

Visual Teaching Philosophy Empowering Inclusive Learning and Managing Expectations

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Abstract

Educators revisit their teaching philosophy statement (TPS) when applying for new jobs or promotion and tenure. However, sharing our teaching philosophy with our students could make a significant difference. This research presents the results of creating a visual model of my teaching philosophy and sharing it with my students. My teaching philosophy informs my students that we learn in teams to gain not only technical knowledge but also skills and ethics. It expresses to students that my core values are to care, share, and be fair. I care about their life-long learning, as well as achieving fair grades. The visual model also shows the different levels of engagement and communication; student-to-student and student-to-teacher. In this student-centered, inclusive classroom, I share all the needed resources and provide clear expectations to ensure students' success. Thus, for assessment, the visual grading chart reveals to students what is required to earn an "A." This chart communicates the expected amount of time, effort, and commitment.

Overall, students were inspired by the visual model of my teaching and assessment philosophy that we discuss on the first day. This visual model bridges the gap between instructor and students' expectations and facilitates an inclusive learning environment. Using syllabus survey, discussion board, and classroom observations, students reported that they took the initiative of their learning and achieved higher grades. Nearly 90% of my students (N=87) strongly agreed that sharing my teaching philosophy is critical. Additionally, underrepresented students were empowered and achieved more than half the "A"s in my courses. In conclusion, since equal is not always fair, instructors must make their expectations exceptionally clear to ensure that any student can succeed and earn an "A." I believe it is time for educators to polish their teaching philosophy, create appealing visual models, and share them with their students.

Introduction

Developing a Teaching Philosophy Statement (TPS) is central in any academic career [1]. TPS declares the educator's approach to teaching and learning. Creating a teaching philosophy engages educators in metacognitive reflection on what they value [2]. However, while educators commend active learning, their teaching philosophies are still passive in a traditional written format. There is considerable literature on writing a teaching philosophy; nevertheless, there are limited attempts to develop a visual representation using emerging technologies [1]-[3]. This research hypothesizes that creating and sharing a visual teaching and assessment philosophy

empower student success and foster an inclusive learning environment for everyone to learn and score an “A.”

Teaching Philosophy Literature

1-What is a Teaching Philosophy?

A teaching philosophy is a narrative that uncovers the instructor’s beliefs and values about teaching and learning, often including concrete examples of how educators enact those beliefs in their classrooms [4]. Peña et al. depict the underlying message of an effective teaching philosophy as “... *disciplinary knowledge transfer based on students’ interests, skills and attitudes, and with a heavy emphasis on building students’ core values*” [5]. Also, “A teaching philosophy statement is a systematic and critical rationale that focuses on the important components defining effective teaching and learning in a particular discipline” [6]. A teaching philosophy is usually one to two pages in length, written in present tense using the first person, includes teaching strategies and methods to help “visualize” what one’s teaching looks like within a typical classroom setting. However, teaching philosophy is not a review of one’s vita of what courses have taught or interested in teaching in the future [4].

2-Why a Teaching Philosophy?

Universities and educational institutions often request faculty to develop a Teaching Philosophy Statement (TPS) to showcase one’s values and beliefs related to teaching and learning [4]. Teaching philosophy makes the instructor’s implicit views on teaching and student learning explicit as they showcase what, why, and how they teach [7]. There are many reasons for writing a teaching philosophy. Caukin and Brinthaupt argued that teaching philosophy facilitates professional development by engaging educators in a deep reflection [8]. In many cases, teaching philosophies are required for job application, promotion, and tenure purposes [4].

Beatty et al. argued that a TPS should align the educator’s beliefs and practices and include the teacher’s and student’s role in the learning process [9]. TPS guides course development, including the syllabus, which puts the teaching philosophy into practice as we determine the course structure, teaching pedagogies, assignments, and assessment methods [6]. TPS also keeps educators academically viable when their performance is reviewed [10]. Also, teaching philosophy is used when applying for a teaching grant or in support of a teaching award nomination. Additionally, sharing the TPS helps to personalize the teacher, create a bond between students and teacher, and encourage a sense of community [1]. Sawers et al. [11] found a direct relationship between educator’s constructivist philosophy and students’ engagement in active learning. The instructor’s attitude and beliefs inspired this strong correlation. However, the lack of faculty training can result in a well-written statement about the ideal teacher, whereas the reality is entirely different.

3-How to Develop a Teaching Philosophy?

