

H. EL-Deghaidy

**Heba Fathy EL-Deghaidy**

*Interim Dean*

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**EDUCATION**

- 2001 PhD. School of Education University of Birmingham, UK (Science Education)
- 1998 MPhil School of Education, University of Birmingham, UK (Science Education)
- 1994 Master degree courses in Curriculum and Instruction, Faculty of Education, Suez Canal University, Egypt
- 1993 Special Diploma in Science Education, Faculty of Education, Suez Canal University, Egypt and areas of specialization (Botany Zoology and Geology)
- 1990 BSc. Science Education (Biology), Faculty of Education, Suez Canal University, Egypt

**PROFESSIONAL EXPERIENCE**

- Nov 2018- Present Interim Dean, Graduate School of Education, American University in Cairo
- 2017- present Chair of the International and Comparative Education Department, Graduate School of Education, American University in Cairo
- Sep. 2016 Promoted to Professor of Curricula and Science Education
- June 2016 Tenured at the American University in Cairo
- 2012-2015 Associate Professor of Science Education at the Graduate School of Education- American University in Cairo and Director of STEAM Education Centre
- 2011-2012 Adjunct Instructor - Management Centre, American University in Cairo,
- 2010-2012 Associate Professor of Science Education, Faculty of Education, Suez Canal University
- 2009-2011 Adjunct Instructor, Graduate School of Education, American University in Cairo
- 2007-2008 Adjunct Instructor, Graduate School of Education, American University in Cairo, Programme developer (Secondary Science Teacher),
- 2002-2010 Assistant Professor of Science Education, Faculty of Education, Suez Canal University
- 1994-1997 Instructor of Science Education, Curricula and Instruction department, Faculty of Education, Suez Canal University
- 1991-1994 Research fellow in Science Education, Curricula and Instruction department, Faculty of Education, Suez Canal University

**NATIONAL AND INTERNATIONAL PROJECTS**

2019	PI ICLITE (Interdisciplinary Centennial Lab for Innovation and Technology in Education).
2016-present	Co-PI of the School and University Partnership for Peer Communities of learners (SUP4PCL). Project Number: 573660-EPP-1-2016-1-EG-EPPKA2-CBHE-JP (2016-2516/001-001). American University in Cairo Funded by Erasmus+ project, Budget 782, 000 Euros.
2014-2016	Project Investigator of the Bilingual STEAM Professional Educator Diploma project at the American University in Cairo funded by British Gas, Budget 100,000 US Dollars.
2010-2012	TEMPUS, EU funded joint project. Education for Sustainable Development beyond the Campus (EduCamp). 511132-TEMPUS-1-2010-1- DE-TEMPUS-JPHES. Grant holder "RWTH Aachen University", Budget 1.121.556, 88 Euros
2010-2012	TEMPUS, EU funded joint project. Reorient University Curricula to Address Sustainability (RUCAS). 511118-TEMPUS-1-2010-1-GR-TEMPUS-JPCR. Grant holder "University of Crete". Budget. 759.078,97 Euros.
2007-2008	National project, Higher Education Enhancement Project Funds, (HEEPf), Quality Assurance and Accreditation at the Faculty of Education, Suez Canal University
2007-2008	National project, HEEPf, Enhancement of Teaching Quality of Zoology Courses. Department of Zoology, Faculty of Science, Suez Canal University
2006-2007	National project, HEEPf, Education Enhancement of Organic Chemistry Laboratories, Faculty of Science, Suez Canal University
2006-2007	National project, HEEPf, Education Enhancement of Experimental Physics Courses, Faculty of Science, Suez Canal University
2006-2007	National project. Teaching Mathematics & Science in English Project (SUZ2)
2005-2006	Member of National Project HEEPf, Quality Control, Department of Chemistry, Faculty of Science, Suez Canal University
2004-2006	Assistant Academic Coordinator, University of Maryland, Community College at Baltimore County and Suez Canal University. Teacher Training to Develop Egyptian Civic Education Curricula

