

PRACTITIONER TO PRACTITIONER

NATIONAL ORGANIZATION FOR STUDENT SUCCESS

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The NOSS *Practitioner to Practitioner* publishes articles of interest for developmental education professionals including administrators, faculty, learning assistance personnel, academic counselors, and tutors who are interested in the discussion of practical issues in post-secondary developmental education. *Practitioner to Practitioner* is published electronically twice each academic year. Articles in *Practitioner to Practitioner* are indexed in ERIC.

NOSS *Practitioner to Practitioner* Submissions

Articles should relate to issues that inform and broaden our understanding and practice of teaching and learning in developmental education. The subject of the article may emphasize innovative approaches, best practices, how meaningful research affects teaching and learning, or techniques to enhance student performance. Review the “Call for Manuscripts” on page 2 for more information.

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MISSION

NOSS exists to assist education professionals in making a positive difference in the lives of students.

NATIONAL ORGANIZATION FOR STUDENT SUCCESS
PRACTITIONER TO PRACTITIONER

"Promoting Communication among Education Professionals Who Care About Student Success"

Call for Manuscripts

Practitioner to Practitioner is a publication of the National Organization for Student Success (NOSS). NOSS invites articles of interest for professionals in higher education that relate to issues which inform and broaden members understanding and practice. The subject of the article may emphasize innovative approaches, best practices, or techniques to enhance student access, performance and/or retention. Re-searched or non-researched articles are accepted. If researched, then the article should include references.

Please follow these guidelines when submitting your manuscript:

- There is no deadline for submission. All submissions are accepted for review at any time. *Practitioner to Practitioner* will be published depending on the number of manuscript submissions. Issues are published electronically on the NOSS website.
- Articles are written for faculty, counselors, support service professionals, and academic administrators.
- The article must be typewritten. *Practitioner to Practitioner* articles are generally between 1200 and 1500 words and follow AP Style.

- References, citations in the text, tables, figures or a bibliographic section are only necessary with researched articles.
- The body should be double-spaced with one-inch margins, 12-point font. Do not justify the right margins.
- The manuscript must include a cover sheet with:
 1. Title of the article
 2. The names of the author(s)
 3. Job title and employer of each author
 4. Name, address, and email of author responsible for correspondence.
- The subject matter must be relevant to the journal's audience.
- The manuscript must not have been published previously nor be scheduled for publication in any other publication.
- Manuscripts must be electronically submitted in .doc or .docx format as an attachment to an email addressed to practitioner@thenoss.org
- NOSS will acknowledge receipt of manuscripts via email within ten days.
- Articles are **not** refereed.
- All communication will be with the lead author, who is responsible for all communication with any additional author(s).

NOSS Practitioner to Practitioner

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Back to School: Everyone Deserves a Second Chance

Dr. Michael Rose

Mike is and has been one our field's most influential and contributing professionals. His research has been widely recognized and valued. Many of you have enjoyed his books, some of which include the following:

- *Lives on the Boundary*
- *Possible Lives: The Promise of Public Education in America* (my favorite!)
- *The Mind at Work*
- *Critical Strategies for Academic Thinking and Writing*
- *Literacy: A Critical Sourcebook*
- *Why School: Reclaiming Education for All of Us*
- *Back to School: Everyone Deserves a Second Chance* – new edition is being published in 2020

I had the pleasure of talking with Mike about his current work. His passion and commitment to our students provided me with hope and inspiration. The content is exactly what *Practitioner to Practitioner* is all about: sharing best practices with those of us who are working with students in higher education. Just like *Practitioner to Practitioner*, I don't want his book to be a best kept secret. I invited him to write an article and to allow me to share his work. Thank you Mike! How inspired NOSS is!

—Dr. Deborah Daiek

“One of the biggest debates in public education today is over how to best educate student teachers for the rigors of the classroom. Here is a thoughtful piece on the essence of teaching and the kind of teacher education programs we really need from Mike Rose, who is on the faculty of the UCLA Graduate School of Education and Information Studies and author of “Back to School: Why Everyone Deserve a Second Chance at Education.” This is longer than your average blog post but well worth the time, and is the first of three pieces on teacher education by Rose.”

