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The UW System Center of Excellence in Undergraduate Chemistry and Physics

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To whom it may concern:

I am writing this letter of support for UWRF to earn innovation credits for this year's sustainability report. We are in our first full year of teaching in the newly constructed Hagestad Hall Active Learning Classroom (ALC). This classroom was built in our old Brandy's Student Center dance and food court area. My first exposure to this area was that it was an abandoned, dark space full of old office supplies and boxes. Many campuses have converted these large open spaces into ALCs. I have even heard of an old swimming pool being turned into an ALC. Large enrollment ALCs utilize open floor plans with tables of 6-9 students. The instructor station is central and the tables are arranged around the perimeter of the room. Our ALC has twelve tables of nine for a total of 108 student capacity with each circular table partitioned into three sections of three students. Each table of nine has a TV monitor, two glass white boards, three convertible laptop/tablet computers, three cable connections to interface with the TV monitors and one table output control panel.

I have been fortunate to be able to teach General Chemistry I in this new ALC. My teaching methods employ research supported team based guided inquiry approaches as a dominant pedagogical technique. Prior to moving into this classroom, I was forcing 65-90 students in a tiered lecture hall to organize into small teams (3-4) and work on guided inquiry activities. Students were bending over fixed seats, papers and calculators were falling off pedestal tops, groups were quickly turning into pairs, and not to mention groups were rarely interacting with other groups. I would call upon students to report out answers but this was dominantly a verbal exchange given that it took too long for students to squeeze their way out of the rows to reach the one room chalk board. Last, I could move around the outside of the single block of fixed seats but movement within the seats was difficult. Since moving into the ALC, students can naturally arrange into groups of 3-4 depending on how many students are at each table given the circular design and rolling chairs. Students have plenty of room to spread out paperwork and calculators. Students can easily talk with the other groups at the table and are often called upon to write up table consensus answers on the glass white boards. I can quickly move around to each table, and I can view table answers written on the boards from the center of the room. This allowed me to intervene in a timely fashion with further probing questions and help as needed to address the needs of all of the students.

As part of the assessment of this movement into the ALC from a mismatched tiered lecture hall, we administered a student attitude survey asking about their perceptions of the classroom environment and their interactions during class. Students reported working in small groups (2-3) at about the same level in both classes supporting a high degree of active group learning in both environments. However, they reported working in medium groups (4-9) very infrequently in the lecture hall compared to a high level in the ALC. This data supported the observation of collaboration between the smaller groups at each table. Students also reported statistically significant gains in their confidence, engagement, enrichment, and student learning outcomes as a result of the ALC environment.

This project has transformed a formerly abandoned space in an old student union into a state of the art classroom environment that supports and promotes students learning and engagement.

Sincerely,

Dr Jamie Schneider

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