



President's Angle

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One of the reasons I enjoy teaching is this thing called “summers off.” I turned my grades in several weeks ago and now I have nothing to do for the entire summer – **not**. As stated in a previous column, my motivation for work and professional participation must extend well beyond a paycheck and my selfish preferences. FYI, I am deeply committed to development of our collective professional capacity and see that as a journey, not as a destination. Yes, my summers are also quite busy, but enjoyable.

I hope to keep this column short, but in keeping with previous rhetorical questions about “learning how to learn,” I will also encourage the reader to ponder issues that may extend beyond the obvious. In the May 2009 President’s Angle, I recognized a number of persons who keep NMPS running smoothly. Yes, that was a good start, but I have also come to realize that there are many others who are making valuable contributions. Many talented dedicated persons are members of NMPS and I am humbled to serve as your President. To everyone doing a good job day after day – thank you! Keep it up. The collective finesse with which we do our work contributes to the integrity and reputation of our profession. Using the Biblical phrase (Matt 5:15); let’s not hide our light under a bushel. And, oh yes, my previous comment about the NMPS President having less to do after the Annual Conference – I must have been dreaming. That simply is not the case.

Elsewhere in this issue you will find a report on Height Modernization and the Precise Digital Leveling Workshop held in Albuquerque in May, 2009. Be sure to read it and talk with persons who attended. I see that workshop as a step in the right direction and evidence we are “doing it for ourselves.” I will do what I can to build on the enthusiasm exhibited by those participants. Our professional journey can be an enjoyable one if we continue to share our successes and join forces to meet the challenges ahead.

Education: What is the difference in learning and learning how to learn? I do not have the answer but I invite each reader to give it some thought. One event that made a difference for me was a fluid mechanics class at the University of Michigan in which the professor was also the author of the text. Now fluid mechanics had a reputation of not being an easy class and Victor Streeter was a no-nonsense professor. Upon returning an assignment in which the class performance was less than stellar he commented, “Look

- as engineers, people's lives will depend upon your understanding and correct use of the concepts, not just your ability to use an equation or piece of equipment." I think many will agree that rote learning can be beneficial. We all do it. But as an educator I will push concepts and as surveyors (boundary, measurement, and development professionals) we are judged, in part, by how well we apply and use surveying concepts correctly.

Without carrying that logic very far, I am a victim of my own scenario. I am not an electrical engineer and I struggle to understand what happens with all those bits and bytes chasing around in my computer or GPS receiver. In modern practice, most of what we do involves or relies on electronic signal processing. We need to rely on others for competent application of concepts in their domain and our clients need to rely on our competent application of surveying concepts. I see the spectrum between extremes of rote applications and "writing the book" as continuous and including many concepts. The point is not where we are on the continuum but in what direction we are moving. In my case, I am grateful for the opportunity I had to write a book on spatial data models but in other areas I am closer to the rote end of the spectrum. Nevertheless, I am committed to progress and enjoy learning in other areas. Incidentally, just because I wrote a book does not mean I've arrived there either. Watch the professional literature for evidence that I did not go far enough.

More to the point of learning and learning how to learn, I offer two imperfect analogies - walking versus learning how to walk and production versus building tools of production. You, the reader, will certainly think of others. Learning how to walk is fundamental to many life experiences. How do we learn to walk? Some, but not all of the learning elements include desire, example, encouragement, practice, failure, and more practice. Where does understanding fit in? Maybe that comes later. To learn how to walk, you must do it. But, knowing how to walk does not make one an athlete. To be a successful athlete one must practice, practice, practice. But the successful athlete will also devote time and effort to understanding concepts such as diet, development of muscles, lung capacity, endurance, attitude, and steroids (?).

The production example may be out of date. The Industrial Age is past and many of us have come to grips with living in the Information Age. Even so, the standard of living we enjoy owes much to those who "make things." The question I wish to raise is who makes the tools used in production, e.g., generators, welders, lathes, grinders, trucks and robots? And how do they make the tools used to make those tools? I don't have the answer but enjoyed reading the book, "A Whole New Mind: Moving from the Information Age to the Conceptual Age" by Daniel Pink. He has much to say about how we marshal brain power in supporting activities of modern society - on a global scale. I find it fascinating to read about the endless potential and opportunities that are available to those persons who take the time to understand and apply fundamental concepts. I submit that even though we know how to learn, we should also pay more attention to how and what we learn. It is an on-going effort and can be enormously satisfying.

In each column, I try to provide a clue as to what will be in the next column. It occurs to me that success in many endeavors involves two separate issues - content and process. Both are required and should be used in concert. Is one more important than the other? Or, what happens if one is promoted at the expense of the other? Oh my . . . that is a huge can of worms - stay tuned. §