CURRICULUM VITAE

PERSONAL DATA

Name	:	Prof. Dr. Hadi Suwono, M.Si.
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Place and date of birth	:	Pati, 15 Mei 1967
Nationality	:	Indonesia
Department and Faculty	:	Department of Biology Faculty of Mathematics and Natural Sciences
University address	:	Universitas Negeri Malang (State University of Malang) Jl. Semarang 5 Malang, Indonesia
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EDUCATION

S1	(Bachelor)	Biology Education	(1990)	Institute of Teacher Training and Education
S2	(Master)	Biology	(1993)	Bandung Institute of Technology
S3	(Doctor)	Biology Education	(2007)	Universitas Negeri Malang

EXPERTISE

Biology education, Science education

TEACHING EXPERIENCE

No.	Subject	Study Program
1.	Research Methodology	Bachelor of Biology Education
2.	Education Research methodology	Bachelor of Biology Education
3.	Assessment and Evaluation	Bachelor of Biology Education
4.	Science Assessment	Master of Biology Education
5.	Qualitative Research	Master of Biology Education
6.	Curriculum Development	Doctor of Biology Education
7.	Research Dissemination	Doctor of Biology Education
8.	Transformative learning	Doctor of Biology Education

RESEARCH PROJECT (2018-2022)

Research	Year	Funding (USD)
1. Developing transdisciplinary biology curriculum and teaching for 21st century students (2021)	2021-2022	22375 USD Ministry of Education and Culture
2. Greenovation: STEM learning project for senior high school in supporting sustainability (2020-2021)	2020-2021	9790 USD Universitas Negeri Malang
3. Evolution Theory Acceptance Model (ETAM) Reconciliation and Acceptance of Evolution Theory Through Critical Teaching of Science-Religion Relations	2021	4550 USD Universitas Negeri Malang
4. The effect of metacognitive-driven constructivist model on critical thinking ability, problem solving, creative thinking, retention and cognitive learning outcomes of secondary school students	2021	2587 USD Universitas Negeri Malang
5. Development of four-tier diagnostic test instruments based on google forms to identify misconceptions regarding immune, vaccine and physiological regulations	2021	1748 USD Universitas Negeri Malang
6. Development of electronic module of viruses and bacteria based on three-tier diagnostic tests as an effort to overcome misconceptions and growing capabilities of the 21st century of high school students in learning biology during the covid-19 pandemic	2021	1750 USD Universitas Negeri Malang
7. The effect of flipped classroom problem-based learning (Fc-PBL) on information literature and biological problem-solving skills of secondary school students	2021	1750 USD Universitas Negeri Malang
8. STEM-PjBL biomimicry to improve problem-solving skills, creative thinking and career planning	2021	1200 USD Universitas Negeri Malang
9. STEM learning (science, technology, engineering, and mathematic) at school: systematic review	2020	1355 USD Universitas Negeri Malang
10. Development of global socio-scientific decision-making questionnaire: factor analysis of socio-	2020	1800 USD Universitas Negeri

scientific decision making skills of students		Malang
11. The effect of analytical thinking infusion in biology learning on student decision making, entrepreneurship skills, trans-discipliner thinking, and good citizenship.	2020	3986 USD Universitas Negeri Malang
12. Misconceptions In Biology: portrait, contributing factors, and effort to overcome them	2020	4700 USD Universitas Negeri Malang
13. Synthesizing accountability and relevancy of STEM structures and practices into Indonesian senior high school curriculum 4.0	2019	4685 USD Universitas Negeri Malang
14. Making Thinking Visible: an essential approach to promote biology and physics students to be a skillful thinker	2019	4588 USD Universitas Negeri Malang
15. Development of Fuel Cell Learning Packages for Science Teaching in Schools	2019	8741 USD Universitas Negeri Malang
16. Development Teaching Strategies to Foster Scientific Literacy of High School Students and 21st Century Preservice Biology Teachers	2018	27972 USD Ministry of Research and Higher Education
17. Development of Student Capabilities through Life-Based Learning in Biology Curriculum	2017	8741 USD Ministry of Research and Higher Education

PUBLICATION (2020-2022)

1. Suwono, Hadi, Rofiah, D., Saefi, M., & Fachrunnisa, R. (2021). Interactive socio-scientific inquiry for promoting scientific literacy, enhance biological knowledge, and developing critical thinking. *Journal of Biological Education*, *00*(00), 1–15. https://doi.org/10.1080/00219266.2021.2006270.
2. Suwono, H., Maulidia, L., Saefi, M., Kusairi, S., & Yuenyong, C. (2022). The Development and Validation of an Instrument of Prospective Science Teachers ' Perceptions of Scientific Literacy. *EURASIA Journal of Mathematics, Science and Technology Education*, *18*(1), 1–16. https://doi.org/https://doi.org/10.29333/ejmste/11505
3. Suwono, Hadi, Permana, T., Saefi, M., & Fachrunnisa, R. (2021). The problem-based learning (PBL) of biology for promoting health literacy in secondary school students. *Journal of Biological Education*, *00*(00), 1–15. https://doi.org/10.1080/00219266.2021.1884586
4. Suwono, Hadi, Prasetyo, T. I., Lestari, U., Lukiati, B., Fachrunnisa, R., Kusairi, S.,

