

Prof. Dr. Wasis, M.Si.

Position	Lecturer in Physics Education Study Program: Assessment and Instrument of Learning, Physics in School, and Modern Physics		
	Professor in Assessment and Evaluation in Science-Physics Learning		
Academic career	**Degree/Non Degree**	**University/Institution**	**Year**
	Bachelor at Physics Education	IKIP Surabaya - Indonesia	1987-1992
	Basic Science Training: Quantum Physics (non-degree)	ITB-Dikti	1994
	Master at Physics	Universitas Gadjah Mada-Indonesia	1996-1999
	Doctoral at Educational Research and Evaluation	Universitas Negeri Yogyakarta - Indonesia	2004-2009
	Sandwich-like Program: Measurement, Scoring, and Instrument Development (non-degree)	Australian Council for Educational Research (ACER)	2008
Employment	**Position**	**Employer**	**Period**
	Honorary Physics Teacher	SMAN 5 & SMA Sejahtera Surabaya	1991-1993
	Lecturer in Physics Education Study Program	Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya	1993-now
	Local Consultant of Science Education Quality Improvement Project (SEQIP)	Indonesia-Germany Cooperation, Ministry of Education and Culture	2000-2002
	Science-Physics Teacher Training Facilitator and Trainer	Directorate of Junior School, Ministry of Education and Culture	2000-2010
	Reviewer and Researcher	Assessment and Learning Center, Ministry of Education and Culture	2002-2021
	Expert Team of Content Standard and Education Assessment Standard	National Education Standard Agency, Ministry of Education and Culture	2010-2019
	Vice Dean of General and Finance Affairs	Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya	2011-2018
	Vice Director of Academic Affairs	Postgraduate of Universitas Negeri Surabaya	2019-2023

Research and Development Project over the last 5 years	**2017-2018:** Development of Competency Test Model Oriented to the Needs of the 21st Century and the Indonesian National Qualifications Framework – Penelitian Pengembangan Unggulan Perguruan Tinggi, Directorate of Higher Education – IDR 150,000,000 (Lead Researcher) **2018:** Development of Assessment Model in Thematic and Integrated Learning – Competitive Research, The Education Assessment Center, Ministry of Education and Culture - IDR 250,000,000 (Lead Researcher) **2019:** Conceptual Analysis and Multi Representation Skills of Postgraduate Science Students, Postgraduate Policy Research – IDR 40,000,000 (Lead Researcher) **2020:** Development of Online Lectures to Improve Critical Thinking Skills of Postgraduate Students, Postgraduate Policy Research – IDR 25,000,000 (Lead Researcher) **2021:** Development of Financial Literacy Assessment Model – Competitive Research, The Assessment and Learning Center, Ministry of Education and Culture – IDR 200,000,000 (Lead Researcher)

Patents and proprietary rights	**Title**	**Year**
	Hunaidah M, Endang Susantini, **Wasis**. Pengembangan model pembelajaran CinQASE untuk meningkatkan individual dan collaborative critical thinking (HaKI EC00201977652)	24 Oktober 2019
	M N R Jauhariyah, **Wasis**, T Sunarti, W Setyarsih, A Zainuddin, dan S. Hidayat. Buku Elektronik Evaluasi Belajar dan Pembelajaran Topik Taksonomi Bloom (HaKI EC00202048963)	12 November 2020

Important publications over the last 5 years	**Title**	**Year**
	I Wicaksono, **Wasis**, Madladzim. 2017. The Effectiveness of Virtual Science Teaching models (VS-TM) to Improve Student Scientific Creativity and Concept Mastery On Senior High School Physics Subject. Journal of BalticScience Education 16 (4) 549-561. http://oaji.net/articles/2017/987-1503905158.pdf	2017
	MA Thohir, **Wasis**, WW Sugimin. 2017. Peningkatan Keterampilan Berpikir Kritis melalui Pembelajaran Metode Penemuan Terbimbing dalam Upaya Remediasi Miskonsepsi Materi Listrik Dinamis. Jurnal Penelitian Pendidikan Sains 1 (2), 62-67. https://journal.unesa.ac.id/index.php/jpps/article/view/392	2017
	S Prayogi, L Yuanita, **Wasis**. 2017. Critical-Inquiry-Based-Learning: Model of Learning to Promote Critical Thinking Ability of Pre-service Teachers. Open Conference Systems, MISEIC 2017 http://miseic.conference.unesa.ac.id/ocs/index.php/ocs/miseic2017/paper/view/34	2017
	T Sunarti, Madlazim, **Wasis**. 2017. Developing Worksheets to Civilize	2017

