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"Philosophy of Teaching and Student and Peer Mentorship:

A Christian Perspective"

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Abstract

As Professors our students have the multifaceted status of being 1) our customers, 2) our product and 3) our future colleagues. In addition as Christians, they are our brothers and sisters in Christ or those we influence for His glory. As customers they have a choice where to pursue their education and have expectations. Some expectations are reasonable, some we need to recalibrate for them. As our product, their professional growth and abilities are to varying degrees a result of, and to a very large degree, a reflection of us and our institutions. As graduates employed in an industry we participate in and serve, they will become colleagues who will recall our relationship when they were students.

As fellow Christians, and those whose souls we are concerned for, we need to demonstrate and teach how to live the faith in their profession, and seek their spiritual growth and welfare as they grow academically and transition to their professional lives. We find ourselves rapidly switching roles from salesman, to customer service agent, to concierge, to manufacturing process optimizer, to trainer, to quality inspector, to warden or judge, to mentor, to friend, to career/life coach, to make shift pre-marital counselor, to poorly prepared emergency Pastor, to collaborator, to friend, and to brother or sister in Christ.   In the mist of this chaos we are committed to teach classes to meet the requisite needs for career success and accreditation. How we teach; quality, demeanor, and life example is as relationally important as what we teach. A contemplated and written Philosophy of Teaching makes executing these diverse responsibilities easier and beyond that, a Philosophy of Student Mentorship can uniquely help us as Christian faculty. A sample of each philosophy will be presented and discussed as a starting point for subsequent individual creative thoughts and document generation. As a conversation starter, a fledgling philosophy of peer mentoring will be introduced for subsequent refinement.

Introduction

As engineering Professors we are called upon by our discipline to teach, serve, research and publish such that the next generation of engineers is prepared to face the challenges of today and able to figure out solutions to the challenges of tomorrow. All Professors share these individual challenges and the unsettling challenge of balancing between them in such a way that legitimate needs are met and tenure is granted. (Boyer) As Christian faculty we have, or should have, a tendency to be more likely to seek the best for others, while not neglecting our own concerns, such as tenure and promotion. In a Christian University context (largely undergrad, higher cost structure than a state university) the pressure to research and publish is often reduced, but not to zero. The new additional imperative is to answer the often unspoken question "What value does

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a student derive from this Christian University experience?" which is at the forefront in the mind of both students and parents. The answer often involves a philosophy of science as understanding how God has created the world and an examination of thoughts and findings for Biblical consistency, as well as community covenants for standards of living and behavior. However, feedback from parents has indicated that the key differentiating expectation is the way Christian faculty interact with and invest in their students. As teaching and learning is largely a human interaction, shouldn't the human interaction also be affected by a Christian worldview such that teaching could be done differently by a Christian or in a Christian university context? While drastic deviation of tested and proven methods of teaching and human relating would be perilous at best and self-destructive at worst, perhaps a further refining of standard approaches from a Christian perspective would be wise and effective.

Biblical Overview on Human Relating

While this overview is cursory at best, it will provide a backdrop for consideration of a teaching philosophy. There are many verses and principles in verses that could be extracted to apply to the human interaction of teaching and learning. Some of them are highlight below:

> *Matthew 7:12 "So in everything, do to others what you would have them do to you, for this sums up the Law and the Prophets."*
>
> *I Peter 4:10 "Each of you should use whatever gift you have received to serve others, as faithful stewards of God's grace in its various forms."*
>
> *Philippians 2:3-4 "Do nothing out of selfish ambition or vain conceit. Rather, in humility value others above yourselves, not looking to your own interests but each of you to the interests of the others."*
>
> *I Peter 5:5b" All of you, clothe yourselves with humility toward one another, because, "God opposes the proud but shows favor to the humble.""*
>
> *Galatians 5:22-23 "But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, and self-control. Against such things there is no Law."*

A Biblical word search on "teaching" or "one another" would surely provide additional insight for developing a philosophy of teaching.

Questions for Reflection Before Developing a Teaching Philosophy

A list of questions is put forth for consideration as the reader warms up to developing a teaching philosophy. The list does not include what must be taught, as that is covered by ABET requirements or when should it be taught, as that is covered by the course sequence.

1. How do I like to learn?
2. What distracts me from learning?
3. What makes learning boring for me?

4. Do I like a structure or outline up front, so I can see where a lecture or topic is going before I get there?
5. How does God get me to respond – force, kindness, winsomeness, patience?
6. What makes a topic seem scary to me?
7. What makes a scary topic seem doable to me?
8. What did I like about my favorite Professors?
9. What did I dislike about some Professors?
10. How is this generation known, or perceived, to be different from when I was an engineering student?
11. What helped me most when I was stuck on homework?
12. What as a student nearly broke my will to try?

