The Lost Discipline of Life-Long Learning

Rebekah Trittipoe, CCP

"That I, whose experience of teaching is extremely limited, should presume to discuss education is a matter, surely, that calls for no apology. It is a kind of behavior to which the present climate of opinion is wholly favorable. Bishops air their opinions about economics; biologists about metaphysics; inorganic chemists, about theology; the most irrelevant people are appointed to highly technical ministries; and plain, blunt men write to papers to say that Epstein and Picasso do not know how to draw . . . For if we are not all professional teachers, we have all, at some time or another, been taught. Even if we learnt nothing—perhaps in particular learnt nothing—our Contribution to the discussion may have potential value.

...if we are to produce a society of educated people, fitted to preserve their intellectual freedom amid the complex pressures of our modern society, we must turn back the wheel of progress some four or five hundred years, to the point at which education began to lose sight of its true object, towards the end of the Middle Ages."

The quote is from an essay written in 1947 and presented at Oxford University by the author, Dorothy Leigh Sayers. Ms. Sayers was born in 1893, the sole child of an Anglican minister and school headmaster. Writing became a passion for this woman, authoring, among many others, Whose Body, the first of fourteen volumes centering on the main character, Lord Peter Wimsey. She wrote constantly, drawing on her expertise of modern language and medieval history. Sayers also fell in love with the stage, writing many plays. Much time was spent in meticulous translations of works originally written in Italian or the old French. Contemporaries and friends, the likes of CS Lewis and TS Eliot encouraged her to stand firm even when opposition to her work was great. Dorothy L. Sayers thrived on controversy, using logic and humor to win many battles.

"The Lost Tools of Learning", from which the quote was taken, served as a treatise on the state of education. Sayers expounded a reversion to the educative process of the Middle Ages, which included the Trivium and Quadrivium, both of which will be discussed later. Her goal for doing so is reflected in the following words written by her own pen.

"Do you ever find that young people, when they have left school, not only forget most of what they have learnt (that is only to be expected), but forget also, or betray that they never have really known, how to tackle a new subject for themselves? . . . Is not the great defect of our education today . . . that although we often succeed in teaching our pupils 'subjects' we fail lamentably on the whole in teaching them how to think: they learn everything, except the art of learning" . . . We dole out lip-service to the importance of education—lip-service and, just occasionally, a little grant money; we postpone the school-leaving age, and plan to build bigger and better school; the teachers slave conscientiously in and out of school hours; and yet, as I believe, all this devoted effort is largely frustrated, because we have lost the tools of learning, and in their absence can only make a botched and piecemeal job of it.”

Sayers argues that the Middle Ages concept of the Trivium consisted of Grammar, Dialectic, and Rhetoric. These three elements are not “subjects” per say. They are merely the logical methodology of dealing with “subjects”. It was only when the Trivium was mastered that this syllabus served as the basis or preparatory stages for the Quadrivium, a university-based study of specific subjects.

Now, back to the Trivium. There is a grammar of everything. The grammar of language seeks to establish rules and relationships for words. The grammar of math is the rudimentary relationships of numbers. Math facts are key. Memorization of multiplication tables standard. The grammar of art is a study of color and composition. It is
learning to hold the paintbrush prior to being told to “create”. Rote and rhythm are techniques readily accepted and delighted in by young children where as reasoning is difficult. The grammar phase of anything—whether it is science, history, geography, or English—lays the strong foundation upon which higher levels of learning are based.

In a school setting, Sayers imagines that the Dialectic phase begins in the upper elementary level up to seventh or eigth grade. Since children of this age are naturally argumentative, classical education urges instruction in formal logic; not as an end in itself, but as the tool that is to be applied to the all subjects, prompting “detection and exposure of invalid inference”. There is a need for logic and reason to be applied in every discipline. The “subjects”, however, provide material alone. “… but they are all to be regarded as mere grist for the mental mill to work upon.” However, no amount of dialectic process is possible without the firm foundation of the grammar phase first established.

As a child progresses in his education, he enters the Rhetoric stage. Young people begin to understand that the factual base of the grammar phase and the logical elements of the dialectic phase combined leave a gap in their thinking. What is awakened is the imagination.

“The doors of the storehouse of knowledge should now be thrown open for them to browse about as they will. The things once learned by rote will be seen in new contexts; the things once coldly analyzed can be brought together to form a new synthesis; here and there a sudden insight will bring about that most exciting of all discoveries: the realization that truism is true.”

A Rhetoric student will be equipped to express himself both verbally and in writing. He will take the lessons learned from the application of grammar and logic and apply it to a novel situation or problem. He will be equipped to defend his positional thesis in front of faculty. He will enter the Quadrivium phase (or University level study of “subjects”) having learned how to learn.

“But I am not here to consider the feelings of academic bodies: I am concerned only with the proper training of the mind to encounter and deal with the formidable mass of undigested problems presented to it by the modern world. For the tools of learning are the same, in any and every subject; and the person who knows how to use them will, at any age, get the mastery of a new subject in half the time and with a quarter of the effort expended by the person who has not the tools at his command. To learn six subjects without remembering how they were learnt does nothing to ease the approach to a seventh; to have learnt and remembered the art of learning makes the approach to every subject an open door.”

