

Computer Science | 2017-2018 Assessment Report

1. Please give a brief overview of the assessment data you collected this year.

We surveyed students with a questionnaire composed of 7 numerically-rated questions. The ratings were done on a 7-point "Strongly Disagree" (1) to "Strongly Agree" (7) scale. We also used three open-ended questions. A total of 100 students responded to the survey, comprised of 52 Communication Majors, 37 Computer Science, and 11 Information Science Majors. The majority were Juniors or Seniors. See attached summary in Appendix A.

2. How will you use what you've learned from the data that was collected?

That's up to the new CS chair but it does indicate a need to further develop students' ability to provide CI feedback.

- Further train students on providing useful formal and informal feedback
- Consider revising current student feedback forms
- Train new faculty on how to provide useful feedback

Appendix A Information & Computing Science

The purpose of the ICS continuous improvement (CI) survey was to:

- Understand the views of our students on CI
- Assess the effectiveness of our department's CI efforts
- Determine if CI has become part of our students' cultures

Method

The survey was composed of 7 numerically-rated questions. The ratings were done on a 7-point "Strongly Disagree" (1) to "Strongly Agree" (7) scale. We also used three open-ended questions. A total of 100 students responded to the survey, comprised of 52 Communication Majors, 37 Computer Science, and 11 Information Science Majors. The majority were Juniors or Seniors (see Table 1).

Results

Table 2 highlights the overall mean for the numerically-rated questions in rank order. Table 3 provides the frequency distributions for each survey item. Tables 4, 5, and 6 provide details by major. The appendices contain results of open-ended items.

Several noteworthy findings emerge from the survey results:

- All the items were rated above the conceptual midpoint. (see Table 2)
- The highest-rated item was "I embrace CI", while the lowest-rated item was "My colleagues are skilled at providing CI." (see Table 2)
- Generally, student feelings about the meaning of CI were in line with faculty expectations. In response to the question, "Top Three Words that Continuous Improvement (CI) Brings to Mind," the prominent words of "better," "growth" and "improvement" mirrored faculty expectations (see Figure 1). Likewise, with only one exception, the comments in Appendix 1 were right in-line with faculty objectives.
- There was considerable variability between the departments in regard to all items (see Figure 2).
- Peer evaluations surfaced as one area to target for improvement (see Appendix 2).

Table 1 Return Rates

	Communication Majors	Information Science Majors	Computer Science Majors
Senior	26	6	11
Junior	17	1	15
Sophomore	9	1	7
Freshman	0	2	4
Total	52	11	37

Table 2 Item Responses

Rank	Question	Total Mean	Comm Mean	IS Mean	CS Mean
1	I embrace continuous improvement.	6.12	6.24	6.18	5.95
2	I'm regularly challenged to practice continuous improvement.	5.33	5.80	4.91	4.81
3	The faculty members are skilled at providing continuous improvement feedback.	5.22	6.00	4.73	4.30
4	My student colleagues embrace continuous improvement	5.13	5.12	4.91	5.21
5	The faculty in my program practice continuous improvement.	5.09	5.75	4.18	4.44
6	My program has the proper tools and processes to encourage continuous improvement.	5.01	5.76	4.18	4.27
7	My colleagues are skilled at providing continuous improvement feedback.	4.83	4.98	4.36	4.68

Table 3
Item Responses by Frequencies

Rank	Question	7 Strongly Agree	6	5	4	3	2	1 Strongly Disagree
1	I embrace continuous improvement.	45.5	39.4	9.1	2.0	0.0	0.0	4.0
2	I'm regularly challenged to practice continuous improvement.	13.1	50.5	14.1	8.1	10.1	1.0	3.0
3	The faculty members are skilled at providing continuous improvement feedback.	24.2	28.3	21.2	9.1	10.1	3.0	4.0
4	My student colleagues embrace continuous improvement.	9.1	33.3	30.3	17.2	9.1	1.0	0.0
5	The faculty in my program practice continuous improvement.	20.4	26.5	25.5	9.2	9.2	6.1	3.1
6	My program has the proper tools and processes to encourage continuous improvement.	11.3	37.1	24.7	8.2	9.3	5.2	4.1
7	My colleagues are skilled at providing continuous improvement feedback.	9.2	30.6	23.5	18.4	7.1	8.2	3.1