	Scientific Literacy for Students of Physics Teacher Candidates. Proceeding the International Conference on Education Innovation 1 (1), 910-916. http://proceeding.icei.conference.unesa.ac.id/index.php/articel/article/view/190	
	Wasis, Bastari, Kumaidi, Mundilarto, Wintarti, A. Analytical Weighting Scoring for Physics Multiple Correct Items to Improve the Accuracy of Students' Ability Assessment, Eurasian Journal of Educational Research (EJER), Issue 76, July 2018 https://ejer.com.tr/analytical-weighting-scoring-for-physics-multiple-correct-items-to-improve-the-accuracy-of-students-ability-assessment/	2018
	T Sunarti, **Wasis**, Madlazim, Suyidno and B K Prahani. 2018. The effectiveness of CPI model to improve positive attitude toward science (PATS) for pre-service physics teacher. Journal of Physics: Conference Series 997 012013. DOI : https://doi.org/10.1088/1742-6596/997/1/012013	2018
	E Purwaningsih, Suyatno, **Wasis**, BK Prahani. 2018. The effectiveness of comcorels model to improve skills of creating physics lesson plan (CPLP) for pre-service physics teacher. Journal Physics: Conference Series 997 012022. DOI: https://doi.org/10.1088/1742-6596/997/1/012022	2018
	I Limatahu, **Wasis**, S Sutoyo, B K Prahani. 2018. Development of CCDSR Teaching Model To Improve Science Process Skills Of Pre-Service Physics Teachers. Journal of Baltic Science Education 17 (5) 812-827. http://www.scientiasocialis.lt/jbse/files/pdf/vol17/812-827.Limatahu_JBSE_Vol.17_No.5.pdf	2018
	Armansyah, M Ibrahim, **Wasis**. 2018. Pengembangan Perangkat Pembelajaran Fisika Menggunakan Model Siklus Belajar 5E untuk Melatihkan Kemampuan Berpikir Kritis. Prisma Sains: Jurnal Pengkajian Ilmu dan Pembelajaran Matematika dan IPA IKIP Mataram 6 (2) 56-65. DOI: https://doi.org/10.33394/j-ps.v6i2.967	2018
	S Prayogi, L Yuanita, **Wasis**. 2018. Critical Inquiry Based Learning: A Model of Learning to Promote Critical Thinking Among Prospective Teachers of Physics. Journal of Turkish Science Education 15 (1) 43-56. DOI: https://doi.org/10.12973/tused.10220a	2018
	Erman, **Wasis**, E Susantini, U Azizah. 2018. Scientific Thinking Skills: Why Junior High School Science Teachers Cannot Use Discovery and Inquiry Models in Classroom. Proceedings of The International Conference on Science and Technology (ICST 2018) DOI: https://doi.org/10.2991/icst-18.2018.43	2018
	M N R Jauhariyah, **Wasis**. 2018. Students' Reasoning on Physics Related to Visual Representation Case Study of College Students. Proceedings of The International Conference on Science and Technology (ICST 2018). DOI: https://doi.org/10.2991/icst-18.2018.182	2018
	B Yonata, **Wasis**, R Sulaiman, E Sudibyo, M S Prastiwi. 2018. Profile of The Academic Competency of Chemistry Education Students. Proceedings of The International Conference on Science and Technology (ICST 2018).DOI: https://doi.org/10.2991/icst-18.2018.40	2018
	Wasis, R Sulaiman, E Sudibyo, B Yonata, M S Prastiwi. 2018. The Assessment Model of Undergraduate Mathematics and Science Education Competency Based on Indonesian National Qualification Framework and 21st Century Demand. Proceedings of The International Conference on Science and Technology (ICST 2018).DOI: https://doi.org/10.2991/miseic-18.2018.29	2018
	T Sunarti, Madlazim, **Wasis**, Suyidno. 2018. Keterlaksanaan Literacy Learning Model (LLM) Dalam Melatihkan Literasi Sains Dan Sikap Positif Terhadap Sains Mahasiswa Calon Guru Fisika. Prosiding Seminar Nasional	2018

