

## Wajeih Daher: Curriculum Vitae

### Personal information:

Adress: P.O. box 8861, Nazareth, 16000

Phone: 9725446019050

Email: [wajeihdaher@gmail.com](mailto:wajeihdaher@gmail.com)

Last rank from An-Najah University:

The rank: Associate professor

Date: 1.4.2013

Last rank from the ministry of education:

The rank: Senior lecturer A.

The college: Al-Qasemi Academic College of Education

Date: 1.9.2013

### Academic higher education:

Degree	Department	University	Years
B.A.	Mathematics	University of Haifa	1975-1978
B.A.	Arabic language	University of Haifa	1975-1978
M.A	Mathematics	University of Haifa	1980-1986
B.A.	Economics and accounting	University of Haifa	1983-1987
M.A.	Education	Tel-Aviv University	1996-2000
Ph. D.	Education	Haifa University	2001-2006

**Dissertations:**

Title	Supervisor	Subject
Planar Graphs	Jousef Zacs and Gadi Moran	Mathematics
Verbal interaction types in the MUD classroom	David Mioduser and Avigail Oren	Technology in education
Semiotic analysis of electronic mathematical texts	Michal Yerushalmi	Mathematics education

**Pedagogic higher education:**

University	Certificate name	Year
University of Haifa	Teaching certificate	1994

**Educational Experience:**

Years	Institution name	Institution description
1978-1981	University of Haifa	Academic Institution
1980-1999	Alzahraa middle school- Ministry of education	Middle school
1994-1999	University of Haifa	Academic Institution
1999-2017	Al-Qasemi Academic College of Education	Academic Institution
1999-2002	Oranim College	Academic Institution
2001-2004	Beit berl College	Academic Institution
2009-2017	An-Najah University	Academic Institution

## Working places and positions

Place	Position	Years
An-Najah National University	Lecturer of mathematics education and technology in education	2009-2017
Al-Qasemi Academic College of Education	Pedagogic supervisor	1999-2005
	ICT coordinator	2003-2006
	Head of mathematics department	2006-2010
	Editor-in-chief of the journal: "Elmajallah"	2007-2012
	Member of the editorial board of Jamea'a Journal	2008-2012
	Member of the steering committee of the ICT center	2008-2013
	Member of the research center committee	2010-2013
	Students' courses' coordinator in the ICT center	2011-2013
	Editor in chief of Jamea'a journal	2012-2013
	Head of the mathematics education M.Ed program	2012-2017
	Head of the research center	2014-2016
Alzahraa middle school	Teacher of mathematics	1980-1999
	Coordinator of the mathematics subject	1996-1998
Oranim College	Lecturer in the mathematics department	1999-2002
Beit berl College	Lecturer of computer integration in education	2001-2004
University of Haifa	Teaching assistant in mathematics department	1978-1981

	Teacher supervisor	1994-1999
	Member of the steering committee of the math center for elementary teachers	2008-2011
	Member of the steering committee of the math center for high school teachers	2008-2011

**Continuing education courses (with 56 hours and more):**

Institute	Course	Hours	Academic year
CET, Tel-Aviv	Internet informatics	196	1997
Weismann Institute of science, Rehovot	Symbolic computer system	56	1997
Weismann Institute of science, Rehovot	History of mathematics	56	1997
Technion, Haifa	Integrating computers in mathematics	56	1997
Mofet institute, Tel-Aviv	Workshop for computerized development staff	56	2005

## Publications

### 1. Scientific/Professional book

1. Daher, W. (2009). *Semiotic Analysis of Electronic Mathematical Texts*. VDM Verlag: Saarbrücken, Germany.
2. Daher, W. (2010). *Mathematics and its teaching in the early childhood*. Baka: Al-Kasemi Academic College of Education.

