



UNIVERSITAS NEGERI YOGYAKARTA

Faculty of Mathematics and Natural Sciences
Department of Mathematics Education

Jl. Colombo No. 1 Yogyakarta 55281 Telp. 0274-586168 Fax. 0274-548203 Email: humas_fmipa@uny.ac.id Website: fmipa.uny.ac.id

Bachelor of Education in Mathematics

Telp. : 0274-565411 Psw 1396

Email : matematika@uny.ac.id

Website : http://pmat.fmipa.uny.ac.id/

STAFF HANDBOOK

Name	Ariyadi Wijaya, S.Pd.Si., M.Sc., Dr.		
Expertise	Mathematics Education; Context-based Tasks; Mathematical Modelling		
Academic Career	Initial Academic Appointment	Institution	Year
		Universitas Negeri Yogyakarta	2005
Academic Background	1. Post Doctoral	-	-
	2. Doctoral Degree	Utrecht University, the Netherlands	2015
	3. Master Degree	Utrecht University, the Netherlands	2008
	4. Undergraduate Degree	Universitas Negeri Yogyakarta	2004
Employment	Position	Employer	Period
	1. Tenaga Pengajar/CPNS	Universitas Negeri Yogyakarta	01/01/2005 - 01/10/2008
	2. Asisten Ahli	Universitas Negeri Yogyakarta	01/10/2008 - 01/02/2011
	3. Instructor (Lektor Muda)	Universitas Negeri Yogyakarta	01/02/2011 - 01/06/2018
	4. Associate Professor (Lektor Kepala)	Universitas Negeri Yogyakarta	01/06/2018 - sekarang
Research and development projects over the last 5 years	1. DIPA PPs UNY "Developing an Online System for Diagnosing Mathematics Learning Difficulties Based on A Comparative Study Between Indonesia and Japan" Periode: 2017 Partner: Dr. Sugiman; Dr. Heri Retnawati; Wahyu Setyaningrum, Ph.D. Amount of financing: IDR 75.000.000,-		
	2. DIPA UNY "Developing Instrument for Measuring the Competences of Prospective Mathematics Teachers through PPG Program (Pengembangan Instrumen untuk Mengukur Kompetensi Calon Guru Matematika Peserta Program Pendidikan Profesi Guru)" Periode: 2018 Partner: Drs. Tuharto, M.Si.; Dr. R. Rosnawati Amount of financing: IDR 15.000.000,-		
	3. DIKTI "Designing Culture-based Learning Instruction to Develop Mathematical Literacy (Desain Pembelajaran Matematika Berbasis Budaya untuk Menumbuhkan Mathematical Literacy)" Periode: 2018 Partner: Prof. Dr. Siti Irene Astuti D.; Eka Zuliana, M.Pd. (Univ Muria Kudus) Amount of financing: IDR 53.000.000,-		