Saefi, M., Fauzi, A., & Atho'Illah, M. F. (2021). Cell Biology Diagnostic Test (CBD-Test) portrays pre-service teacher misconceptions about biology cell. *Journal of Biological Education*, *55*(1), 82–105. https://doi.org/10.1080/00219266.2019.1643765

5. Dewi, I. S., Hastuti, U. S., Lestari, U., & Suwono, H. (2020). Local wisdom and laboratory experiment-based extension booklet development for wadi makers of elementary-educated and dropout society in central kalimantan. *Jurnal Pendidikan IPA Indonesia*, *9*(4), 611–619. https://doi.org/10.15294/jpii.v9i4.23166
6. Astriani, D, Susilo, H., Suwono, H., Lukiati, B., & Purnomo, A. R. (2020). Mind mapping in learning models: A tool to improve student metacognitive skills. *International Journal of Emerging Technologies in Learning*. https://doi.org/10.3991/IJET.V15I06.12657
7. Riyanto, R., Amin, M., Suwono, H., & Lestari, U. (2020). The New Face of Digital Books in Genetic Learning: A Preliminary Development Study for Students' Critical Thinking. *International Journal of Emerging Technologies in Learning (IJET)*. https://doi.org/10.3991/ijet.v15i10.14321
8. Saputri, Wulandari, Corebima, A. D., Susilo, H., & Suwono, H. (2020). Qasee: A potential learning model to improve the critical thinking skills of pre-service teachers with different academic abilities. *European Journal of Educational Research*, *9*(2), 853–864. https://doi.org/10.12973/eu-jer.9.2.853

CONFERENCE PROCEEDING (2020-2021)

Ahmada, R. F., Suwono, H., & Fachrunnisa, R. (2021). Development scientific literacy through STEM project in biology classroom: A mixed method analysis. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043260

Anisa, S. I. P., Suwono, H., & Fachrunnisa, R. (2021). Entrepreneurship skills on visible creative thinking skills framework: A problem-solving idea in biology learning process. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043264

Arsih, Fitri, Zubaidah, S., Suwono, H., & Gofur, A. (2021). The implementation of RANDAI to improve pre-service biology teachers' communication skills. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043166

Ashari, R. M. R., Suwono, H., & Fachrunnisa, R. (2021). Students HOTS in PjBL based STEM learning in biology classroom: An experimental analysis. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043256

Buroidah, H., Suwono, H., & Fachrunnisa, R. (2021). Cultivating character as good citizen through problem solving infusion. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043265

Mawarni, A. I., Suwono, H., & Fachrunnisa, R. (2021). Adaptability in biology classroom: A metacognitive discourse. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043258

Naovalia, R., Amin, M., & Suwono, H. (2021). The effectiveness of research-based learning improves student arguments about genetic codes and genetic mutations. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043447

Putri, V. A., Suwono, H., & Lukiati, B. (2021). Major domain of socioscientific decision making: Preliminary questionnaire development. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043263

Suciari, N. K. D., Lbrohim, L., & Suwono, H. (2021). The impact of PjBL integrated STEAM on students' communication skills and concept mastery in high school biology learning. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043395

Sukma, D. T., Suwono, H., & Fachrunnisa, R. (2021). Student's rationality in decision making on infusion of analytical thinking skill's framework in biology learning. *AIP Conference Proceedings*, *2330*(March). https://doi.org/10.1063/5.0043262

Zakiyah, R. N., Ibrohim, I., & Suwono, H. (2021). The influence of science, technology, engineering, mathematic (STEM) based biology learning through inquiry learning models towards students' critical thinking skills and mastery of biological concepts. *AIP Conference Proceedings*, *2330*. https://doi.org/10.1063/5.0043361

Ariyati, E., Susilo, H., Suwono, H., & Rohman, F. (2020). Habits of mind potency of students of prospective biology teacher. *Journal of Physics: Conference Series*. https://doi.org/10.1088/1742-6596/1567/2/022048

Arsih, F, Zubaidah, S., Suwono, H., & Gofur, A. (2020). Critical thinking skills of prospective biology teachers: A preliminary analysis. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000538