### 2. Articles in peer reviewed scientific/professional journal

1. Daher, W. (2009). Semiotic Tools for Evaluating Electronic Mathematical Texts. *Ubiquitous Learning: An International Journal*, 1, 1, 1-7. <http://ijq.cgpublisher.com/product/pub.186/prod.4>
2. Daher, W. (2009). Students' Perceptions of Learning Mathematics with Cellular Phones and Applets. *International Journal of Emerging Technologies in learning*, (1), 23-28. <http://online-journals.org/i-jet/issue/view/51>
3. Daher, W. (2009). Students' Learning by Means of Spreadsheet Simulations: The Case of Probability. *The International Journal of Learning*, 16 (1), 283-293. <http://ijl.cgpublisher.com/product/pub.30/prod.2021>
4. Bayaa, N. & Daher, W. (2009). Learning Mathematics in an Authentic Mobile Environment: the Perceptions of Students. *International Journal of Interactive Mobile Technologies*, 3, 6-14. <http://online-journals.org/i-jim/article/viewArticle/813>.
5. Daher, W. (2009). Preservice Teachers' Perceptions of Applets for Solving Mathematical Problems: Need, Difficulties and Functions. *Journal of educational Technology & Society*, 12 (4), 383–395. [http://www.ifets.info/journals/12\\_4/32.pdf](http://www.ifets.info/journals/12_4/32.pdf)
6. Baya'a, N. & Daher, W. (2010). Middle School Students' Learning of Mathematics Using Mobile Phones: Conditions and Consequences. *Journal of Interactive Learning Research*, 21(1), 1-25. <http://www.editlib.org/p/29401>

7. Daher, W. (2010). Building mathematical knowledge in an authentic mobile phone environment. *Australasian Journal of Educational Technology*, 26(1), 85-104. <http://www.ascilite.org.au/ajet/ajet26/daher.html>
8. Daher, W. & Jaber, O. (2010). Elementary School Geometry Teachers' Conceptions of Geometry and Teaching Geometry and Their Practices. *The International Journal of Interdisciplinary social sciences*, 5(1), 139-156. <http://iji.cgpublisher.com/product/pub.88/prod.975>
9. Jaber, O. & Daher, W. (2010). Relations among the Educational Constructs of Elementary School Geometry Teachers. *The International Journal of Learning*, 17 (2), 371-390. <http://ijl.cgpublisher.com/product/pub.30/prod.2623>
10. Daher, W. (2010). Mathematics Learning Community Flourishes in the Cellular phone Environment. *International Journal of Mobile and Blended Learning (IJMBL)*, 2(2), 1-17. <http://www.igi-global.com/bookstore/Article.aspx?TitleId=44679>
11. Zuhdi, A. & Daher, W. (2010). Factors influencing students' use of electronic resources and their opinions about this use: the case of students at An-Najah National University. *International Journal of Emerging Technologies in Learning (iJET)*, 5 (4), 51-58.
12. Daher, W. (2010). Wiki interaction tracks in geometry learning. *International Journal of E-Adoption*, 2 (4), 15-34. <http://www.igi-global.com/Bookstore/Article.aspx?TitleId=50302>
13. Daher, W. (2011). Solving word problems and working with parameters in the spreadsheets environment. *The electronic journal of mathematics and technology*, 5 (1), 64-80. [https://php.radford.edu/~ejmt/deliverAbstract.php?paperID=eJMT\\_v5n1p1](https://php.radford.edu/~ejmt/deliverAbstract.php?paperID=eJMT_v5n1p1)
14. Daher, W. (2011). Building mathematics cellular phone learning communities. *International Journal of Interactive Mobile Technologies (iJIM)*, 5 (2), 9-16. <http://www.online-journals.org/index.php/i-jim>
15. Daher, W. (2011). Learning mathematics in the mobile phone environment: students' emotions. . *Journal of interactive learning research*, 22 (3), 357-378.

