

Engagement of Veterinary Medicine Students in Extracurricular Activities and impact on Academic Achievement: The Experience of Veterinary Student Clubs at the University of Gondar, Ethiopia.

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Context

Students' participation in extracurricular activities is typically seen as beneficial to their entire educational experience. Extracurricular activities are those which exist outside the domain of normal curriculum and to be performed by students voluntarily unlike the mandatory tasks. Students who participated in extracurricular activities had often a considerably higher overall academic achievement as compared to non-participant students , demonstrating the impact of extracurricular activities on student performance (Jones et al., 2014).

Veterinary students experience high levels of stress, with concerns about academic performance, workload, and the amount of time spent studying. According to Hafen et al. (2008), this causes individuals to suffer from depression at higher rates than the overall population, which is particularly noticeable among first-year students. Students participating in extracurricular works know the method of living in groups by developing leadership skills and managing tensions in easier way. According to undergraduate students, their biggest obstacles to participating in extracurricular learning activities are time and scheduling (McKinney et al., 2004). Developing skills like time management, stress management, budgeting, and study techniques, as well as forming study groups, interacting with others, forming friendships, and creating a support system, are some ways to manage such circumstances (Garland, 2010).

Extracurricular activities are important for working and for learning as well. According to Montelongo (2002), David and Jasmine (2017), and others, involvement in extracurricular activities offers college students a range of opportunities for improved campus life within their institution, which is linked to higher levels of persistence through graduation, increased leadership capacity, student academic and career success, and generalized cognitive and social development. In Ethiopia, student drop out is a major roadblock among veterinary medicine students due to lack of motivation, reactiveness, and confidence. The veterinary education twinning program between University of Gondar and Ohio State University, particularly the student exchange program was instrumental to initiate student-led clubs in the University of Gondar that helped much to increase student participation and motivation.

Methods / Descriptions of activities

In order to improve the quality of veterinary education and produce qualified, recently graduated veterinarians whose education meets the World Organization for Animal Health (WOAH) day-one competence, the University of Gondar (UoG) and Ohio State University (OSU) partnered to implement a veterinary educational twinning program between 2015 and 2022 with support from the WOAH (Armando et al., 2020). In 2016 and 2018, 16 UoG veterinary students of advanced classes (4th - 6th year) participated in a student exchange program that allowed them to attend practices twinned with OSU veterinary students in the College of Veterinary Medicine.

During this program, students visited OSU teaching-learning facilities, participated in student rotations, were exposed to advanced learning practices, and had the chance to explore new learning strategies and exchange experiences with the OSU student club leaders. In order to engage in extracurricular activities, UoG students used this opportunity to start their own student clubs at their local university. Consequently, three student-led clubs—Veterinary Public Health, Clinical Medicine, and One Health—were established by the exchange program participant students starting in 2017. Every year, about 300 (85%) of the students at the veterinary school engage in extracurricular activities.

The clubs were voluntarily established to provide students with extracurricular learning opportunities to enhance their practical skills and knowledge. They established a venue for debating important current events in research, veterinary medicine, and public health, promoted networking and communication between students, the general public, and veterinarians, and built social relationships and provided community services.

Results / Monitoring and evaluation of results

Each year, the member students design activity plans, organize themselves structurally, and adopt a code of behavior. Developing clinical abilities, soft skills, and providing community services were the main goals of many of the student activities completed and skills acquired.

- Clinical diagnosis, case management, and medication administration skills training
- For laboratory diagnostics, students learned how to collect and submit samples from both living and dead animals.
- Artificial insemination training for cow breeding, as well as instruction in diagnosing and treating dystocia in both early and late pregnancy.
- Procedures for surgery, and diagnostic imaging (using x-ray and ultrasound equipment)
- Elementary school pupils in Gondar city were made aware of the animal welfare, and the need to prevent and control zoonotic diseases, particularly canine rabies.
- Ant-rabies dog vaccination campaigns in urban areas.
- Educating secondary school pupils about the veterinary profession.
- The participants developed and managed business and project plans through entrepreneurial trainings.

• Participants have gained knowledge about resume and motivation letter writing, and job search resources. Following the introduction of extracurricular activities, students' motivation, involvement, and general academic performance all improved in UoG. The percentage of veterinary graduates with distinction (GPA >3.5) rose from 27% in 2019 to 48.5% in 2023, reflecting the annual increase in the number of top-performing students in terms of grade point average. The UoG-OSU veterinary education twinning program in general and the students' extracurricular activities improved the quality of the veterinary education and the performance of graduates reflected by their competitiveness and employability.

Pictures / images







Figure 1: Clinical and laboratory skill practices of participant students.







Figure 2: Student practices on sampling techniques.





Figure 3: Artificial insemination and pregnancy diagnosis training of students





Figure 4: Autopsy and surgical practices



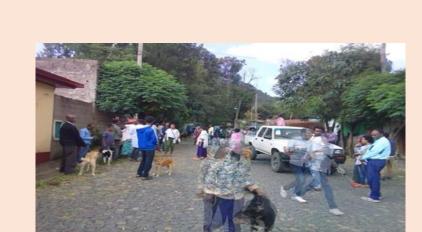




Figure 5: Rabies prevention (awareness creation and dog vaccination) services







Figure 6: Soft skill trainings (business planning, resume writing, job search

Fig. Cumulative grade point average of vet graduates (2019-2024) in UoG

Conclusions and recommendations

The UoG veterinary student led clubs organized extracurricular events that encouraged students to engage in clinical, lab, and community service projects as well as soft skill development exercises for themselves. As seen by the rise in high-achieving graduates between 2019 and 2024, these knowledge and skill-building initiatives enhanced students' engagement and general academic achievement. As a result, UoG veterinary graduates are more competent from the start of their careers, and most of them land a job within six months of graduation. The veterinary education twinning program between UoG and OSU in general and the students' extracurricular activities in particular has improved the quality of veterinary education as well as the employability and competitiveness of graduates. In light of UoG's experiences, other Ethiopian veterinary schools must strive just as hard to produce qualified graduates for the country's veterinary workforce in order to influence the enhancement of veterinary services nationwide.

References

- David M. Rosch, Jasmine D. Collins (2017). The Significance of Student Organizations to Leadership Development. ew Directions for Student Leadership: Volume 2017, Issue 155 Special Issue.
- Diane Jones, Mee Joo Kim, Cheryl Allendoerfer, Rebecca Bates, Joy Crawford, Tamara Floyd-Smith, Melani Plett, Nanette Veilleux (2014) The Link between Cocurricular Activities and Academic Engagement in Engineering Education. https://doi.org/10.1002/jee.20057Citations: 30
- Hafen et al. (2008) 'Impact of Extracurricular Activities on Academic Performance of Students at Secondary Level. International Journal of Applied Guidance and Counseling 2(2):7-14
- Montelongo (2002). Student Participation in College Student Organizations: A Review of Literature. Journal Of The Indiana University Student Personnel Association.



World Organisation for Animal Health

Organisation mondiale de la santé animale

Organización Mundial de Sanidad **Animal**

