

## DAFTAR PUSTAKA

- AK, S. (2011). The Effects of Computer Supported Problem Based Learning on Students' Approaches to Learning. *Current Issues in Education*, Vol. 14, No. 1, pp. 1-18. ISSN: 1099-839X.
- Ali, B., Kade, A., Fihrin. (2015). Pengaruh Model Pembelajaran *Predict, Discuss, Explain, Observe, Discuss, Explain* terhadap Hasil Belajar Fisika Siswa Kelas X SMA Negeri 5 Palu. *Jurnal Pendidikan Fisika Tadulako*, Vol. 2 No. 4. ISSN: 2338-3240.
- Alwan, A.A. (2011). Misconception of Heat and Temperature among Physics Students. *Procedia Social and Behavioral Sciences*, 12, pp. 600-614.
- Andre, E., Ding, P. (1991). Student Misconceptions Declarative Knowledge, Stimulus Conditions, and Problem Solving in Basic Electricity. *Contemporary Educational Psychology*, 16, pp. 303-313.
- Ardiyana, F.R., Rusimanto, P. W. (2015). Pengaruh Strategi Pembelajaran PDEODE (Predict-Discuss-Explain-Observe-Discuss-Explain) terhadap Hasil Belajar Siswa Kelas X pada Kompetensi Dasar Menerapkan Macam-Macam Gerbang Dasar Rangkaian Logika di SMK Negeri 2 Surabaya. *Jurnal Pendidikan Teknik Elektro*, Vol. 4, No. 3, pp. 681-686.
- Ariasi, N., Mason, L. (2011). Uncovering the Effect of Text Structure in Learning from A Science Text: An Eye-Tracking Study. *Instructional Science, Springer*, 39, pp. 581-601. DOI: 10.1007/s11251-010-9142-5.
- Arikunto, Suharsimi. (2009). *Dasar-Dasar Evaluasi Pendidikan*. Bandung: Bumi Aksara.
- Aslan, A., Demircioglu, G. (2014). The Effect of Video-Assisted Conceptual Change Texts on 12th Grade Students' Alternative Conceptions: The Gas Concept. *Procedia Social and Behavioral Sciences*, 116, pp. 3115-3119.
- Aufschnaiter, C.V., Rogge, C. (2010). Misconceptions or Missing Conceptions?. *Eurasia Journal of Mathematics, Science, & Technology Education*, 6 (1), pp. 3-18.
- Azar, A., Sengulec, O.A. (2011). Computer-Assisted and Laboratory-Assisted Teaching Methods in Physics Teaching: The Effect on Student Physics

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Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Achievement and Attitude toward Physics. *Eurasian Journal of Physics and Chemistry Education*, Jan (Special Issue), pp. 43-50.
- Bakaç, M., Taşoğlu, A.K., Akbay, T. (2011). The Effect of Computer Assisted Instruction with Simulation in Science and Physics Activities on the Success of Student: Electric Current. *Eurasian Journal of Physics and Chemistry Education*, pp. 34-42. ISSN: 1306-3049.
- Baser, M. (2006). Effects of Conceptual Change and Traditional Confirmatory Simulations on Pre-Service Teachers' Understanding of Direct Current Circuits. *Journal of Science Education and Technology*, Vol. 15, No. 5, pp. 367-381. DOI 10.1007/s10956-006-9025-3.
- Baser, M. (2006). Effect of Conceptual Change Oriented Instruction on Students' Understanding of Heat and Temperature Concepts. *Journal of Maltese Education Research*, Vol. 4, No. 1, pp. 64-79.
- Berg, E.V. (1991). *Miskonsepsi Fisika dan Remediasi*. Salatiga: Universitas Kristen Satya Wacana.
- Biemans, H. J. A., Simons, P. R. J. (1996). Computer-Assisted Instruction and Conceptual Change. *Educational Research and Evaluation*, Vol. 2, No. 1, pp. 81-108.
- Bunawan, W., Setiawan, A., Rusli, A., & Nahadi. (2014). Pengembangan Instrumen Tes Diagnostik Pilihan Ganda Tiga Tingkat untuk Mengakses Kemampuan Mahasiswa Calon Guru Fisika. *Edusains*, Volume VI No.2, pp. 140-144.
- Caleon, I. S., Subramaniam, R. (2010). Do Students Know What They Know and What They Don't Know? Using a Four-Tier Diagnostic Test to Assess the Nature of Students' Alternative Conceptions. *Research Science Education*, 40, pp. 313-337. DOI 10.1007/s11165-009-9122-4.
- Çepni, S., Taş, E., Köse, S. (2006). The Effects of Computer-Assisted Material on Students' Cognitive Levels, Misconceptions, and Attitudes Towards Science. *Computers & Education*, 46, pp. 192-205.
- Çepni, S. (2009). Effects of Computer Supported Instructional Material (CSIM) in Removing Students Misconceptions about Concepts: "Light, Light, Source