16. Daher, W. & Baya'a, N. (2012). Characteristics of Middle School Students Learning Actions in Outdoor Mathematical Activities with the Cellular Phone. *Teaching Mathematics and its Applications*, 31(3), 133-152.
17. Al-Fahel, E.; Daher, W. & Abu-Hussein, J. (2012). Teachers' perceptions of the interactive boards for teaching and learning: the case of Arab teachers in Israel. *The international journal of e-adoption*, 4 (1), 33-50.
18. Daher, W.; Abu-Hussein, J. & Al-Fahel, E. (2012). Teachers' perceptions of interactive boards for teaching and learning in public and private high schools in the Arab education system in Israel. *The international journal of emerging technologies in learning*, 7(1), 10-18.
19. Daher, W. (2012). The influence of mathematical outdoor activities' characteristics on students' emotions, *The International Journal of Interactive Mobile Technologies*, 6 (2), 4-12.
20. Daher, W. (2012). Students' perceptions of democracy in the mathematics classroom: Freedom, equality and dialogue. *Pythagoras*, 33 (2), 68-77.  
<http://www.pythagoras.org.za/index.php/pythagoras/article/viewFile/158/277>
21. Baya'a, N., & Daher, W. (2012). From social communication to mathematical discourse in social networking: The case of the Facebook, *International Journal of Cyber Ethics in Education (IJCEE)*, 2 (1), 58-67.
22. Daher, W. (2012). Educational and cultural identities in virtual social networks. *International Journal of Cyber Ethics in Education (IJCEE)*, 2 (3), 57-70.
23. Baya'a, N. & Daher, W. (2012). Mathematics Teachers' Readiness to Integrate ICT in the Classroom: The Case of Elementary and Middle School Arab Teachers in Israel. *International Journal of Emerging Technologies in Learning, (iJET)*, 8 (1), 46-52.
24. Daher, W.; Saifi, A. & Habayeb, A. (2013). University and High School Students' Perceptions of the Nature of Science: the Effect of Gender, Class, Specialty and Reported Ability in Science. *The international Journal of Science, Mathematics, and Technology Learning*, 19 (2), 51-63.



25. Daher, W. (2013). Cognitive, Meta-Cognitive, Affective, Social and Behavioral Aspects of Mobile Mathematics Learning. *The electronic Journal of Mathematics and Technology*, 7 (5), 364-381.
26. Daher, W. & Shahbari, J. (2013). Pre-service Teachers' Modelling Processes through Engagement with Model Eliciting Activities with a Technological Tool. *The International Journal of Science and Mathematics Education*. DOI 10.1007/s10763-013-9464-2
27. Daher, W. (2014). Manipulatives and Problem Situations as Escalators for Students' Geometric Understanding: A Semiotic Analysis. *International Journal of Mathematical Education in Science and Technology*, 45 (3), 417-427.
28. Shahbari, J., Daher, W. & Raslan, S. (2014). Mathematical knowledge and the cognitive and metacognitive processes emerged in model-eliciting activities. *International Journal of New Trends in Education and Their Implications*, 5 (2), 209-2019.
29. Daher, W. (2014). Students' Adoption of Social Networks as Environments for Learning and Teaching: The Case of the Facebook. *International Journal of Emerging Technologies in Learning (iJET)*, 9 (8), 16-24.
30. Anabousi, A., Daher, W., Baya'a, N. & Abu-Naja, M. (2014). Conceiving Function Transformations in Different Representations: Middle School Students Working with Technology *Electronic Journal of Mathematics Education (IEJME)*, 9 (2), 97-112.
31. Daher, W. & Baya'a, N. (2014). In-service and Pre-service Middle School Mathematics Teachers' Attitudes and Decisions Regarding Teaching Mathematics Using Mobile Phones. *International Journal of Interactive Mobile Technologies (iJIM)*, 8 (4), 4-13.
32. Baya'a, N., & Daher, W. (2015). The development of college instructors' technological pedagogical and content knowledge. *Procedia - Social and Behavioral Sciences*, 174, 1166 – 1175.