Biruni, Iqbal Bilgrami, Suwono, H., & Sueb. (2020). Fostering student' critical thinking skills in respiratory and excretory system classroom through 5E learning cycle in 11th grade SMAN 2 Malang. *AIP Conference Proceedings*, *2215*(April), 1–7. https://doi.org/10.1063/5.0000567

Fachrunnisa, R, Fitriyati, U., Susilo, H., Suwono, H., Setiawan, D., & Ibrohim, I. (2020). Life-based learning: Two trajectories of students in biology education program. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000704

Fachrunnisa, R, Suwono, H., & Ubadati, N. (2020). Teaching creative thinking skills: Promoting more visible creativity in undergraduate students of biology education. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000706

Fachrunnisa, Rifka, Fitriyati, U., Susilo, H., Suwono, H., Setiawan, D., & Ibrohim, I. (2020). Life-based learning: Two trajectories of students in biology education program. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000704

Fachrunnisa, Rifka, Suwono, H., & Ubadati, N. (2020). Teaching creative thinking skills: Promoting more visible creativity in undergraduate students of biology education. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000706

Febriyani, Shoimatun, Suwono, H., & Ibrohim. (2020). Guided inquiry model combined with edutainment to increase junior high school students' science of learning interest. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0003784

Jannah, A M, Suwono, H., & Tenzer, A. (2020). Profile and factors affecting students' scientific literacy of senior high schools. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000568

Jannah, Atiqah Miftakhul, Suwono, H., & Tenzer, A. (2020). Profile and factors affecting

students' scientific literacy of senior high schools. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000568

Marsuki, M F, Suwono, H., & Slamet, A. V. (2020). Development of digital learning media based on android games with joyful inquiry model to increase science literacy skills for second year students of junior high school in subject matter of vibration. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000565

Marsuki, Muhammad Fajar, Suwono, H., & Slamet, A. V. (2020). Development of digital learning media based on android games with joyful inquiry model to increase science literacy skills for second year students of junior high school in subject matter of vibration. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000565

Mustikasari, V R, Suwono, H., & Farhania, K. (2020). Improving students' science learning outcomes through joyful-inquiry interactive demonstration assisted by game android. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000566

Mustikasari, Vita Ria, Suwono, H., & Farhania, K. (2020). Improving students' science learning outcomes through joyful-inquiry interactive demonstration assisted by game android. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000566

Suryani, Della Putri Irma, Suwono, H., & Gofur, A. (2020). Implementing group investigation (GI) learning model combined with socio scientific issue (SSI) to improve students' problem solving skills in XI grade IPA 4 SMAN 2 Malang. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000570

Suwono, H, Ansori, M. F., & Susilo, H. (2020). Comparative study of three levels inquiry viewed from critical thinking skills in the first grade class of senior high school. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000571

Suwono, H, Salmah, H., & Tenzer, A. (2020). Scientific literacy profile of science and non-science students in senior high schools in Malang. *AIP Conference Proceedings*. https://doi.org/10.1063/5.0000573

Suwono, Hadi, Ansori, M. F., & Susilo, H. (2020). Comparative study of three levels inquiry viewed from critical thinking skills in the first grade class of senior high school. *AIP Conference Proceedings*, *2215*(April). https://doi.org/10.1063/5.0000571

Suwono, Hadi, Salmah, H., & Tenzer, A. (2020). Scientific literacy profile of science and non-science students in senior high schools in Malang. *AIP Conference Proceedings*, *2215*(April), 1–7. https://doi.org/10.1063/5.0000573

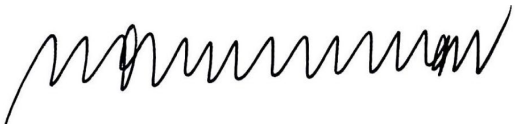
MANAGERIAL EXPERIENCE:

1. Head of Department of Biology, Universitas Negeri Malang (2015-2019)
2. Dean Faculty of Mathematics and Natural Sciences, Universitas Negeri Malang (2018-2022)
3. Director of Association of Indonesian Biology Education Program (2016-2018)
4. Secretary-General of the National Cooperation Network of Science and Mathematics Higher Education Institutions, Indonesia (2020-2022).

EDUCATION ADVISER:

Project name	Funding	Year
1. Science Education Quality Improvement Project	GTZ / GIZ	1997-2003
2. Managing Basic Education	USAID	2004-2007
3. Mainstreaming Good Practices in Basic Education	UNICEF	2007
4. Learning Assisstance Program for Islamic School	AUSAID	2008-2009
5. Basic Education Sector Capacity Support Program -	ADB	2010
6. Decentralized Basic Education	USAID	2010-2011
7. PRIORITAS (*Prioritizing Reform, Innovation, and Opportunities for Reaching Indonesia's Teachers*)	USAID	2012-2015

Malang, 29 January 2022



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