

Skills for Success

CPSC 481 Guest Lecture Series

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There is a palpable if unspoken disconnect between the skills we emphasize when teaching *to* students and the skills they will come to rely upon when they become successful. This disconnect is heard every time a students ask “When will I ever use this stuff [that I am learning]?” Why does this disconnect exist?

A common theme you'll will have heard in the guest lecturers who took CPSC 481 is that their participation in the course forever changed the trajectory of their scholastic and professional careers. What was it in their experiences that had such dramatic effect on their lives?

Here's my hypothesis: the nature and dynamics of the project work done in CPSC 481 (and the follow-on course CPSC 581) gives students a “proving ground” in which they may tap into and further develop **skills for success** (which all students possess to varying degrees). Moreover, these skills are hard to teach by direct instruction but easy to learn through practice and self-discipline.

By *skill*, I mean a thing at which one gets better through repeated practice.

In this lecture, I present eight such skills. The list is by no means complete, but each skill is nevertheless vital to one's professional and often personal success. Taken as a whole, these skills cross-cut every discipline and every profession: taking the time to use the work you do in CPSC 481 as an opportunity to practice, assess and improve your performance in each skill will serve you well regardless of your interest in usability or user experience design.

Empathy

1. What is it?

The ability to feel things from another's perspective, to understand what matters to them and why.

2. What is it not?

Feeling bad for another: that's sympathy (or, worse, pity).

3. Why does it matter?

To be successful at anything that involves customers -- be it sales, support, requirements analysis, product design, usability testing and yes, even coding -- demands having a customer-centered mindset.

This literally means that the thing that is in the center of your mind -- the focus of your attention - is the customer and their experience.

In order for you to truly adopt a customer-centered mindset, you have to be able to put aside your own feelings and empathize with customers.

What are their fears? What are their frustrations? What makes them feel validated? What makes them feel successful?

If you know these things and act accordingly, the outcomes of your decisions will be more in tune with your customers and, by extension, more valuable to them.

4. How do you get better at it?

CPSC 481 is a great place to get better at empathizing with others. Your project work gives you a reason to go out and observe people in their workaday world and ask them questions to get inside their heads.

Discount usability methods like cognitive walkthroughs also give you a chance to practice seeing things and thinking like another person.

Finally, the usability testing you will do on your own design gives you a chance to practice putting aside your own thoughts and feelings and take in the thoughts and feelings of another person and prioritizing follow-on work in response.

Beyond 481, practice active listening skills. If you have the time and the inclination, volunteer for any organization that serves the disadvantage or those in need.

Humility

1. What is it?

The ability to recognize and celebrate the greatness of others and to appreciate the limits of your own greatness without denying your self-worth.

2. What is it not?

Blind obedience or adoration, self-deprecation.

3. Why does it matter?

Regardless of whether you are working alone or on a team, an honest reckoning of your strengths and weaknesses is vital to ensuring you are applying your efforts in ways that are more likely to be successful.

Often, when success befalls someone, it isn't clear why. Often, people over-attribute the success to themselves (e.g., their talent or "hard work") and under-attribute contextual factors like timing: this is often called the "hubris of success".

Humility helps you identify the real reasons for your success. And, when you are in a team, humility in the individual helps keep everyone's focus on ensuring that the team is successful: this is the famous "There is no I in team".

4. How do you get better at it?

Your CPSC 481 project will teach you humility the moment you watch another person try to use your design. In fact, show your work to others and invite friendly-but-critical feedback. Be open to all kinds of feedback, even if hard to take.

Get to know others better: compliment them but avoid platitudes. Get to know yourself better: take self-assessments like Myers-Briggs or Clifton StrengthsFinder. Take on jobs that are outside your comfort zone and get in the habit of asking for help.

Awareness

1. What is it?

Understanding of what others are doing, how they are doing, and how you can help.

2. What is it not?

Being bossy or gossiping.

3. Why does it matter?

Being part of team doesn't mean you do *everything* together. Teams are often successful because they can parallelize the work (divide-and-conquer). But, to successful parallelization requires effective coordination.

Staying aware of what the others on your team are doing, and in particular how their work is progressing, is vital to self-regulation of your own work. It helps you foster and sustain rapport: the social "grease" that ensures timely and problem-free communication. And, It helps you identify and resolve integration problems early on.

4. How do you get better at it?

In your projects you'll get lots of opportunity to work with others in a divide-and-conquer fashion. Practice giving frequent status reports. Pay attention when others give their reports and mirror back to them how you think their work will affect yours and vice versa. Consider applying SCRUM methodologies.

Outside of school practice team sports (consider joining a rec league if not athletic), join a choir or participate in a jam session, take a few ballroom dancing lessons, join an urban search/rescue society... Anything which requires you to work with at least one other person where you work as a unit.