—Valerie Strauss

When I was a young teacher starting out many moons ago, I would hear older teachers at conferences or professional development sessions talk about all they learn from their students. I didn't buy it. I mean, come on, after studying mathematics or literature for four years in college and then in graduate school, you're telling me that a middle schooler or tenth grader or college freshman can

enlighten you about solving for unknowns in algebra or how metaphor works? That sounded like happy talk to me.

But as I explained and illustrated metaphor with different groups of students, in reference to different poems, I found myself going back to my college notes, to reference books, to other, more experienced teachers. I began to be more articulate in my explanations and more supple in my responses to questions—in fact, was starting to anticipate questions, which led to reading more poetry, looking for just the right examples. And then there were those times when the meaning of a metaphor in a given poem—let's say an abandoned house, or a clock, or a storm forming in the distance—was well established by critics. We know what the metaphor means and how it functions—and then a student comes up with a credible different take on the poem. Maybe its meaning isn't so settled after all. I'll be damned if I wasn't learning something about metaphor, though not in the way I had naively imagined when I was beginning my ca-

reer—not simply acquiring more factual information. I was learning about metaphor through interacting with others, trying to help them understanding how literature works and, in the process, coming to better understand and appreciate literature myself, literature as a living thing. Teaching was affording me a dynamic way of knowing.

The longer I do this work, the more I've come to appreciate the range of what teaching enables us to know, the wide scope of human experience it opens up to us. Think of all those times in classrooms or student conferences or even in a casual encounter on campus when something revelatory happens: A student has an insight, makes a connection, thinks

her or his way into and through a problem, confronts a limitation, discovers something new about a subject, discovers something about him or herself. These experiences are so much a part of the work we do that we might not pay much attention to them in the moment, and semester by semester they likely fade from memory. But the fact is we are witnesses to something remarkable that our teaching helped foster. I can say now with a little more humility but, paradoxically, a little more wisdom than I had at the beginning of my career that, yes, we do learn from our students... and learn about them, learn about each other and learn about ourselves. Our work gives us a line of sight into what makes us human: exploration, challenge, courage, and growth. ■



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Join practitioners from across the country and abroad for outstanding professional development opportunities. More details coming soon.

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4th National Math Summit

February 23-24, 2021

Westgate Resort and Casino, Las Vegas, NV

The 4th National Math Summit begins at 1:00 p.m. on Tuesday, February 23rd, and features a keynote speaker, concurrent sessions and more. The program will conclude Wednesday, February 24th at 5:00 p.m. This is a pre-conference to the NOSS 2021 conference and requires separate registration. The Math Summit is co-sponsored by AMATYC, NOSS, and Paul Nolting. Supporting partners include the Charles A. Dana Center, Carnegie Math Pathways/WestEd, and the Mathematical Association of America.

[Register here.](#)

Words of Wisdom from a few NOSS Leaders

Several former and current NOSS leaders wanted to share some words of support and encouragement during this time of uncertainty and confusion. A global pandemic was certainly something no one ever expected, but we will continue to work together to help our students achieve success.

My Tip

Wes Anthony, Ph.D.
Interim Director, National Center
for Developmental Education

Developmental Education is being taught in a variety of new ways in light of COVID-19. Be sure to choose technology that fits the student population skill level in your courses. Plan ahead, but be flexible. Use asynchronous and synchronous methods of instruction. ■

Let It Shine

Annette Cook

As an educator for more than 30 years, with a deep passion for student success, I always try to shine a light. Even though doing this is a real challenge in times like these, I think it is still critical to let our students, colleagues and all those around us see that light. I encourage all those in education to focus on students, helping them find their light. As educators, we must make decisions based on what's best for students, and daily interactions, which will provide a path of light. If student success is our passion, we can't help but to be a light, no matter how dark the world may seem. As a parent, I tell my grown children, "Go be a light!" I'd like to send the same charge to our membership. Let it shine! ■

Make Some Lemonade

Dr. Rebecca Goosen

Sometimes we stare so long at a door that is closing that we see too late the one that is opening.

