Research on the Reform of Teaching Evaluation in Animal Husbandry and Veterinary Education

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Abstract: This paper delves into the key issues of reform in teaching evaluation in the field of animal husbandry and veterinary education, focusing on the deficiencies of traditional teaching evaluation methods in the current educational system and proposing new evaluation approaches to address these challenges. By analyzing the implementation effects of these new evaluation methods, the paper demonstrates their potential benefits in improving students' academic performance, active participation, and cultivation of practical skills. Additionally, the article emphasizes the importance of educational evaluation reform for veterinary and animal husbandry professional education and its crucial role in promoting educational quality and adapting to modern veterinary practice needs. Ultimately, the aim of this study is to provide new ideas and methods for training more comprehensive and practically skilled professionals in animal husbandry and veterinary fields.

Keywords: Animal Husbandry and Veterinary; Teaching Evaluation; Reform Study

1. Introduction

Education in the field of animal husbandry and veterinary plays a crucial role in meeting the growing food demands, maintaining animal and plant health, and ensuring public health. However, modern veterinary and animal husbandry education face multiple challenges, including emerging technologies, changing regulatory requirements, and global challenges. In this context, the reform of educational evaluation becomes particularly critical to ensure students not only master traditional knowledge and skills but also can handle complex real-life situations and evolving industry demands. This paper will discuss the background of teaching evaluation reform in animal husbandry and veterinary education, new evaluation methods, and their effectiveness, aiming to provide strong support for training more comprehensively skilled and practically capable veterinary and animal husbandry professionals.

2. The Key Role of Teaching Evaluation

2.1 Feedback on Student Learning Progress

Feedback on student learning progress plays a crucial role in education. Through timely evaluation and feedback, educators can better understand the learning status of each student, including their strengths and difficulties. This understanding aids in personalized teaching, allowing teachers to adjust according to the needs of the students, providing additional support or challenges. At the same time, students benefit from clear feedback, which helps them understand their learning objectives and performance more clearly, allowing them to improve and enhance their academic level more effectively. Therefore, feedback on student learning progress not only helps improve the quality of education but also cultivates students' self-awareness and enthusiasm for learning, promoting their personal and professional development.[1]

2.2 Improving Teaching Quality

Improving teaching quality is an eternal goal in the field of education, crucial for cultivating excellent students and providing a high level of education. To achieve this goal, educators should continually review and improve their teaching methods and strategies. This may include adopting innovative educational technologies, increasing interactive and practical teaching activities, providing

timely feedback and personalized support, and continuously updating teaching materials and course content. Additionally, educators should continually update their educational philosophies and methods to adapt to the changing learning needs and educational environment. Through these efforts, a more challenging and inspiring learning environment can be created, stimulating students' interest in learning, enhancing their academic achievements, and laying a solid foundation for their future professional success. Improving teaching quality is not just a task but a commitment to ensure continual progress in education, powerfully influencing the future of society.[2]

3. Background of Teaching Evaluation Reform in Animal Husbandry and Veterinary Education

3.1 Evolution of Educational Philosophy

The evolution of educational philosophy is an important phenomenon in the field of education that cannot be overlooked. With changes in society, technology, and culture, educational philosophies are also constantly developing and evolving. In the past, education may have focused more on imparting basic knowledge and cultivating students' memory abilities, while modern education emphasizes developing students' comprehensive literacy, critical thinking, and problem-solving skills. This evolution reflects a significant shift in society's expectations of education, demanding it to be more adaptable to complex and variable real-life situations. Modern educational philosophy emphasizes active student participation, practical experiences, collaborative learning, and personalized education, providing new directions for educational reform. Therefore, educators need to continually review and adjust their educational philosophies to ensure they meet the ever-changing needs of students and society, providing a more comprehensive and beneficial direction for future education.[3]

3.2 The Rise of Technology

The rise of technology has brought revolutionary changes to the field of animal husbandry and veterinary education. With the rapid development of information technology, modern veterinary and animal husbandry education is no longer confined to traditional classrooms and laboratories. Technological tools such as virtual laboratories, simulation technologies, remote education platforms, and electronic health records provide students with broader and more diverse learning opportunities. These tools not only strengthen students' theoretical knowledge but also simulate real-life veterinary practice situations, allowing students to practice and improve their clinical skills in a safe environment. Additionally, the rise of technology provides more opportunities for self-directed learning, allowing students to customize their learning paths based on their interests and needs. The rise of technology in animal husbandry and veterinary education brings unprecedented opportunities, promising to cultivate more comprehensive and practically skilled veterinary and animal husbandry professionals.[4]