- and Seeing". *Energy Education Science and Technology Part B: Social and Educational Studies*, Vol. 1 (2), pp. 51-83.
- Chang, K.E., Chen, Y.L., Lin, H.Y., & Sung, Y.T. (2008). Effects of Learning Support in Simulation-Based Physics Learning. *Science Direct, Computers & Education*, 51, pp. 1486-1498. DOI 10.1016/j.compedu.2008.01.007.
- Chao, C.T., Tseng, C.J. (2013). The Effectiveness of Remedial Intensive Course: A Case Study of a Private University in Northern Taiwan. *Procedia-Social and Behavioral Sciences*, 89, pp. 16-21.
- Chen, S. (2010). The View of Scientific Inquiry Conveyed by Simulation-Based Virtual Laboratories. *Science Direct, Computers & Education*, 55, pp. 1123-1130. DOI 10.1016/j.compedu.2010.05.009.
- Civelek, T., Ucar, E., Gokcol, O. (2012). Cyprus International Conference on Educational Research the Effects of Computer Assisted Simulations of Physics Experiments on Learning. *Procedia Social and Behavioral Sciences*, 47, pp. 1780-1786.
- Costu, B. (2008). Learning Science Through the PDEODE Teaching Strategy: Helping Students Make Sense of Everiday Situations. *Eurasia Journal of Mathematics, Science, & Technology Education*, 4 (1), pp. 3-9.
- Costu, B., Ayas, A., Mansoor, N. (2009). Promoting Conceptual Change in First Year Students' Understanding of Evaporation. *Chemistry Education Research and Practice*, 11, pp. 5-16.
- Cresswell, J.W. (2013). *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.
- Dahar, R.W. (1989). *Teori-Teori Belajar*. Jakarta: Erlangga.
- Dewi, N. L.P.K., Arini, N.W., Riastini, P.N. (2013). Pengaruh Model Pembelajaran PDEODE terhadap Kemampuan Berpikir Kreatif dalam Pembelajaran IPA pada Siswa Kelas V SD Laboratorium Undiksha. *Mimbar PGSD*, Volume 1.
- Dipalaya, T. Susilo, H., Corebima, A.D. (2016). Pengaruh Strategi Pembelajaran PDEODE (Predict-Discuss-Explain-Observe-Discuss-Explain) pada Kemampuan Akademik Berbeda terhadap Keterampilan Komunikasi Siswa.

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Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, Vol. 1, No. 9, pp. 1713-1720. EISSN: 2502-471X.
- Disessa, A.A., Sherin, B.L. (1998). What Changes in Conceptual Change?. *International Journal of Science Education*, Vol. 20, No. 10, pp.1155-1191.
- Erceg, N., Aviani, I. (2014). Students' Understanding of Velocity-Time Graphs and The Sources of Conceptual Difficulties. *Croatian Journal of Education*, Vol. 16, No. 1, pp. 43-80.
- Eryilmaz, A. (2002). Effects of Conceptual Assignments and Conceptual Change Discussions on Students' Misconceptions and Achievement Regarding Force and Motion. *Journal of Research in Science Teaching*, Vol. 39, No. 10, pp. 1001-1015.
- Fariyani, Q., Rusilowati, A., Sugianto. (2015). Pengembangan Four-Tier Diagnostic Test untuk Mengungkap Miskonsepsi Fisika Siswa SMA Kelas X. *Journal of Innovative Science Education*, 4 (2), pp. 41-49. ISSN: 2252-6412.
- Gonen, S., Kocakaya, S. (2010). A Cross Age Study on the Understanding of Heat and Temperature. *Eurasian Journal of Physics and Chemistry Education*, 2 (1), pp. 1-15.
- Gürbüz, R., Birgin, O. (2012). The Effect of Computer-Assisted Teaching on Remedying Misconceptions: The Case of the Subject "Probability". *Computers & Education, Elsevier*, 58, pp. 931-941.
- Gurel, D.K., Eryilmaz, A., McDermott, L.C. (2015). A Review and Comparison of Diagnostic Instruments to Identify Students' Misconceptions in Science. *Eurasia Journal of Mathematics, Science, and Technology Education*, 11 (5), pp. 989-1008.
- Güzel, H. (2011). Factors Affecting the Computer Usage of Physics Teachers Working at Private Training Centers. *The Turkish Online Journal of Educational Technology*, Vol. 10, Issue 2, pp. 122-132.
- Guzzetti, B. J., William, O. W., Skeels, S. A., & Wu, S. M. (1997). Influence of Text Structure on Learning Counterintuitive Physics Concepts. *Journal of Research in Science Teaching*, Vol. 34, No. 7, pp. 701-719.