Table 4
Communication Majors

Rank	Question	7 Strongly Agree	6	5	4	3	2	1 Strongly Disagree
1	I embrace continuous improvement.	43.1	45.1	0.0	0.0	9.8	0.0	2.0
2	I'm regularly challenged to practice continuous improvement.	19.6	60.8	9.8	3.9	3.9	0.0	2.0
3	The faculty members are skilled at providing continuous improvement feedback.	33.3	43.1	19.6	2.0	0.0	0.0	2.0
4	My student colleagues embrace continuous improvement.	7.8	37.3	31.4	7.8	13.7	2.0	0.0
5	The faculty in my program practice continuous improvement.	31.4	31.4	27.5	2.0	5.9	2.0	0.0
6	My program has the proper tools and processes to encourage continuous improvement.	20.4	49.0	26.5	0.0	0.0	2.0	2.0
7	My colleagues are skilled at providing continuous improvement feedback.	12.0	30.0	34.0	6.0	6.0	10.0	2.0

Table 5
Computer Science Majors

Rank	Question	7 Strongly Agree	6	5	4	3	2	1 Strongly Disagree
1	I embrace continuous improvement.	48.6	23.4	8.1	2.7	0.0	0.0	8.1
2	I'm regularly challenged to practice continuous improvement.	2.7	43.2	18.9	16.2	10.8	2.7	5.4
3	The faculty members are skilled at providing continuous improvement feedback.	10.8	16.2	21.6	16.2	21.6	5.4	8.1
4	My student colleagues embrace continuous improvement.	13.5	29.7	27.0	24.3	5.4	0.0	0.0
5	The faculty in my program practice continuous improvement.	11.1	19.4	22.2	19.4	11.1	11.1	5.6
6	My program has the proper tools and processes to encourage continuous improvement.	2.7	21.6	24.3	18.9	18.9	10.8	2.7
7	My colleagues are skilled at providing continuous improvement feedback.	5.4	35.1	10.8	35.1	2.7	5.4	5.4