**CONSULTANCIES and PROFESSIONAL SERVICES**

- Jan. 2020 External Examiner, PhD Thesis at the Sultan Qaboos University, "The impact of engineering design on engineering habits of mind, mind-set and scientific career interest among eighth graders in the Sultanate of Oman".
- Mar. 2018 NARST-NSTA Research Worth Reading Decision. Sponsored Session at the 91<sup>th</sup> Conference of the *National Association of Research in Science Teaching (NARST)*. March 10<sup>th</sup> - 13<sup>th</sup>, Atlanta, USA.
- Jan. 2018 Head of the Nile International Egyptian School search committee for Curriculum Manager and Professional Development Manager.
- Dec. 2017 External Examiner, PhD Thesis at the British University in Dubai, "Exploration of STEM Reforms for Developing an Effective Large-scale, Research-based Policy in the UAE".
- Nov. 2017 RISE 1<sup>st</sup> Annual Education Solutions Summit in Egypt: Evidence-based innovation & investment for Education. Co-organised a session on education research priorities in Egypt.
- 2017- 2018 Chair of the Sub-committee on Research Matters, Publication advisory committee member at National Association for Research in Science Teaching (NARST)
- 2016 External examiner, Master Thesis in Distance Teaching and Training, Arabian Gulf University- Bahrain  
"Designing e-Learning Environment Based-on Problem Solving and its Effect on Science Achievement and Scientific Thinking among Kuwaiti 4th Grade Students".
- 2015- 2018 Publication advisory committee member at National Association for Research in Science Teaching (NARST)
- 2015 Science Education in Egypt Based on Integrated Ecological Needs and STEAM Education. Second Graduate School of Education Research Seminar, 28th October.
- 2015 Internal Examiner of MA thesis, Graduate Programme for Sustainable Development, American University in Cairo, AUC. "A needs assessment and design for a non-formal education for sustainable development summer program".
- 2015 International Technical Committee member for the Second International Conference of Teachers and Education Sciences, Kuala Lumpur, (Malaysia).
- 2012-2014 Committee member of Strand 8, In-service Science Teacher Education, National Association for Research in Science Teaching (NARST)
- 2011-2012 Professional Services and Consultancy- Management Centre, American University in Cairo, AUC
- 2011 External examiner Master Thesis in Distance Teaching and Training, Arabian Gulf University- Bahrain  
"The Effectiveness of Individual and Cooperative E -Training on the Science Teachers' Skills in Dealing with New Technologies and their Critical Thinking".

- 2010 International Scientific Advisory Committee of International Conference on Education and New Learning Technologies, EDULEARN10, Barcelona, (Spain).
- 2009 International Scientific Advisory Committee of International Conference on Education and New Learning Technologies, EDULEARN 09, Barcelona, (Spain).
- 2009 National Authority of Quality Assurance and Accreditation in Education to develop National Academic Reference Standards for the Faculties of Education Graduates, NAQAEE.
- 2008 National Authority of Quality Assurance and Accreditation in Education to develop modules for the Blended e-learning Professional Academy, NAQAEE.
- 2005-2007 National Consultant, International Project, USAID. Educational Reform Program (ERP), Faculties of Education Reform Division (FOER), Teacher Training and Community Based-Learning Programmes
- 2005-2006 Academic Coordinator, International Joint Project on Civic Education University of Maryland, Baltimore City Community College and Suez Canal University
- 2004-2005 National Consultant, International Project, World bank- European Union. Assessing teacher supplementary materials in Ismailia governorate

## REVIEWER

- 2020 International Journal of Educational Methodology (IJEM).
- 2019 Journal for STEM Education Research
- 2016-2018 Journal of Research in Science Teaching (JRST)
- 2018-2020 Asia Pacific Journal of Education
- 2018 European Journal of Educational Research
- 2018 Asia-Pacific Forum on Science Learning and Teaching
- 2015-2018 Eurasia Journal of Mathematics, Science and Technology Education (EURASIA)
- 2008-2018 Computers & Education, Elsevier
- 2014 National Association for Research in Science Teaching (NARST). 86<sup>th</sup> NARST Annual International Conference. Pittsburgh
- 2013- 2014 Environmental Education Research, Routledge: Taylor and Francis Group
- 2013 National Association for Research in Science Teaching (NARST). 85<sup>th</sup> NARST Annual International Conference. Puerto Rico
- 2012 National Association for Research in Science Teaching (NARST). 84<sup>th</sup> NARST Annual International Conference. Orland
- 2010 EDULEARN10, International Conference on Education and New Learning Technologies, Barcelona (Spain).
- 2009 EDULEARN 09, International Conference on Education and New Learning Technologies, Barcelona (Spain).
- 2007 Asia- Pacific Forum on Science Learning and Teaching
- 2006-2009 Macmillan UK publisher, Reviewer of manuscripts for Science and Mathematics primary stage books in Egypt and the Gulf Region.

