Committees

Honorary Guests from Organizing Universities
Riza AYHAN, Rector, Gazi Universitesi
Uğur ERDENER, Rector, Hacettepe Universitesi
Ahmet SERPİL, Rector, Yeditepe Universitesi
Selahattin SALMAN, Rector, Abi Evran Universitesi

Honorary Guests from Sister Organizations
Charlene M. CZERNIAK, Past-President, NARST, University of Toledo, USA
Richard A. DUSCHL, President, NARST, The Pennsylvania State University, USA
Dana L. ZEIDLER, President-Elect, NARST, The University of South Florida - USA
Ton ELLERMEIJER, President, GIREP, University of Amsterdam, THE NETHERLANDS
Terry LYONS, President, IOSTE, University of New England, AUSTRALIA
Masakata OGAWA, President, EASE, Kobe University, JAPAN

ESERA 2009 Conference International Scientific Committee

- José Selles MARTÍNEZ, Universidad de Buenos Aires, ARGENTINA
- Peter FENSHAM, Monash University, AUSTRALIA (Emeritus)
- Annette GOUGH, RMIT University, AUSTRALIA
- Richard GUNSTONE, Monash University, AUSTRALIA (Emeritus)
- David TREAGUST, Curtin University of Technology, AUSTRALIA
- Rosaria da Silva JUSTI, Universidade Federal de Minas Gerais, BRAZIL
- Liu ENSHAN, Beijing Normal University, CHINA
- Yuri ORLIK, President, the International Congress of Science Education, COLOMBIA
- Josef TRNA, Masaryk University, CZECH REPUBLIC
- Pierre CLÉMENT, LEP-LESHEM, University Lyon 1, FRANCE
- André TIBERGHEN, CNRS–Université Lyon 2, FRANCE
- Reinders DUIT, IPN, GERMANY (Emeritus)
- Ingo EILKS, University of Bremen, GERMANY
- George KALKANIS, University of Athens, GREECE
- Dimitris PSILLOS, Aristotle University of Thessaloniki, GREECE
- Georgios TSAPARLIS, University of Ioannina, GREECE
- Jari LAVONEN, University of Helsinki, FINLAND
- Jouku VIIRI, University of Jyväskylä, FINLAND
- May Hung May CHENG, The Hong Kong Institute of Education, HONG KONG SAR
- Odilla FINLAYSON, Dublin City University, IRELAND
- Haim ESHACH, Ben Gurion University of the Negev, ISRAEL
- Asl HOFSTEIN, The Weizmann Institute of Science, ISRAEL
- Igal GALLI, The Hebrew University of Jerusalem, ISRAEL
- Nir ORION, The Weizmann Institute of Science, ISRAEL
- Anat YARDEN, The Weizmann Institute of Science, ISRAEL
- Saouma BOUJAUDE, American University of Beirut, LEBANON
- Vincente LAMANALSKAS, Stadskal University, LITHUANIA
- Ed van den BERG, AMSTEL Institute, THE NETHERLANDS
- Lila HALIM, Universiti Kebangsaan Malaysia, MALAYSIA
- Noraini Binti IDRIS, University of Malaya, MALAYSIA
- Kamilah OSMAN, Universiti Kebangsaan Malaysia, MALAYSIA
- Rohaida Mohd. SATT, University of Malaya, MALAYSIA
- Carl ANGELL, University of Oslo, NORWAY
- Svein SJÖBERG, Universitetet i Oslo, NORWAY
- Iwona MACIEJEWSKA, Jagiellonian University, POLAND
- Maria Graça Ferreira Simões CARVALHO, Universidade do Minho, PORTUGAL
- Maria Helena Pedrosa de JESUS, Universidade de Aveiro, PORTUGAL
- Christine CHIN, National Institute of Education, SINGAPORE
- Chan-Jong KIM, Seoul National University, SOUTH KOREA
- Maria Pilar Jiménez ALEXANDRE, Universidad de Santiago de Compostela, SPAIN
- Marina CASTELLS, Universitat de Barcelona, Barcelona, SPAIN
- Roier PINTO, Universitat Autònoma de Barcelona, SPAIN
- Onno de JONG, Klearst University, SWEDEN
- Chin-Chung TSAI, National Taitung University of Science and Technology, TAIWAN
- Hsin-Kai WU, National Taichung Normal University, TAIWAN
- Abougouli MONDHER, ISIEC, TUNISIE
- Sibel EBURAN, University of Bristol, UK
- John GILBERT, University of Reading, UK (Emeritus)
- John LIACH, University of Leeds, UK
- William McCULLEN, Queen's University Belfast, UK
- Robin MILLAR, University of York, UK
- Phil SCOTT, University of Leeds, UK
- Keith TABER, University of Cambridge, UK
- Sue Dale TUNNICLIFFE, University of London, UK
- Fouad ABD-EL-KHALICK, University of Illinois at Urbana-Champaign, USA
- Sandra ABELL, University of Missouri, USA
- William COBERN, University of Western Michigan, USA
- Barbara CRAWFORD, Cornell University, USA
- Jazlin EBENEZER, Wayne State University, USA
- Patricia FRIEDRICHSEN, University of Missouri, USA
- Deborah HANUSCIN, University of Missouri, USA
- Gregory KELLY, The Pennsylvania State University, USA
- Joseph KRAJCIK, University of Michigan, USA
- Norman G. LERMAN, Illinois Institute of Technology, USA
- Zafrin LERMAN, Columbia College Chicago, USA
- Julie LUT, Arizona State University, USA
- Vincent LUNETTA, The Pennsylvania State University, USA (Emeritus)
- Jonathan OSBORNE, Stanford University, USA
- Renee S. SCHWARTZ, Western Michigan University, USA
- Kenneth TOBIN, City University of New York, USA
- Dana L. ZEIDLER, University of South Florida, USA
ESERA 2009 Conference Local Scientific Committee

