"SINE DOCTRINA VITA EST QUASI MORTIS IMAGO"

VOLUME XXVI NUMBER III

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## ACCS

*Classical Christian Education:*
*A New "Old-Way"*



MISSION STATEMENT

The primary mission of this association is to promote, establish, and equip schools committed to a classical approach to education in light of a Christian worldview grounded in the Old and New Testament Scriptures.

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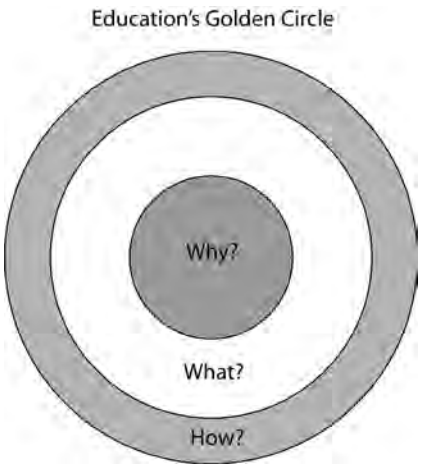
# WHAT HANGS ON THE WALLS VS. WHAT HAPPENS IN THE HALLS

*by Richard Halloran, Providence Classical School*

Over a decade ago, while attending a pastoral ministry conference, I heard Andy Stanley make a statement that has stuck with me ever since. While discussing the importance of organizational systems, he made the point that what happens in the hall (the day-to-day actual life of a ministry) is more important than what's hanging on the wall (a ministry's mission statement). Such terminology also resonates with the life of a school.

Almost every school has a mission statement, designed to explain *why* the school exists. Mission statements can be actual, reflecting that the school community owns and lives out the mission daily. Sometimes, however, what happens in the halls reflects that the mission statement is more aspirational than actual. It simply reflects what the school aspires to be rather than what actually happens in the classrooms and in the school community. As classical Christian schools, we do well to remember that "the proof is in the pudding," not the wording of a statement.

This does not mean that mission statements are irrelevant. In fact, the opposite is true. A clear mission statement is foundational for a school. Simon Sinek's concept of the golden circle is valuable in understanding this. Great organizations work from the inside out, from the *why* to the *how* to the *what*. However, for schools, I would suggest that the *what* is more central than the *how* because our product is not a computer or a movie but people. Our *what* attempts to paint a picture of what the




mission looks like fulfilled. It is our vision for who our ideal graduates are becoming and how they are compelled to influence the world. The mission statement is critical because the circle finds its center with the *why*, explaining the purpose of the school. As Sinek rightly points out, "People are inspired by the *why*."

A school's mission statement is what distinguishes it from other schools. As Christian schools, our mission statements should be rooted in Christ's commission to make disciples. We exist to daily be a part of God's plan to reach the world! As classical schools, our methodology distinguishes us from others. While we must be careful not to allow this to lead us to exalt ourselves arrogantly above other schools, we must also boldly allow our mission to distinguish us from other schools: being classical is what makes us distinctive. Our schools are filled with a

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community of people who are committed to fulfilling a specific mission.

Since a mission statement is the guiding statement for all that the school does, it is important to craft it well. Since the goal is for the entire community to internalize the mission, it must be marketable and memorable. It must pass the "people test." If people do not understand it, it is not clear. If people cannot remember it and quote it, it is not memorable. ISM (Independent School Management) recommends that a school keep its mission statement under thirty words. Personally, I find keeping a mission statement around twenty words to be more manageable, memorable, and marketable.

Why should a mission statement be marketable and memorable? The mission and vision of classical Christian education is lofty and requires hard work to fulfill. In order for the mission to become a reality, all parts of the community have to be committed to striving toward the same goals. This includes school boards, administrations, faculty, staff, students, and parents. The mission statement becomes the primary means to unite the community, serving as a clear guide that leads us, a reminder that keeps us focused, and an inspiration that motivates us to be unmovable and outstanding in our work for the Lord.

While a school's mission statement must be value-laden, reflecting both a Christian and classical commitment, the statement is inherently broad. It has to be broad enough to summarize all that the school does, but it is not intended to be comprehensive. It is impossible to be comprehensive in twenty words. Furthermore, it is highly unlikely that a comprehensive mission statement is marketable and memorable.

Consider the following sample from our school: "Providence Classical School is a Christian school using the classical model to train students to impact their culture for Christ." This mission statement was created by our founders long before I arrived, so I take no credit for its clarity, conciseness, and marketability. The statement is broad enough to encompass all aspects of what we do. It is value-laden in that it clarifies that we are a Christian school, while also distinguishing us by our commitment to using the classical model. It is connected to the Great Commission in that it highlights that our purpose is to train students who will then replicate the growth they've experienced in the world. It is not comprehensive, but it provides a platform to be more fully explained every time it is shared with the community.