**TRAINER**

- 2020 The Global Challenge: STEAM education for Sustainable development. Partners School Global Network: British Council. Cairo Marriott Hotel 4<sup>th</sup>-5<sup>th</sup> March.
- 2019 Presentation: Preparing Students for Jobs that Do not Exist. LPD Educational Forum. UK Trade and Investment. Hilton Heliopolis Hotel, 23<sup>rd</sup> September.
- 2018 STEAM: Linking Education to life. 4<sup>th</sup> Arab Gulf Teacher Forum. Ministry of Education, United Arab Emirates
- 2018 Mind the gap: Possibilities of bridging science with other disciplines. Eduforum. American University in Cairo, November 10<sup>th</sup>-12<sup>th</sup>.
- 2018 STEAM: Integrating Education with Life. 4th Arab Gulf Teacher Forum. Improving STEM\STrEaM Education & Skills: Increasing Participation to Build UAE Innovation. Ministry of Education, United Arab Emirates. Teachers Training Institute, United Arab Emirates, April 1<sup>st</sup>-3<sup>rd</sup>.
- 2017 Meeting the needs for the future: STEAM. EducateMe First public school teacher conference on September 8th and 9th, American University in Cairo
- 2012- present Trainer at the Executive Education (previously Management Centre), School of Business- American University in Cairo
- 2013 SUEZ STEM Petrochemical School, Misr El-Kheir and Exxon Mobile
- 2011 Ministry of Education- Ismailia, Trained Science teachers on 'New trends of Active learning and Authentic Assessment', Faculty of Education- Suez Canal University
- 2010 Early Childhood Education Enhancement Project (ECEEP) - Ministry of Education, Trained early childhood teachers, supervisors and local district managers at the Faculty of Education- Suez Canal University
- 2009 Early Childhood Education Enhancement Project (ECEEP)- Ministry of Education, trained teachers on Standards and Accreditation in Early Childhood Education
- 2009 Manar Private Language School- Ismailia, outreach programme between the Faculty of Education and Manar School
- 2006-2010 Trained teachers on new trends of teaching.
- 2006-2007 Teaching Mathematics & Science in English Project (SUZ2). Trained Science and Mathematics teachers in Language schools on various teaching strategies
- 2005-2007 National Project, FLDP. Member of a team that developed programmes and taught in Faculty Leadership Development Programmes (FLDP) for training University faculty members on "New Trends in Teaching" and "Presentation Skills".
- 2004 International Project, World bank- European Union. Trained MOE Preparatory Science Teachers in topics related to Educational Technology (Project funded by the World Bank and European Union).

2002-2006 National Project, FLDP. Member of a team that developed programmes and presented in a training programme under the title “Enhancing the Educational Professional Development of University Faculty Members”.

## UNIVERSITY SERVICE

### *Administrative service at AUC:*

November 2018-Present: Interim Dean  
2017- Present : Chair of International and Comparative Department

### *Service at AUC:*

2018: Member of Student Union Real Life Competition on Education  
2018- Present: Member of the Senate Curricula Committee, AUC  
2018- Present: Member of Graduate School of Education General Faculty Committee,  
2018: Chair of the search committee for new faculty, Graduate School of Education  
2017- Present: Member of Task Force on Quality of Education  
2017- Present: Senate Member of the Curricula Committee  
2015-2017: Associate Member for the Centre of Learning and Teaching  
2015-2017: Member of University Institutional Research Board, IRB  
2015-present: Member of Graduate School of Education Curriculum and Assessment Committee, CAC  
2014-2015: Member of the Graduate Students Support Grants Committee, AUC  
2014-2015: Member of the Departmental Research Committee  
2014-2015: Member of the Teacher Assistant Senate Task Force, AUC,  
2013-2015: Member of the Senate Faculty Affairs Committee, AUC  
2013-present: Member of Graduate School of Education General Faculty Committee,  
2012-2014: Member of Graduate School of Education Student Affairs Committee, SAC  
2012: Member of the January 2011 Award Thesis Fund

### *Service at SCU:*

2010-2012: Member of the Environmental Board, Faculty of Education  
2010-2011: Member of the Cultural Affairs Committee, Faculty of Education,  
2008-2010: Appointed at the University Educational Development Centre,  
2006-2007: Supervised the development of the Faculty of Education library  
2006/2008-2010/2012: Member of the Curricula & Instruction Department Board, Faculty of Education

## AWARDS and HONORS

- 2019: Awarded internal grant from AUC \$32,00 for the ICLITE  
2018: Awarded 160,000 EGP external grant from Edupedia  
2016: Awarded Best Pitch at the AUC First Research Day, 30<sup>th</sup> March 2016  
2015: Awarded Best Paper at the 2<sup>nd</sup> International Conference on Teaching and Education Sciences, Kuala Lumpur, 9<sup>th</sup> -10<sup>th</sup> June.  
2013: Awarded for International Publishing from Suez Canal University  
2009: Awarded for International Publishing from Suez Canal University

