# Assignment 5 – Major Reflective Report (Part 2 of 2)

# Section A: Ethics Scenario

**SCENARIO**

You’re a fourth-year Computer Science student at the University of Waterloo. You recently finished your final co-op term, which you spent working for a local software-development company, and you’ve just agreed to work for this company full-time after you graduate. You really like working at this company; you like your co-workers there, and you’re very happy with the salary they’ve offered you.

Back on campus, it’s been announced that the University is procuring a new software system for matching co-op students to co-op jobs. The system is going to employ a new matching algorithm that prioritizes employers’ rankings of students over students’ rankings of employers, a decision the University is making to keep employers happy and to convince them to return every term with new job postings.

The students are strongly opposed to the proposed system because their preference rankings will have less influence on matching outcomes. You’re a member of WUSA (the University’s student council) as the VP Education and, as part of your role, you’re helping to lead the students’ effort to convince the University’s administration to use a more balanced algorithm, thus empowering students.

After several meetings with the administration and with co-op services, you discover that your future employer has been engaged by the University to provide the proposed new co-op job matching system. Your future boss has said that you’ll likely be assigned to work on this project when you start working for the company on a full-time basis.

Please reference the instructions in the Assignment 5 Part 2 description on LEARN while completing this assignment. You must use the ACM/IEEE Software Engineering Code of Ethics and Professional Practice to answer the following questions.

# Question 1

According to the code of ethics, I must act in the public interest. As a member of WUSA, I have a ethical responsibility to represent the students since they represent the public interest. In this case, I do not have an ethical responsibility to the university, because despite being my employer, their actions are not consistent with public interest. Similarly, I do not have an ethical responsibility to the companies using WaterlooWorks because their best interests are not consistent with the public interest.

# Question 2

1. We can advocate against the change using petitions, public statements and social media to demonstrate the strength of student opposition against the proposed algorithm. This follows Aristotle’s ethical theory, since we understand that standing up for the students is the right thing, and I have an emotional attachment to this idea.
2. We can find a common ground between the university, the students and the companies by organizing student, university and company representatives to discuss a new solution that is innocuous for all stakeholders. This will help take into consideration the mission of the companies and the university administration and hopefully lead to a result that is beneficial to everyone.
3. Finally, we can suggest a change where we implement the university’s change to the algorithm and gather user feedback on the change, allowing us to determine whether the change is effective and satisfactory for everyone in practice, and rollback the change if it provides a more negative experience for the students. This goes against my own judgement since this decision can negatively impact students before any reversions.

# Question 3

I would be most likely to choose option 1, and then use option 2 after leveraging our position against the university administration. This is because if we organize student, university and company representatives to discuss a new solution, student representatives will have no leverage since they have no authority, and the success of option 2 depends on an equality in power between parties.

# Question 4

I would be comfortable explaining my position to the employer described because I would not want to work at a company that does not share my personal values as well. Furthermore, I am confident in my ability to find another job if things do not work out. As the VP of WUSA, I would also be comfortable explaining my decision to the student body since I am fulfilling my ethical responsibilities by acting in their best interests, and fighting against the implementation of the new algorithm.

# Section B: Diversity Scenario

**SCENARIO:** Paulo and Rachelle are both studying Computer Science at the University of Waterloo. They’re getting ready to enter their fifth work term, and they’ve both applied to a position as a technology consultant at OmniCorp’s office in downtown Kitchener. OmniCorp is a software-based company with mostly male employees making up their development team. Because of their experience in the field, academic performance, and extracurricular activities, they’re roughly equally qualified for the position, and they both have successful interviews with OmniCorp’s hiring team. They each believe that they have a very good chance at being hired for the position.

When the rankings are released, Paulo learns that he hasn’t been offered the position by OmniCorp, and he contacts the leader of the hiring team to learn what kept him from receiving the offer. The hiring manager tells him that although he is a very strong candidate, OmniCorp’s diversity policy recommends giving priority to candidates from underrepresented populations (e.g., women, minorities) when considering potential hires who have equivalent qualifications. (In this case, that means Rachelle was hired over Paulo, although Paulo is not given her name.)

Paulo is outraged by this decision and believes that he is a victim of reverse discrimination; in his eyes, he has been denied employment because of his gender. He contacts a reporter at The Record and gives an interview claiming that he has been unfairly treated by OmniCorp, putting the company in a situation where they’re forced to respond publicly to his claims.

# Question 5

Employees Hired by OmniCorp

Pros: Underrepresented groups of people can be more comfortable in their workspace. In this case, Rachel can be more comfortable in a less male-dominant workspace.