Dian Oktaviani, 2017

**PENGEMBANGAN CSIM BERBASIS SIMULASI VIRTUAL UNTUK PENERAPAN MODEL PEMBELAJARAN PDEODE BERORIENTASI REMEDIASI MISKONSEPSI SISWA SMA PADA MATERI KINEMATIKA GERAK LURUS**

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Hake, R.R. (1999). *Analyzing Change/Gain Scores*. Tersedia: [www.physics.indiana.edu/~sdi/AnalyzingChange-Gain.pdf](http://www.physics.indiana.edu/~sdi/AnalyzingChange-Gain.pdf).
- Halloun, I.A., Hestenes, D. (1985). Common Sense Concept about Motion. *American Journal of Physics*, 53 (11), pp. 1056-1065.
- Hikmat, Tayuri, Y.R., Purwana, U., & Suhandi, A. (2014). Strategi Konflik Kognitif Berbantuan Media Simulasi Virtual dalam Pembelajaran Fisika Berorientasi Perubahan Konseptual untuk Meningkatkan Pemahaman Konsep dan Menurunkan Kuantitas Siswa yang Miskonsepsi. *Prosiding Pertemuan Ilmiah XXVIII HFI Jateng & DIY*, 26 April 2014, pp. 342-347. ISSN: 0853-0823.
- Ismail, I.I., Samsudin A., Suhendi, E., & Kaniawati I. (2015). Diagnostik Miskonsepsi Melalui Listrik Dinamis Four Tier Test. *Prosiding Simposium Nasional Inovasi dan Pembelajaran Sains 2015*, 8 dan 9 Juni 2015, Bandung, pp. 381-384. ISBN: 978-602-19655-8-0.
- Isnaini. (2015). Identifikasi Miskonsepsi Mahasiswa Fisika Menggunakan Tes Diagnostik pada Mata Kuliah Fisika Dasar Materi Gaya dan Gerak. *Jurnal Fisika dan Pendidikan Fisika*, Vol. 1, No. 1, pp. 29-31.
- Jimoyiannis, A., Komis, V. (2001). Computer Simulations in Physics Teaching and Learning: A Case Study on Students' Understanding of Trajectory Motion. *Computers & Education, Elsevier Science*, 36, pp. 183-204.
- Jong, T. (1991). Learning and Instruction with Computer Simulations. *Education & Computing, Elsevier*, 6, pp. 217-229.
- Kala, N., Yaman, F., Ayas, A. (2013). The Effectiveness of Predict-Observe-Explain Technique in Probing Students' Understanding about Acid-Base Chemistry: A Case for the Concepts of pH, pOH, and Strength. *International Journal of Science and Mathematics Education*, 11 (3), pp. 555-574.
- Kaunang, R.O.W. (2010). Menganalisis Butir Soal. *Inovasi*, Vol. 7, No. 1, pp. 176-188. ISSN 1693-9034.
- Kulkarni, V.D., Tambade, P.S. (2013). Enhancing the Learning of Thermodynamics Using Computer Assisted Instructions at Undergraduate

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**PENGEMBANGAN CSIM BERBASIS SIMULASI VIRTUAL UNTUK PENERAPAN MODEL PEMBELAJARAN PDEODE BERORIENTASI REMEDIASI MISKONSEPSI SISWA SMA PADA MATERI KINEMATIKA GERAK LURUS**

Universitas Pendidikan Indonesia | [repository.upi.edu](http://repository.upi.edu) | [perpustakaan.upi.edu](http://perpustakaan.upi.edu)