## PUBLICATIONS in PEER REVIEWED JOURNALS

- Lederman, J., Lederman, N., Bartels, S., Jimenez, J., ..... **EL-Deghaidy, H. (2019)**. An international collaborative investigation of beginning seventh grade students' understandings of scientific inquiry: Establishing a baseline. *Journal of Research in Science Teaching*, 56(4), 486–515.
- EL-Deghaidy, H. (2018)**. Initial teacher education in primary education in Egypt. In M., Toprak, M., Tatto & I. Menter (Eds). *Bloomsbury Education and Childhood Studies*. London: Bloomsbury Digital Resources. DOI: 10.5040/9781474209441.0052.
- EL-Deghaidy, H., Mansour N., Khalid Alhammad & Mohammad Alzaghibi (2017)**. Context of STEM integration in schools: Views from in-service science teachers. *EURASIA Journal of Mathematics, Science & Technology Education*, 13(6), pp. 2459-2484 - DOI: 10.12973/eurasia.2017.01235a. Available at: <http://www.iserjournals.com/journals/eurasia/articles/10.12973/eurasia.2017.01235a>
- EL-Deghaidy, H., Mansour, N., Aldahmash, A. & Alshamrani, S. (2015)**. A framework for designing effective professional development: Science teachers' perspective in a context of reform. *EURASIA Journal of Mathematics, Science & Technology Education*, 11(6), 1579-1601. DOI: 10.12973/eurasia.2015.1424a. Available at: <http://www.iserjournals.com/journals/eurasia/articles/10.12973/eurasia.2015.1424a>
- EL-Deghaidy, H., Mansour, N. (2015)**. Science teachers' perceptions of STEM education: Possibilities and challenges. *International Journal of Learning and Teaching*, 1(1), 51-54. Available at: <http://www.ijlt.org/uploadfile/2015/0824/20150824063944539.pdf>
- Biasutti, M. & **EL-Deghaidy, H. (2015)**. Interdisciplinary project based learning: An online Wiki experience in teacher education. *Technology, Pedagogy and Education*, 24(3), 1-17. DOI: 10.1080/1475939X.2014.899510
- EL-Deghaidy, H., Mansour, N., & Alshamrani, S. (2014)**. Science teachers' typology of CPD activities: A socio-constructivist perspective. *International Journal of Science and Mathematics Education*, 13 (6), 1539-1566. DOI 10.1007/s10763-014-9560-y
- Mansour, N., **EL-Deghaidy, H.**, Alshamrani, S. & Aldahmash, A. (2014). Rethinking the theory and practice of continuing professional development: Science teachers'

perspectives. *Research in Science Education*, 44(6), 949-973. DOI: 10.1007/s11165-014-9409-y

Nouby, A. & **EL-Deghaidy, H. (2013)**. Electronic discussion (collaborative –directive) in a virtual learning environment and its impact on critical thinking and professional performance of science in-service teachers. *Studies in Curriculum and Instruction*, 198, 1-48. (Published in Arabic).

**EL-Deghaidy, H. (2012)**. Education for sustainable development: Experiences from science teachers' action research. *Discourse and Communication for Sustainable Education*, 3(Jan), 23–40, DOI: 10.2478/v10230-012-0002-1.

Biasutti, M. & **EL-Deghaidy, H. (2012)**. Using Wiki in teacher education: Impact on knowledge management processes and student satisfaction. *Computers & Education*, 59 (3), 861–872.

**EL-Deghaidy, H. (2010)**. Teaching portfolios: An authentic tool for documenting pre-service science teachers' growth in teaching competencies and its effect on attitudes towards portfolios. *Journal of Science Education*, 13 (2), 169-206. (Published in Arabic).

**EL-Deghaidy, H. and Nouby, A. (2008)**. Effectiveness of a blended e-learning cooperative approach in an Egyptian teacher education programme. *Computers & Education*, 51(3), 987-1003.

Othman, S. & **EL-Deghaidy, H. (2008)**. Relationship between aesthetic values and environmental peace: An absent aspect in the national standards of education in the curricula: a suggested proposal. *Journal of Educational Sciences*, 1, 295-333 (Published in Arabic).

Othman, S. & **EL-Deghaidy, H. (2007)**. The relationship of achieving portfolio purposes and the ability of postgraduate students, at the faculty of education, to dialogue and negotiate intellectually. *Studies in Curriculum and Instruction*, 120, 92-124. (Published in Arabic).

**EL-Deghaidy, H. (2006)**. An investigation of pre-service teacher's self-efficacy and self-image as a science teacher in Egypt. *Asia-Pacific Forum on Science Learning and Teaching*, 7 (2), Article 2. Available Online at <http://www.ied.edu.hk/apfslt/>

## CONFERENCE PAPERS

**EL-Deghaidy, H. (2019)**. Education for sustainable development: A means for infusing social responsibility in higher education. Paper presented at the 63<sup>rd</sup> Comparative and International Education Society, San Francisco, April 14<sup>th</sup>-18<sup>th</sup>.