So how does a school make sure there is not a discrepancy between "what is hanging on the wall" and "what happens in the halls"? Here are a handful of suggestions that I have found successful:

- Recognize God's sovereignty and man's responsibility. The school's community, including its students, has the responsibility to own and live out the mission. Leaders in schools have the responsibility of inspiring others to share the mission. Yet, our labors will never accomplish the work of God without the empowerment of the Spirit of God. We do well to apply Saint Benedict's principle of *ora et labora* (pray and work).
- Take every opportunity to communicate the mission, internally and externally. Your community needs to consistently hear the mission. Such communication will not only educate but will inspire. Prospective families need to hear the mission clearly explained and know its importance in the life of the school. If they are joining the school, they will become a part of the mission's fulfillment.
- Remember that people are your most important key to carrying out your mission. Not only is your *what* focused on people (i.e., our students), but a key component of your *how* is also people, the faculty and staff. Your faculty are the biggest influence on whether or not your students have excellent classical Christian learning experiences. As one of my mentors once told me, "People are

more important than the process."

- Recognize that systems help create behaviors that either facilitate or impede the fulfillment of your mission. Systems are an essential component of your how. While we shepherd the hearts of students recognizing that behaviors flow from the heart, we must also recognize that the systems our school creates and implements impact the behaviors of faculty, staff, students, and the community. Every teacher recognizes that clear and consistent implementation of classroom systems goes a long way in managing a classroom. Consider whether or not your school's systems facilitate or impede your mission.
- Take the time to learn from others who fulfill their mission well. Certainly, ACCS is a good starting point and offers resources to help. Visit other schools that model mission fulfillment also. Additionally, consider other types of organizations who are known for creating systems and cultures that enable mission fulfillment.

ACCS has used John Milton's challenge to "repair the ruins" caused by our fallen world as a charge to classical Christian schools. While the decline of the modern educational system can be discouraging, classical Christian education provides a solution to Milton's challenge by providing students with the tools for a lifetime of learning and training students who are capable of entering the world to repair the ruins. This is an exciting time to be part of a mission that has never been more important. Let's make sure we are clear and unwavering in our reason for existence, making certain our mission statements are not merely aspirational but are actually lived out on a daily basis in the life of our schools.

# THE ART OF BOARD VISITATION

*by Douglas Wilson, Christ Church*

An elementary mistake that is often made by boards of classical Christian schools has to do with the nature and the extent of their involvement in the day-to-day operations of the school. This mistake frequently comes in the form of two possibilities, comparable to a ditch on either side of the road. The mistakes are either total involvement, or almost complete abdication.

When board members of classical Christian schools go astray, it is either because they are, as the saying goes, down in the weeds, or they have removed themselves to such a distance that they scarcely know what is happening in the hallways of their school at all.

Schools at their founding are often dependent on high-energy founder types, who make the school a success with their time, money, ideas, dedication, vision, and zeal. Naturally, once the school is up and running, they continue to care about what is happening in the hallways and classrooms, and this sometimes translates into a board that treats the superintendent like he was their own personal sock puppet. They try to run the school, down to every detail, through their Diligent Oversight.

Then sometime later, perhaps after a board meeting that went to 2 a.m. because of strong disagreements over the toilet paper roll rotation processes, the lights come on and the board members discover the loveliness of delegation. Find a man you trust, tell him what the vision of the school is, give him his executive limitations (the basic things he is not permitted to do), and evaluate him on that basis. The board meetings are now a monthly affair, and the board meetings mysteriously got a lot shorter.

Some readers may recognize that in this previous paragraph I have briefly outlined the Carver governance model. The board evaluates the superintendent, and they steer the school through the direction they give to that superintendent through their approved policy manual, after which they evaluate his job performance based on a reasonable interpretation of what they told him to do, and what they told him to avoid doing. The mission or vision of the school is outlined and described, and that is what they tell him to do. The executive

***Douglas Wilson*** *is the minister of Christ Church in Moscow, Idaho. He is a founding board member of both Logos School and New Saint Andrews College, and serves as an instructor at Greyfriars Hall, a ministerial training program at Christ Church. He is the author of numerous books on classical Christian education, the family, and the Reformed faith.*

limitations are spelled out as the things he is not to do, whatever happens. Both educational institutions that I am associated with (Logos School and New St. Andrews College) operate under the Carver governance model.

The reason I bring this up is that both of these boards also conduct a school visitation in the course of their annual duties. These visitations include classroom observations, interviews with students, parents, and faculty. The question naturally arises—how do such visitations fit with a governance model that seeks to keep the boards, as boards, out of the weeds?

The answer has to do with what board members do with information they gather from various sources, and not at all with whether or not they gather such information. In most cases, board members gathering information is inescapable. The mark of an informed board member is how he puts that information in play.

Say that a board member is an experienced teacher himself, and during the course of one such classroom visitation, he notices that a first-year teacher is struggling. He sees that with his own eyes, and can tell that the back third of the class is not paying any attention at all. He also knows, from conversations with his own kid, a junior at the school, that the student opinion of that teacher is low, with some kids just being mean about it, and other kids wishing her well, but thinking that she is plainly not going to last.