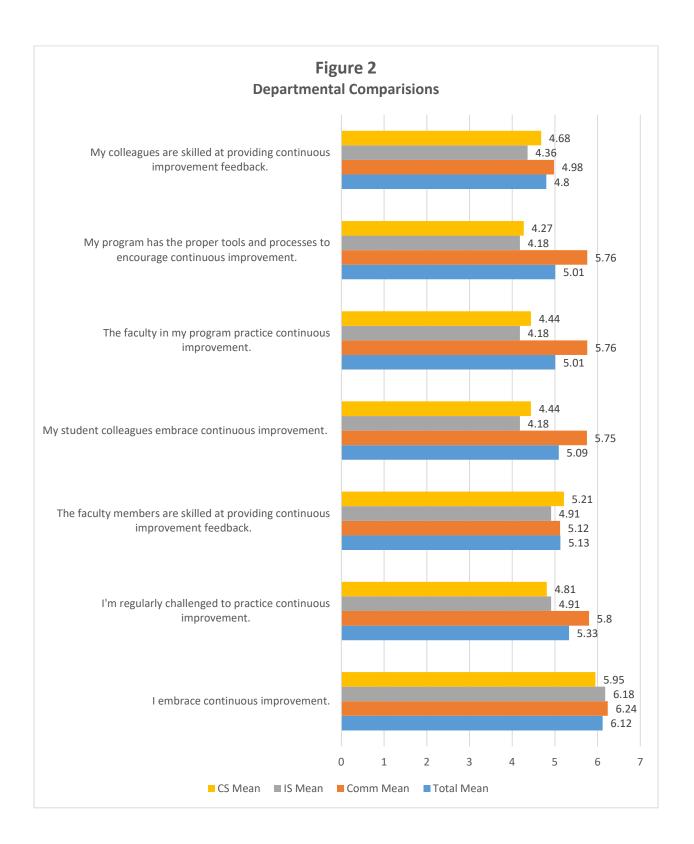
Table 6
Information Science Majors

Rank	Question	7 Strongly Agree	6	5	4	3	2	1 Strongly Disagree
1	I embrace continuous improvement.	45.5	36.4	9.1	9.1	0.0	0.0	0.0
2	I'm regularly challenged to practice continuous improvement.	18.2	27.3	18.2	0.0	36.4	0.0	0.0
3	The faculty members are skilled at providing continuous improvement feedback.	27.3	0.0	27.3	18.2	18.2	9.1	0.0
4	My student colleagues embrace continuous improvement.	0.0	27.3	36.4	36.4	0.0	0.0	0.0
5	The faculty in my program practice continuous improvement.	0.0	27.3	27.3	9.1	18.2	9.1	9.1
6	My program has the proper tools and processes to encourage continuous improvement.	0.0	36.4	18.2	9.1	18.2	0.0	18.2
7	My colleagues are skilled at providing continuous improvement feedback.	9.1	18.2	18.2	18.2	27.3	9.1	0.0

Figure 1

Top Three Words that Continuous Improvement (CI) Brings to Mind





Appendix 1

What does continuous improvement mean to you?

- Taking feedback and using it to improve yourself
- To learn new materials and improving my skills
- The ability of improving myself
- Continuous improvement seems standards aren't meant and you're trying to improve them
- Room for improvements
- A pointless day of class.
- Understand what I can do better
- For me continuous improvement means an unlimited development of someone, helped or no by others
- Get better. Plain and simple. Correct mistakes and improve.
- continuing growth
- It's a way of assessing my faults in order to be able to fix them, but also keeping it balanced by assessing strengths.
- That the world is ever changing becoming more efficient.
- Always looking for new innovations to incorporate.
- Always improving and trying your best.
- For me, I think of it as constructive criticism. It means never settling for less and always aiming higher for what you want for yourself. It means always trying to improve yourself and learn new skills.
- It means to better oneself
- always trying to get better
- teaching students the right way to code and understanding the material
- It is a means to continue growing and developing to better myself
- Never stop learning
- Being able to make things better than what they currently are.
- always improving yourself for the next time
- Being provided help when needed, tips to improve, taking constructive feedback and using it to improve the quality and efficiency of your work
- It means discovering things that you can be doing better in order to improve yourself
- It means that I have the ability to gain positive insight from what can be seen as a learning experience.
- Not much
- It is a way to know how to improve my presentations and work
- hopeful
- personal growth
- Learing something new everyday.
- Keep getting better, never stop learning
- Keep gaining knowledge and getting ready for the working environment after college
- It's a word used in Comm classes.
- It's a way of assessing my faults in order to be able to fix them, but also keeping it balanced by assessing strengths.
- It means to better oneself
- It means to better my skills and develops new ones that will help my future and current self.
- It means that there is always room to improve and to get better at a task
- It means that no matter what the final product is, there are always ways to innovate and improve the product
- It means that I have the ability to gain positive insight from what can be seen as a learning experience.