**EL-Deghaidy, H. (2019)**. STEAM and inquiry education for Childhood Education. 3<sup>rd</sup> Excellence Conference, "A scientifically educated generation for a prosperous economy". Center of Excellence in Research in the Development of Science and Mathematics Education, King Saud University, Riyadh- Kingdom of Saudi Arabia.



- EL-Deghaidy, H. (2018).** Advanced Education in a Changing World: The Education Strategy of the United Arab Emirates. November 20<sup>th</sup> -21<sup>th</sup>, 2018. Emirates Center for Strategic Studies and Research (ECSSR), United Arab Emirates
- EL-Deghaidy, H. (2018).** STREAM Education for building future minds. 9<sup>th</sup> Conference on Advanced Education in a Changing World: The Education Strategy of the United Arab Emirates. November 20<sup>th</sup> -21<sup>th</sup>, 2018. Emirates Center for Strategic Studies and Research (ECSSR), United Arab Emirates
- EL-Deghaidy, H. (2018).** Mind the Gap: Possibilities of bridging science with other disciplines. Paper presented at the 3<sup>rd</sup> International Educational Forum in Egypt. November 1<sup>st</sup> -3<sup>rd</sup>. American University in Cairo.
- EL-Deghaidy, H. (2018).** Promoting STEAM and STE2AM Education for Empowerment. 4<sup>th</sup> Arab Gulf Teacher Forum. Ministry of Education, United Arab Emirates
- EL-Deghaidy, H. (2018).** Wikis and interdisciplinary project-based learning in teacher education programmes. Paper presented at the 91<sup>th</sup> Conference of the *National Association of Research in Science Teaching (NARST)*. March 10<sup>th</sup> -13<sup>th</sup>, Atlanta, USA.
- Lederman, N., Lederman, J., & **EL-Deghaidy, H. & others (2018).** International collaborative investigation of twelve grade students' understandings of scientific inquiry. Symposium presented at the 91<sup>th</sup> Conference of the *National Association of Research in Science Teaching (NARST)*. March 10<sup>th</sup> -13<sup>th</sup>, Atlanta, USA.
- EL-Deghaidy, H. (2017).** Meeting the needs for the future: STEAM. Paper presented at Educate Me, Moallam Conference. September 8<sup>th</sup>, American University in Cairo, Egypt.
- EL-Deghaidy, H. (2017).** Reflections from the first Arabic MOOC in STEAM education. Paper presented at Edraak's First Regional Conference, Reimagining Education in the Arab World. August 13-14<sup>th</sup>, Amman, Jordan.
- EL-Deghaidy, H. (2017).** Nature of science and teachers' attitudes toward democratic teaching and decision making. Paper presented at the 90<sup>th</sup> Conference of the *National Association of Research in Science Teaching (NARST)*. April 22<sup>nd</sup> -25<sup>th</sup>, San Antonio, Texas, USA.
- Lederman, N., Lederman, J., & **EL-Deghaidy, H. (2017).** International collaborative investigation of beginning seventh grade students' understandings of scientific inquiry. Paper presented at the 90<sup>th</sup> Conference of the *National Association of Research in Science Teaching (NARST)*. April 22<sup>ed</sup> -25<sup>th</sup>, San Antonio, Texas, USA.
- EL-Deghaidy, H., Aly, S. & Elzokani, A. (2017).** Reflections from the first Arabic MOOC in STEAM education. Paper presented at the AUC 23<sup>rd</sup> Annual Research Conference. April 5<sup>th</sup>- 6<sup>th</sup>, American University in Cairo, Egypt.