If the board member goes in to the superintendent and demands that the teacher be fired, then that board member is way out of his lane. First, he is just one board member, not the entire board. As just one board member, he carries no authority whatever. Second, he is trying to act as though he does carry authority, even though the board did not commission him to do anything. Third, he is assuming that he has the full story when he is not there every day, while the superintendent is. It is not his job to have the complete picture, and it is the job of the superintendent to have a complete picture. He needs to understand his limitations.

So why bother having a board visitation at all then?

The answer lies in the fact that the extra eyes and ears of all the board members visiting can be extremely helpful—if what they see is processed properly. The authority of the board is *corporate*, and so when they speak it should be after they have consulted with one another. Let us say that after seven board members spent the day at the school, five of them noticed that classroom discipline had deteriorated from previous years. They discover this by comparing notes, and they make an observation that is based on more than just one snapshot from one board member. It is an observation that would be accurate across various classrooms. And so they include this item on the superintendent's evaluation, noting that classroom discipline seems to be getting a little raggedy, and that they would like him to address it.

The board doesn't address it at the school. The board doesn't do the job evaluations of the teacher who was being too lax. The board doesn't try to do an end run around the superintendent. They confer with one another, and if they agree, they tell the superintendent what they saw, and what they would like not to see next time. The board has one direct report, and that one person is the superintendent. The board talks to the school through the superintendent. The school talks to the board through the superintendent.

And if the board is going to lead and direct the school, it is crucial that the individual board members have the opportunity to learn a little bit about what they are talking about. If the board members all lived in another city, and were simply dependent on the reports that the superintendent gave them, it could be very difficult for them to know exactly how accurate the reports were. At the same time, a board member needs to realize that his own personal observations might also be limited and inaccurate. That is why he should filter any critical input through the board.

There is one other way that a board member can approach this. If an individual board member, without

acting like he has any authority at all, gives a responsible heads up to the superintendent (as they are friends), this could be mightily appreciated. He might say something like, "Hey, I think you've got a situation developing in the third grade. You might want to check in there." "Thanks, man," comes the reply. This is fine because the board member is just being a friend, and he left his board hat at home.

But when it comes to board visitations, I highly commend the practice, and strongly encourage boards to adopt it. At the same time, I would want to make sure the board understood fully how such visitations were supposed to fit in with their governance of the school.

# THE SEVEN LAWS OF TEACHING

John Milton Gregory

| The Seven Factors | The Laws Stated | The Laws Stated as Rules |
|---|---|---|
| **A Teacher** | A *teacher* must be one who *knows* the lesson or truth or art to be taught. | Know thoroughly and familiarly the lesson you wish to teach—teach from a full mind and a clear understanding. |
| **A Learner** | A *learner* is one who *attends* with interest to the lesson. | Gain and keep the attention and interest of the pupils upon the lesson. Do not try to teach without attention. |
| **A Common Means of Communication** | The *language* used as a *medium* between teacher and learner must be *common* to both. | Use words understood in the same way by the pupils and yourself—language clear and vivid to both. |
| **A Lesson or Truth** | The *lesson* to be mastered must be explicable in the terms of truth already known by the learner—the *unknown* must be explained by means of the *known*. | Begin with what is already well known to the pupil upon the subject and with what he has himself experienced —and proceed to the new material by single, easy, and natural steps, letting the known explain the unknown. |
| **The Teacher's Work** | *Teaching is arousing* and *using the pupil's mind* to grasp the desired thought or to master the desired art. | Stimulate the pupil's own mind to action. Keep his thought as much as possible ahead of your expression, placing him in the attitude of a discoverer and anticipator. |
| **The Learner's Work** | *Learning is thinking* into one's own *understanding* a new idea or truth or working into *habit* a new art or skill. | Require the pupil to reproduce in thought the lesson he is learning—thinking it out in its various phases and applications until he can express it in his own language. |
| **The Review Work** | *The test and proof* of teaching done—the finishing and fastening process—must be a *reviewing, rethinking, reknowing, reproducing, and applying* of the material that has been taught, the knowledge and ideals and arts that have been communicated. | *Review, review, review,* reproducing the old, deepening its impression with new thought, linking it with added meanings, finding new applications, correcting any false views, and completing the true. |

# MATHEMATICS AS ONE OF THE HUMANITIES

*by William Carey, Ad Fontes Academy*

With some regularity parents come up to me and let me know that they hated math in high school. Such are the occupational hazards of teaching math. I console them, though, by suggesting that the thing they hated in high school probably wasn't math, and that if they took a stab at actual math, they might find that they like it.

The cultural practices of adults gathering to make music or discuss books together seem normal. The cultural practice of gathering to do math together for pleasure and nourishment seems, well, odd. Why is that? Inasmuch as it's *odd*, it's odd because of how we were taught to think about mathematics.