What is A Philosophy of Teaching?
A philosophy of teaching is not overly pedantic or technical, but is broad and quite personal to the writer. There are numerous discussions and examples to draw from in the higher education community. (Chism) (University of Minnesota: Center for Educational Innovation) (The Ohio State University)

Common attributes of a philosophy of teaching are:
- 1-2 pages
- Personal statement and in first person
- Generally write in present tense unless reflecting on a past experience.
- Includes general (not course specific) goals for students
- Includes what is done to make teaching effective and why it is done – gives the rationale.
- While our students will not likely be invited to read it, it should be written at a level that our typical student could largely comprehend.

A Christian's philosophy of teaching should have the same attributes that make a typical philosophy of teaching effective, but also have a sense of deeper human concern and desire for whole person prospering.

Below is an example for consideration.

Example Philosophy of Teaching

Given that a large part of my profession as a Professor is teaching, I have developed the following Teaching Philosophy as a set of guiding principles in teaching my courses. I would like to add that beyond teaching course material I am constantly modeling professionalism, responsible citizenship and people skills. Candidly, I find this realization simultaneously exciting and an awesome responsibility.

<u>Major Goals for my Students</u>
1) Learn the course material
2) Understand the industry relevance of the course material

3) Learn to think critically – question logical inconsistencies
4) Embrace lifelong learning
5) Learn to communicate effectively (groups, writing, presentations)
6) Learn to take personal responsibility (timeliness, quality of work)

The fundamental principle in my teaching philosophy is to teach a class the way I would want it taught to me. Out of this principle flow the following outcomes:

1. I provide clear communication of my grading criteria and expectations of students.
2. I provide multiple opportunities for grade assessment and consider that anyone can have a bad day on one exam day.
3. I engage students in class discussions by asking questions and encouraging students to share experiences on course topics.
4. I explain to students **why** we are studying an entire course or a specific topic.
5. I assign homework that emphasizes the important topics for the exams and professional practice and weight it as approximately 20% of the course grade. This weighting ensures that students do the assigned work and learn the material so we can move on to subsequent topics.
6. In calculation intensive courses, I provide solutions before most homework is due in order to allow students who are struggling with a problem to refer to the solution and learn the material the correct way efficiently. By me providing solutions before the homework is due, my students can avoid the frustration of wasting extensive time on a relatively simple mistake. I plainly warn students that if they blindly copy the homework solutions they will 'earn' the homework portion of the course grade, but I will catch them on the exams. The main objective behind this is effective use of their time and effort. The secondary benefit of this is effective use of my time in that the students have fewer questions and clearer questions when they come for help. This not only saves me time but, more importantly, allows me to spend time contributing higher value in students learning.
7. I encourage students to ask questions if something is unclear or if it seems contradictory to some other established course concept. I openly tell them that the contradiction could be 1) I misspoke, 2) they misunderstood, 3) some other possibility that we need to figure out.
8. I require students to maintain a professional atmosphere in the class room, including no foul language or disrespectful attitudes. On one problematic occasion I told students something like,
    "I don't know what happens in your other classes, but in this class we need to have mutual respect, between you, me and each other (fellow classmates). If you don't have mutual respect, fake it. If you can't fake it, find another class to take."
9. When I don't know an answer to a student question I openly tell them, "I don't know". I often follow up "I don't know" with possible answers and candid uncertainty. Students have commented on course evaluations that they appreciate my openness.

10. I make great efforts to relate the course material to professional practice based on my own 8 years of industry experience and when applicable I incorporate my own scholarly publications in course material.
11. When students are losing interest in lecture, I try to engage them with questions and entertaining stories. My primary goal is to teach them, not to entertain them. However, if I make them laugh they will 'wake up' (become more engaged in class discussions) and if they are awake (engaged) they have a chance to learn.
12. I treat students with the respect that I would want to be treated with.

When dealing with struggling students I strive to apply the following principles:
1. "Warn the idle" – make students aware of the implications of non-performance
2. "Encourage the timid" – teach students who lack confidence that they can succeed
3. "Help the weak" – assist struggling students to help them develop the skills to succeed
4. "Be patient with everyone" – this principle applies to all categories above ("Idle", "timid", "weak") and anyone else who I cannot 'fit' into one of these categories. Candidly, this is the toughest of these principles to practice consistently.

Surely other examples of philosophies of teaching can be searched and reviewed to gain broader insight in preparation for writing your own philosophy of teaching.