- EL-Deghaidy, H. (2016).** Education for sustainability in Egypt: Participants' Perspectives. Paper presented at the 89<sup>th</sup> Conference of the *National Association of Research in Science Teaching (NARST)*. April 14<sup>th</sup> -17<sup>th</sup>, Baltimore, Maryland USA.
- EL-Deghaidy, H. (2015).** Science education in Egypt based on integrating ecological needs and STEAM education. Paper presented at the 11<sup>th</sup> biannual Conference of the *European Science Education Research Association (ESERA)*. August 31<sup>st</sup> - September 4<sup>th</sup>, Helsinki, Finland.
- EL-Deghaidy, H. & Rizkallah, M. (2015).** The Impact of Model-Eliciting Activities on Attitude Towards STEM Education. Paper presented at the 11<sup>th</sup> biannual Conference of the *European Science Education Research Association (ESERA)*. August 31<sup>st</sup>- September 4<sup>th</sup>, Helsinki, Finland.
- EL-Deghaidy, H. & Mansour, N. (2015).** Science Teachers' Perceptions of STEM Education: Possibilities and Challenges. Paper presented at the 2<sup>nd</sup> *International Conference on Teaching and Education Sciences (ICTES2015)*. June 9<sup>th</sup>-10<sup>th</sup>, Kuala Lumpur, Malaysia.
- EL-Deghaidy, H. (2015).** Education for sustainability: perspectives from the Graduate school of Education. Paper presented at the *International Conference on Education and Training for Sustainability (ICETS 2015)*. April 19<sup>th</sup>- 22<sup>nd</sup>, American University in Cairo, Egypt.
- EL-Deghaidy, H., Said, T, & Matar, H. (2013).** Supporting science, technology, engineering and mathematics (STEM) teacher in Egypt: Where reform is needed. Paper presented at *7th International Technology, Education and Development Conference, (INTED2013)*. March 4<sup>th</sup>-6<sup>th</sup>, Valencia Spain.
- EL-Deghaidy, H. & Abbas, N. (2013).** Public-private partnerships with science, technology, engineering and mathematics (STEM) schools in Egypt. Paper presented at INTED2013 conference, *7th International Technology, Education and Development Conference, (INTED 2013)*. March 4<sup>th</sup>-6<sup>th</sup>, Valencia Spain.
- EL-Deghaidy, H. (2012).** Education for sustainable development: experiences from science teachers' action research. Paper presented at the *International Conference New Technologies, Education for Sustainable Development and Critical Pedagogy*. June 15<sup>th</sup> -17<sup>th</sup>, Rethymnon, Crete Greece.
- El-Adawy, M. & EL-Deghaidy, H. (2011).** The effectiveness of computer simulations for pupils with learning difficulties in science: A case from Egypt. Paper presented at *CAL Conference: Learning Futures: Education, Technology & Sustainability*. April 13<sup>th</sup> - 15<sup>th</sup>, Manchester Metropolitan University, UK.
- EL-Deghaidy, H. (2008).** Developing science teachers' attitude towards democratic teaching and decision making: an Egyptian in-service training programme. Paper presented at the *International Conference of Education, Research and Innovation (ICERI 2008)*. November, 17<sup>th</sup>-19<sup>th</sup>, Madrid- Spain.

Othman, S. & **EL-Deghaidy, H. (2008)**. Secondary student portfolio: An integrated system to higher educational enrolment. Paper presented at the *National Conference of Secondary Education*. AlAzhar Conference Centre, May 10<sup>th</sup>-13<sup>th</sup>, Cairo. (Published in Arabic).

Othman, S, AlAhmad, N. & **EL-Deghaidy, H. (2007)**. The extent of student teacher commitment, in both Egypt and Saudi Arabia, to classroom time management in the light of total quality standards and its relationship with self-management and trend towards teaching profession. Paper presented at the *19th Egyptian Curriculum Society Conference: Developing Curricula in the Light of Total Quality Standards*. 25<sup>th</sup> -26<sup>th</sup> July, Ain Shams Guest House, Cairo. (Published in Arabic).

#### NON PEER-REVIEWED CONFERENCES and SYMPOSIUMS

**EL-Deghaidy, H. (2016)**. A paradigm shift in teacher education: Voices from the Arab region. Paper presented at The First Inter-Regional Research Conference on Science and Mathematics Education: *Interfacing Arab and European Science and Mathematics Education Research*. The American University of Beirut, AUB. November 26<sup>th</sup>- 27<sup>th</sup>, Beirut-Lebanon.

**EL-Deghaidy, H. (2016)**. Promoting STEAM/ STE<sup>2</sup>AM for empowerment. Oral presentation at Schools Network. British Council, Abu Dhabi: United Arab Emirates, 1<sup>st</sup>-3<sup>rd</sup> March 2016.

**EL-Deghaidy, H. (2013)**. MediaThread: Where images and videos are worth thousands of words. Oral Presentation for the Centre for Learning and Teaching (CLT) SYMPOSIUM 2013 “*Innovative Pedagogies and Technologies for 21<sup>st</sup> Century Learning*”, April 18<sup>th</sup>, 2013, American University in Cairo, Egypt.

**EL-Deghaidy, H. (2009)**. Macmillan Online Courses. Paper presented at the 6<sup>th</sup> *International Conference on e-learning Applications*. 10<sup>th</sup>-12<sup>th</sup> January, American University in Cairo, Egypt.

**EL-Deghaidy, H. (2007)**. Civic education in the Egyptian democratic society. Paper presented at the final conference of “*Civic Education*”. Suez Canal University: Joint project between Suez Canal University and University of Maryland, USA.

#### BOOK CHAPTERS

**EL-Deghaidy, H. (2020)**. Education for sustainable development: A means for infusing social responsibility in higher education in Egypt. In N., El-Bassiouny, D., El-Bassiouny, E., Mohamed, & M. Basuony (Eds.). *Ethics, CSR and sustainability (ECSRS) education in the Middle East and North Africa (MENA) region: Conceptualization, contextualization, and empirical evidence*. UK: Routledge, Taylor & Francis Group.

