



January 13, 2021

To whom it may concern:

It is my pleasure to write a letter supporting Dr. Todd Iverson for tenure and promotion at Winona State University. In addition to the many hours Todd and I have spent discussing our teaching philosophies and practices, I have also had the chance to observe him interact with students. These experiences have convinced me that he is an *exceptional* educator, and I hope that this letter of support does justice to describe some of the many contributions he has made to our department and programs.

Our data science program has significantly improved since Todd joined our faculty. He created two new courses on his own to fill gaping holes in the curriculum, which is a daunting and time-demanding task. Furthermore, he also worked with other faculty members to improve existing data science courses. His expertise is valued by us all, and we often seek out his advice. Todd is *always* willing to offer ideas and opinions to his colleagues - even for courses he is not currently teaching - no matter how busy he is with his own teaching assignment. He is committed to making our courses better, regardless of whether he is the one teaching them or not, and his efforts have had a positive impact.

In my opinion, the contributions he has made to our data science program alone along with the work he's done to share his ideas with the larger data science/statistics community are enough to warrant tenure and promotion, but Todd has gone above and beyond to also improve our statistics program. One specific example I'd like to highlight is his creation of web applets that are now used across almost all sections of introductory statistics on campus. Before these applets were available, I required my students to purchase a program (which cost them about \$8) that was used to run simulation studies (these simulation studies are used to intuitively introduce the idea of statistical inference). The software was easy to use for most students, but some did struggle and ended up falling behind early in the course. Todd identified this added cost to the students and the issues some students had using the program as hurdles to their learning, and he decided to do something about it. He created a beta version of his own applet, asked us to test it and give feedback, and then made the final version available for free on the web. I have been using this binomial simulation study applet in my introductory courses for about a year now, and it is fantastic. Not only is it free, but it's *much* easier for students to learn and use than the software I used previously. In addition, he created another applet that simplifies the computation of binomial probabilities that is now a part of several introductory courses, as well. His applets have made my courses better, and my students and I both owe him a great deal of gratitude.

Another example I'd like to highlight involves Todd's contributions to STAT 310. A few years ago, I taught that course for the first time in a long time. Todd and I were both teaching sections of the class the next semester, and the changes he convinced me to make from my first iteration of the course were great improvements. We met regularly to discuss what worked well and what didn't work well, and his insights and suggestions helped me rethink and revise my teaching approach in that class. Also, STAT 310 recently became a writing intensive course. Todd put a lot of work into creating a writing project. Students were required to work in groups to choose a research question of interest and then conduct a pilot study to investigate that question in a virtual population known as *The Islands*. He found articles that provide

students with the basic knowledge needed to design a pilot study, created an assignment description and rubric, and found a way to make the project even more fun by encouraging competition amongst the students. Fortunately for me, he was willing to share his work so that I could use the same assignment in my sections. Overall, the STAT 310 course is currently in a very good place, and once again, I have Todd to thank.

Finally, Todd has also worked to bring consistency to our capstone projects. He sought out resources and put together forms to streamline the process of students using internships for their capstone. He also created a common rubric that can be used to evaluate all our graduating seniors' capstone papers. Once again, he was prompted to do these things simply because he recognized that the need was there. These efforts weren't tied to a specific course that was part of his teaching load; instead, they were part of his service (and this type of service too often goes unnoticed).

In summary, we are very fortunate to have Todd as a faculty member in our department, and he is most deserving of both tenure and promotion. We truly hit the jackpot when we hired him, given his knowledge of and passion for both data science and statistics. He not only brings a strong work ethic, enthusiasm, talent, and creativity; he also brings a collegial spirit and sense of professionalism that I value. All of us (teachers and students alike) benefit from his dedication to this university and to our programs, and I look forward to working alongside him for years to come.

Sincerely,



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