- It means that even if you think something you have done, or are doing, is perfect, you're probably wrong. There is always some sort of way to improve, whether it be the final outcome, or the process to get there.
- It means taking what you know and adding to it, expanding your knowledge and skills
- It means no setbacks, keep moving forward
- It means discovering things that you can be doing better in order to improve yourself
- It is a way to know how to improve my presentations and work
- It is a means to continue growing and developing to better myself
- It helps me grow as a comm major
- improving over time within a system
- Improving on what we have done in the past, to better ourselves for the future.
- I want to know what my weaknesses are so that I can improve on them for next time.
- I break it down to what I can continue to do to be a better overall person.
- hopeful
- helping students to succeed
- growth, making changes for the better
- Growth
- Growing from past experiences to insure greatness
- Git gud
- Getting better over time
- Getting better at your weak points.
- Getting better at what I do
- Get better. Plain and simple. Correct mistakes and improve.
- For me, I think of it as constructive criticism. It means never settling for less and always aiming higher for what you want for yourself. It means always trying to improve yourself and learn new skills.
- For me continuous improvement means an unlimited development of someone, helped or no by others
- Fixing issues that are addressed
- Continuous improvement seems standards aren't meant and you're trying to improve them
- Continuous improvement means that you are constantly reviewing and assessing the systems and processes you have in place. Feedback should be had by the creator(s) of the systems, the individuals using or partaking in the systems, and a couple individuals outside of the system. After assessment is done, and feedback is gathered, changes are made. This should be done regularly (a deep dive at least once per year; in the case of a school or university, after each semester is a good idea).
- continuing growth
- Continually getting better throughout time
- Constantly trying to implement the newest processes, especially through feedback from students/faculty.
- Constantly trying to get better at the things I do
- Constantly learning what I can improve on.
- Constantly improve in the field of communication to be well equipped when entering the work field.
- Constantly getting better
- Consistent growth
- Checking incrementally on progress in areas where skill still need to be developed or could be strengthened
- Changing and expanding the ways of thinking and learning to benifit the individuals
- Building off of what you already have done
- Better
- Being provided help when needed, tips to improve, taking constructive feedback and using it to improve the quality and efficiency of your work
- Being on top of the lattest ways of improving or better quality education and or learning experience

- Being able to take ownership of mistakes and shortcomings and use feedback given to you to become better.
- Being able to make things better than what they currently are.
- Becoming stronger both personally and professionally
- Becoming better at what you do and not being stuck in a rut in regards to skill.
- An ongoing effort to improv upon yourself, your education, your career, your skills.
- always working on yourself to get better
- always trying to get better
- Always looking for new innovations to incorporate.
- Always learning and adapting
- always improving yourself for the next time
- Always improving for the better
- Always improving and trying your best.
- Always aiming to strengthen weaknesses, and excel within current strengths.

Appendix 2

How could the department do a better job sharing continuous improvement feedback?

- have meetings with students
- The department can elaborate more on those feedbacks rather than just "giving" feedbacks
- Stop telling me everything you're doing and just do it.
- Updating the classes based on student feedback.
- providing more resources and create more groups working on a variety of projects
- Provide more elaboration on returned assignments/essays, continue sharing feedback after presentations, and personally email/reach out to those groups who particularly struggled on a presentation.
- Grade homework.
- Notifications calendar
- Always updating students on their grades and status in that the classes they are taking.
- I think some things that are meant to act as CI can easily turn into blatant criticism that is not only unhelpful, but undermines the self-confidence, self-esteem, and motivation of some students. I think the department should make sure that their feedback is more constructive rather than aggressive.
- Not having peer evals because Comm major students are mean
- include it in the grade for homework
- Not have CI day.
- explain material thoroughly and teach better
- I think using the 5 week grade report and the grades I have near the end of the semester is a good way to provide feedback, when they are compared with what the professor has noticed from my growth during the semester. At the end of the semester, professors could comment on what the student has advanced with and what they could improve on still.
- I think they already do a wonderful job
- Maybe having professors meet with you to discuss current progress and how to either improve on what you've done
- I feel that the process in which the department shares continuous feedback is well done
- Possibly have one on one meetings with faculty.
- Written versions of the feedback not just verbal
- one on one meetings
- More direct answers. As it more details
- I think that you could go over at the beginning of the year the main forms of CI students have experienced after going through the course
- Showing more examples of how the content we learn is reflected after college at work and how we could actually use those tools we get from school.
- Get rid of the studnet feedback (green sheets). In my four years here, there has never been feedback that has been helpful. In fact, these sheets have only provided nonconstructive feedback or just harmful feedback that targets individual students.
- Provide grades more promptly, and give actual feedback when grades come instead of "great job"
- To explain why points were taken off for assignments and papers to understand what to improve on.
- I don't think there are any other ways, the Comm program really embraces CI and does a great job sharing CI feedback.
- Have the students be involved more with how that improvement happens.
- I think teaching students how to identify weaknesses and giving time to talk to others to find ways to improve on a specific area could be helpful. Also teaching students how to reflect internally and come up with continuous improvement ideas for themselves.