	Pendidikan, Banjarmasin 24 Maret 2018. http://snpfmotogpe.ulm.ac.id/proceeding/index.php/snpf/article/view/21/22	
	Julianto, **Wasis**, R Agustini. 2018. Profil Sikap Terhadap Sains, Keterampilan Proses Sains, Dan Kreativitas Mahasiswa Jurusan PGSD FIP UNESA di Mata Kuliah Konsep Dasar IPA. Prosiding Seminar Nasional Pendidikan, Banjarmasin 24 Maret 2018. http://snpfmotogpe.ulm.ac.id/proceeding/index.php/snpf/article/view/9	2018
	R Y D Primayudha, S Poedjiastoeti, **Wasis**. 2018. Development of Science Learning with Spiritual Approach to Improve the Understanding of Science Concepts in Muslim Boarding School. Advances in Social Science, Education and Humanities Research (ASSEHR) 125 271-273.DOI: https://doi.org/10.2991/icigr-17.2018.65	2018
	N Erlina, E Susantini, **Wasis**, I Wicaksono, P Pandiangan. 2018. THE Effectiveness of Evidence-Based Reasoning in Inquiry-Based Physics Teaching To Increase Students' Scientific Reasoning. Journal of Baltic Science Education 17 (6) 972-985. DOI: https://doi.org/10.33225/jbse/18.17.972	2018
	Wasis, Y S Rahayu, Suyono, D Novita. 2018. Characterizing Assessment Instrument of Higher Order Thinking Skills and Scientific Literacy. The 11th International Conference on Educational Research, Faculty of Education, Khon Kaen University, Thailand. 601-606. http://repository.unesa.ac.id/sysop/files/2019-06-18_similarity15%20wasis.pdf	2018
	Julianto, **Wasis**, R Agustini. 2018. Profil Sikap Terhadap Sains, Keterampilan Proses Sains, Dan Kreativitas Mahasiswa Jurusan PGSD FIP UNESA di Mata Kuliah Konsep Dasar IPA. EduStream Jurnal Pendidikan Dasar 2 (1) 10-15. https://journal.unesa.ac.id/index.php/jpd/article/view/6260/3177	2018
	T Ansori, **Wasis**, H Nasrudin. 2019. Development of Physics Learning Instrument with Model Project Based Learning to Train Students' Critical Thinking Skills. International Journal of Multicultural and Multireligious Understanding 6 (5) 74-79. https://ijmmu.com/index.php/ijmmu/article/view/1046	2019
	M Hunaidah, E Susantini, **Wasis**. 2019. Validitas Model Pembelajaran CinQASE untuk Meningkatkan Keterampilan Individual Critical Thinking (INCT) dan Collaborative Critical Thinking (CCT). Prosiding Seminar Nasional Fisika PPs Universitas Negeri Makassar 1 1-4. https://ojs.unm.ac.id/semnasfisika/article/view/8680	2019
	I Limatahu, S Sutoyo, **Wasis**, B K Prahani and J Alfin. 2019. Improving science process skills learning ability of physics teacher candidates through the implementation of CCDSR learning model. Journal of Physics: Conference Series 1171 012005. https://doi.org/10.1088/1742-6596/1171/1/012005	2019
	A U Yunianti, **Wasis**, and M Nur,The Effectiveness of Guided Inquiry Learning Model to Improve Science Process Skill on Heat Matter, Journal of Physics: Conference Series, doi:10.1088/1742-6596/1417/1/012080 https://iopscience.iop.org/article/10.1088/1742-6596/1417/1/012080	2019
	D. Setiawan, **Wasis**, B Jatmiko. Development of SEA-MEA (Self Efficacy Academic-Means Ends Analysis) Learning Model to Increase Problem Solving Skills, Mathematics, Informatics, Science, and Education International Conference (MISEIC), https://www.atlantis-press.com/proceedings/miseic-19/125928588	2019
	A E Kusuma, **Wasis**, E Susantini, and Rusmansyah. Physics innovative	2020

	learning: RODE learning model to train student communication skills, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1422/1/012016	
	T Sunarti, **Wasis**, M Madlazin, and S Suyidno. Multidisciplinary, Interdisciplinary, and Transdisciplinary Approaches in Literacy Learning Model, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1491/1/012054/pdf	2020
	A T Kusumawati, **Wasis**, I G M Sanjaya, and Abd. Kholiq. Elite (E-Book Literacy) for Junior High School Student's ScientificLiteracy in Solar System Material, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1491/1/012070	2020
	P H Sudewa, M Nur, and **Wasis**. Need assessment for development of inquiry based learning materials using PhET media to enhance students' science process skills, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1521/4/042104	2020
	E. F. Fahyuni, **Wasis**, A. Bandono, M. B. U. B. Arifin, Integrating islamic values and science for millennial students' learning on using seamless mobile media, Jurnal Pendidikan IPA Indonesia, JPII 9 (2) (2020) 231-240, https://journal.unnes.ac.id/nju/index.php/jpii/article/view/23209	2020
	H Z Puspitaningrum, **Wasis**, and T Prastowo, Higher Order Thinking Skills Students Through Multirepresentation Test on Newton's Law Study, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012010	2021
	T Sunarti, **Wasis**, Supardiyono, and MNR Jauhariyah. Train the skills of making HOTS-based physics questions to physics teachers in Mojokerto, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012027/meta	2021
	M N R Jauhariyah, T Sunarti, **Wasis**, Supardiyono, W Setyarsih, and A Zainuddin, Analysis of physics questions based on HOTS criteria: the result of physics teacher training, Journal of Physics: Conference Series, https://iopscience.iop.org/article/10.1088/1742-6596/1805/1/012023/meta	2021

Activities in specialist bodies	**Organization**	**Position**	**Period**
	The Indonesian Physical Society	Unesa Commissariat	1999-2002
		Member	1999 – now
	The Indonesian Education Evaluation Association (Surabaya Branch)	Vice Chairman	2012-2015
	The Indonesian Education Evaluation Association	Cooperation Division	2014-2019
	The Indonesian Science Educators Association	Expert Committee	2020-2025