—Alexander Graham Bell

This may be where we are now. One door has closed and a new one is about to open because of COVID 19. How many of us have lamented that developmental education is under attack by those that do

One Day at a Time

Dr. Rosemary Karr

The pandemic's effect on education has truly been a one-day-at-a-time scenario. Information, technology, opportunities, and requirements are constantly changing. After teaching for more than 40 years, I felt it was an opportunity, albeit a challenge, to learn new techniques that can be implemented in future semesters even for face-to-face instruction. Initially, I thought I could offer Zoom sessions at the same time as our regularly-scheduled class sessions. Through the process, I realized students had to share computers, become full-time caregivers, learn to deal with slow internet, and see changes in job hours (reductions and increases). Thus, offering synchronous sessions worked well for some, but asynchronous options needed to be available for those unable to "attend." I needed to be flexible, open-minded, and supportive to make this work.

In my college algebra co-requisite class, one student had five children, including one with special needs, and a wife who was also working from home. Yet he attended class via Zoom with me every Monday, Wednesday, and Friday morning. His tenacity was nothing less than remarkable. Professors would like to know how to instill this in all of their students! My advice ... stay strong, stay flexible, stay healthy, and continue to do what you love doing—teaching students how to learn in any environment! ■

not really understand who we are yet we do not understand how to voice what we know works? How many of us have opposed on-line learning for developmental education because we thought developmental education students lacked skills that would assist them to be successful in that environment? How many of us want to use an alternative learning technique but have been stymied by colleagues, administrators or outside

sources? How many of us are governed by placement criteria that does not measure accurately what a student is capable of doing or rules that were developed by legislators? Now is your time to walk through that door to make change happen.

Many of these thoughts may be true, however, we now have the opportunity to be creative and imagine new pathways for those students that come to us underprepared. Many of you have wanted to try new things but work at institutions that do not have the resources or leadership that facilitate those changes. Now is your time to speak up, show others the way and progress through that door to show our students they can do what ever we need them to do, be successful and complete their academic journey.

We have been staring at that door too long, feeling like we have been cast aside without considering the alternatives. We need to be aware of the new doors opening and how to be creative and reactive to those doors or opportunities in ways we have never imagined. That might be on-line learning, corequisites, the use of multiple measures or accelerated course work for your students.

This could also be an opportunity for you to have personal growth. This may be the time you write that practitioner article about what you see in the classroom, that especially successful instructional technique you have or what the struggle of your students actually is and share it with a legislator. Tell the story of the young mother at home trying to educate her children who are doing school remotely and her own on-line learning with only one computer, inefficient Internet service and no job. The cupboards are bare yet she was able to successfully complete her course work. How did she do that? What did you do as the instructor that assisted in meeting her educational goals and social needs? What support services needed to be in place? Tell her story. You never know what will happen.

Perhaps you volunteer at the food bank in the neighborhood or shop for a family that could use the help to give you purpose and them hope. You never know what that relationship or contact may grow into. Maybe you use this time to understand more deeply

those that are not like you or come from your background through reading, reflection, research or virtual chats.

Our college went from primarily all face-to-face courses in developmental education to 100% on-line with little preparation. One week we were on spring break the next we did not have classes and the next congratulations you are now an on-line student! Talk about shock therapy. Luckily we have our entire faculty at least have a presence on Blackboard, we embedded mentors of faculty who had a good history of teaching remotely into classes of those who were new to teaching this way. And we gave people the grace to take some time to improve their skills recognizing that you do not become a great on-line teacher over night.

We also have the luxury of employing retention specialists on each campus that we could embed in courses to help faculty monitor students that appear to be struggling, not signing into the class or missing assignments and then they could build a personal relationship with the student. They called students just to check in, and provide them opportunities to have their needs met. The students were very grateful that someone noticed them and reached out to the student personally. We even had a virtual contest with them and the winners got two large pizzas delivered to their houses. They loved that and we did too.

No one is going to give you the platform you need to express what you know about developmental education so be ready to take it. I recognize that collectively there are years of wisdom in our membership and we are never asked to contribute. When I was President at the Denver convening I remember standing before you and saying..."They gave me a gavel and a microphone, do they not know how dangerous that is?" I took the opportunity to talk about who we are and what we know. I continued and still continue to talk about the journey our students undertake everyday without apology. My challenge to you all then and now is to take each opportunity to grow, be vocal and understand we are not all in the same boat and most importantly...

When they hand you lemons make lemonade!
Go make some great lemonade!