When we teach a subject, we do at least two things: we teach the subject, and we teach our students what it means to be a student of the subject. So, when a history teacher has the students read Herodotus, she both gives them a picture of the Persian wars, and also a vision of what it means to read and write history. By selecting Herodotus and not selecting, say, a long list of facts and figures about the chronology of the Persian wars, the history teacher is making claims about what it means to be a historian. Similarly, when a literature teacher chooses to give his students an essay exam instead of having them answer multiple choice questions, he is making a definite claim about what it means to be a reader and engage in the cultural practice of thoughtful reading. When the math teacher assigns problems one through thirty, just the odds, for homework, he is making a definite—though perhaps unconscious—claim about what it means to be a mathematician.

So, what does the shape of a modern math class teach students culturally about being a mathematician? Here I'll lean on Paul Lockhart's most excellent essay "A Mathematician's Lament." Lockhart describes an imaginary music class like this:

> *Music class is where we take out our staff paper, our teacher puts some notes on the board, and we copy them or transpose them into a different key. We have to make sure to get the clefs and key signatures right, and our teacher is very picky about making sure we fill in our quarter-notes completely. One time we had a chromatic scale problem and I did it right, but the teacher gave me no credit because I had the stems pointing the wrong way.*

***Bill Carey*** *has been involved in the life of Ad Fontes Academy since he was in high school. After five years of teaching, Mr. Carey took a sabbatical writing computer programs for a defense contractor to better understand how adults think about and use mathematics. Drawn back to the classroom, Bill is in his fourth year of his second tour at Ad Fontes and second year as dean of instruction.*

Music teachers might well shudder in horror. His contention—right I think—is that we teach math in an analogous way. Modern mathematical education teaches students that mathematics is unreal, authoritarian, and Sisyphean.

## MATH IS UNREAL

A chapter in our old Algebra II book opened by explaining that linear inequalities were relevant because you could use them in your job . . . as a bowling pin manufacturing quality control inspector. If I'm a student, I'm out. I don't want to be a bowling pin manufacturing quality control inspector, so I guess I don't need to learn this! And how many of those are there in the world? Five? Ten? Out of billions of people.

There are examples like this throughout math textbooks. The fundamental difficulty with these imagined problems is that the context is unreal. If you want to . . . calculate the height of a jumping armadillo, you should learn quadratic equations with negative coefficients. Well, I don't, so I guess I shouldn't. Instead of genuine problems faced by adults, these problems are ruses to trick students into practicing what math teachers want them to practice. What does that teach students about how mathematicians think about *truth*?

We are purveyors of hypothetical imperatives that patronize and embarrass students. The whole thing is a sort of kabuki theatre, in which math teachers pretend (I hope?) to think these problems meaningful, and students pretend not to laugh at them. Not, perhaps, what we're aiming for.

## MATH IS AUTHORITARIAN

"They" have invaded our math classrooms. It's fascinating how students want to know what the illusory "they"—by which they mean the authors of their textbook—want the students to do. Think for a minute about what that says about mathematical community. The most important people in the community are a faceless —and often nameless—committee, who bestow their judgements impersonally, and often without explanation. The aim of math is not to convince one's self, or one's peers, or even one's teacher, but to placate some ethereal "they."

Imagine, for a minute, a literature textbook that featured, after a chapter of *Pride and Prejudice* a series of questions like: "Do Wickham and Lydia have a good marriage?" When students turn to the back of the book to check their answer, it simply says, "no," absent any sort of justification, reasoning or argument. What would that tell us about reading and literature? And yet mathematics textbooks do that very thing!

## MATH IS SISYPHEAN

Worst of all, the liturgy of a modern math classroom teaches students that the reward for successfully completing bad "mathematical" tasks is worse mathematical tasks. Once you've finished tonight's homework, there will be tomorrow's—equally meaningless, but harder! Like Sisyphus, students roll the boulder of their homework up the hill every night only to have it roll down the next day during class.

Good mathematicians can tackle upwards of thirty sort-of-related problems per hour! Good mathematicians spend as much time on scientific notation as they spend on the idea of an infinitude of primes! Good mathematicians spend as much time on graphing quadratic inequalities as they spend on the fundamental theorem of arithmetic! Good mathematicians realize that all topics are equally important and worth the same time and energy!

No one could mistake this sort of work for the good life.

## MATH AS ONE OF THE HUMANITIES

Of course, it doesn't have to be like that, and hasn't always been like that. Classical educators are uniquely

positioned to teach math in a profoundly human and humane way because we recognize we are part of a long tradition aimed at human flourishing.

If I had to boil it down to one thought, it'd be this: when we talk humanities pedagogy, we should stop saying "except in math." When we talk about good pedagogy in, say, literature or history or rhetoric, we're also talking about good pedagogy in math. There's a profound unity to our intellectual life, and if we recognize that, it transforms how we think about teaching mathematics.

Teaching the humanities means putting the students face-to-face with something powerful and outside themselves: the great texts of our shared intellectual heritage. Those texts then work their way into the hearts of our students and form them into the sorts of people they are meant to be. It's the same in math. Mathematical texts are often good problems, and sometimes they good solutions, too. To be good, a problem must ride a razor's edge: it can't be so trivial that a young mathematician will see the answer in five minutes, and it can't be so hard that it takes a whole class six weeks to work through. Ideally, a good mathematical text should be, to borrow a word from Andrew Smith, dean of academics at Veritas Academy, "apocalyptic," that is, it should reveal some broader pattern or truth.