Industry collaborations over the last 5 years	1. Project Title: INOVASI and Numeracy projects (2016 - present) Partners: Palladium International - DFAT Australia	
	2. Project Title: Spatial Reasoning Project (2018) Partners: The World-Bank	
	3. Project Title: Integration Calculator into Mathematics Learning (2018 - present) Partners: Casio for Education Japan	
	4. Project Title: International Comparative Studies (2017 - present) Partners: Puspendik (Center for Educational Assessment)	
	5. Project Title: Short Courses for ASEAN teachers (2016 - present) Partners: SEAMEO QITEP in Mathematics	
Patents and proprietary rights	Title	Year
	1. Published book: " Pendidikan Matematika Realistik: Suatu Alternatif Pendekatan Pembelajaran Matematika " Oleh: Ariyadi Wijaya Graha Ilmu, Yogyakarta ISBN: 978-979-756-797-2	2012
	2. Published book: " Matematika itu Asyik (Untuk SMP) " Oleh: Ariyadi Wijaya Mobius (imprint Graha Ilmu), Yogyakarta ISBN: 978-602-19479-0-6	2012
	3. Published book: " Asyiknya Belajar Matematika Untuk Siswa SMA/SMK " Oleh: Ariyadi Wijaya Mobius (imprint Graha Ilmu), Yogyakarta ISBN: 978-602-262-142-3	2014
	4. Published book: " Kajian Matematika Sekolah Menengah " Oleh: Ariyadi Wijaya UNY Press, Yogyakarta ISBN: 978-602-6338-93-8	2017
	5. Published book: " Empowering Mathematics Learners through Exploratory Tasks (a chapter in Empowering Mathematics Learners) " https://doi.org/10.1142/9789813224223_0011 Oleh: Ariyadi Wijaya World Scientific (Singapore) ISBN: 9813224231, 9789813224230	2017
Important publications over the last 5 years	Selected recent publications form a total of approx.:	
	1. Wijaya, A. , Van den Heuvel-Panhuizen, M., Doorman, M., & Robitzsch, A. (2014). Difficulties in solving context-based PISA mathematics tasks: An analysis of students' errors . <i>The Mathematics Enthusiast</i> , 11(3), 555–584.	
	2. Wijaya, A. , Van den Heuvel-Panhuizen, M., & Doorman, M. (2014). Identifying (Indonesian) students' difficulties in solving context-based (PISA) mathematics tasks . <i>Proceedings of the International Seminar on Innovation in Mathematics and Mathematics Education</i> . Yogyakarta, Indonesia.	
	3. Wijaya, A. , Van den Heuvel-Panhuizen, M., & Doorman, M. (2015). Metacognitive prompt as a means to improve students' task comprehension . <i>Proceedings of the International Conference on Research, Implementation and Education of Mathematics and Sciences 2015</i> (pp. 107–112). Yogyakarta, Indonesia.	
	4. Wijaya, A. , Van den Heuvel-Panhuizen, M., & Doorman, M. (2015). Opportunity-to-learn context-based tasks provided by mathematics textbooks . <i>Educational studies in mathematics</i> 89 (1), 41-65.	

5.	Wijaya, A. , Van den Heuvel-Panhuizen, M., & Doorman, M. (2015). Teachers' teaching practices and beliefs regarding context-based tasks and their relation with students' difficulties in solving these tasks. <i>Mathematics Education Research Journal</i> 27 (4), 637-662.
6.	Sadidah, A. & Wijaya, A. (2016). Developing mathematics learning set for special-needs junior high school student oriented to learning interest and achievement. <i>Jurnal Riset Pendidikan Matematika</i> , 3(2), 150-161.
7.	Wijaya, A. (2016). Students' Information Literacy: A Perspective from Mathematical Literacy. <i>Journal on Mathematics Education</i> , 7(2), 73-82.
8.	Sari, R. H. N. & Wijaya, A. (2017). Mathematical literacy of senior high school students in Yogyakarta. <i>Jurnal Riset Pendidikan Matematika</i> , 4(1), 100-107.
9.	Wijaya, A. (2017). Exploring students' modeling competences: A case of a GeoGebra-based modeling task. <i>AIP Conference Proceedings</i> , 1848(1).
10.	Wijaya, A. (2017). The difficulties of Indonesian fourth graders in learning fractions: An early exploration of TIMSS 2015 results. <i>AIP Conference Proceedings</i> , 1868(1).
11.	Wijaya, A. , Van den Heuvel-Panhuizen, M., Doorman, M., Veldhuis, M. (2018). Opportunity-to-Learn to Solve Context-based Mathematics Tasks and Students' Performance in Solving these Tasks – Lessons from Indonesia. <i>Eurasia Journal of Mathematics, Science and Technology Education</i> , 14(10), em1598. https://doi.org/10.29333/ejmste/93420
12.	Wijaya, A. , & Rosnawati, R. (2018). How Could We Assess the Pedagogical and Professional Competences of Prospective Mathematics Teachers? <i>Journal of Physics: Conference Series</i> , 1097(1), p. 012095
13.	Rizki, H. T. N., Frentika, D., & Wijaya, A. (2018). Exploring students' adaptive reasoning skills and Van Hiele Levels: A case study in geometry. <i>IOP Journal Conference Series</i>
14.	Wijaya, A. (2018). How do open-ended problems promote mathematical creativity? A reflection of bare mathematics problems and contextual problems. <i>IOP Journal Conference Series</i> .

Activities in specialist bodies over the last 5 years (Membership without a specific role need not be mentioned)	Organization	Role	Period
	Journal on Mathematics Education	International Editorial Board	2016 - present
	Jurnal Riset Pendidikan Matematika	Associate Editor	2017 - present