Guidance to our Membership and to other Communities in Higher Education

Dr. Patricia Levine Brown
Assistant Professor Leadership and Educational Studies, Reich College of Education

In a recent letter to the Appalachian State University community, Dr. Melba Spooner, Dean of the Reich College of Education, stated, “Words are inadequate right now, but I want to acknowledge the grief and pain that is being felt across our country and in our local communities.” Dr. Spooner expressed exactly what I am feeling. As an educator for more than 30 years it is hard to make sense of some of what is happening in our society, and words do simply seem inadequate.

I have long struggled with racial injustice and the practices resulting from inequality, discrimination, prejudice, and bias. Fundamentals of injustice directly impact the student population I have served throughout my career. This is why I, like so many other educators, continue to push to ensure access and opportunity for the underrepresented, economically disadvantaged, learning disabled, and underprepared.

So many who have come before me have devoted their lives to putting “best” practices into place for those who have little or no voice in established policies and laws that directly affect their lives. We all come from different backgrounds and identities with varying perspectives and understanding. We should celebrate our differences and use them to our advantage. Do not be afraid to challenge those who would take what rightly belongs to human beings in the free world—the right to speak against injustice, cruelty, and inhumane treatment—and discard it as unimportant or immaterial.

In a call to action, I would ask that we stand united in our continued efforts to stay connected and support those who now need us more than ever—those whose voices are otherwise silenced. Please know how important you are in the lives of so many, and remember how much more we can accomplish together rather than apart.

All My Best,
Patti

Just Breathe

Dr. Deborah Daiek,
Immediate Past President

A lifetime is not what is between the moments of birth and death.

A lifetime is one moment between my two little breaths.

The present, the here, the now,
That’s all the life I get.

I live each moment in full, in kindness, in peace,
without regret.

—Chade Meng

For many of our students, these past few months of quarantine may have left them feeling as though they fell through Alice’s magic rabbit hole; they can’t navigate their lives very well. They aren’t alone—many of us are experiencing emotional illiteracy—this is our first pandemic, which has many of us also stuck in pools of fear and anxiety. For those of you who work directly with students, I will share how you can help to alleviate some of the negative emotions they are experiencing. One small way is to share one or two breathing techniques with your students.

Breathing is more than you may think. We have been breathing all of our lives but it isn’t something we ever really think about; it’s something our amazing bodies just do involuntarily. Our bodies take an average of 20,000 breaths a day. We inhale, we exhale. We don’t realize how wonderful breathing is, until we can’t. Right now, with the Coronavirus, breathing has become the focus of many discussions. We take—or used to take—it for granted. If you are not breathing correctly, your body can be drained of oxygen, leading to many negative consequences. Our skin suffers without a flow of fresh oxygenated blood provided by deep breathing; our muscles tire more easily during workouts, leaving us constantly tired and lethargic. Poor breathing habits lead to poor cognition—leaving us unable to fully focus.

Most of us breathe very shallowly—especially when we are stressed out. We don’t breathe from the abdomen which allows us to optimize our breath capacity. We breathed correctly when we were born but most of us develop poor breathing habits as we age.

continued

Breathing is a critical step in learning how to meditate; however it also plays a critical role in our health. It impacts our entire body. Good breathing can:

- help prevent insomnia
- reset your nervous system – creating a state of calm
- lower blood pressure and the heart rate
- support detoxification—rids the body of carbon-dioxide
- boost your immune system
- aid digestion
- increase the metabolism
- improve circulation
- fuel every cell in your body and wakes up your brain, which promotes clearer thinking.
- improve thinking (writing, speaking, test-taking, and working with others)

Additionally, when you breathe deeply, good brain chemicals can be released: endorphins, oxytocin, dopamine and serotonin. (Twenty-percent of your oxygen is needed for your brain alone!) By learning to control the breath, students can learn to control the thoughts of fear and other negative emotions that may prevent them from achieving their goals. Most importantly, deep breathing helps students (all humans) to manage everyday stress so that they can enjoy life—be in joy. Change does not happen overnight, but is a day-by-day process. You can show students that deeply focused breathing is one the greatest pleasures in life! I will share two powerful yet easy breathing techniques which you can pass along to your students.

Technique #1 • Square Breath or Box Breath

This technique calms the body, helps you to unwind, sleep. Helps you to “re-boot” your body-mind system. It’s good for those times you can’t seem to turn your head “off.”

