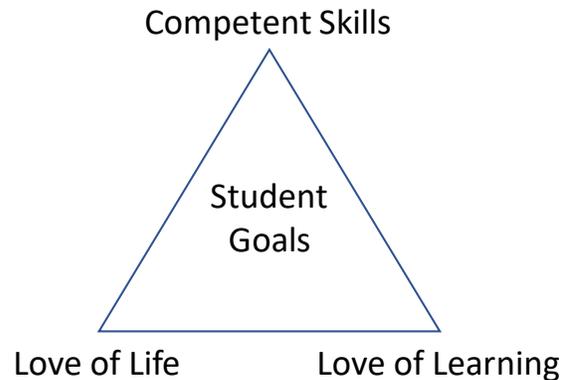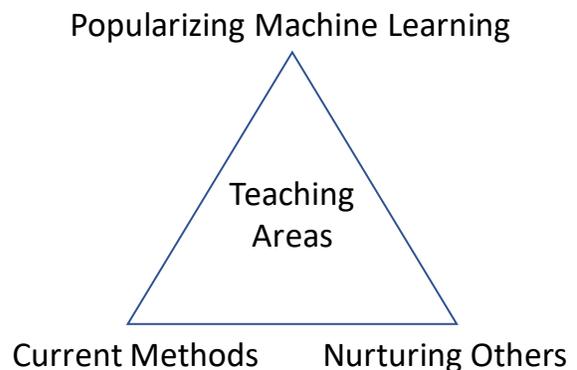Teaching Statement – Theodore (Ted) Allen

Purpose: Through my teaching related activities, I have some influence on hundreds of thousands of people (e.g., through my 3rd edition textbook) and, indirectly, many millions. I want that influence to support the goals of enlightenment (e.g., telling real world positive, humble stories and greater conceptual clarity and intellectual integrity) and to build skills to benefit society (e.g., through active learning).

Measuring success: I have won six teaching awards including one from the Ohio State College of Engineering (all by student votes). My paper on case study-based quality active learning won the best paper award from *Quality Approaches in Education* in 2013. I have taught more than 115 courses with an overall SEI average of 4.3/5.0. Yet, assessing success is truly elusive and sometimes I have gotten quite low scores necessitating major upgrades. Also, I simply do not know how many people are really using methods they would not have otherwise mastered as well as exhibiting increased love of life and learning.

Competent Skills

Student Goals

Love of Life   Love of Learning

Specific goals: A major feature of our educational system is the evaluation and ranking of individuals through grading. The related sorting may help to motivate some individuals to excellence and assure that critical jobs are performed by qualified personnel. Yet, increasingly this judgmental and fairness-related goal is less relevant than skill building and love of life and love of learning goals. In my own anecdotal experience, some students with the greatest attainment of publications and achievement did not measure up nearly the best in their course work. Therefore, my main specific goals are to show respect to students (in answering questions and joint research) and to model a positive love of life and love of learning (adding application stories for context).

Topics: The subject selection in education and the educational method selected are both important and difficult. My textbooks on engineering statistics and lean six sigma and discrete event simulation helped me to know the current methods to be a better teacher and to spread some modern conceptions of the related topics. My current book on machine learning aims to improve the organization of the subject and to establish roles for operations researchers and applied statisticians.

Popularizing Machine Learning

Teaching Areas

Current Methods   Nurturing Others

Advising: My major goal in advising is to nurture others to find their own voice as researchers or other types of professionals. I must acknowledge that my own strategy in pursing publication primarily in the highest prestige and most exclusive journals has impeded by efforts in this regard. Tough journals prompt faculty to push students to the side and try to do the work ourselves. My new strategy of focusing on less difficult journals and only rarely on tough ones is helping my students to build their confidence and voices more effectively. Having been the primary adviser for 21 Ph.D. students who graduated and nine in progress means that I need to develop ways for students to help each other. This is an on-going focus area.