Once we've found a good problem or text, we want the students to talk about it, just like they would in a literature or history class. This is usually wildly countercultural for them, so much of my job as a math teacher is subverting and replacing their cultural expectations about mathematics.

Students typically walk into our classes believing that authority is the source of mathematical truth—the authority in the back of the book. It's perplexing to them not to have that authority available. Students typically believe that the teacher's role in class is to explain and the students to be explained at. It's challenging to them to bear much of the explanatory burden themselves. Students typically believe that math is a deeply individualistic pursuit. This is trickier to unpack. The refrain I use with my students is that the goal of mathematical discussion is to first convince yourself that you're correct, then convince your peers, and then convince me. So our discussions revolve around reasoning and persuasion, also deeply countercultural in mathematics. The discussions aim at knowing transcendent truths together in community.

Forming that mathematical community is a process deeply rooted in the formation of Christian character. The central image I use when talking to my students about how to form their mathematical community is the body of Christ. As St. Paul writes in his letter to the Corinthians:

> *[T]here are varieties of gifts, but the same Spirit; and there are varieties of service, but the same Lord; and there are varieties of activities, but it is the same God who empowers them all in everyone. To each is given the manifestation of the Spirit for the common good.*

Some students conjecture, some test conjectures, some write programs, some draw diagrams, some point out errors, some work particular examples. Each contributes meaningfully in the search for truth. How different a picture from a modern math classroom!

So, what do mathematicians make? What is the proper telos of mathematical work? Trusting the textbooks we were raised with, we might think some sort of context-free numerical answer. But according to G.H. Hardy, mathematicians are artists whose medium is "patterns in ideas." I find that compelling. How do mathematicians communicate their art? They write to one another. Much of mathematics has been transacted over letters and papers. We should join the rest of our sibling humanities and do the same. Once we have settled on a path through a problem, it's time for each student to write his or her own paper synthesizing and explaining that path as elegantly and clearly as possible.

This terrifies the students the first time it happens—math has usually been the lone respite from paper writing! So we do the first paper together in class, writing it sentence

by sentence. We talk about each sentence, whether it can be whittled down just a little bit more, whether it conveys precisely what we want it to convey. We gradually weave those sentences together into a cogent explanation that would be convincing to someone approaching the problem for the first time.

For a discipline that is notionally about eternal and perfect truths, high school mathematics can leave a lot on the table. In book seven of *The Republic*, Plato notes that:

> *. . . for [practical] purpose[s] a very little of either geometry or calculation will be enough; the question relates rather to the greater and more advanced part of geometry – whether that tends in any degree to make more easy the vision of the idea of good; and thither, as I was saying, all things tend which compel the soul to turn her gaze towards that place, where is the full perfection of being, which she ought, by all means, to behold.*

If we teach mathematics like one of her peers, the humanities, we can incline our students, ever so gently, towards the vision of the good. If we teach mathematics like the vocational, authoritarian slog that so many of us experienced, we can ensure that most students regard math as a horror to be endured, like their parents endured before them.

Mathematics, more than any other subject, forces a school to decide what it's really about. At Ad Fontes, our goal isn't just college acceptance; it's human flourishing. Our goal isn't crassly maximizing our students' future earning; it's ensuring that they see the image of God in themselves. It's not building a materially richer world; it's building a world more like the kingdom of heaven. Teaching mathematics in harmony with her sister humanities is an essential part of that project.

# COLLEGE STUDENTS THINK THEY LEARN LESS WITH AN EFFECTIVE TEACHING METHOD

*by John Timmer, Ars Technica*

*They don't even realize they've learned more.*

One of the things that's amenable to scientific study is how we communicate information about science. Science education should, in theory at least, produce a scientifically literate public and prepare those most interested in the topic for advanced studies in their chosen field. That clearly hasn't worked out, so people have subjected science education itself to the scientific method.

What they've found is that an approach called active learning (also called active instruction) consistently produces the best results. This involves pushing students to work through problems and reason things out as an inherent part of the learning process.

Even though the science on that is clear, most college professors have remained committed to approaching class time as a lecture. In fact, a large number of instructors who try active learning end up going back to the standard lecture, and one of the reasons they cite is that the students prefer it that way. This sounds a bit like excuse making, so a group of instructors decided to test this belief using physics students. And it turns out professors weren't making an excuse. Even as understanding improved with active learning. the students felt they got more out of a traditional lecture.