There are nerve bundles under the diaphragm, attached to the bottom of your lungs. When you begin to breathe irregularly (shallow/rapidly) from anxiety, it can trigger a response to your body-mind system that may have the opposite effect of what you want, especially if you’re trying to sleep, take an exam, or give a speech. The Square Breath is a way to reconnect your body-mind system. It deactivates the alarm system within your body, and calms it. It is a great breath to lead you into meditation.

- Sit comfortably with your spine straight and both feet flat on the floor.
- Relax your shoulders.
- Place your hands comfortably on your lap or loosely by your side.
- First, take a deep breath, expanding your chest/ribs as much as possible, then complete a deep double-exhalation—open mouth making a ha-ha sound as you exhale. Push all the air out with the ha-ha exhalation.
- Next, inhale to the count of five, breathing into your belly.
- Hold to the count of five.
- Exhale to the count of five.
- Hold your breath to the count of five.
- Repeat four more rounds.
- Gradually increase the count – as long as you are able
- Inhale to count of five
- Hold to count of five
- Exhale to count of five
- Hold to count of five
- Repeat

Technique #2 • Happiness Thump

This technique is a quick and effective way to calm the body—great for adults/children who are afraid or anxious. Underneath the breast bone is the thymus gland—which is known as the happiness point. Gently thumping it along with deep breaths exudes a calm feeling. It supports the immune system; it’s your immune system’s surveillance gland. Thumping it gives it a boost, makes you feel good. When added to breathing and a smile—it has very healing affects.

- Using your middle and index fingertips, tap quickly on your chest... just below the neck. As you tap, inhale deeply... then blow like you’re blowing out a candle.
- Inhale deeply.
- Exhale... quickly pushing out air... again like you are blowing out a candle.
- Smile as you are doing this technique. It activates positive chemicals in brain.
- Repeat several times. ■

New Opportunities for Equity-mindedness

Jeni Ussery, Faculty, Phoenix College

At this year's NOSS meeting in March (as I write this, only a month ago, BUT WHAT A MONTH IT HAS BEEN!) the Equity, Access, and Inclusion Network (formerly the Diversity Committee) sponsored a conference session in which we discussed various ways in which equity could or should inform our practice. My section of the presentation focused on equity in assessment, on my personal journey of growth in how I perceived and implemented equitable classroom and course assessments, and on facilitating an exercise in which I asked participants to critique an anonymous syllabus in terms of how it might disenfranchise various communities of learners (spoiler alert: it was my syllabus from my first semester of teaching and it was pretty terrible).

Little did I know that a week later, we would all be reconsidering our own syllabi as colleges and universities around the country rapidly moved most instruction online to cope with the challenges of the COVID-19 virus. The sudden and dramatic move to online instruction is not my topic here today: [excellent articles](#) have already been published and widely dispersed over the past month by wiser souls than I regarding the ways in which we should move to emergency online teaching.

But when the adjustment has been made and we start to move out of emergency mode with regards to our teaching, our students' learning, and maybe even the world, how can we learn from this experience? How can the changes we have made in response to a global pandemic highlight the ways in which we might better serve students? How can the extraordinary flexibility we have demonstrated be leveraged in our future courses? In what ways might this abrupt and unasked for interruption in our practice help reveal the ways in which we were stuck in old routines which no longer served us or our students?

Most of us have heard stories from our students at this point about what their lives are like right now. They've lost a job. They're at home with younger siblings and are expected to keep them safe. They are being asked to work double shifts. They must make their

own facemasks. They are suddenly homeschooling their children. They are out of toilet paper. They went home for Spring Break on March 6th and now can't get back. They are cut off from seeing their extended social network. They do not have the technology they need to transition to online learning. Their family member has become ill and needs care.

In response to these needs, many of us have made changes to assignments, our parameters for demonstrating success, and our requirements for engagement in the course. We've tested countless iterations of conferencing software, trying to find the best fit for our students and the needs of our class. We've slashed assignments, focusing with laser precision on the best ways for students to demonstrate competency in our course objectives. We've given extensions, gone asynchronous, learned how to create captions, and created veritable Rube-Goldberg machines that allow us to show a PowerPoint, our faces, and us drawing on a legal pad to our students at the same time in a YouTube video. We have found new and innovative ways to connect current events with the content of our course, ensuring that we are making this learning relevant to our students now. We have allowed modifications for assignments—a reflection paper has become a reflection video; a capstone project on local history has become a crowd-sourced student blog on daily life during COVID-19; and internships, work experiences, and other service-learning opportunities are being reinvented at every turn.