- EL-Deghaidy, H.** (2019). STREAM education for building minds of the future. In *Education and jobs of the future: Developing qualified human capital to secure the UAE's progress*. The Emirates Center for Strategic Studies and Research: UAE.
- EL-Deghaidy, H.** (2017). STEAM methods: A case from Egypt. In A. Sickel and S. Witzig (Eds.). *Designing and teaching the secondary science methods course: An international perspective*. Sense Publishers.
- EL-Deghaidy, H. & Loftly, N.** (2013). North Africa: Egypt country case study. In K. Biraimah, I., Kamere, & CC. Wolhuter (Eds.). *A Student's Textbook in Comparative Education*, pp. 241-288 288. Potchefstroom, South Africa: Platinum Press.
- EL-Deghaidy, H.** (2012). Education for sustainable development: Experiences from science teachers' action research. In V. Makrakis & N. Kostoulas - Makrakis (Eds). *New technologies, education for sustainable development and critical pedagogy*. ICTeESD University of Crete. ISBN 978-960-87898-7-6, pp. 121- 135. Accessed from: [http://icteesd.v-campus.edc.uoc.gr/download/e-Book\\_Collection.pdf](http://icteesd.v-campus.edc.uoc.gr/download/e-Book_Collection.pdf)
- EL-Deghaidy, H.** (2012). Using blended e-learning cooperative approach in higher education: A case from Egypt. Book Chapter in Anastasiades, P. (Ed.) *Blended learning environments for adults: evaluations and frameworks*. IGI Global United States of America.
- EL-Deghaidy, H.** (2010). Teacher education in Egypt: Past, present and future directions. In K. Karakis & C.C. Wolhuter (Eds.) *International handbook on teachers' education worldwide: Training, issues and challenges for teachers' profession*. Athens: Atrapos Editions.
- EL-Deghaidy, H.** (2010). Teacher education in Egypt: Past, present and future directions. In K. Karakis & C.C. Wolhuter (Eds.). *International Handbook on Teachers Education Worldwide: Training, issues and challenges for teachers' profession*, pp. 382-397. Athens: iWV. (Published in Greek).
- EL-Deghaidy, H.** (2007). Civic education in the Egyptian democratic society. In S. Gibaly & T. Wahdan (Eds.). *Educational material for a suggested curriculum in civic education at faculties of education Suez Canal University*, pp. 8-28. Suez Canal University Press, Ismailia, Egypt.

## INNOVATIVE CONTRIBUTIONS

Designed and presented the First Arabic Massive Open Online Course (MOOC) on STEAM: Integrating Education with Life. Host Platform Edraak.org.  
Available at: [https://www.edraak.org/en/course/course-v1:AUC+STEAM101+R2\\_Q3\\_2017/](https://www.edraak.org/en/course/course-v1:AUC+STEAM101+R2_Q3_2017/)

Over 33,000 participants enrolled.

**INTERNATIOAL KEYNOTE/INVITED GUEST SPEAKER**

**EL-Deghaidy, H. (2020).** Achieving Sustainable Development Goals and Global Citizenship Through STEAM. Keynote Speaker at Schools Now! Conference: Developing global learners: Preparing young people for life in school and beyond. Partners School Global Network: British Council. Cairo Marriott Hotel 4th-5th March.

**EL-Deghaidy, H. (2020).** Educational leadership: Leading change in the 21<sup>st</sup> century. Alexandria Principals' Gathering. British Council. Hilton Cornish, Alexandria, February 6<sup>th</sup>. Cairo, March 4<sup>th</sup> -5<sup>th</sup>.

**EL-Deghaidy, H. and others (2019).** Decolonizing Education for Sustainability: African perspectives. Highlighted session at the 63<sup>rd</sup> Comparative and International Education Society, San Francisco, April 14<sup>th</sup>-18<sup>th</sup>.

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**EL-Deghaidy, H. (2018).** STREAM Education for building future minds. 9<sup>th</sup> Conference on Advanced Education in a Changing World: The Education Strategy of the United Arab Emirates. November 20-21, 2018. Emirates Centre for Strategic Studies and Research (ECSSR), United Arab Emirates

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**EL-Deghaidy, H. (2014).** Education for sustainable development: Experiences from science teachers' action research". *International Seminar of Science Education*

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## **MEMBERSHIP IN NATIONAL AND INTERNATIONAL ORGANIZATIONS**

Comparative and International Education Society (CIES)  
National Association for Research in Science Teaching (NARST)  
European Science Education Research Association (ESERA)  
Korean Association for Science Education (KASE)  
International Economics Development and Research Centre (IEDRC)  
Egyptian Council for Curriculum and Instruction (ECCI)  
Egyptian Society for Science Education (ESSE)  
Arab Educational Technology Society (AETS)