The reader may now question what point this diatribe is attempting to make, and rightly so. I do not wish to bore you with an educational philosophy we have chosen for our children. Rather, it is an educational philosophy that has great application to those who have stepped through the school door and into the waiting world. It is a concept too frequently ignored by adults.

It is my thesis that we have grown lax in our educational pursuits. I believe that as a profession, we have become lazy in a disciplined approach to learning. We want our information handed to us on a silver platter; easily digestible with little effort required on the part of the learner. We have become intolerant of lectures that espouse factual information or basic science. Rather, we prefer lectures that give us step-by-step instruction on how to perform a clinical skill. We can find thousands of Internet sites that hold a certain fascination for us. However, we dare not waste our precious time browsing a perfusion-related site. A TV news show or extra cup of coffee in the lounge at work is more compelling than reading an article in a scientific journal. Allow me to build my case.

There have been less than a handful of years since my graduation from perfusion school in 1984 that I have not been involved with AmSECT’s educational program. I have come to observe that there has been a steady digression in the desire for continuing education. The thirst for knowledge as evidenced by many new graduates appears to fade early in their professions. Few show interest in directing their recently acquired perfusion training into something of substance outside of their daily jobs settings. Perfusionists now mature in the profession give an air of apparent disinterest.

My comments are not based on attendance at meetings. Over the years, AmSECT has provided many opportunities for learning, most of which have been well attended. However, look around. By day’s end, what percentages of attendees remain in their seats? How many find it more reasonable to visit with friends in the hallway at the expense of a lecturer speaking to an empty room? And how many sign-in at the beginning of the day to tally their CEUs, only to vacate the premises shortly thereafter to escape to the greens of the golf course?

At the 2003 Las Vegas convention, I conducted a survey of AmSECT members and nonmembers alike to determine meeting format preferences and attendance patterns. What I found was that 64% admitted that they attended no more than one-half of the sessions or only those sessions that held clinical significance. This preference contributed to the fact that a mere 13% stated that they would attend all offered sessions. Further questioning revealed that 73% of those interviewed people were inclined to skip lectures that were in the late afternoon of a full day meeting.

Lest you think I am being overly critical, give me a chance to explain my position. There is no doubt that meetings can—and should—provide a wonderful time of refreshment from the routine of doing cases and taking

JECT. 2003;35:112–114
call. The informal exchanges between meeting-goers can be extremely valuable. Undoubtedly, there will be some topics that are more personally appealing than others. Nevertheless, many (78%) express that if meetings were in a half-day format, they would be much more likely to attend each and every session. Others, though the clear minority, prefer and say they would consistently attend a concentrated full-day format. AmSECT is expending great effort to organize its coming meetings in an appealing format; one that would encourage high attendance rates at every lecture. Some will be half-day formats at resorts with others being full-length days in standard hotels or at universities. AmSECT will do whatever is reasonable to meet the desires of their clients. However, all the logistical rearranging in the world will not address the fundamental issue at hand; the lost art of life-long learning.

I do not suggest that there exists no perfusionist committed to learning. What I do suggest is that most of us are a product, at least in part, of an educational system that places little premium on the discipline of self-study. We have grown up in an instant society that demands instant gratification. We hear teachers say they don’t want to “burden” the student with memorization at the risk of stifling creativity. Then, we hear those same teachers bemoan the fact that their students cannot understand what they read or apply a mathematical principle to a novel problem.

I concur that much of what I learned even in perfusion school is now a faint memory in the recesses of my brain. I have gained considerable practical experience in my nineteen years of practice. However, I must admit that the factual basis on which that practice was founded has now grown hazy.

I can still remember those golden days of late summer when the smell of freshly sharpened pencils and a new patent leather purse gave hint to the excitement of a new academic year. I organized my notebooks and dutifully covered each textbook. It felt so good to sit at my desk engaged in the process of learning, checking off each task in my assignment book. Inevitably, however, the luster of the patent leather would dull, as would the pencil points. Fall would turn into winter and winter into a cold and wet spring, the level of educational excitement falling in parallel with the rain. Eventually, nature would run its course and the arrival of late summer would stir the latent embers, building once again a fiery desire to learn.

I propose that we could all benefit from once again sharpening those pencils in preparation. We may have focused so heavily on the how-tos of perfusion that our grammatical basis of science, anatomy and physiology, hemostasis, anatomy, pharmacology, and the like may have crumbled beneath us. When questioned, we have not the resources on which to argue a point or reach logical conclusions. “Because we have always done it this way” holds no great sway. Neither do we have the tools readily accessible to address new questions in need of answers.

Let us return to the basics so that we may be complete in our knowledge. Let us not emphasize clinical practice without a thorough understanding of the “grammar” behind the technology. Though the teacher has a responsibility to effectively teach, let us not grow weary in the discipline of being a student. Let us enter the classroom with rapt attention, forcing our minds to focus and to analyze. Let us love learning for the sake of learning, not for the monetary benefit it could bring. Let us set forth personal educational goals and work toward realizing them. Forgo the sitcom. Start reading. Start teaching. Keep learning life-long.

“For the sole true end of education is simply this: to teach men how to learn for themselves; and whatever instruction fails to do this is effort spent in vain.”