Wonder

1. What is it?

Being filled with childlike curiosity and joy at the splendour and marvel of the world around you and the people in it.

2. What is it not?

Fearful awe, feeling of insignificance or inferiority.

3. Why does it matter?

Wonder is the primary emotion that drives human intellectual exploration. All of science, all technological innovation, nay all human creativity can be linked to wonder.

It is also the core thing that drives continuous learning. Initial success often comes by chance. Repeated success depends on learning. Remaining consistently surprised by people and the world is how you stay open to learning.

4. How do you get better at it?

In CPSC 481, take the time to appreciate the beauty in design and to really reflect on it and ask questions. What makes that iPhone so alluring? What makes animations so intriguing? Ask others for their opinions and start discussions on the things that catch your attention.

Outside of school, go outdoors and spend quiet time alone communing with nature. Take photographs, read the classics of literature and watch films that critics judge as timeless and ask what is it that makes these things so beloved?

Finally, spend time with children.

Credit

1. What is it?

The skill of being able to readily ascribe to people (including oneself) the recognition they deserve for the talent and effort they have contributed.

2. What is it not?

Making assumptions about what others are good at or capable of contributing; giving platitudes or empty compliments.

3. Why does it matter?

As with awareness and humility, repeated success depends on being able to ascertain the true causes for initial success. Publicly attributing the actions of one or more individuals to a successful outcome reinforces positive behaviours in themselves and in the rest of the team. Affirming the unique value of team members strengthens their resolve to continue to help the team thrive and is an important part of the “immune system” of a healthy team.

Moreover, having confidence in oneself and being able to both receive credit with humility and take credit when due (especially when not properly conferred upon you by those who should offer it) protects you from abuse and helps to repair the damage caused by a dysfunctional group member.

4. How do you get better at it?

In your project work, practice the “design critique” making sure to give equal emphasis to what was done well and what needs improvement. Perform self-assessments of your own work drawing up a list of merits and demerits then have a trusted colleague verify and validate your self-assessment. Do code reviews. When a bug is found in shared code, perform a root cause analysis in an unbiased, egoless manner.

Outside of school, show gratitude for the kindness others extend to you. Write thank you notes for small acts of kindness.

Faith

1. What is it?

The ability to surrender control over some decisions to another with the expectation that they will make sound decisions when properly supported; trust; empowerment.

2. What is it not?

“Blind” optimism; fire-and-forget delegation; setting up another person for failure; arrogance.

3. Why does it matter?

Individuals cannot thrive without measures of freedom. Self-efficacy is attained only through the exercise of control. You cannot learn from experience without a real risk of failure. Faith in yourself develops when you internalize the faith another has in you.

“Fail fast” and “fail forward” mantras imply that we trust others to do what they think is best and spend our energy supporting them, not dominating them. Finally, the most efficient way of organizing a team happens when individual team members are trusted to prioritize team success ahead of individual glory.

4. How do you get better at it?

Practice letting go. The twin pillars of humility and awareness are important. First, humility helps us recognize that we are all imperfect in some way or another and that it is acceptable and indeed necessary for us to fail if we are to grow. Second, awareness helps reinforce trust by ensuring that problems are dealt with early and not left as surprises (which undermine trust).

Practice both “positive psychology” (I can because I believe I can) and “negative psychology” (think of the worst case scenario and what your response will be in that scenario).

To anyone whom you love, tell them: “I believe in you.” This includes yourself.

Try things that are outside your comfort zone so that you get accustomed to failure, especially public failure. Lack of faith is most often fear of rejection due to failure.

Tenacity

1. What is it?

Intelligent perseverance in the face of challenge or obstacle, adapting your strategy and approach iteratively as you learn from each failure. Surprisingly, tenacity can even mean giving up and moving on.

2. What is it not?

Stubbornness; “Einsteinian insanity” (repeating the same steps and expecting a different outcome).

3. Why does it matter?

“If at first you don’t succeed: try, try again.” Likewise, “Fail fast” and “fail forward” imply you will fail and you will try again, albeit in some way different after failure. Being able to make smart choices about when to press ahead, in which directions, and when to back off for a bit or completely is vital to successfully completing any challenging goal.

Self-efficacy comes only when one rises to a challenge. Perseverance is an essential trait shared among all dreamers be they entrepreneurs, innovators, or leaders inspiring change.

4. How do you get better at it?

Before you begin a task in your project work, be clear to yourself on what “success” looks like (outcomes, measures), what the plan of execution is, what pre-requisites or co-requisites must be satisfied and where there is uncertainty or ambiguity that demand investigation. Check your assumptions with your team members. Track your performance: use an app to track how much time you actually spend on tasks and record which tasks have been started, completed, or are blocked.

Outside of school, try hobbies that interest you but also challenge or perhaps even frustrate you a little bit. Set stretch goals but be sure to use the S.M.A.R.T. goal setting methodology (talk to Student Services for info on this) to break the goals up into attainable and actionable chunks. Go to hear inspirational speakers who visit the University. Play poker or strategy games.