We are all bound in a common purpose to help our students find success. We may have differing beliefs about what best serves our students at this time (I have seen, among my colleagues near and far, a lively and spirited debate about synchronous versus asynchronous classes) and we may have constraints upon us which we do not control (the particular technologies that are licensed or used by our institutions, for example). But as we are making the choices we do have available to us, we are actively considering our students and their stories—the student who doesn't have a computer at home and is trying to finish the

class on her mobile phone; the student who works in healthcare and is finishing a double shift to come home to try to finish an essay for his English class; the student whose grandfather has suddenly fallen ill. These situations are not unique to this time, but they take on a new poignancy in a time of global pandemic. I have heard from many of my colleagues around the country about the extraordinary grace that they are extending to students at this time for circumstances beyond their control. What I ask is that we remember this: our new perspective on the lives of our students, our flexibility in meeting their needs, our capacity for grace—I ask that we remember all of this as we are planning our courses for the future. These situations are not unique to this time, and I hope that our extraordinary work to meet our students' needs in the spring of 2020 turns out not to be extraordinary at all.

As you look at your syllabus moving into the future, I hope that you question it critically and then recognize where you already shine. I hope that you dig into critique of your own practice as diligently as the participants in our conference panel dug into my terrible syllabus, then acknowledge the growth that this critique represents. I hope you consider how each piece of your course serves the broadest possible contingent of students. I hope that you write and rewrite and rewrite your assessment schema, considering carefully the student populations for whom that schema will be helpful and for whom it might be disenfranchising. I hope, most of all, that you do all of this with your students, our students, all students, in mind. We have, in the midst of this epidemic, the opportunity to do real, lasting, and meaningful work to provide a more equitable educational experience for our students.

The Role of the Professor in Adult Student Success: Teaching Today's College Students to Succeed

Dr. David Otts

In the first two decades of the 21st Century, higher education has faced several challenges including decreasing enrollments, emphasis on getting students through to graduation, remote teaching, and an increasing reliance on online teaching. These challenges raise three central questions: How has the role of the professor in student success changed? What characteristics does a teaching professor require? What influence does the professor have on student success?

Answering the role question requires examining the typical professor of the second half of the 20th Century. The role of the professor in the past derived from the three-fold requirements of higher educational institutions, research, service, and teaching, basically in that order. The role of faculty members revolved around research, presenting at professional conferences, publishing articles, and primarily lecturing for classroom teaching. Polya (1973, p. v) described this type of professor as depending on dull routine in the classroom. The result lessened interest and slowed intellectual development in students. This professor wasted the opportunity to engage the students.

Polya (1973) also described a second type of professor, the teaching professor, who answers the

characteristics question. Instead of routine drills, this professor engaged the students with challenging discussions and problems, sparking their curiosity. Further, the teaching professor enriched the students through directed activities and leading questions. Students were encouraged and stimulated to develop independent, critical thinking skills. Therefore, the students became empowered to present their own thoughts and showcase their own skills.

The answer to the influence question explains why professors need to improve their classroom teaching. As Boylan (2002) wrote, "The single most important contributor to student success is the quality of classroom instruction" (p. 68). True teaching professors teach actively; mentor; communicate in person, remotely, and online; provide nonacademic counseling (different from academic advising); conduct and guide research; serve the professional communities at campus, state, and national levels; and present and publish. The greatest change from traditional college lecture to teaching for student success involves direct engagement with students, whether on-ground or online.