Philosophy of Student Mentoring
This document could be a continuation of the Philosophy of Teaching, but is likely more personal as the relationship between mentor and mentee is deeper than teacher and student. It deals with deeper interpersonal interactions that occur through the natural growth of some human relationships, a Senior Design Team, or a student who was "encouraged" (read - required) by Student Life personnel to find a mentor in response to a behavior problem. This document will also include general ministry and Christian living concerns. Below is an example.

Example Philosophy of Student Mentoring
1. I have a scary responsibility and will be utterly ineffective without God's blessing and empowerment.
2. While student ministry is very important, neglecting my own wife and children would be sacrificing the essential for the important. I must be vigilant.
3. Not every student will connect with me or relate to my personality, but I do hope they know I care about them personally.
4. I can help people in things that I have not yet mastered as it is God's word and Holy Spirit that give power, not my arrival at an ideal position.
5. In the closeness of Christian living, professional and personal boundaries must be kindly enforced and if needed, fiercely guarded. I am their brother in Christ, but I am still their Professor. They may be invited to my home but must respect my family. Alumni who become friends can call me Scott, students call me Dr. Anson. It reminds them and other students of the invisible boundary.

6. Not all students are Christians yet. I should deliberately look for opportunities/openness.
7. Christian young men need a model – kindness, boldness, tenderness, willingness to fight for what is important, grace, enthusiasm, leadership.
8. Christian young women need the same things as young men, but also need to be simply respected as people and treated as students. Focus on the commonalties (students, people who God loves, Christians, professionals forming) not the difference (gender).
9. Students want to be understood before they will take life advice.
10. Students want to discuss life problems and options, not be given answers.
11. Devotionals can be topical but often the daily life lessons that God teaches me resonate with students.

There are many fine examples of student mentoring philosophies, but they are largely for graduate student mentoring, and no examples were found that specifically included a Christian perspective. (Sollenberger) (Toke) (Barger)

What About Practicing Engineers Mentoring New Engineers at Work?
Mentoring in the workplace can be formal or informal. The risk of formal mentoring is that someone is asked by upper management to be a mentor and does it out of obligation or to get some sort of corporate "mentoring merit badge". These obligatory mentors don't necessary have the skills to care for people or even a desire for the welfare of the mentee. Mandatory mentoring is like mandatory kindness; it does not mean as much unless it is sincere. In general but especially in formal/mandatory mentoring scenarios it is very helpful to have a defined period for a mentoring relationship to continue such as 6 months or 1 year. It is much easier to renew a mentoring relationship than it is to fire a mentor. The prearranged timeline becomes a natural breaking point for a mentoring relationship to end if it is not bearing sufficient fruit or to be renewed if it is sufficiently beneficial.

Guiding Principles
It is essential to match expectations for mentoring colleagues. Some want a formal structured program with a curriculum and others want something less formal and more personal. A couple of years ago, a colleague and friend, asked if I would mentor him. I replied "probably, but let's discuss what you want from me and the experience". He replied, "I just want to ask you questions when I have them". Well, we are in a mentoring relationship! I suggested a year period but it has been so informal that we lost track of the year and there have been some key times where I have been the one on the receiving end of the mentoring. As our friendship has grown, mentoring is not really a topic but trusted friendship and seeking each other's wellbeing is.

You don't need to have it all figured out to be a mentor and the mentee can be stronger than the mentor in some areas. Proverbs 27:17 states "As iron sharpens iron, so one person sharpens another." This passage says nothing about one person having it all figured out or being somehow "better" than someone else. The key requirement is that the mentor care for the mentee and have some things to offer. Frankly, people who have most things figured out would either intimidate me or be unreachable from my position in the organization.

Questions for Reflection Before Developing a Work Mentoring Philosophy

1. What do I wish someone told me when I was a new Engineer?
2. What was I embarrassed to find out too late?
3. What "tribal knowledge" (unwritten but everybody knows it) exists in this company?
4. How could someone respect me as capable while guiding me as not knowing corporate culture?
5. How did I feel the first day with no desk or computer?
6. Who told me about using the group refrigerator and microwave?
7. How can I show appropriate care and respect before I give advice?
8. How can I give advice while allowing the mentee to act on it or not, without feeling like I think they are wrong?
9. How would I feel if someone referred to me as their protégé?