Cons: People not considered as underrepresented have a lower chance of getting a job with the same qualifications which is unfair to them. Underrepresented groups may be ostracized against by others since they will be perceived as undeserving of a job due to favourable treatment due to the policy.

Corporations

Pros: Corporations like OmniCorp get to meet their diversity quotas. Furthermore, studies have shown that workplace diversity leads to an increase in productivity due to increased motivation and job satisfaction (Merin, 2023). Having more diversity in the workplace also introduces new perspectives to the team, which can be beneficial for the growth of the company.

Cons: Increased diversity in the workplace also causes reduced social cohesion, poor communication and increased conflict (“Diversity in the Workplace,” 2021). This has been proven to increase employee turnover, not because some professionals are intolerant, but because conflicts of interest that arise due to different cultural values and political beliefs will cause people to leave an unpleasant environment. This type of policy, similar to affirmative action, although to a lesser extent, can be seen as a form of reverse discrimination. In an attempt to compensate for the mistakes of the past, we now discriminate against people who had nothing to do with them.

Tech Industry

Pros: The tech industry can benefit from increased diversity similar to corporations. More perspective can lead to faster innovation which benefits the industry (Potochny, 2019). Furthermore, increased perspective leads to more inclusion in tech products. For example, a predominantly male tech industry may release new technology without properly considering all the needs of women, or a predominantly asian tech industry may fail to consider the cultural needs of other races. Introducing diversity allows the industry to approach problems from different angles and solve real world issues more quickly.

Cons: An overemphasis on diversity is a real problem that has begun plaguing many corporations today. This indirectly has a negative effect on the tech industry today by compromising the focus to hire the most qualified individuals (Potochny, 2019). Furthermore, increasing diversity in the workplace does not actually address the root of the issue. What we really need is more qualified individuals from underrepresented groups to have senior positions at corporations in order to reshape the power structure (Ely, 2021).

Overall, I believe the pros of diversity outweigh the cons heavily. The pros address real problems that people are suffering from today, whereas the cons do not immediately have a negative impact on anyone, only longterm disadvantages.

References:

1. Merin. (2023, March 13). How workplace diversity increases productivity? | HR Shelf. *HRShelf*. https://hrshelf.com/diversity-increases-productivity/

2. Diversity in the workplace. (2021). *Human Resource Management International Digest*, *29*(4), 32–34. https://doi.org/10.1108/hrmid-04-2021-0088

3. Ely, R. J. (2021, August 27). *Getting Serious About Diversity: Enough Already with the Business Case*. Harvard Business Review. https://hbr.org/2020/11/getting-serious-about-diversity-enough-already-with-the-business-case

4. Potochny, D. (2019). Is there such a thing as being too diverse? *BioSpace*. https://www.biospace.com/article/is-there-such-a-thing-as-being-too-diverse-/

# Section C: Reflection

# Question 6

Going into question 5, I was expecting myself to be more central in my view of preferential treatment towards minorities in the workplace. However, after reviewing the pros and cons of the impacts on each level ranging from the employees to the industry as a whole, it introduced me to a wide range of pros that I was previously unaware of, such as an increase in productivity in the workplace. Moreover, while doing research and reading through the article by Harvard, it made me reevaluate the entire concept of diversity and inclusion by introducing the idea that diversity and inclusion requiring a change in the power structure, rather than the percentage of minorities in the workforce. While I still believe it is fundamentally unfair to give someone a job over someone equally as qualified due to their identity, I can still appreciate the benefits it brings to the corporation, its employees and on the tech industry.

# Question 7

I feel very confident and competent about my ability to navigate potential legal and ethical issues in the future after this course. At the start of the course, I only had a rudimentary understanding of copyright, licensing and warranties. This course has introduced me to the laws surrounding these legal concepts, how to avoid infringement and most importantly, why they are important. In contrast to the start of this course, I am now confident in my ability to tackle these issues and knowledge of when to seek guidance from legal experts. Furthermore, compared to the start of the course when I did not even consider ethics when developing software, it has now become a key part of my everyday work life, where I consider all the stakeholders for changes that are being made, and act accordingly. For example, I would previously cave under deadlines and release changes prematurely, which would be acting against the public interest since I am releasing code into production with possible bugs and issues which would negatively impact the user experience. Overall, I think this course has taught me a lot about diversity and inclusion, ethical practices in the software industry and legal complications that may arise.

# Works Cited/References

*Insert Works Cited/References here*