33. Daher, W. (2015). Discursive Positionings and Emotions in Modelling Activities. *International Journal of Mathematical Education in Science and Technology*. 46(8), 1149-1164. DOI:10.1080/0020739X.2015.1031836
34. Al-Shamali, M., & Daher, W. (2015). Scientific Reasoning and Its Relationship with Problem Solving: the Case of Upper Primary Science Teachers. *International Journal of Science and Mathematics Education*. DOI 10.1007/s10763-015-9646-1.
35. Daher, W., & Anabousy, A. (2015). Students' Recognition of Function Transformations' Themes Associated with the Algebraic Representation. *REDIMAT*, 4(2), 179-194.
36. Egbariyya, Q., & Daher, W. (2015). School violence among Arab adolescents in Israel and its relation to self-control skills and social support. *Psychological Reports*, 117(1), 1-7.
37. Daher, W., & Anabousy, A. (2015). Students' conceptions of function transformation in a dynamic mathematical environment. *International Journal for Mathematics Teaching and Learning*, 16(4).  
<http://www.cimt.plymouth.ac.uk/journal/daher.pdf>
38. AlFahel, E., Daher, W., & Saied Ahmad, M. (2016). Educational reform in elementary schools in Israel: Arab teachers' attitudes and satisfaction. *International Journal of Innovation and Learning*, 20(3), 233-250.
39. Daher, W., & Saifi, A. (2016). Democratic practices in a constructivist science classroom. *International Journal of Science and Mathematics education*. doi:10.1007/s10763-016-9772-4
40. Shahbari, J., & Daher, W. (2016). Pre-service teachers' mathematical models' features. *European Journal of Science and Mathematics Education (EJSME)*, 4(4), 523-533.
41. Daher, W. (2017). Student voice in the mobile phone environment. *International Journal of Mobile and Blended Learning (IJMBL)*, 9(3), 12-23.
42. Daher, W., & Musallam, N. (2017). Objectifying the adjacent and opposite angles: a cultural historical analysis. *International Journal of Mathematical*

*Education in Science and Technology*. DOI:

<http://dx.doi.org/10.1080/0020739X.2017.1357847>

43. Daher, W., Tabaja-Kadan, A., & Gierdien, F. (2017). Educating Grade 6 students for higher-order thinking and its influence on creativity. *Pythagoras*, 38(1). DOI: <http://dx.doi.org/10.4102/pythagoras.v38i1.350>

## **Publications in conferences:**

### In English

1. Daher, W. (2007). Fostering Participation in Electronic Forums. *REAP International Online Conference 2007: Assessment design for learner responsibility*. Virtual participation.  
[http://www.reap.ac.uk/reap07/Portals/2/CSL/feast%20of%20case%20studies/Fostering\\_participation\\_in\\_electronic\\_forums.pdf](http://www.reap.ac.uk/reap07/Portals/2/CSL/feast%20of%20case%20studies/Fostering_participation_in_electronic_forums.pdf)
2. Daher, W. & Bayaa, N. (2008). Managing Online Courses: Problems and Worked-Out Solutions. In *Proceedings of 3rd International Conference on Interactive Mobile and Computer Aided Learning*. Amman-Jordan.
3. Bayaa, N. & Daher, W. (2009). Students' Perceptions of Mathematics Learning Using Mobile Phones. In *Proceedings of 4th International Conference on Interactive Mobile and Computer Aided Learning*. Amman-Jordan.
4. Daher, W. & Baya'a, N. (2010). A blended model for non-traditional teaching and learning of mathematics. *Readings in Technology and Education: Proceedings of ICICTE 2010*, Corfu, Greece, 407-417.
5. Baya'a, N. & Daher, W. (2011). From social communication to mathematical discourse in social networking: The case of the Facebook. *Readings in Technology and Education: Proceedings of ICICTE 2010*, Rhodes, Greece.
6. Daher, W. & Baya'a, N. (2012). Interdisciplinary Phenomena in Social Networking Sites: The case of the Golden Ratio in the Facebook. *The International Conference on Education and New Learning Technologies*, Barcelona, Spain, 2-4 July, 2012.
7. Baya'a, N. & Daher, W. (2012). Mathematics Teachers' Readiness to Integrate ICT in the Classroom: The Case of Elementary and Middle School Arab Teachers in Israel. *The 7<sup>th</sup> International Conference on Interactive Mobile and Computer Aided Learning*. Amman-Jordan, 6-8 November 2012.
8. Daher, W. & Baya'a, N. (2013). Pre-Service Teachers' Perceptions of the Integration of ICT in the Mathematics Classroom. In: *Proceedings of the International Conference on Technology in Mathematics Teaching, ICTMT11*. The University of Bari Aldo Moro, Bari – Italy, 9-12 July, 2013.