Example Working Engineer Mentoring Philosophy

Goals for my mentee:
1) Produce for the company
2) Grow in capability and confidence
3) They feel respected and cared for by me
4) Remain eligible for career advancement
5) They value other people (colleagues, management, customers)

1. I strive to make new people feel welcome in the workplace. This is done through a welcome greeting, checking if they are settling in alright and helping when they need something.
2. It costs very little time to stop in someone's doorway and greet them. Read their body language and determine if it is best to connect for a moment, move on quickly that day, or most days.
3. I share tribal knowledge (unwritten norms) that would be difficult to figure out unless someone in the tribe shared them with you.
4. Coffee is not always about caffeine; it can be about connection. I often spontaneously invite a colleague or mentee for coffee as it allows us to catch up and possibly help with any concerns. It is important to reassure an invitee that we can have coffee another time if the time of my spontaneous suggestion is not best.
5. I think of things I wish had been told instead of floundering my way through and figuring them out. Examples are:
   a. Work is very unproductive between Christmas and New Years as many people are out of the office and those that are in the office are not fully engaged in work. You might want to take time off or plan some very independent work.
   b. On the Friday before a holiday weekend, nearly everybody leaves in the mid-afternoon.
   c. Bonus checks come out in May and November, if they are issued.
   d. Drive separately if taking customers to dinner with that colleague. He sometimes drinks excessively and you will not want to ride with him.

6. I provide my perspective on what works for me while realizing the mentee has a different set of skills, style and perspective. It is essential that the mentee feel free to not take my advice in that they can consider it and freely decide to take a different course of action.

A Biblical Model of Mentoring

I Thessalonians Chapters 1 and 2 are a demonstration of biblical mentoring. Paul, Silas and Timothy greet the church of the Thessalonians in this letter. Paul had mentored both Silas and Timothy and now the three of them are mentoring the Thessalonians. The highlights of this mentoring are:

> *I Thessalonians 1:5b-6 "You know how we lived among you for your sake. <u>You became imitators of us and of the Lord</u>, for you welcomed the message in the midst of severe suffering with the joy given by the Holy Spirit." (Emphasis added)*

Paul, Silas and Timothy modeled the Lord so the Thessalonians could see it an imitate service, faithfulness and Godly suffering.

> *I Thessalonians 2: 7b-12 "Just as a nursing mother cares for her children, so we cared for you. Because we loved you so much, we were <u>delighted to share with you not only the gospel of God but our lives as well</u>. Surely you remember, brothers and sisters, our toil and hardship; <u>we worked night and day</u> in order not to be a burden to anyone while we preached the gospel of God to you. <u>You are witnesses</u>, and so is God, of how holy, righteous and blameless we were among you who believed. For you know that <u>we dealt with each of you as a father deals with his own children, encouraging, comforting and urging you to live lives worthy of God</u>, who calls you into his kingdom and glory." (Emphasis added)*

As Paul, Silas and Timothy lived their lives in service to the Lord; they modeled and urged/exhorted the Thessalonian church (mentees) to do the same. They lived well among them so others could model after them, and in so become more like Christ. At times it is unclear whether Paul is mentoring Silas and Timothy, or whether they are mentoring the church at Thessalonica. While it could be an interesting topic to discuss over good coffee, the important point is that mentoring was occurring, and people were growing in work ethic and in service to Christ.

Conclusion

In the conduct of our profession as Christian faculty, we find ourselves rapidly switching roles from salesman, to customer service agent, to concierge, to manufacturing process optimizer, to trainer, to quality inspector, to warden or judge, to mentor, to friend, to career/life coach, to make shift pre-marital counselor, to poorly prepared emergency Pastor, to collaborator, to friend, and to brother or sister in Christ. On the surface this is impossible, or at least unreasonable! Upon reflection this is no more than what our Lord and Savior Jesus Christ offered us in that He is our brother, Creator, teacher, judge, substitutional atonement, companion and friend. It is our call as Christian faculty to imitate Christ as we fulfill these diverse and manifold roles.[2] May the reader

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[2] Thanks to "Abstract Reviewer 1" for calling out this thinking.

find comfort and inspiration in His words in Matthew 11:29 "Take my yoke upon you and learn from me, for I am gentle and humble in heart, and you will find rest for your souls." What has been put forth is a lofty goal, but should be considered in the fuller context of scripture such as Proverbs 21:31 "The horse is made ready for the day of battle, but victory rests with the Lord." This verse concisely states the duality that we must work and exert effort in life but that we cannot guarantee outcomes in that God is ultimately responsible for the outcome ("victory"). Our role is to do what we can to honor Him and lead a balanced life; not overworking as some misguided sense of duty. As Professors and former/current practitioners of engineering, we have the opportunity to inspire our students, who are becoming engineers, to first seek a mentor in the workplace and to eventually become a mentor as an act of service to others.

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