STAFF HANDBOOK

Name	**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**	**University**	**Year**
	Bachelor at Physics Education	*IKIP Surabaya - Indonesia*	*1987-1992*
	Basic Science Training: Quantum Physics (non-degree)	*ITB-Dikti*	*1994*
	Master at Physics	*Universitas Gajah Mada- Indonesia*	*1996-1999*
	Doctoral at Educational Research and Evaluation	*Universitas Negeri Yogyakarta - Indonesia*	*2004-2009*
	Sandwich-like Program: Measurement, Scoring, and Instrument Development	*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 Reseacher	*Assessment and Learning Center, Ministry of Education and Culture*	*2002-2021*
	Expert Team of Content Standard and Education Assessment Standard	*National Education Standard Board, Ministry of Education and Culture*	*2010-2019*
	Team of Development of School Accreditation Instruments	*National Board for School Accreditation*	*2019*
	Team of Development of Performance Assessment Instrument for Teacher Education Program	*Directorate General of Teachers and Education Personnel, Ministry of Education and Culture*	*2019-2020*
	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*

	Title	Funder	Year	Amount of Financing (million)
Research and Development Project Over the Last 5 Years	*Application of Real World Problems to Train First Year Students' Problem Solving Ability in Physics Education Study Program*	*Penelitian Kebijakan FMIPA*	*2023*	*20*
	Development of a Business Plan and Research Roadmap and FMIPA Community Service to Support Unesa PTN-BH	*Penelitian Kebijakan LPPM Batch 1*	*2023*	*100*
	Strategic Plan Development and Optimization of Postgraduate Governance Welcoming Unesa as a PTN-BH (Lead Reseacher)	*Penelitian Kebijakan Strategis Unesa*	*2022*	*100*
	Development of Financial Literacy Assessment Model – Competitive Reseach, The Assessment and Learning Center, Ministry of Education and Culture. (Lead Reseacher)		*2021*	*200*
	Assessment-Link Application as a Media for Training Analyzing Skills on Biology Tests Based on Revised Bloom's Taxonomy -	*Penelitian PNBP(Penelitian Kolaboratif Internasional*	*2021*	*75*
	Postgraduate Academic Performance Exploration Studies to Support Unesa Towards a Word Class University.	*Penelitian PNBP(Penelitian Kebijakan Pasacsarjana)*	*2021*	*25*
	Development of Online Lectures to Improve Critical Thinking Skills of Postgraduate Students, Postgraduate Policy. (Lead Reseacher)	*Penelitian PNBP(Penelitian Kebijakan Pasacsarjana)*	*2020*	*25*
	Conceptual Analysis and Multirepresentation Skills of Postgraduate Science Students, Postgraduate Policy Reseach. (Lead Reseacher)	*Penelitian Dana PNBP Pascasarjana*	*2019*	*40*
	Development of Competency Test Model for MIPA education graduates oriented to the needs of the XXI century and KKNI.	*Penelitian Unggulan PT II*	*2018*	*150*
	Website Assisted Electronic Module Development to Reduce Chemistry Misconceptions for Master's Degree Students of Science Education Study Program.	*Penelitian Dana PNBP Pascarjana UNESA*	*2018*	*50*
	Development of Thematic and Integrated Assessment Learning Model – Competitive Reseach, The Education Assessment Center, Ministry of Education and Culture (Lead Reseacher)	*Penelitian Puspendik*	*2018*	*250*
	Development of Competency Test Model Oriented to the Needs of the 21st Century and the Indonesian	*Penelitian Pengembangan Unggulan Perguruan Tinggi,*	*2017-2018*	*150*

	National Qualifications Framework – *(Lead Reseacher)*	*Directorate of Higher Education.*		
Community Service Over The Last 5 Years	**Title**	**Funder**	**Year**	**Amount of Financing (million)**
	Training on the Use of VLP Simulation Software (Volcano Learning Project) in Developing Disaster Mitigation Capability of Communities around Kelud	*BOPTN FMIPA UNESA*	*2018*	*7,5*
	Learning Training and Higher Order Thinking Skills (HoTs) Science Subjects for SMP/MTS	*PNBP Pascasarjana*	*2019*	*15*
	Workshop on Preparation of Higher Order Thinking Skills (HOTS) Questions at the Physics MGMP of SMA Mojokerto Regency	*PNBP FMIPA UNESA*	*2019*	*7,5*
	Training on making Scientific Articles Based on Literature Review Online for Physics Department Students, FMIPA Unesa (Solution for Thesis Program Students during the Covid 19 Pandemic)	*PKM Kebijakan FMIPA*	*2020*	*7*
	Improving the Quality and Production Capacity of Environmentally Friendly Masks for the Prevention of the Spread of Covid-19 and Empowering the Family Economy of Unesa Postgraduate Students	*PKM Penugasan Pascasarjana*	*2020*	*20*
	Training on Learning and Assessment of High Order Thinking Skills (HOTS) and Science Literacy for Middle School Science Teachers in Nganjuk Regency	*PKM Penugasan Pascasarjana*	*2021*	*15*
	Scientific Article Writing Training to Improve Scientific Publication of MGMP Teachers in Lamongan Regency	*PKM Kebijakan FMIPA*	*2021*	*10*
	Training on Learning and Assessment of Higher Order Thinking Skills (HOTS) and Science Literacy for Middle School Science Teachers in Mojokerto City	*PKM Kebijakan Pascasarjana*	*2022*	*15*
	Optimizing the Scientific Publication Competency of Mover Teachers in Trenggalek Regency	*PKM Kebijakan FMIPA*	*2022*	*10*
	Learning Planning Training and Numerical Literacy Assessment for Teachers	*PKM Kebijakan FMIPA*	*2023*	*10*
Industry Collaborations Over the Last 5 Years	**Title**	**Partner**		**Year**
	Title	**Patent ID**		**Year**