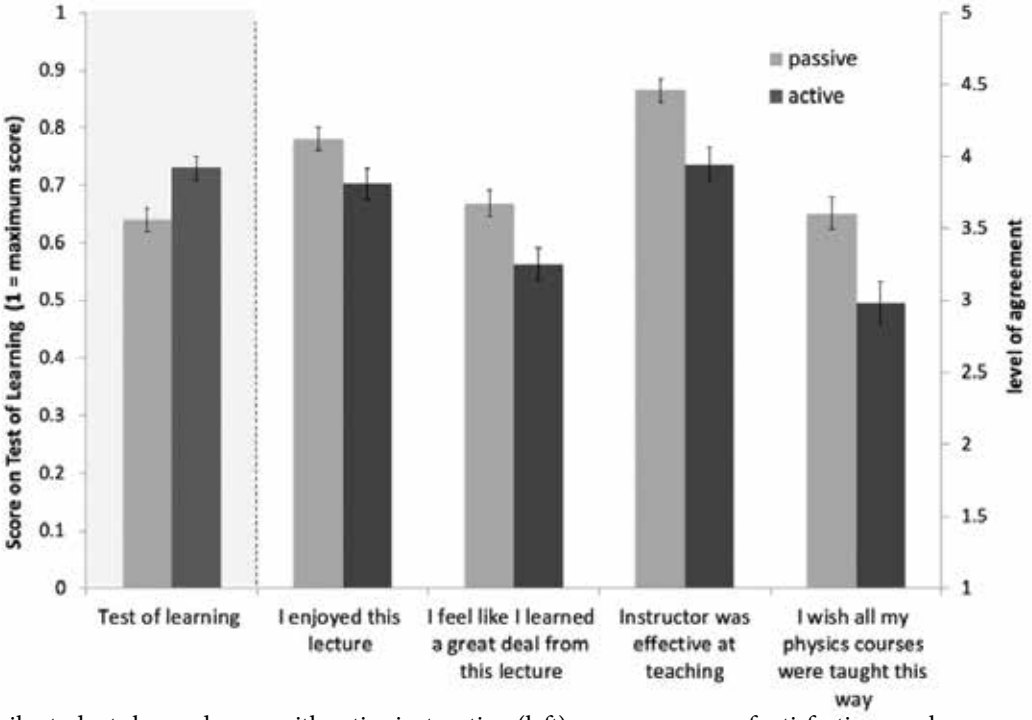
Department of Education

## TESTING EDUCATION

One of the challenges of tracking this sort of thing is that every class will have a different range of talents, and some instructors will simply have been better at teaching. Figuring out how to control for this variability is essential if you want to understand the impact of teaching methods. Fortunately, the Harvard team came up with a clever way of doing so.

They essentially split a physics class in two. One half would get a standard lecture. The person teaching the other half would use the same slides and class materials but lead these students through an active learning

***John Timmer*** *became* Ars Technica's *science editor in 2007 after spending 15 years doing biology research at places like Berkeley and Cornell. Originally published in* Ars Technica *at https://arstechnica.com/science/2019/09/college-students-think-they-learn-less-with-an-effective-teaching-method/. Used by permission.*



While students learned more with active instruction (left), every measure of satisfaction was lower.

process during the class. Then, two weeks later, the two groups of students would swap places; the first would now have an active learning class on a different physics topic, and the second would receive a standard lecture. That way, the same students experience both regular lectures and active learning, and the instructors would bring any talents they had to both approaches.

After each class, the students were surveyed about the experience, and they took a short quiz to determine how well they understood the subject of the class. The whole thing was done for both the spring and fall semesters of a class to provide a larger sample size.

As expected from past studies, the students in the active learning classes consistently outperformed their peers (and themselves), scoring a half a standard deviation higher on the quizzes.

But based on the surveys, the students would have been surprised to find out that's the case. The students found the active learning classroom to lack a bit of coherence, and it suffered from the frequent interruptions, which made the experience frustrating and confusing. When asked how much they felt they learned, students in the active learning classroom consistently rated themselves as having learned less—the exact opposite of what the quizzes indicate. The students also indicated that they would prefer that all their future classes be standard lectures.

## EXPLANATIONS ABOUND

So why is an extremely effective way of teaching so unpopular? The researchers come up with a number of potential explanations. One is simply that active learning is hard. "Students in the actively taught groups had to struggle with their peers through difficult physics problems that they initially did not know how to solve," the authors acknowledge. That's a big contrast with the standard lecture which, being the standard, is familiar to the students. A talented instructor can also make their lecture material feel like it's a straightforward, coherent packet of information. This can lead students to overrate their familiarity with the topic.

The other issue the authors suggest may be going on here is conceptually similar to the Dunning-Kruger

effect (https://arstechnica.com/science/2016/11/revisiting-why-incompetents-think-theyre-awesome/), where people who don't understand a topic are unable to accurately evaluate how much they knew. Consistent with this, the researchers identified the students with the strongest backgrounds in physics, finding that they tended to be more accurate in assessing what they got out of each class.

Whatever the cause, it's not ideal to have students dislike the most effective method of teaching them. So, the authors suggest that professors who are considering adopting active learning take the time to prepare a little lecture on it. The researchers prepared one that described the active learning process and provided some evidence of its effectiveness. The introduction acknowledged the evidence described above—namely, that the students might not feel like they were getting as much out of the class.

In part thanks to this short addition to the class, by the end of the semester, 65% of the students reported feeling positive toward active learning. That's still not exactly overwhelming enthusiasm, but it might be enough to keep instructors from giving up on an extremely effective teaching technique.