A well-established body of literature attests to the effectiveness of active, engaged, student-centered

teaching and how the teaching professor contributes to student success. Both Carroll (1963) and Bloom (1968) identified the quality of teaching as one of the five main variables involved in Mastery Learning. In his 25-year retrospective, Carroll (1989) explained that teaching quality grew from the characteristics of the teacher, the preparation of teaching materials, and the use of mastery learning procedures. Casazza and Silverman (1996) wrote about the student-centric belief system and philosophic basis of a successful college teacher. Walker and Plata (2000) found confirmation in some research that the instructor is the factor most closely related to student success when showing sensitivity to the emotional needs as well as the subject area needs of the students. Tinto (2012, p. 5) wrote about the role for the professoriate to establish clear and high expectations, provide academic and social support, provide frequent assessment of and timely feedback on student progress, and actively involve students with others in the class. Supiano (2018, April 15) reported that two papers, presented at an annual meeting of the American Educational Research Association (AERA) about introductory courses, reached the important conclusion that academic departments should use their best, most experienced faculty to teach introductory and general education courses. The first impression students have of a discipline is the first teacher in the first course. A good impression leads to better completion and retention. The influence of teaching professors extends beyond classroom or online interactions. McMurtrie (2020) reported that the 20th anniversary of the National Survey of Student Engagement (NSSE) showed about a 10% increase in the number of first-year students who discuss career plans and additional topics with professors outside of class. Seniors who reported an increase in diverse (not limited to classroom) interactions rose 12% from 2004 to 2019.

Becoming a Teaching Professor

The two professor types identified by Polya (1973) can be categorized as the unengaged professor and the teaching professor. To clarify how the teaching of each type influences student success, a comparison of major characteristics of the two types follows. Practitioners may find value in adding a self-comparison to these.

First, the characteristics of the unengaged professor:

- Primary teaching style: lecture, drill, routine, uninspiring, wasted opportunity.
- Out-of-class engagement with students: minimal, distracted.
- Primary focus: self-centric; secondary concern for students and teaching
- Professional goals: primarily promotion, tenure, reputation, research, and publications.

Second, the characteristics of the teaching professor:

- Primary teaching style: engaging, encouraging, enriching, and empowering
- Out of class engagement with students: office visits, consultations (FaceTime and Zoom type meetings for online classes), phone calls, supporting student activities (sports, music, drama, other)
- Primary focus: student-centric; cares about the person as well as the student
- Professional goals: student success in and beyond the classroom, service to colleagues, promotion, and tenure.

The teaching professor works to achieve one main Teaching Goal: Take the students from where they are and move them to or beyond where they should be when the class is over as possible. To accomplish this goal, the teaching professor strives to meet the instructional, emotional, and personal needs of students. Goal attainment means helping students achieve their personal educational goals while contributing to institutional and departmental goal completion.

Principal Teaching Guidelines: The Four E's

No single method produces the same results for everyone. No one size fits most, let alone all. Therefore, as a practitioner of 30 plus years, I offer four guidelines as a scaffold for other practitioners to build their own teaching professor model. Each person should adopt, adapt, and modify these guidelines to personalize the specifics needed to grow into the best teaching professor possible.

Engage: meet the students where they are both in and out of class, on the academic and personal levels;

remember that students are people, too. Ask them to share something memorable on the first day. Attend a recital, a play, or a sporting event where the student participates.

Enrich: require active participation; ask and listen (let them teach each other and you); provide clear, essential, and direct instruction, scaffolds, and supports. Use formative assessment and guided instruction. Begin new concepts inductively, then model how to apply the concept deductively to similar situations. Provide opportunities for students to help themselves and each other. Use humor appropriately and set the standard high.

Encourage: use meaningful praise and provide timely, specific feedback (corrective, not punitive), say please and thank you often and with true feeling. Remember what being a student was like. Respond positively to students. Find something they can contribute to the class and let the other class members experience the contribution.

Empower: provide informal and formal opportunities for success; offer choices and a time to shine as individuals and in groups (See the Appendix for examples that I use in freshman mathematics classes).

What I have learned about the practice of teaching: 8 tips to adopt and adapt:

1. Meet them where they really are. Listen to what they say, as well as what they do not say but need someone to hear.
2. Provide a reason to learn. Use directed reading activities, challenges just within their grasps, and opportunities to shine.

3. Actively engage students in the learning process. Ask them what to do or what they see. Allow a student to answer another student's question.
4. Model the behavior expected. Show what to do when making a mistake; how to mess up, 'fess up, fix it, and learn from it.
5. Set high expectations and require stretch goals, then provide scaffolding and support so that students pursue and achieve them. Involve students singly and in small groups in class activities. Allow students to share insights and ideas.
6. Remember that students are people who sometimes struggle to overcome exterior obstacles (those outside of the classroom) and provide assistance. Know and direct them to the proper campus agency for help that exceeds the instructor's ability to provide. Lend an ear when a student needs someone to listen. Keep chocolate and peppermints on the desk.
7. Delegate a learning and reporting tasks to students in small groups and provide minimal direction. Give them their task and free them to accomplish it (the creativity is amazing).
8. Reduce the anxiety. Students need someone they can depend on. The need someone who will find a way for them to be successful at some personal level.