9. Shahbari, J. & Daher, W. (2013). Model eliciting activities for promoting fractions' utilization. In: *Proceedings of the International Symposium Elementary Mathematics Teaching (SEMT13)*. Prague, Czech Republic, August 18-23, 2013.
10. Baya'a, N. & Daher, W. (2014). The development of college instructors' technological pedagogical and content knowledge. In: *Proceedings of the INTE International Conference on New Horizons – 2014*. Paris, France, June 25-27, 2014.
11. Daher, W., Swidan, O., & Shahbari, J. (2015). Discursive positionings and emotions in a small group's learning of geometric definitions. In: *Proceedings of the Eighth Congress of European Research in Mathematics Education (CERME 8)*. February 4-8, 2015. Prague, the Czech Republic.
12. Daher, W., & Baya'a, N. (2015). Integrating HOTS Activities with Geogebra in Pre-Service Teachers' Preparation. In *Proceedings of 17th International Conference on Innovation in Education (ICIE 2015)*. July 9-11, 2015. Prague, the Czech Republic.
13. Daher, W., Baya'a, N., & Anabousy, R. (2016). Professional development school as a catalyst for in-service teachers' integration of ICT. *Thirteenth International Congress on Mathematical Education (ICME13)*, July, 24-31. Hamburg, Germany.
14. Daher, W., & Anabousy, A. (2016). Flexibility of pre-services teachers in problem posing in different environments. *Thirteenth International Congress on Mathematical Education (ICME13)*, July, 24-31. Hamburg, Germany.
15. Daher, W., Swidan, O., & Darawsha, N. (2016). Low achieving students' routines in learning the equivalence concepts. *PME40*, Szeged, Hungary, August 3-7, 2016.
16. Anabousi, A., & Daher, W. (2016). Coping with the erroneous use of the intuitive rule “more a – more b” using mathematical cases. *PME40*, Szeged, Hungary, August 3-7, 2016.
17. Daher, W., Swidan, O., & Masarwa, A. (2017). Positioning and emotions in learning algebra: The case of middle- achieving students. Paper presented at the *CERME10*. February 1-5, 2017. Dublin, Ireland.

18. Baya'a, N., Daher, W., Anabousy, R., & Anabousy, A. (2017). The development of pre-service teachers' TPACK in the use of digital tools. Paper presented at the CERME10. February 1-5, 2017. Dublin, Ireland.
19. Swidan, O., Daher, W., & Darawshi, N. (2017). Using dynamic and interactive technological tools to support conceptual learning of equations among low-achieving students. Paper presented at the CERME10. February 1-5, 2017. Dublin, Ireland.
20. Daher, W., Baya'a, N., Anabousy, A., & Anabousy, R. (2017). Pre-service teachers' preparation as a catalyst for the acceptance of digital tools for teaching mathematics and science. Paper presented at the thirteenth International Conference of Technology in Mathematics Teaching (ICTMT13). July, 3-6, 2017, Lyon, France.
21. Baya'a, N., Daher, W., & Mahagna, S. (2017). The effect of collaborative computerized learning using geogebra on the development of concept images of the angle among seventh graders. Paper presented at the thirteenth International Conference of Technology in Mathematics Teaching (ICTMT13). July, 3-6, 2017. Lyon, France.
22. Daher, W., Anabousy, A., & Jabarin, R. (2017). The effect of meta-cognition on positioning and emotions in authentic mathematical activities. Paper presented at the International Conference on Education in Mathematics, Science & Technology (ICEMST). May 18-21, 2017, Ephesus - Kusadasi, Turkey.
23. Daher, W., Baya'a, N., & Anabousy, R. (2017). In-service mathematics teachers' integration of ict as innovative practice. Paper presented at the International Conference on Education in Mathematics, Science & Technology (ICEMST). May 18-21, 2017, Ephesus - Kusadasi, Turkey.
24. Daher, W., Al-Khalili, F., & Abu-kayyas, Y. (2017). Variables that affect students' performance in mathematics. Paper presented at the International Conference on Research in Education and Science (ICRES). May 18-21, 2017, Ephesus - Kusadasi, Turkey.