3.3 Demands of a Knowledge Society

The demands of a knowledge society pose new challenges and opportunities for animal husbandry and veterinary education. In modern society, the needs of the animal husbandry and veterinary field are not limited to traditional breeding and clinical practice but also include complex issues such as food safety, animal welfare, environmental sustainability, and public health. Therefore, education must be more integrated, cultivating students with interdisciplinary knowledge and comprehensive literacy to address various complex challenges. Additionally, the knowledge society also emphasizes the importance of continuous learning and adaptation, requiring graduates to have the ability to learn independently and continuously develop. Therefore, the reform of animal husbandry and veterinary education needs to focus more on cultivating students' comprehensive literacy, interdisciplinary capabilities, and lifelong learning abilities, to meet the high demands of modern society for veterinary and animal husbandry professionals.

4. New Teaching Evaluation Methods

4.1 Project-Based Learning

Project-based learning is a key initiative in the reform direction of animal husbandry and veterinary education, bringing positive changes to veterinary and animal husbandry professional education. Traditional classroom teaching methods may lean more towards the inculcation of theoretical

knowledge, but in the veterinary field, students need more practical skills and the ability to solve real-world problems. Project-based learning emphasizes student participation, practice, and teamwork, integrating learning with real-world veterinary practice. In project-based learning, students often face specific cases or problems, requiring teamwork to collect and analyze information, propose solutions, and validate these solutions in practice.[5] This method of learning not only helps students develop critical thinking and problem-solving skills but also enhances their teamwork and communication skills, which are very important in the veterinary field. Additionally, project-based learning offers an opportunity for interdisciplinary learning, as veterinary problems often involve multiple disciplines, including biology, medicine, ecology, etc. This enables students to understand and address complex veterinary challenges more comprehensively. Through project-based learning, students actively participate in the learning process, enhancing their motivation and interest, which helps them master knowledge and skills more deeply. In summary, project-based learning cultivates students' practical skills, teamwork, and critical thinking, helping to better meet the needs of veterinary professionals.

4.2 Distance Education and Online Learning

Distance education and online learning have attracted widespread attention and adoption in the field of animal husbandry and veterinary education reform, bringing revolutionary changes to veterinary and animal husbandry professional education. This educational model extends educational opportunities globally through the internet and digital technologies, providing students with greater flexibility and convenience. Students in veterinary and animal husbandry fields can access high-quality course content through online learning platforms, regardless of geographic location, especially beneficial for students unable to attend traditional campuses. Online learning also offers more personalized learning opportunities, allowing students to customize their learning plans according to their own pace and interests and choose courses and resources that suit them. Additionally, online learning platforms allow students to access course materials anytime, anywhere, providing opportunities for review and independent learning. In the fields of veterinary and animal husbandry, distance education and online learning also offer innovative ways for practical education. Virtual laboratories, simulation technologies, and online practice tools can simulate actual animal medical and livestock scenarios, allowing students to practice clinical skills and face real challenges in a virtual environment. This type of practical online learning helps students accumulate experience in a safe environment, preparing them for future practice. However, distance education and online learning also face challenges, such as lack of interactivity, demands for self-discipline in learning, and technological barriers. Therefore, educators need to continuously improve the design of online courses, providing more interactive opportunities and support to ensure that students can fully participate and receive support.[6]

4.3 Personalized Learning Pathways

Personalized learning pathways are an important initiative in the reform of animal husbandry and veterinary education, aiming to better meet students' learning needs and interests. Traditional educational models usually place all students in the same teaching framework, ignoring their individual differences. However, each student has different learning styles, subject preferences, and learning paces, so the introduction of personalized learning pathways helps better meet these diverse needs. Personalized learning pathways allow students to choose courses, projects, and resources based on their interests and academic needs. This not only stimulates students' learning interest but also motivates them to participate in the learning process. Students can delve deeper into areas of greater interest while also receiving more support and resources to address their weaknesses. Additionally, personalized learning pathways also emphasize the importance of self-directed learning. Students need to take more responsibility for their learning, set their own learning plans, and manage their learning progress appropriately. This helps develop students' self-directed learning and problem-solving skills, which are particularly important in the practice of veterinary and animal husbandry. However, implementing personalized learning pathways also requires support and resources from educators. Educational institutions need to offer a variety of courses and resources to ensure students have enough choices. Educators can act as academic advisors, working with students to develop personalized learning plans and providing feedback and support.