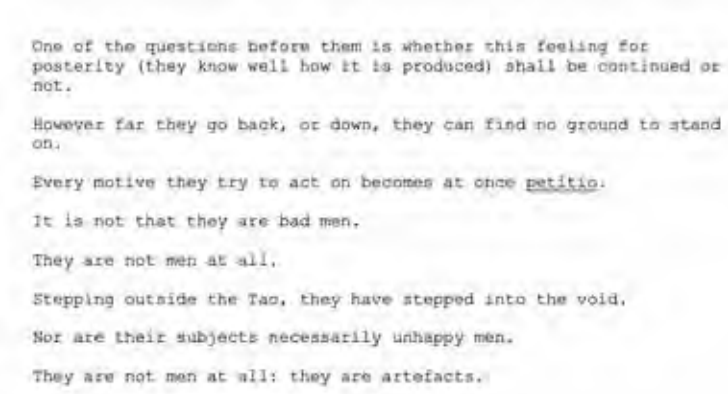
## CITATION:

Louis Deslauriers, Logan S. McCarty, Kelly Miller, Kristina Callaghan, and Greg Kestin, "Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom," in PNAS, Sept. 24, 2019, https://www.pnas.org/content/116/39/19251 .

# WRITING EXERCISE

*by Ben Meyers, Liberal arts the Millis Institute, Christian Heritage College Australia*

As a writing exercise, I sometimes get students to place their sentences on separate lines and study the length and structure of their sentences. Then I do the same thing with a random page from CS Lewis



One of the questions before them is whether this feeling for posterity (they know well how it is produced) shall be continued or not.

However far they go back, or down, they can find no ground to stand on.

Every motive they try to act on becomes at once petitio.

It is not that they are bad men.

They are not men at all.

Stepping outside the Tao, they have stepped into the void.

Nor are their subjects necessarily unhappy men.

They are not men at all: they are artefacts.

On average, Lewis's sentences are probably 5 or 6x shorter than most other writers. And 50 or 60x more exciting to read.

*Ben Meyers is the director of the Millis Institute, Christian Heritage College, Australia  This comment was posted on Twitter by @_BenMyers_ on September 11, 2019.*

# CURRICULUM CHOICES THAT ENCOURAGE TRANSFERENCE OF CHRISTIAN CULTURE

*by Amber Burgin & Destiny McPheeters, Regent Preparatory School of Oklahoma*

*"Assemble the people to Me, that I may let them hear My words so they may learn to fear Me all the days they live on the earth, and that they may teach their children."*
*Deuteronomy 4:10*

Once upon a time a powerful leader conquered the enemies in the land that their King had promised them. When he was old, the leader called the people together and reminded them to continue serving the King. The leader reminded them how the King had been faithful to them so the leader instructed the people to honor the King and make certain their houses and children were faithful to the King. The leader warned them that failure to honor their King would result in trouble. The people cried out, "We will honor the King!" The leader wasn't convinced and he said, "I'm not sure that you will. I think you might forsake your King and then He will bring disaster on you." The people cried out again, "We will honor the King!"

The people settled down in their homes and became comfortable and forgot their promise to honor only their King. They failed to tell their children to honor only the good King. When the leader died, the children started loving the bad kings of the land and doing what they thought was right for themselves. The children in the land forgot how wonderful their King had been to give them good things. The King heard of their love of bad kings and became angry and let their enemies come in and conquer them. The people suffered and cried out to their good King, and their King heard them and sent another leader to teach them and remind them of their promises. The people would remember their good King, ask for forgiveness, and for a time, love only their King again. Unfortunately, the people were not teaching their children to love only the good King so the people would follow the bad kings of the land. Once again the good King would allow enemies to come in, his people would cry out for help, and then the King would send a new leader to teach them. This continued for many generations until the people forgot their good King completely and did what was right in their own eyes. The King is Yahweh. The people are the Israelites. The leader is Moses. The cycle of teaching and learning was happening in the family.

Over and over again in the Old Testament the Israelites forgot God. They forgot what God had done, who God was, and they quit teaching their children about God. Inevitably, everything fell apart. Moses' final words to the people were - hear, listen, and teach your children. Don't forget. Tell your sons and daughters. Deuteronomy 4:10 says generational transference of who God is, takes place in the family.

One area where our school has tried to honor and encourage parents teaching their children is through our Bible curriculum. Perhaps this example will encourage other schools to look for new ways to promote heritage

