Case Study: Faculty Analysis Scenario

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Due to a huge rate of growth in higher education institutions since 1940 and new financial changes, accountability pressures, and technological challenges, faculty appointments now include part-time, tenure, and fixed-term positions. From 1971 to 2011 part-part time employment has grown from 23% to just over 50%. The increase in part-time faculty has helped ease the need for full-time faculty and introduced diverse expertise to the learning environment, but it has also introduced power struggles within the faculty dynamics.

Full-time faculty often work towards becoming tenured which is a life-long position that is attained after a 6-year probationary period and institutional approval. Tenure brings academic freedom, the right to vote on institutional issues, and the opportunity to hold further leadership positions in the university. The full-time faculty that are not on a tenure track hold fixed-term positions with contracts of generally 1-3 years. Part-time and fixed-term faculty do not have the same institutional influence and voting rights as full-time tenured and tenure-track faculty.

This case study evaluates the need to reform curriculum in the chemistry, physics, and mathematics departments to increase engineering major retention through including more applicable skills and interactive instruction. The tenured chemistry professor, Dr. Mwangi, had sufficient power and influence to implement curriculum reforms within the chemistry department before this study was completed. He was able to promote more active forms of learning and he was supported by his colleagues as these reforms were implemented. Ultimately, there was a positive change and student passage rates and evaluations improved. It is reasonable to use these changes as a model to reform the mathematics and physics entry level classes as well.

Physics teacher, Oakley, is a fixed-term lecturer who has proposed and lobbied for reforms similar to Dr. Mwangi’s improvements to be applied to the entry level physics. Unfortunately, those within the department with voting rights voted against these reforms. Although Oakley was willing to support reform, she simply didn't have sufficient influence or voting rights within the department for her proposal to be validated and approved.

The mathematics department does not have a teaching philosophy or curriculum for lower-level classes. They also do not have strong leadership within the department, so the faculty operate with autonomy regarding content and style of instruction. Most problematic is that lower-level math classes are taught by part-time faculty members because full-time professors teach upper-level courses. Therefore, tenured faculty are not directly experiencing the retention issues, so those with voting rights do not support curriculum reforms.

In order to increase the number of engineering majors at MASU, the math and physics departments should reform their curriculum to involve direct application of skills and active learning as the chemistry department has. There are part-time faculty who are willing to lead these initiatives, but they lack the power to enforce changes are not backed by the tenured professors who have this power. The chemistry professor Dr. Mwangi should become involved with other tenured professors in the math and physics departments to propose and communicate the value of updating the curriculum. If this does not help implement reform, I would encourage these professors to propose solutions that they would be willing to enforce. I would also hold these tenured professors accountable to meet and cooperate until the MATH 175, PHYS 190, and CHEM 115 saw higher completion grades and more positive student evaluations. Additionally, they must propose alternate solutions for teaching hands-on application of skills to engineering majors, and be proactive in finding internships where students can learn skills directly.

I do not think any solution will be put into place without the support of tenured faculty as part-time and fixed-term faculty do not hold the power to propose and enforce changes.

References

Penn State World Campus. (n.d.). Lesson 7: Faculty. In HIED 545: *Foundations of Higher Education and Student Affairs: Spring 2020*. Retrieved from https://psu.instructure.com/courses/2043984/modules/items/27822364