- Ali Rıza AKDENİZ, Rize Üniversitesi
- Esra AĞIL, Yeditepe Üniversitesi
- Buket AKROYUNLU, Hacettepe Üniversitesi
- Ö. Omur AKYILDIZ, Yeditepe Üniversitesi
- Dilek ARDAC, Boğaziçi Üniversitesi
- Orhan ARSLAN, Gazi Üniversitesi
- Petek AŞKAR, Hacettepe Üniversitesi
- Basri ATASOY, Gazi Üniversitesi
- Alipaşa AYAS, Karadeniz Teknik Üniversitesi
- Mustafa AYDOĞDU, Gazi Üniversitesi
- Hüseyin BAHÇETEPE, Pamukkale Üniversitesi
- Gülşen BAĞCI KILIÇ, Abant İzzet Baysal Üniversitesi
- Şule BAYRAKTAR, Selçuk Üniversitesi
- Erdoğan BÜYÜKASAP, Erzincan Üniversitesi
- Jale ÇAKIROĞLU, Orta Doğu Teknik Üniversitesi
- Gültakin ÇAKMAK, Hacettepe Üniversitesi
- Erdal ÇATALOĞLU, Abant İzzet Baysal Üniversitesi
- Salih ÇEPHİ, Karadeniz Teknik Üniversitesi
- Sinan ÇERTER, Hacettepe Üniversitesi
- Hamide ÇILKIN, Orta Doğu Teknik Üniversitesi
- Ömer GEBAN, Orta Doğu Teknik Üniversitesi
- Yasemin GÖDİKAYA, Abi Evran Üniversitesi
- Berna GÜÇÜM, Hacettepe Üniversitesi
- Ali GÜL, Gazi Üniversitesi
- Bilal GÜNŞEŞ, Gazi Üniversitesi
- Fitnat KAPTAN, Hacettepe Üniversitesi
- Ali İhsan KARAYİĞİT, Abi Evran Üniversitesi
- Teoman KESERÇIOĞLU, Dokuz Eylül Üniversitesi
- Ziya KILIÇ, Gazi Üniversitesi
- Sabri KOCAKULA, Balıkesir Üniversitesi
- Fitnat KOŞOĞLU, Gazi Üniversitesi
- Hüseyin KÜÇÜKÖZER, Balıkesir Üniversitesi
- Mehmet MAHRAMANLIÓGLU, İstanbul Üniversitesi
- Selma MÖGÖL, Gazi Üniversitesi
- İnci MORGIL, Hacettepe Üniversitesi
- Canan NAKIBOĞLU, Balıkesir Üniversitesi
- H. Ferhan ODABASI, Anadolu Üniversitesi
- Feral OGAN-BEKIROĞLU, Marmara Üniversitesi
- Meltem ORBAY, Amasya Üniversitesi
- Necdet SAĞLAM, Aksaray Üniversitesi
- Haluk SORAN, Hacettepe Üniversitesi
- Mustafa SÖZBİLİR, Atatürk Üniversitesi
- Ahmet İlhan ŞEN, Hacettepe Üniversitesi
- Mustafa TAN, Gazi Üniversitesi
- Leman TARHAN, Dökuz Eylül Üniversitesi
- Mehmet Faik TAŞAR, Gazi Üniversitesi
- Ceren TEKKAH, Orta Doğu Teknik Üniversitesi
- Lütfüullah TÜRKMEŞ, Uşak Üniversitesi
- Muhammet UŞAK, Dumlupınar Üniversitesi
- Rahmi YAĞBAŞAN, Bayburt Üniversitesi
- Necati YAŞÇIN, Gazi Üniversitesi
- Mustafa YEL, Gazi Üniversitesi
- Ayhan YILMAZ, Hacettepe Üniversitesi
ENGAGING STUDENTS PRODUCTIVELY IN PHYSICAL SCIENCES LESSONS: EVIDENCES FROM THE MEDIATION PERFORMED BY TWO TEACHERS