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transference. As educators we have the role of assisting parents in making God known to the next generation. Our Bible curriculum is not a "curriculum." We do not have teacher curriculum guides, or student crafts, or colorful illustrations. Instead, we have chosen to forgo these good curriculums in order to establish the habit of parents teaching their children, generationally. We have substituted the "curriculum" for an exercise that can be done at both school and home. Regent has adopted a three-year Bible reading plan in Classes 1-8. If a family is faithful to do the Bible reading, they will read through the Scriptures three times by the time their child enters high school. Basically, students, teachers, and parents read a chapter a day. We have a daily primary and secondary objective as well as overall objectives for each book of Scripture. The Bible reading is published weekly and families are encouraged to read the Scripture the evening before we read it in class. Our Bible time is given priority during the first part of our day. This is a time to discuss, review, narrate and understand each chapter along with some devotional elements. The teaching varies according to teacher style and the age of the student. Preschool and kindergarten classes use story Bibles to teach the Scriptures, staying with the reading schedule as closely as is age appropriate. Class 1 uses a mixture of the Scripture and a story Bible depending on the specific Scripture we are reading. Beginning in Class 2, students read directly from the Scripture. The parent is the first teacher of the chapter. Ideally, children come to school having already read the chapter at home and discussed it as a family. The classroom becomes a second discussion of the passage, undergirding and supporting the parents' instruction of their children.

Every classroom is unique during Bible reading time. Sometimes students sit on the floor, sometimes they sit at desks. The reading might be teacher led, student led, acted out, include questions and answers, narration, or summarizing. Teachers sometimes stop for discussion during the reading. They may have the children keep a list of key words or repeated words. Teachers post timelines in the classroom that include the period divisions of Scripture. We also encourage conversation, questions, illustrating, and students sharing the highlights discussed at home when they read the passage with their family. One of the habits we are modeling to students is how to read and study Scripture on their own. Every day we are showing them how to look for God's hand throughout Scripture and to keep verses in the context of all of Scripture. We also sow the expectation of a lifetime devotion to daily Bible reading. As a school we defer to parents by encouraging children to return home with questions, especially ones that enter the area of secondary doctrine or denominational differences. We do this partly because as an interdenominational school we represent a wide spectrum of Christianity and partly because we wish the conversation to continue between school and home.

Encouraging and instructing the faculty is another important element of our Bible reading. Once a week in morning faculty devotions we discuss the following week's Bible text. This is one of the most uplifting, positive, and helpful moments of our time together as a faculty. Our objectives drive this, but each teacher also brings something unique to his or her presentation of the upcoming reading. This weekly meeting helps maintain consistency from classroom to classroom in the approach to the chapters. It also encourages faculty to meditate and apply the Word to ourselves before discussing it with little ones.

We asked some of our families with children of varying ages to give feedback regarding their use of the Bible readings and the effect it had on their families. One family responded, "It [the Bible reading] has helped our family stay focused on the most important thing during what is otherwise a very distracting time in life." Another parent commented, "Frankly, none in our family had ever made a conscious effort to read through the entire Bible on our own before attending Regent. I

believe that reading through it every three years has been one factor that has encouraged us to read on our own." Other families noted that the dual approach to home and school reading reinforced important concepts and kept them faithful to the task of passing on truth to their students.

No matter how God leads you to apply parents teaching their children, making it a top priority is the crucial element to success. We put Bible reading first thing in the morning to signify its importance. It may be difficult to convince parents that the kind of practices that shape truth, beauty, and goodness are worth the hard choices that come along with these habits. Sometimes choosing the very best activity over good ones is truly a struggle. Not all families will participate. One difficulty we have encountered is when children know this practice is expected by their teacher, but they have a family that is modeling rejection of a community expectation or even deception. This puts the child in a difficult position. This is one of the reasons we do not attach a consequence to failure to complete the Bible reading expectation. We encourage families through relational influence, but do not monitor those families or children who do not participate. Ultimately, we understand that parents are responsible to God for these choices, and we pray that they will catch the vision of the blessings and advantages which come when these important parts of the classical Christian education are completed.

These practices create culture. Together we touch and hold the Bible. We slog through the hard parts of Scripture, modeling how Scripture interprets Scripture. Families, students, and teachers are encouraged to read and discuss together. The practice fosters love and a taste for Scripture, love for one another, and ultimately love for God! The tool, whatever it is, can become burdensome and a requirement to complete rather than the joyful activity which it is intended. Just like the Israelites, as time passes, some families forget the joy of the practice and quit altogether. It is our calling as teachers and administrators to refill the vision cup and remind them of the joy and benefits of the practice and be careful ourselves that we do not lose the joy of it.

We have the amazing opportunity to partner with families and make a lasting influence on their future. It isn't often that parents give access to influence their family to someone on the outside. We are responsible for what we do, what we encourage, and what we model, but at the end of the day, it is the parent who is held accountable for their own children. This thought gives freedom to the school and faculty. When we have done all we can as a school to promote truth, beauty and goodness; we can trust the outcome to our heavenly Father. May our experience spark some thoughtfulness about the need to use curriculum to continually pull parents into the transference of truth, beauty, and goodness to their children.

It is not the completion of the Scripture reading in which we find reward, but in the fruits of the habit. Regent desires to give parents the tools and spur the tools on to good use, not to burden families with a task to complete. This practice has produced fruit over the years and proven to be an important vehicle for fostering family and school partnership. This is only one example of a continuing conversation to cultivate school cultures that honor Deuteronomy 4:10, "Assemble the people to Me, that I may let them hear My words so they may learn to fear Me all the days they live on the earth, and that they may teach their children."

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