4.4 Group Discussion and Team Collaboration

Group discussion and team collaboration have special significance in the reform of animal

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husbandry and veterinary education. Traditional classroom teaching often focuses on a one-way transfer of knowledge, while group discussion and team collaboration emphasize interaction and cooperation among students. This educational method helps cultivate students' teamwork, communication, and collaboration skills, which are particularly important in the veterinary and animal husbandry fields where work often requires multidisciplinary team cooperation to solve complex problems. Through group discussions, students can jointly explore course content, share insights, and consider different perspectives. This interaction stimulates students' critical thinking and problem-solving abilities, while also deepening their understanding of course content. Team collaboration enables students to apply what they have learned in practice, jointly addressing challenges in veterinary and animal husbandry fields. Students take on different roles in the team, thereby developing leadership, coordination, and teamwork skills. Additionally, group discussion and team collaboration provide a social support system for student learning, where students can face academic pressures together, encouraging and supporting each other, enhancing their learning enthusiasm. This social interaction helps build academic and professional networks, providing strong support for future career development. In summary, group discussion and team collaboration are methods for cultivating comprehensive literacy and teamwork capabilities, helping to provide veterinary and animal husbandry students with a more comprehensive educational experience.

5. The Effectiveness of Teaching Evaluation Reform

5.1 Improvement of Student Performance

The improvement of student performance is one of the goals of animal husbandry and veterinary education reform. Traditional classroom teaching may lean towards the transmission of theoretical knowledge, but the fields of veterinary and animal husbandry require students to have practical operational skills and comprehensive capabilities. Therefore, by adopting novel educational methods and evaluation strategies, students' performance can be significantly improved. Firstly, new evaluation methods emphasize the cultivation of practical operations and practical skills. Through simulation experiments, clinical practice, and project-based learning, students have the opportunity to apply learned knowledge in real-world scenarios, which helps improve their skill levels. This practical method of learning makes it easier for students to master actual skills in veterinary and animal husbandry fields, providing a solid foundation for their future careers. Secondly, personalized learning pathways and feedback mechanisms can be adjusted based on each student's academic needs and learning progress. This helps students more specifically address their weaknesses and expand their strengths, improving academic performance. Students can choose courses that suit their interests and needs, stimulating their learning interest and enthusiasm. Additionally, group discussion, teamwork, and interactive teaching methods also help improve student performance. Students can expand their thinking and deepen their understanding of course content by sharing knowledge and insights with classmates. Team collaboration enables students to learn coordination and communication skills in collaboration, which are very important in veterinary and animal husbandry practice. Overall, adopting new evaluation methods, personalized learning pathways, feedback mechanisms, and promoting interactivity and teamwork in teaching methods is expected to significantly improve the academic performance of students in veterinary and animal husbandry fields.

5.2 Increased Student Engagement and Enthusiasm

One of the outcomes of teaching evaluation reform is the significant increase in student engagement and enthusiasm. By introducing innovative evaluation methods and teaching strategies, educators can create a more attractive and interactive learning environment, stimulating students' passion for learning. Personalized learning pathways provide students with more choices and autonomy, allowing them to choose courses, projects, and tasks based on their interests and academic needs. This autonomy stimulates their learning motivation. Students participate in learning activities they find meaningful and relevant, making them more likely to engage actively and invest in learning. New evaluation methods, such as project-based learning and group discussions, emphasize active participation and collaboration among students. In project-based learning, students need to work with a team to solve real-world problems, stimulating their curiosity and desire for knowledge. Group discussions encourage students to actively share opinions and interact with classmates, deepening their understanding and engagement. Additionally, timely feedback and assessment are key factors in enhancing students' enthusiasm. Students need a clear understanding of their academic performance to adjust their learning strategies in

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time. Educators can help students identify their strengths and weaknesses through feedback and assessment, providing guidance and promoting their learning progress.

In summary, the effectiveness of teaching evaluation reform enhances student engagement and enthusiasm, helping to cultivate veterinary and animal husbandry professionals with greater self-directed learning and problem-solving capabilities.