Ana Edite Cunha (University of Trás-os-Montes e Alto Douro), Maria Júlia Branco (University of Trás-os-Montes e Alto Douro), J. Bernardino Lopes (University of Trás-os-Montes e Alto Douro), J. Paulo Cavaco (University of Trás-os-Montes e Alto Douro), Carla Santos (University of Trás-os-Montes e Alto Douro)

The quality of students' learning in school science may improve if their teacher addresses, in her mediation, the fundamental role of the students' productive engagement.

From narrations about teacher mediation of students' learning in classroom context, we analysed their students' engagement in school science lessons, the effort of teachers to induce this engagement, as well as indicators of student productivity. Based in the empirical evidences gathered, we analysed the dynamics of the mediation of two teachers from the perspective of their students' productive engagement.

THE EFFECT OF PROJECT-BASED LEARNING APPROACH IN ALGAL BIOTECHNOLOGY TO THE SECONDARY-EDUCATION STUDENTS' ATTITUDE

Rubayi Özçam (Private Sengi College), Hikmet KATIRCIÖGLU (Gazi University Gazi Teacher's College, Department of Secondary Education Science and Mathematics)

In this study we delineated teaching of algae biotechnology. Algae biotechnology was taught according to the project-based learning approach (PBL). The particular PBL approach employed included a technology rich learning environment by also paying attention to students' problem solving skills and enhancing peer support through cooperative learning. The present survey was conducted by participation of 9th grade students in a private high school in a metropolitan district of Ankara during the first semester of 2006-2007 school year. Students in one class were selected as the experimental group while another 9th grade class served as the control group. The sample selection was random. During this research study, the experimental group received instruction according to the PBL approach while the control group received standard instruction. Pre-test/post-test scores were examined in both groups, and a comparison was made between the test scores. It was concluded that no statistically significant difference was found between the experimental group and the control group students following the experimental treatment in the algae biotechnology.