FOREWORD

Praise and gratitude to God Almighty who has given His grace and grace, so that the author can complete the writing of the thesis entitled "Development of Scientific Approach-based E-worksheet to Improve Student Critical Thinking Skills on Digestive System Material Class XI SMA Unggulan Al-Manar".

The writing of this thesis is intended to fulfill some of the requirements for obtaining a Bachelor of Education degree in the Biology Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan. The author realizes that the preparation of this thesis will not be completed without the support of various parties, both directly and indirectly. Through this opportunity, the author would like to express his respect, affection, and gratitude to:

- 1. Prof. Dr. Baharuddin, S.T., M.Pd. as the Rector of Universitas Negeri Medan.
- 2. Ma'am. Dr. Ani Sutiani, M.Si. as the Dean of the Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.
- 3. Mr. Drs. Jamalum Purba, M.Si. as the Vice Dean for Academic Affairs of the Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.
- 4. Ma'am. Dr. Dewi Wulandari, M. Si. As the Vice Dean for Finance and Infrastructure of the Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.
- 5. Mr. Rahmatsyah, M.Si. as the Vice Dean for Student Affairs of the Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.
- 6. Ma'am. Khairiza Lubis, S.Si., M.Sc., Ph.D. as the Head of Biology Department, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.
- 7. Ma'am. Aswarina Nasution, M.Pd. as Secretary of the Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.
- 8. Ma'am. Dr. Ely Djulia, M.Pd. as the Head of the Bilingual Biology Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.

- 9. Ma'am. Dr. Apt. Endang Sulistyarini Gultom, S.Si., M.Si. as Thesis Supervisor, for her extraordinary time, guidance, motivation, and direction so that all stages in the preparation of this thesis can be assessed properly.
- 10. Ma'am. Dr. Widya Arwita, S.Pd., M.Pd. as Academic Supervisor who has provided a lot of guidance and advice during the author's lectures.
- 11. Ma'am. Prof. Dr. Masdiana Sinambela, M.Si. as the first examiner of the author who has provided a lot of guidance and advice in writing this thesis.
- 12. Mr. Dr. Hasruddin, M.Pd. as the second examiner of the author who has provided a lot of guidance and advice in writing this thesis.
- 13. Ma'am. Dra. Marlinda Nilan Sari Rangkuti, M.Si. as the third examiner of the author who has provided a lot of guidance and advice in writing this thesis.
- 14. Mr. and Mrs. Lecturers of Biology Education, Faculty of Mathematics and Science, Universitas Negeri Medan, who have provided a lot of knowledge during lectures to the author.
- 15. To all Staff Employees of the Faculty of Mathematics and Science, Universitas Negeri Medan, who have provided a lot of assistance in terms of administration.
- 16. Ma'am. Cut Athiah Thaib, SH. as the Principal of Al-Manar Unggulan High School who has given research permission for the preparation of this thesis, as well as Mrs. Chyntia Khairiyah Nasution, S.Pd. as the supervising teacher at Al-Manar Unggulan High School who has taken the time to direct the author in carrying out research.
- 17. Especially to the author's beloved parents, Mr. Hendra and Almh Mrs. Oktavina, who always support and pray for the author under any circumstances.
- 18. Especially the author's dearest grandmother, Asni, who has raised and educated the author from childhood to the present, providing her sincere support and prayers for the author's smooth running of every process in life, may she always be given health and blessings from Allah Swt.
- 19. Especially to the author's dearest guardians, Mr. Andi Aguspel, S.Kep and Ma'am. Apt. Sri Yuliasmi, S.Farm, M.Si., who always provide support and prayers in the course of the author's studies from high school until now.
- 20. Especially to the author's dearest sisters and younger siblings, namely Sukma Ranum Sari, S.Pi, Muhammat Alif, Alya Zahirah, Fadillah Afiqah, and Aisyah

Aulia Salsabila who always provide enthusiasm, support, and entertainment in the midst of writing this thesis.

- 21. Especially for the author's cousin, who always provides support and prayers.
- 22. The author's dearest friend during lectures, WisBar, namely Amalia Putri, Elsariya Br Ginting, Jessika Maria Simanjuntak, Siti Nuraisah Asma Ujung, and Syahana Sabila Fajriah Bintang who have become the author's best friends in taking lectures and have taught many things in the meaning of real friendly relations. As well as BESP 2020 classmates who have accompanied in carrying out lectures.
- 23. At last but not least, I want to thank you for believing in me and surviving through the hard work, thank you for not giving up and stopping.
- 24. And all those who provide support and prayers to the author who cannot be mentioned one by one, thank you for everything.

The author realizes that this paper is far from perfect. For this reason, the author really hopes for critical and suggestions from readers to perfect this thesis, finally the author hopes that this thesis can be useful for all parties and become entry material for those who need it.

Medan, 15 Juli 2024 Author

Azura Nur Yenda

IDN. 4202441013