5.3 Improvement of Educational Quality

Teaching evaluation reform has significantly promoted the improvement of educational quality. By introducing new evaluation methods and teaching strategies, educators can more comprehensively and accurately assess students' academic performance, thereby targeting improvements in teaching and enhancing educational quality. Firstly, new evaluation methods emphasize the cultivation of practical operations and practical skills. The veterinary and animal husbandry fields require students to have clinical skills and operational capabilities, which traditional written assessments often fail to fully assess. However, through practical evaluations such as simulation experiments, clinical practice, and project-based learning, students can apply their knowledge in real-world scenarios, helping to develop their practical skills and improving the practicality and quality of education. Secondly, the promotion of personalized learning pathways and feedback mechanisms provides more support and guidance, helping students better understand and master course content. Students can choose courses that suit their academic needs, and personalized learning pathways allow them to delve deeper into their areas of interest, improving learning efficiency. Timely feedback mechanisms help students identify and correct learning problems early, improving academic performance. Additionally, group discussions and teamwork encourage students to share knowledge and insights, deepening their understanding of course content. Students not only learn more through interaction with classmates but also improve their critical thinking and problem-solving abilities. This interactive teaching method helps cultivate students' comprehensive literacy, improving the quality of education.

5.4 The Driving Force of Educational Reform

The driving force of educational reform in the field of animal husbandry and veterinary cannot be overlooked, with teaching evaluation reform playing a key role. This reform, by introducing new evaluation methods and strategies, actively promotes the evolution of the education system and the improvement of educational quality. Firstly, one of the driving forces of educational reform is the introduction of new evaluation methods. Traditional educational evaluations rely mainly on standardized tests and exams, which often fail to comprehensively reflect students' actual abilities and competencies. However, teaching evaluation reform has introduced more practical operations and comprehensive assessments, such as project-driven learning, group discussions, and practical tasks. These methods align more closely with the actual needs of the veterinary and animal husbandry fields, aiding in the development of students' practical skills and problem-solving abilities, thereby advancing the practicality and quality of education. Secondly, the promotion of personalized learning paths is also part of educational reform. This approach allows students to customize their learning plans based on their interests and academic needs, enhancing the relevance and appeal of learning. Educational reform advocates for the active and autonomous participation of students in the learning process, helping to stimulate their motivation and encouraging them to engage more actively in learning. Additionally, educational reform emphasizes the importance of hands-on and practical learning, encouraging students to apply their knowledge in real-life situations. This mode of practical learning helps to improve students' skill levels and strengthens their readiness for professional careers, further advancing the quality of education in the veterinary and animal husbandry fields.

6. Conclusion

In the discussion of teaching evaluation reform in animal husbandry and veterinary education, while the importance of traditional evaluation methods in certain aspects cannot be denied, the great potential of new evaluation methods in adapting to modern veterinary practice needs and improving the quality of education is also evident. The continuous evolution of the field of education and the rapid development of technology offer more possibilities for teaching evaluation, while also presenting greater challenges. Therefore, there is a call for educators to continually strive in the area of evaluation reform, actively adopt new evaluation methods, and advance veterinary and animal husbandry professional education to keep pace with the times, thereby cultivating students with more

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comprehensive literacy and practical abilities.

References

[1] Sun Lingli, Zhang Mengzhe, Hao Zhenfang, et al. Exploring Practical Teaching Reform of Animal Husbandry and Veterinary Specialties Aimed at Innovation and Entrepreneurship Education. Henan Agriculture, 2023(24): 23-24.

[2] Xu Rui, Xiang Jinmei, Wang Wenxi, et al. Research and Practice on the Construction of Teaching Innovation Teams in Higher Vocational Animal Husbandry and Veterinary Specialties. Swine Industry Science, 2023, 40(08): 62-64.

[3] Wang Xingqun, Deng Qingsheng, Han Changquan, et al. Exploration of Pathways for Constructing Teaching Innovation Teams in Vocational Education for Animal Husbandry and Veterinary Specialties. Guizhou Animal Husbandry and Veterinary, 2023, 47(04): 28-31.

[4] Cui Yizhe, Wang Qiuju, Wang Chang, et al. Application of Modern Educational Technology in Animal Husbandry and Veterinary Teaching. Science and Technology Wind, 2022(28): 92-94.

[5] Xu Kewei. Exploration of Teaching Reform Strategies for Animal Husbandry and Veterinary Courses Based on Core Literacy. Today's Animal Husbandry and Veterinary, 2022, 38(07): 116+118.

[6] Wang Qiuju, Cui Yizhe, Wang Chang, et al. Exploration of Innovative Education and Practical Teaching in Animal Husbandry and Veterinary Specialties. Science and Technology Wind, 2022(28): 74-76.