Graduate students receive limited instructions on teaching and learning. Therefore, preparing a teaching philosophy becomes a reflection of their own experience as learners or their most influential teachers [6]. A new faculty member's teaching philosophy appears different than an experienced faculty member who had numerous experiences and professional development opportunities [7]. We should think about teaching philosophy as a work in progress. Bowne outlined the process of developing a teaching philosophy by answering four questions: why do we teach, what do we teach, how do we teach, and how do we assess our teaching effectiveness? [4] According to O'Neal et al., a successful teaching philosophy: offers evidence of practice, conveys reflectiveness, communicates the teacher's enthusiasm and commitment, is a student- or learning-centered, and is well written, clear, and readable [7].

Saritas studied the relationship between the adopted educational philosophy and the teaching styles of 301 classroom teachers. This study defined five educational philosophies: perennialism, idealism, realism, experimentalism, and existentialism. These philosophies were correlated to five teaching styles: expert (who is interested in knowledge transfer), formal authority (who never hesitate to give negative feedback), personal (who encourages students to follow their way), facilitator (who present alternative and encourage students to take the initiative and responsibility to construct knowledge), and delegator (who expects students to study independently in projects). Saritas argued that teachers mostly adapt a facilitator teaching style and prefer experimentalist philosophy [12].

Typically, we develop TPS with administrators and promotion committees in mind. However, Brinthaup et al. debated that there is an exclusion of the students' feedback in TPS. They suggested an alternative approach: distributing the TPS to students at the beginning of a course and collecting evaluative data and feedback from students about its accuracy. They concluded that the innovative multimedia format used to develop and present one's TPS enhances the ease with which this document can be shared and effectively communicates expectations [1].

Contrary to the traditional written format, there were some attempts to develop visual teaching and learning philosophies. Nuhfer et al. introduced an innovative fractal visual teaching philosophy [13]. Also, Watson et al. presented a newly developed multimodal teaching philosophy [2]. Furthermore, Alexander et al. proposed remediation of traditional TPS into a slideshow, websites, visual, and digital movies. They claimed that this approach enhanced the ease with which the TPS can be shared. Yet, most of these innovative multi-models and traditional teaching philosophies are not presented to or assessed by our principal constituent and stake-holder, students [3].

My Teaching and Assessment Philosophy Visual Model

In 2019, in my active learning workshop, I was inspired to create a simple visual model of my teaching philosophy to help communicate my expectations with my students. Figure 1 shows that my philosophy starts with why we are doing what we are doing, followed by how and what. For my students, I want them to gain the needed work ethics, values, and attitude. I also want them to learn the necessary technical knowledge and gain hireable skills. These skills for engineers include communication, collaboration, problem-solving, critical thinking, and decision-making.

As a life-long educator, I believe in three core values: care, share, and fair. I want my students to know that I care about their success now (in terms of a fair grade) and in the future by achieving life-long learning and self-regulation. In my learner-centered, inclusive classroom, I share all the needed resources and provide clear expectations to ensure students' success. For example, I use grading rubrics and multiple means of assessment to give informative feedback and feedforward. Also, I strive to provide all students with a fair opportunity to succeed by managing expectations and being transparent. The visual model also shows the three ways to engage; student-to-student, student-to-teacher, and student-to-learning. This ASK for success triangle shows my three core values at its center and their relation to the students' gain of attitude, skills, and knowledge.

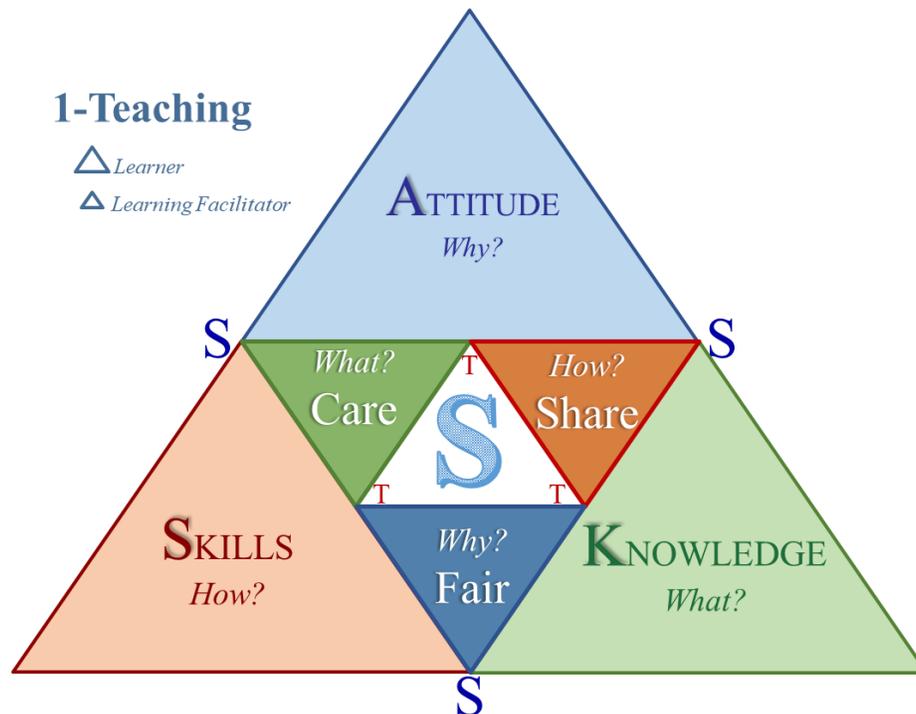


Figure 1 The ASK for Success triangle of my teaching philosophy for learner and learning facilitator

