be well, I think, that each pupil should learn to do one, or two, subjects really well, while taking a few classes in subsidiary subjects so as to keep his mind open to the inter-relations of all knowledge.³

There is nothing "unclassical" about making it possible for some students to specialize in math and science or to develop the leadership skills required by the science and technology industries. To the contrary, for schools whose definition of "classical" includes Sayers' insight, it seems essential to encourage some specialization in the rhetoric stage.

Specific strategies

At Schaeffer Academy, we require all students to acquire the basic tools of learning before allowing specialization. And, even when they specialize, we require courses outside their area of specialization to remind them that knowledge is interrelated, to enrich their lives, and as part of their equipment for making a difference should they attain top leadership. Nevertheless, in eleventh and twelfth grade, we do allow students to specialize.

Juniors and seniors with the ability and desire to specialize in math and science can take Pre-Calculus, Calculus, Honors Physics, and Advanced Placement

(AP) Physics. Those whose ability and desire better suits them for the humanities or the arts are only required to take one math course (Math in the Liberal Arts) and one science course (Physics I). These students are then able to pursue other disciplines more in line with their dispositions.

By offering, but not requiring the advanced math and science courses, we are able to move at a very rapid pace in these classes. We make them very challenging for the students who are so disposed, without needing to worry about bringing along those who are not. We also increase the level of competition among the students and the level of focus and commitment required for an average to above average grade. We assign work that requires unusually large time commitments and teaches students to prioritize time for a goal. This year, we plan to assign work that requires students to establish and manage teams. We also plan to offer extra credit opportunities which can only be attempted by the team with the best bid and have a penalty for failure. All of these things will help prepare students for the realities of leadership in the science and technology industries.

We currently only offer one College Board approved AP course, but as enrollment and funds allow, we plan to offer more. The requirements for some AP courses do pose challenges for the Christian classical school. Space does not allow us to address those

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challenges here. Nevertheless, we believe that it is beneficial to offer some of these courses in Christian classical schools. They stretch conceptual learning and force students to face tests that represent the current standards—standards they will have to deal with in the science and technology industries—under the supervision and care of a mature Christian teacher.

Indeed, for any of these strategies to enable participation for the sake of blessing, our entire curriculum must pass along a Christian worldview. Christian teachers must prepare students to decide—like Joseph and Daniel—when to function within the current system and when to oppose it. Our goal is not industry leadership at any cost: Christ is King. Nevertheless, when God opens the doors, some of our students should be ready to bring the lordship of Christ to bear as leaders in science and technology.

Notes:

1. Abraham Kuyper, “Sphere Sovereignty” in Abraham Kuyper: *A Centennial Reader*, ed. James D. Bratt (Grand Rapids, MI: Eerdmans, 1998), 488.

2. Quoted from Schaeffer’s address at the University of Notre Dame in 1981 in the book by Nancy Pearcey, *Total Truth: Liberating Christianity from Its Cultural Captivity* (Wheaton, IL: Crossway Books, 2005), 15.

3. Dorothy L. Sayers, “The Lost Tools of Learning,” a paper read at a Vacation Course in Education, Oxford, 1947. You may read this at accsedu.org/The_Lost_Tools_of_Learning.ihtml?id=633752.

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help our students understand concepts like the SAS property and eventually they get them. But how does that process shape them if it does not point them to God’s eternal power and divine nature as Romans 1:20 proclaims? Can that mathematical concept begin to bear sweet fruit in their lives? Perhaps the better question is: does our life provide an example of the sweet fruit produced by going beyond the right answer?

As teachers we are keenly aware of the areas in which we fall short. Our lives are marred by sin and twisted by bad habits, so, not surprisingly, our example is flawed, too. And yet, Christ’s incarnation interrupted history and gives us new life and new hope. Christ is not only the reason our marred efforts to teach have a chance of impacting hearts, but He is also the perfect embodiment of the consistency of God and the source of creation’s consistency. “For from him and through him and to him are all things. To him be glory forever” (Romans 11:36 ESV). As we sit in Christ’s classroom, we see that the God who is the same yesterday, today, and forever still never ceases to surprise. His consistency is perfect, but not routine. Children are conceived through the union of man and woman, yet once a baby

was born of a virgin. A sunrise time can be predicted, but for Joshua one day the sun stood still. And even death, the end of all men, was conquered by one man. As we wrestle with bringing Christ’s consistency to bear in our lives, we do so in a world charged with God’s grandeur “shining forth like shook foil.”³ God throws himself into a sunrise, and as one man said, “Man was not made in God’s image for nothing.”⁴ We will echo the delight of toddlers and the gratitude of the insulation installer because in the process of discovering and imitating God’s consistency, His character will become ours.

Notes:

1. G.K. Chesterton, *Orthodoxy* (San Francisco: Ignatius Press, 1995), 65.

2. C.S. Lewis, *Abolition of Man* (New York: HarperCollins, 2001).

3. Gerard Manley Hopkins, “God’s Grandeur,” *Hopkins: Poems and Prose* (New York: Alfred A. Knopf, Inc, 1995), 14.

4. Robert Farrar Capon, *The Supper of the Lamb: A Culinary Reflection* (New York: Random House, 2002), 19.