## **UNDERGRADUATE AND GRADUATE COURSES TAUGHT (SUEZ CANAL UNIVERSITY AND AMERICAN UNIVERSITY IN CAIRO)**

### **Undergraduate**

Fundamentals of Teaching and Learning  
Taking Education Out of the Box  
Principles of Teaching  
Teaching Strategies  
Science Teaching Methodology  
Science Teaching Strategies  
Curricula Design  
Micro Teaching  
Environmental Education  
Teaching Methodology for Special Education  
Teaching Science School Based Curricula

### **POSTGRADUATE**

Human Development and Learning Theories  
Foundations of Instructional Practice  
Education for Sustainability and Steam Education  
STEM Education  
Educational Technology  
Advanced Course in Educational Technology  
Teaching Strategies  
Advanced Course in Teaching Strategies  
Course Design

**THESES AND CAPSTONE PROJECTS AT AUC AND SCU**

Indigenous knowledge: An escort to the infusion of sustainable development in education. MA Thesis, AUC.

Investigating project-based learning in a STEM school in Egypt: A case study. MA Thesis, AUC.

Educational art and sustainable development: Proposal for an initiative for using art for Sustainable Development. MA Capstone Thesis, AUC.

Developing pre-service teachers' personal knowledge management skills and consumption awareness by using a Web-Quest based sustainable development programme. PhD, SCU.

Resolution and reform: Influencing Western normalization to the Middle Eastern Millennials. MA Thesis, AUC.

The influence of applying project-based learning on teaching mathematics and science for tenth graders at STEM schools. MA Thesis, AUC.

Developing an effective social emotional learning program towards a bully-free school environment: An exploratory study. MA Thesis, AUC.

A strategy to improve Egyptian elementary stage ESOL student's speaking skills using role-play. MA Thesis, AUC.

Dimensions of diversity: The impact of diversity and inclusion on the student learner in higher education. MA Capstone Thesis, AUC.

Exploring the impact of community service experiences on social responsibility of adolescents in private schools. MA Thesis, AUC.

Policy reform to high-stakes university admissions examinations in Egypt: A comprehensive history and discussion of the current STEM school model. MA Capstone Thesis, AUC.

Effective professional development and related factors in Egypt. MA Capstone Thesis, AUC.

A blended learning programme based on Marzano's model to develop science achievement, picture reading and social skills of pupils with learning disabilities, at the preparatory stage. PhD, SCU.

Effectiveness of a blended programme in developing some scientific concepts and communication skills for visually impaired students. PhD, SCU.

A programme designed to develop health awareness and social responsibility using virtual classrooms for preparatory students in Gaza. PhD, SCU.

A programme in therapeutic nutrition using medical plants in the development of home economics students' achievement levels and attitudes. Master Thesis, SCU.

Exploring the ability of Montessori education to achieve sustainability and global citizenship education. MA Capstone Thesis, AUC.

Refugees education in Egypt: A case study of a refugee school in Cairo Area. MA Capstone Thesis, AUC.

School principals' emotional intelligence. MA Capstone Thesis, AUC.

Culture contextualization of mathematics instruction a “draw a science teacher (DAST)” analysis. MA Capstone Thesis, AUC.

Language and thought in Egypt’s schools today: What does Arabic mean to Arabic native speakers? A literature review. MA Capstone Thesis, AUC.

To which extent can language education be fun and effective? Investigating means to integrating music as a vital educational tool to language education. MA Capstone Thesis, AUC.

The societal and parental involvement dynamics that affect creativity in International Baccalaureate students in Cairo. MA Capstone Thesis, AUC.

STEM education transfer from the US: Critical analysis of STEM practices in customizing STEM education in Egypt. MA Capstone Thesis, AUC.

Civil society engagement and education for sustainable development (ESD) in Egypt: a case study of the EduCamp initiative in the slum area El Warraq. MA Capstone Thesis, AUC.

Does homework improve learning? MA Capstone Thesis, AUC.

Improving the teaching and learning of science in Egyptian schools: a case study of implementing STEM education using action research. MA Capstone Thesis, AUC.

Integrating language and content in mainstream biology classrooms: the experiences of English language learners. MA Capstone Thesis, AUC.

Clashing curricula, changing narratives. MA Capstone Thesis, AUC.



Assessing the impact of European standards for internal quality assurance on Students' satisfaction and intention behaviour: Cases from the Polish higher education market. MA Capstone Thesis, AUC.

Applying a PBL approach in an undergraduate Biology introductory course. MA Capstone Thesis, AUC.

Reforming the STEM education initiative in Egypt. MA Capstone Thesis, AUC.

## REFERENCES:

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