- Level. *Eurasian Journal of Physics and Chemistry Education*, 5 (1), pp. 2-10.
- Lestari, P.P., Linuwih, S. (2014). Analisis Konsepsi dan Perubahan Konseptual Suhu dan Kalor pada Siswa SMA Kelas Unggulan. *Unnes Physics Education Journal*, UPEJ (3) 2, pp. 62-67. ISSN: 2252-6935.
- Levin, I., Siegler, R.S., Druyan, S. (1990). Misconceptions about Motion: Development and Training Effects. *Child Development*, 61, pp. 1544-1557.
- Liu, G., Fang, N. (2016). Students Misconceptions about Force and Acceleration in Physics and Engineering Mechanics Education. *International Journal of Engineering Education*, Vol. 32, No. 1 (A), pp. 19-29.
- Madu, B. C., Orji, E. (2015). Effects of Cognitive Conflict Instructional Strategy on Students' Conceptual Change in Temperature and Heat. *SAGE Open*, July-September, pp. 1-9. DOI 10.1177/2158244015594662.
- Maunah, N., Wasis. (2014). Pengembangan Two-Tier Multiple Choice Diagnostic Test untuk Menganalisis Kesulitan Belajar Siswa Kelas X pada Materi Suhu dan Kalor. *Jurnal Inovasi Pendidikan Fisika*, Vol. 3, No. 2, pp. 195-200. ISSN: 2302-4496.
- Novitasari. (2016). *Pengembangan Computer Supported Instruction Material (CSIM) untuk Pembelajaran Fisika yang Berorientasi pada Peningkatan Kemampuan Memahami Materi Dinamika Partikel*. Tesis: Tidak Diterbitkan.
- Nurmayanti, F., Bakri, F., Budi, E. (2015). Pengembangan Modul Elektronik Fisika dengan Strategi Pembelajaran PDEODE pada Pokok Bahasan Teori Kinetik Gas untuk Siswa Kelas XI SMA. *Prosiding Simposium Nasional Inovasi dan Pembelajaran Sains*, 8 dan 9 Juni 2015, pp. 337-340. ISBN: 978-602-19655-8-0.
- Özmen, H. (2008). The Influence of Computer-Assisted Instruction on Students' Conceptual Understanding of Chemical Bonding and Attitude Toward Chemistry: A Case for Turkey. *Computers & Education, Elsevier*, 51, pp.423-438.

- Özmen, H. (2009). The Effects of Conceptual Change Texts Accompanied with Animations on Overcoming 11th Grade Students' Alternative Conceptions of Chemical Bonding. *Computers & Education, Elsevier*, 52, pp. 681-695. DOI: 10.1016/j.compedu.2008.11.017.
- Perez, D.G., Carrascosa, J. (1990). What to Do about Science "Misconceptions". *Science Education, John Willey & Sons*, 74 (5), pp. 531-540.
- Rohadi, N. (2011). Kendala Kognitif Mahasiswa Pendidikan Fisika FKIP Universitas Bengkulu pada Sejumlah Konsep Dasar Fisika. *Jurnal Exacta*, Vol. 9 No. 2, Desember. ISSN: 1412-3617.
- Roschelle, J. (1998). Beyond Romantic and Skeptic: A Microanalysis of Conceptual Change in Kinematics. *International Journal of Science Education*, 20 (9), 1025-1042.
- Rusilowati, A. (2015). Pengembangan Tes Diagnostik sebagai Alat Evaluasi Kesulitan Belajar Fisika. *Prosiding Seminar Nasional Fisika dan Pendidikan Fisika (SNFPF) ke-6 2015*, Vol. 6, No. 1, pp. 1-10. ISSN: 2302-7827.
- Sahin, C., Cavus, S., Gungoren, S. (2014). Examining Usage Trends of Computer Support of the Prospective Primary School Teachers in the Science Education Based on the 5E Model. *Procedia Social and Behavioral Sciences*, 116, pp. 1913-1918.
- Sahin, C., Cepni, S. (2011). Developing of the Concept Cartoon, Animation, and Diagnostic Branched Tree Supported Conceptual Change Text: "Gas Pressure". *Eurasian Journal of Physics and Chemistry Education*, Jan (Special Issue), pp. 25-33.
- Sahin, C., Ipek, H., Cepni, S. (2010). Computer Supported Conceptual Change Text: Fluid Pressure. *Procedia Social and Behavioral Sciences*, 2, pp. 922-927.
- Saidah, G., Suyono. (2012). Penerapan Strategi Pembelajaran PDEODE (Predict, Discuss, Explain, Observe, Discuss, Explain) untuk Mereduksi Miskonsepsi Siswa pada Materi Pokok Hidrolisis Garam di SMAN 2 Bojonegoro.