A personal goal I keep in mind: Become the teaching professor I would have wanted to have as a student.

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Appendix

Group Guidelines and Topics for In-class Presentations (Dr. O)

General guidelines:

- All presentations must use a spreadsheet, Prezzi or PowerPoint presentation, a poster, or typed documents on the document camera.
- Each group member must verbally present some of the information during the presentation and identify the role he, she, or it had in crafting the presentation.
- Presentations must be at least 10 minutes and at most 20 minutes long.
- Dr. O determines any extra credit earned by the group. (Appropriate use of visuals, music, and humor will be rewarded)

Topics:

1. Forensics: Determining the relationship of limb bone lengths to height. You will measure the upper arm and lower arm bones and height of team members, then find a method to calculate the height when you know the length of the arm bones.
2. College costs: Determine the fees and tuition for a bachelor's degree at MTSU for BOTH a 4- and a 5-year bachelor degree program for a student attending full time (minimum of 12 hours per semester), plus compare in-state to out-of-state costs. You may use a standard 120-hour degree or a specific degree program for one of the group members. You need to decide whether you will complete your degree with or without taking summer classes.
3. Using Roman Numerals: Explain the what, when, and how of Roman Numerals and show at least 7 examples of modern uses, with evidence (photos from around town, or other evidence).
4. Probability: Define theoretical probability, then use it to calculate all the theoretical probabilities of rolling a sum of a one through a twelve inclusive on two fair dice. Explain how each one was calculated and present your results in a Table of Probabilities, including the odds in favor and against rolling each number. Point out interesting probabilities and patterns that you find (same probability for different sums, most likely sum, and least likely sum, for examples).
5. Sets: Use a standard deck of 52 cards to explain the following concepts from sets: Universal set, Null set, elements of a set, Cardinal number of a set, subsets and proper subsets, union, intersection, show how to calculate and then demonstrate all possible subsets of sets with 3 and 4 elements, the Cardinal Number Formula for sets: $n(A \cup B) = n(A) + n(B) - n(A \cap B)$.

Alternative Demonstration: Use Venn diagrams to demonstrate all the above. Include diagrams with elements inserted and the same diagrams with shading.

6. Counting: Dr. O gives a 10-item vocabulary quiz with each unit test. Explain the counting process needed and use it to determine the total number of ways that he can arrange the key for each of the following quizzes:
 - 1) 10 terms and 10 definitions
 - 2) 10 terms and 11 definitions
 - 3) 10 terms and 9 definitions (one used twice)

Next, calculate the probability of guessing all 10 items correctly as a rational fraction and display all results in a Table of probabilities.

7. Financing a new vehicle: You need to buy a new vehicle. You have \$8000 for a down payment and can get a 1.9% loan. Using data from www.edmunds.com, compare the price, interest on the loan, total cost, and monthly payments for a 48-month loan, and total cost to purchase each of three vehicles: 1) a compact car, 2) a mid-size car, and 3) a small SUV.

An alternative: use the same data to compare two hybrid vehicles.

8. Explain how you could use Polya's Methodical Approach to Problem Solving to solve the following. Remember, you must show how you applied all four steps of Polya's Method (1. Understand the problem; 2. Devise a plan; 3. Work the plan (include checking the process and results); and 4. Reflect:

Given a standard chess board, do the following:

- a. calculate the exact number of pennies on the last square under the following conditions: 1 penny is placed on the first square, then doubled for each successive square (2 on the second square, 4 on the third, 8 on the fourth, and so on).
- b. Show how to represent this number in exponential form using an Integer base and exponent.
- c. Next, a stack of 18 pennies is about an inch high, calculate the number of inches, exactly, of the height of pennies, then the number of feet, then the number of miles high the stack on the last square.
- d. Lastly, calculate, to 7 decimal places, the number of one-way trips from the Earth to the Moon using the average distance of 238,857 miles.