After a long and fruitful career in management consulting, I decided to work more closely with the people who will define the future of our society: our children, and those who educate them. Through this body of experience, I have developed capabilities in leadership, technology, strategic thinking, and program management. I believe these attributes will be valuable as a teacher, and as an educational researcher, in service to my students and to the profession of education as a whole.

Philosophically, I am a pragmatist. This is because I am not a "dualist", in that I don't adhere to an absolute separation of knowledge and the environment through which one acquires knowledge. I see those as inextricably linked, and mutually supportive. I consider the writings of John Dewey as a great influence in my thinking about society generally and education more specifically.

In terms of learning and psychological perspective, I am a constructivist. While social constructivism and cognitive constructivism differ ontologically (subjectivism and relativism), epistemologically (personal vs. social) as well as the "unit of analysis" they study (individual reorganization of knowledge vs. shared negotiation or consensus building), I use both frameworks to guide my instructional approach.

Obviously, every student enters a classroom with varying degrees of knowledge, conceptual capabilities, and collaborative/social skills. Since one of the primary goals of STEAM education is to provide interdisciplinary experience along with the promotion of collaborative solutioning, I tend toward social constructivism in my teaching. This means that I strive to understand each student's "zone of proximal development" – the level of

understanding they bring to the subject. Acting as a benevolent "more knowledgeable other", I offer both my expertise and experience and also furnish "scaffolding" to enrich and accelerate the learning process, on an individual basis as much as possible.

In this way, I think of my role as an educator as a commitment to service - to my students, and to my fellow educators. This means that I view the classroom as a microcosm of society, where all of us are joined together in the spirit of learning. My view is that, to create a positive and inclusive atmosphere, I must understand my students and appreciate the unique style that each of them use to learn. Some students learn best by observing an educator guiding the way, while others prefer to reflect and assimilate information more independently. Moreover, the means by which they communicate provides me further insight. I teach in several institutions where the proportion of English language learners (ELLs) is very high. Many of my students collaborate with others who share their primary language, and so I support this by arranging the design of the classroom to do so with ease.

For each subject that I teach, I begin by thinking of the learning objectives for the course. By leveraging my understanding of my students not merely as learners but as part of a community, I can engage my students to bring to bear their experiences, knowledge, and insight into the curriculum. This will inform the ways I accommodate distinct learning styles are through use of presenting instructional materials through various forms of multimedia, by mentoring small group discussions, and framing independent investigations. I want to enable each student to demonstrate, in their own way, their mastery of the lessons, in a manner that minimizes stress and anxiety. For example, I frequently ask students to present their findings from small group sessions in front of the classroom. Even though they may feel some anxiety because they perceive their English language skills as deficient, my

objective is to establish a safe environment to both desensitize their anxiety and attain greater English language mastery. Another benefit of this approach is to ensure awareness of the diversity of culture in our classroom community, and the importance of tolerance, understanding, and respect for our differences.

Just as I strive to know my students at the outset of the course, I am equally concerned with their progress throughout the course. Not only do I track their understanding of the material through formative assessments (i.e., quizzes, exams, projects, papers, etc.), but more importantly I constantly seek opportunities for each student to engage with the lessons, integrating their existing knowledge with new insights and new information. If I detect that some students are falling behind, I like to set up mini lessons for them, and when possible, bring in a student who has attained mastery to work with them. Another technique I like to use to bring everyone together involves "mind maps", wherein each student can create conceptual maps that illustrate the connections among earlier ideas and new ones. A stimulating extension to this idea is to organize the entire class in creating a mind map that extends across an entire wall — a great way to express both individual and community achievement!

As an prospective STEM educator, I find that this form of experiential learning and reflective practice is effective in demonstrating both the cognitive aspects of what has been learned, but also that collaboration and negotiation through interacting with classmates cultivates the social aspects of learning as well.

I believe that bring a unique perspective to the academic environment as evidenced by my experience as a management consultant and systems architect. By sharing my expertise in leadership and management of complex technical initiatives to the classroom, most importantly, I will offer my experiences in working with diverse enterprises from all over the world, and the results of cultivating lasting and meaningful relationships with the individuals involved. In this way, I will contribute to the overall culture of the academic environment in an interesting and novel manner. I think that students are constantly seeking connections between their learning experiences and the challenges of an uncertain and increasingly complex future. In my role as an educator, I can mentor and guide students toward thinking outside their academic pursuits, and toward their own role as a STEM professional.

In support of these points, I have earned a Master of Science degree at the University of Iowa College of Education, specializing in STEM education and learning sciences. This academic foundation will augment my classroom experiences and bring me to the forefront of methods, research, and practices in educating students in the STEM disciplines.

Finally, a career in education is exactly what I seek: a way to offer my life experience and technical expertise toward the education of our children. I believe that there is no more lasting and impactful pathway toward the betterment of society than this.