- Prosiding Seminar Nasional Kimia Unesa 2012*, pp. 106-113. ISBN: 978-979-028-550-7.
- Schneps, M.H., Ruel, J., Sonnert, G., Dussault, M., Griffin, M., Sadler, P.M. (2014). Conceptualizing Astronomical Scale: Virtual Simulations on Handheld Tablet Computers Reverse Misconceptions. *Computers & Education*, 70, pp. 269-280.
- Setyadi, E., Komalasari, A. (2012). Miskonsepsi tentang Suhu dan Kalor pada Siswa Kelas 1 di SMA Muhammadiyah Purworejo, Jawa Tengah. *Berkala Fisika Indonesia*, Volume 4 No. 1 & 2, pp. 46-49.
- Sugiyono. (2013). *Metode Penelitian Kombinasi (Mixed Methods)*. Bandung: Alfabeta.
- Suhandi, A. Sinaga, P., Kaniawati, I., & Suhendi, E. (2009). *Efektivitas Penggunaan Media Simulasi Virtual pada Pendekatan Pembelajaran Konseptual Interaktif dalam Meningkatkan Pemahaman Konsep dan Meminimalkan Miskonsepsi*. Laporan Penelitian.
- Suparno, P. (2013). *Miskonsepsi dan Perubahan Konsep dalam Pendidikan Fisika*. Jakarta: PT Gramedia Widiasarana Indonesia.
- Susetyo, B. (2015). *Prosedur Penyusunan & Analisis Tes*. Bandung: PT Refika Aditama.
- Tandilling, E. (2012). Pengembangan Instrumen untuk Mengukur Kemampuan Komunikasi Matematik, Pemahaman Matematik, dan Self-Regulated Learning Siswa dalam Pembelajaran Matematika di Sekolah Menengah Atas. *Jurnal Penelitian Pendidikan*, Vol. 13, No. 1, pp. 24-31. ISSN 1412-565X.
- Tao, P.K., Gunstone, R.F. (1999). The Process of Conceptual Change in Force and Motion during Computer-Supported Physics Instruction. *Journal of Research in Science Teaching*, Vol. 36, No. 7, pp. 859-882.
- Taufiq, M. (2012). Remediasi Miskonsepsi Mahasiswa Calon Guru Fisika pada Konsep Gaya melalui Penerapan Model Siklus Belajar (Learning Cycle) 5E. *Jurnal Pendidika IPA Indonesia*, 1 (2), pp. 198-203.

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Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu



- Tawil, M. Rusdiana, D. (2010). *Implementasi Pembelajaran Berbasis Simulasi Komputer pada Topik Superposisi Gelombang dalam Meningkatkan Keterampilan Berpikir Kreatif Mahasiswa*. Laporan Penelitian.
- Thornton, R.K. (2007). *Effective Learning Environments for Computer Supported Instruction in the Physics Classroom and Laboratory*. Tersedia: <https://web.phys.ksu.edu/icpe/publications/teach2/thornton.pdf> [18 Januari 2017]
- Treagust, D. (1986). Evaluating Students' Misconceptions by Means of Diagnostic Multiple Choice Items. *Research in Science Education*, 16, pp. 199-207.
- Troyer, J. A. (2011). Conceptual Change Instruction: A Method for Facilitating Consciousness in Problem Solving Activities. *Procedia-Social and Behavioral Sciences*, 29, pp. 33-38.
- Trundle, K.C., Bell, R.L. (2010). The Use of A Computer Simulation to Promote Conceptual Change: A Quasi-Experimental Study. *Computers & Education, Elsevier*, pp. 1078-1088.
- Wahyuningsih, T., Raharjo, T., & Masithoh D.F. (2013). Pembuatan Instrumen Tes Diagnostik Fisika SMA Kelas XI. *Jurnal Pendidikan Fisika*, Vol. 1, No. 1, pp. 111-117.
- Wulandari, R.R., Siswoyo, Bakri, F. (2015). Pengaruh Model Pembelajaran PDEODE terhadap Hasil Belajar Kognitif Fisika Siswa SMA. *Prosiding Seminar Nasional Fisika 2015 Universitas Negeri Jakarta*, Volume IV, pp. 181-186, p-ISSN: 2339-0654, e-ISSN: 2476-9398.
- Yeo, S. Zadnik, M. (2001). Introductory Thermal Concept Evaluation: Assessing Students' Understanding. *The Physics Teacher*, Vol. 39, pp. 496-504.
- Yuruk, N. (2007). The Effect of Supplementing Instruction with Conceptual Change Texts on Students' Conceptions of Electrochemical Cells. *Journal of Science Education and Technology*, 16, pp. 515-523. DOI: 10.1007/s10956-007-9076-0.
- Yusuf, M.O., Gambari, I.A., Olumorin, C.O. (2012). Effectiveness of Computer-Supported Cooperative Learning Strategies in Learning Physics.

Dian Oktaviani, 2017

**PENGEMBANGAN CSIM BERBASIS SIMULASI VIRTUAL UNTUK PENERAPAN MODEL PEMBELAJARAN PDEODE BERORIENTASI REMEDIASI MISKONSEPSI SISWA SMA PADA MATERI KINEMATIKA GERAK LURUS**

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94-109. ISSN: 2223-4934 E.