Accountability

1. What is it?

The ability to make and keep commitments and to hold oneself and others to the commitments they’ve made.

2. What is it not?

Playing the blame game; “taking” responsibility; being the “fall guy”.

3. Why does it matter?

Engagement -- the willful pledge of one’s support -- is a key “team health” measure. Successful people fully own every aspect of their team’s work even if responsibility for individual tasks is faith-wise parcelled out among team members.

Because they are personally invested in the team and deeply want the team to succeed, such individuals freely commit their competencies to the fulfilment of team goals. They easily pick up tasks they feel they can do well and cheerfully pick up tasks they know need to be done but which no one else wants to do (or is available to do). They are honest about their strengths and weaknesses and humbly ask for support when individual tenacity threatens team success. They are diligent in reporting back to the team on their progress.

When the team fails or under-performs they are honest in determining root cause, even when the cause points to their own poor performance or negligence. They seek to make restitution to the team and, if necessary, on behalf of the team. They expect these things of themselves and they ask for them in return from other team members.

4. How do you get better at it?

In any project work, there are tasks which are incredibly important, but also incredibly boring or effortful. Ask to do more than “your fair share” of these tasks and be honestly happy about taking them on. Seek the honest feedback of your team mates on your performance.

Outside of school, practice making and keeping commitments. Volunteer your time as a peer counsellor or tutor. Be rigorous in how you schedule your time and leave lots of free time for you to recharge your own batteries or help out another on a spur of the moment.

Principles

1. What is it?

The ability to formulate and reformulate a small number of priorities and rigorously align, check and re-align your thoughts, plans and actions to these priorities.

2. What is it not?

Stubbornness; arrogance; or an obsession with every detail where “everything is important.”

3. Why does it matter?

Success is often a matter of *focus*: deciding what you will not do as much as what you will do. Principles let you draw a boundary that separates the goals you will seek and the methods you employ to attain them from goals you will not pursue and methods you will not use. Generally, principles are not arbitrarily decided and because of this they generally steer you towards accomplishable goals and successful methods for attaining them and steer you away from fruitless goals or ineffective (or harmful) methods.

Principles also reinforce self-efficacy by removing doubt about the means by which you attained success, “letting you sleep at night.”

4. How do you get better at it?

In your project teams, openly debate what core usability principles will you prioritize and then evaluate your decision decisions against those principles. Practice thinking about why you choose to emphasize these principles over others: what are the benefits and what are the consequences? Revisiting your decisions frequently helps you understand them more broadly

and deeply.

Outside of school, spend time reflecting on your personal principles. Most of the time, we “inherit” our core value system from our family and give them little thought. Reflective self-questioning, really *wrestling* with difficult topics, is an important element of personal moral and intellectual growth and the development of character and is not something to be ashamed of. Seek the insights of others.

Compromise

1. What is it?

The ability to identify and accept alternate resolutions of conflict that maximize shared benefit over personal gain; to turn every conflict into a “win-win” rather than “zero-sum” game.

2. What is it not?

Capitulation; self-denial; being a push-over; “agreeing to disagree” without resolving anything; passive aggression.

3. Why does it matter?

Again, success is often a matter of focus. When negotiating what the team will do, the interests, priorities and preferences of individual team members set up a situation where the team does not have the resources to do all things desired and the team must make decisions about what will not be done as well as what will be done.

While having some principles is vital to success, having too many principles will place a lot of restrictions on the goals you seek and the methods you employ. Being clear to oneself as to your principles versus your preferences and being firm on your principles but flexible on your preferences, is vital to ensuring that the team quickly reaches a resolution to the conflict that is harmonious and productive.

4. How do you get better at it?

In your project group, learn to speak your mind in a respectful manner and help others feel at ease speaking their mind. Be a champion for the unheard and the underheard, but be mindful to fully investigate their position and encourage them to be open themselves first. As a team, when disagreements arise, review your shared principles, set aside any preconceived solutions you already brought to the table and instead seek to answer the question: “What are things we can do that will fulfil these principles?” Diffuse tension with creative and divergent thinking exercises. Try using De Bono’s Six Thinking Hats.

Outside of school, evaluate yourself honestly and determine if you need to practice “standing up for yourself” or if you should instead practice “giving in to others.” If the former, practice

first standing up for others: for example, volunteer to help kids who are being bullied, or help disadvantaged people navigate social services. If the latter, seek first to practice empathy and humility as these things will help you develop the divergent thinking skills needed to find “win-win” resolutions to situations.

Finally, be uneasy about entering into “win-lose” situations even when the balance is tipped in your favour. Read Covey’s *7 Habits of Highly Effective People* and Carnegie’s *How to Win Friends and Influence People*.