- I don't really get feedback
- I really like getting overall class feedback after presentation. I think it would be interesting to meet with advisors to discuss improvements. We need to discuss in our application what we want to improve, but we never revisit it in a professional manner.
- Doing it
- More communication, more variety of faculty
- By challenging students more on the subject. Never had a teacher talk about this topic ever in class.
- Grading
- Getting physical write ups of needed improvements for projects after like we get from students with eval sheets.
- have tutors to help based on students area of weakness
- Responding to emails more promptly and meeting times
- Send more emails aimed at CS majors.
- make an effort to provide lab, homework, and project feedback by the assigned deadlines.
- In complete honesty, possibly better professors. Most of the very few professors often show their lack of care or effort towards their students, possibly as a result from job security due to the lack of potential professors available in this major. Regardless, to implement proper continuous improvement feedback, professors need to actually want their students to succeed. In turn, if they could simply provide suggestions giving direction for the proper paths to take to either improve or meet goals. One example would be simply providing some real world examples and examples of great resources to use to better one's knowledge.
- Grading assignments on time, giving constant feedback to students, and constantly look to improve course like Anam does.
- I think they're doing a good job.
- Email, written, verbal
- Always being candid.
- The department could find a way to communicate with all faculty about issues that students have.
- Make all group projects have a CI day to have other group members share what each other can improve on
- D2L, have us do weekly in class exercises each week for a portfolio/reel each week. Then more opportunities for reel content is there. We need more hands on reel training classes to prepare especially students who want to pursue journalism and sports reporting.
- Sharing feedback more often.
- transparency and open communication between faculty and students
- Less scantron exams. You get no feedback from it
- The instructors in the department could show up on time for starters. Also, none of the three instructors in the Computer Science department check assignments regularly. Almost every class I've had for the last five semesters, the assignments weren't even corrected until AFTER we were tested on the curriculum. How are we supposed to study if we don't even know if we've done assignments correctly. When there are assignments corrected, there is zero useful feedback. 'Good job' does not help. For several classes, almost the entire semester's worth of assignments were corrected at once, after the final. Clearly things weren't even properly looked at. There were 20+ assignments corrected at once, none with feedback. At this point, I've paid thousands of dollars to teach myself.
- improve communication
- Professors sharing some feedback in front of the class so the class can all learn from other groups mistakes.
- Require all faculty to give CI feedback after major assignments.
- Use more complex rubrics that go into greater depth about the strengths/weaknesses of presentations, projects, etc
- emphasize on group dynamic and collaboration

- More one-on-one personalized discussion
- Having every professor dedicate days for continuous improvement
- On my do CI during q&a when other groups have done the same things
- Have professors provide more feedback on work.
- Frequent updates on the happenings within the department. Involvement of students in minor decision-making processes.
- Informing us more
- Allow a doc that shares the continuous improvement that was given
- We do an excellent job of this already
- Show what questions specifically were wrong and their correct counterparts with an explanation to why it is correct. Many quizzes and projects do not offer in depth feedback to help continuous improvement. At times it feels as if it's just one test to the next without really improving from the test itself.
- Tell us honestly, and when something is wrong say what we did wrong, AND how to fix it
- Email more
- Teach students how to give back feedback
- Being a little bit tougher on the students because the real world is much harder. So setting specific challenges for each group would be a great opportunity for that group to grow.
- Keep students more involved in the program and opportunities; interact more with students and use an up to date curriculum that is optimized for efficient student learning.
- Having an updated CI feedback box for specificities.
- Getting grades back faster and submitting 5 week grade reports
- Find a better way to have students utilize it. I've never seen a student/presentation actually develop from continuous improvement.
- List primary strengths and weaknesses to better facilitate improvement.
- Encouraging students to meet with professors to discuss performance.