I also create an assessment philosophy visual grading chart, shown in Figure 2. The assessment and evaluation chart shows that I care about life-long learning, as well as short-term benefits and

grades. It clearly communicates with my students what is expected to earn an “A” in my course. For example, the chart differentiates between the different performance levels and the expected amount of time, effort, and commitment for each letter grade. It shows the two extremes that I try to avoid: (1) insufficient efforts with a high grade and no potential life-long learning and (2) the extra efforts with a low grade and potential life-long learning. My assessment philosophy targets a fair relationship between the work done in terms of effort and time and the gain in grade and lifelong learning. I discuss with my student the definition of a one-credit hour: one hour in the classroom and two hours outside the classroom. My teaching philosophy embarks on the constructivism framework. I expect students to take the initiative, construct their knowledge, and engage in active and collaborative learning in diverse teams. We discuss diversity, inclusion, and equity while forming the course teams. I teach my students that T.E.A.M. stands for Together, Everyone Achieves More, and the whole is greater than the sum of its parts. I present individuals vs. teams results from previous courses. Allowing students to be teachers helps them assess their understanding of concepts and reveal gaps within their knowledge [6]. I also share with them my favorite quote, “The man on the top of the mountain didn’t fall there – Vince Lombardi”

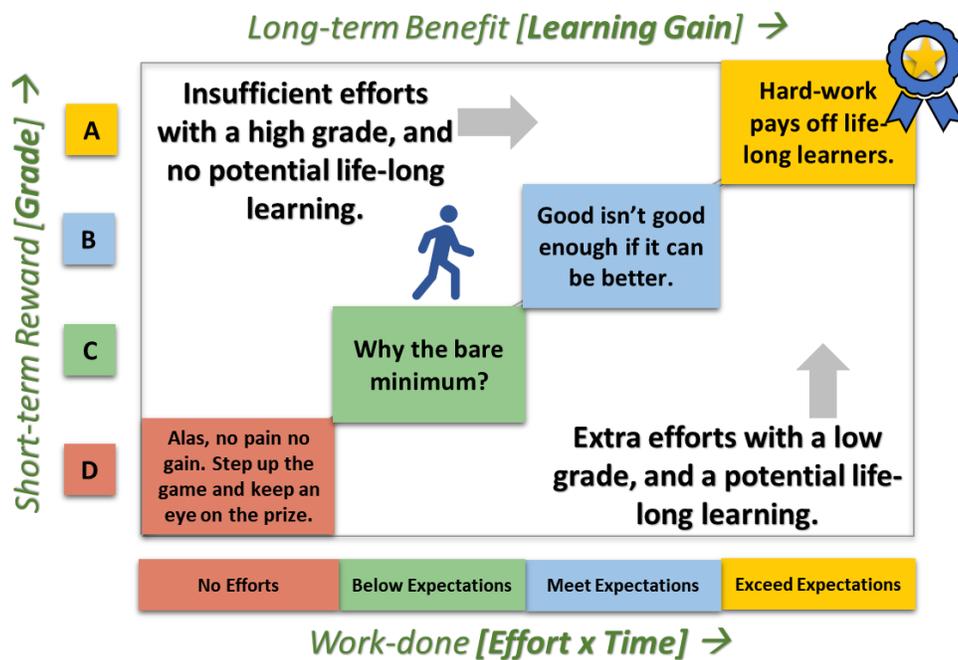


Figure 2 Assessment and evaluation chart. All students can earn an “A”

Methods of Assessment

I teach a diverse group of juniors and seniors including, transfer and international students who didn’t take my classes before and didn’t know what to expect. Thus, I believe it is significant to set clear expectations and to share my teaching philosophy with my students. This study surveyed 87 students over one academic year and four different (hybrid/blended) courses. In the

first week of classes, I discuss my teaching and assessment philosophy (Figures 1 and 2) with my students. I also summarize this philosophy in my course syllabus. To assess this approach's effectiveness, I created a survey that includes Likert and open-ended questions. I also collected the student's formal and informal feedback from the student evaluation and the online discussion board, in addition to my classroom observations.