Patents and Property Right	*Pengembangan model pembelajaran CinQASE untuk meningkatkan individual dan collaborative critical thinking*	*EC00201977652 (HaKi)*	*2019*
	Buku Elektronik Evaluasi Belajar dan Pembelajaran Topik Taksonomi Bloom	*EC00202048963 (HaKi)*	*2020*
	Buku Ajar Mahasiswa Materi Kinematika Menggunakan Model Read Outline Discussion Evaluation (RODE)	*000484517/ EC00202351582*	*2023*
Important Publications Over the Last 5 Years	*I.Limatahu,* **Wasis.,** *Suyatno, B.K. Prahani. 2018. Development of CCDRS teaching model to improve science process skills of pre-service physics teachers. Baltic Science Education, Vol17, No.5, p:812-827 http://oaji.net/articles/2017/987-1539418351.pdf*		*2018*
	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*
	D. Setiawan, **Wasis,** *B.Jatmiko. 2018. Development of SEA-MEA (Self Efficacy Academic-Means Ends Analysis) Learning Model to Increase Problem Solving Skills. Advances in Computer Science Research Vol 95, ISBN 978-94-6252-874-1, ISSN 2352-538X, MISEIC 2019*		*2018*

	https://dx.doi.org/10.2991/miseic-19.2019.48	
	Wasis. et.al. *2018. The Effect Of An Instruction Worksheet With Guide Inquiry Design And Interview Creative Thinking Technique On Creative Thinking Skills In Senior High School Student's. Jurnal penelitian Pendidikan Sains (JPPS) Vol 8, No.1, 1537-1541* http://dx.doi.org/10.26740/jpps.v8n1.p%25p	*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 Pendidikan, Banjarmasin 24 Maret 2018.* http://snpfmotogpe.ulm.ac.id/proceeding/index.php/snpf/article/view/21/22	*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. 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:*	*2019*

	Conference Series, doi:10.1088/1742-6596/1417/1/012080 https://iopscience.iop.org/article/10.1088/1742-6596/1417/1/012080	
	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*
	T. Sunarti, **Wasis,** *Madlazim, and Suyidno. 2020. Multidisciplinary, Interdisciplinary, and Transdisciplinary Approaches in Literacy Learning Model. Journal of Physics: Conference Series Vol.1491 (1), hal.012054 IOP Publishing https://iopscience.iop.org/article/10.1088/17426596/1491/1/012054/pdf*	*2020*
	A E Kusuma, **Wasis**, *E Susantini, and Rusmansyah. Physics innovative 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*	*2020*
	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 assesment 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 Newtons 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*
	Julianto, **Wasis**, *R Agustina, Effectiveness Model Creative Attitude In Science Learning (CASL) To Practice Creative Thinking Skills Students. International Journal of Recent of Educational Research, Terindeks Copernicus International, Vol. 3 No.5. pg. 526-533, 2022*	*2022*
	E.P. Lestari, Wasis, T. Purnomo. Science Learning Materials in Integrated PBL Scientific Literacy Model to Improve Problem Solving Ability of Junior High School Students, Vol.3 (4), pp.464-477. IJORER: International Journal of Recent Educational Research	*2022*
	A.E. Kusuma, Wasis, E.Susantini, & Rusmansyah. Practicality of the RODE Learning Model in Order to Improve Student Communication Skills. Vol. 3 (5), pp.616.630. IJORER: International Journal of Recent Educational Research	*2022*
	Wasis, T. Sunarti, M.N.R. Jauhariyah. Implementation of Continuous-Assessment on Postgraduate Program. IJORER: International Journal of Recent Educational Research, Vol 4 (3), pp. 254-270	*2023*

	A.N. Santoso, T. Sunarti., & Wasis. Effectiveness of Contextual Phenomena-Based Learning to Improve Science Literacy. International Journal of Current Educational Research, Vol 2(1), pp. 17-26		*2023*
Activities in Specialist Bodies Over the Last 5 Years	**Organization**	**Role**	**Period**
	The Indonesian Physical Society	*Unesa Commisarriat*	*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	*Expert Commitee*	*2020-2025*