Results and Discussion

After presenting my visual teaching and assessment philosophy, students were asked to complete a three-question survey and engage in an online discussion about teaching philosophy and syllabus. Overall, the results show my students' satisfaction with my teaching philosophy. Figure 3 depicts that 82.8% of the students strongly agree that the course syllabus, including my teaching and assessment philosophy, is clear, helpful, and matches student expectations. Notably, 98.9% of the students agree and strongly agree with this course syllabus statement.

The course syllabus is clear, helpful, and matches my expectations.
87 responses

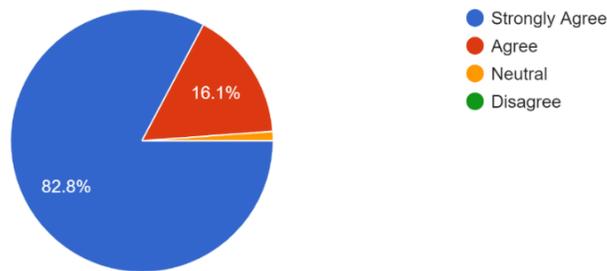


Figure 3 The results of the first survey Likert question about the course syllabus and the clear expectations

Figure 4 illustrates the effectiveness of sharing my teaching philosophy. In this Figure, 89.7% of my students strongly agree that knowing my teaching philosophy is helpful in setting clear expectations. They believe that knowing my philosophy is important, helpful, and insightful.

The instructor shared his teaching philosophy, and the (Attitude, Skills, Knowledge) ASK model of success. I believe knowing the instructor's teaching philosophy is important, helpful, and insightful.
87 responses

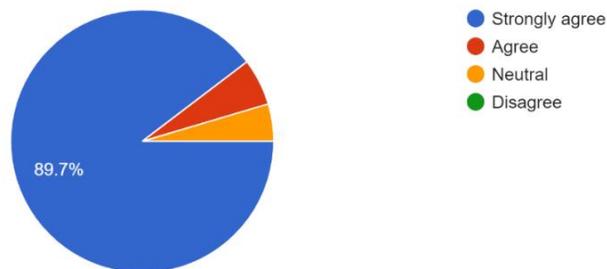


Figure 4 The results of the second survey question on the effectiveness of sharing my visual teaching philosophy

My students also reported that they took the initiative of their learning with their peers and achieved higher grades working in diverse teams and knowing what is needed to earn an “A.” A sample of the students’ responses are listed below.

- *“I thought you did a great job with the syllabus and your explanation of your teaching philosophy. I am excited for the class.”*
- *“I appreciate taking time to go over everything and ensure anyone is on the same page.”*
- *“Everything was very well laid out.”*
- *“I am excited for this class, looks like a lot of effort went into making it as convenient as possible for us”*
- *“No it was one of the most clear syllabus explanations ive had”*
- *“Thanks for today’s extra out-of-content but fairly beneficial learning process topic!”*
- *“The syllabus was very clear and easy to comprehend. I enjoyed the introduction to the class”*
- *“I think the changes that were made were a great addition to the course and will be helpful”*
- *“I really admire the way you go about teaching these courses, and I look forward to another great semester.”*

My classroom observations reveal students performed better in a collaborative and inclusive learning environment. In their open-ended projects, teammates engaged with their peers in deep learning compared to previous terms. I also noticed that eight students out of the 14 students (57%) who scored an A, identify as international, minority, or first-generation college students. This transparency and inclusive pedagogy empowered my student, especially underrepresented groups. Additionally, the results indicate that setting the stage lowered the students’ resistance to active and collaborative learning.

This study’s limitations include the fact that students’ sample in each class is small, which means that the results cannot be extrapolated beyond these courses’ context. However, the study contributes to creating and sharing visual teaching philosophy models with college students, which is critical and valid in improving their life-long learning and grades.

Conclusion

A teaching philosophy statement (TPS) is an explicit declaration of the educator’s narrative of how and why she/he educates others. There are many reasons and purposes for writing a teaching philosophy. This study presents the results of creating and sharing a visual model of my teaching and assessment philosophy. The teaching philosophy illustrates my three core values: care, share, and being fair. It also includes my objectives for my students to gain knowledge, skills, values, and ethics. My assessment philosophy differentiates the different performance levels and emphasizes the expectations to earn an “A.” It reveals that we value gains in grades, as well as lifelong learning. The results show that setting the stage and managing expectations empowers

students. Nearly 90% of my students strongly agreed that knowing my teaching philosophy is essential. Also, 57% of the A students were from underrepresented groups, including international, minority, or first-generation college students. I firmly believe it is time for educators to create attractive visual models of their teaching philosophy and share them with students to ensure their success in an inclusive learning environment.

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