In Hebrew:

25. Daher, W. (2003). Early childhood preservice teachers write mathematically. *Proceeding of the national conference – preparing the primary school mathematics teachers*, Oranim College.
26. Ganayem, A. and Daher, W. (2006). Synchronous and asynchronous learning and teaching: the factors that influence preservice teachers' preferences. *Proceeding of the conference "Opening gates in teacher education: meeting the challenges in education and teaching*. A virtual conference in Mofet institute.
27. Daher, W. (2006). Feedback types in the electronic forums. *Proceeding of Chais conference about the learner in the technological age*, Open University, Raa'nana.  
<http://telem-pub.openu.ac.il/users/chais/2006/04/pdf/chais-11-daher.pdf>

**Researches and scientific articles in local refereed journals:**

In English:

1. Daher, W.(2002-2003). Educational MUDs grow up: The great potential for electronic education. *Alresala*, 11-12, 378-416.  
[http://web.beitberl.ac.il/~bbsite/aitat/alresale-files/alresale-03/mkl\\_20.pdf](http://web.beitberl.ac.il/~bbsite/aitat/alresale-files/alresale-03/mkl_20.pdf).
2. Daher, W., (2006). Evaluating computer programs: tools and assessment. *Jami'a*, 9, 86-113. <http://www.qsm.ac.il/asdarat/jamiea/9/5--wajeeh%20daher.pdf>
3. Daher, W. (2009). Approaches to the spreadsheets environment: the case of preservice teachers when they solve word problems. *Jami'a*, 12, 58-90.  
<http://www.qsm.ac.il/mrakez/asdarat/jamiea/12/eng-3-wajeeh.pdf>

In Arabic:

4. Daher, W. (2001). Math enrichment in the internet. *Jamea'a*, 5, 274-295.  
<http://www.qsm.ac.il/asdarat/jamiea/5/MathematicsEnrichmentOnTheInternet.pdf>
5. Daher, W. (2002). The internet as a source for the history of Arabic and Islamic history of mathematics. *Jamea'a*, 6, 214-233.  
<http://www.qsm.ac.il/asdarat/jamiea/6/WajeehDaher-Moslemathematians-1.pdf>
6. Daher, W. (2003). Writing in the mathematics classroom. *Jamea'a*, 7, 347-370.  
<http://www.qsm.ac.il/asdarat/jamiea/7/WajeehDaher-final.pdf>

7. Daher, W. (2004). Integrating history of math in teaching and learning math. *Jamea'a*, 8, 422-470. <http://www.qsm.ac.il/asdarat/jameia/8/24.pdf>
8. Daher, W. (2006). Reading and writing in the mathematics classroom. *Jamea'a*, 10, 422-470. <http://www.qsm.ac.il/asdarat/jameia/10/11==wajeeh%20daher.pdf>
9. Daher, W. & Baya'a, N. (2009). Spreadsheets in mathematics education. *Jamea'a*, 13, 287-330.
10. Baya'a, N.; Daher, W. & Khalil, R. (2009). The role of the computer coordinator in the school, *Jamea'a*, 13, 257-286.
11. Daher, W. & Baya'a, N. (2010). Contexts and characteristics of middle school students' learning of mathematics with the cellular phone. *Jamea'a*, 14, 221-250. <http://www.qsm.ac.il/mrakez/asdarat/jameia/14/ara-9-wajeeh-nemer.pdf>
12. Anabousy, A.; Daher, W. & Baya'a, N. (2012). Geogebra in the Mathematics Classroom. *Jamea'a*, 16, 3-54.
13. Daher, W., Anabousy, A., & Anabousy, R. (2013). What if not Strategy: Significance, types and Functions in the Mathematics Classroom. *Jamea'a*, 17 (1), 81-220.
14. Naalweh, H., & Daher, W. (2017). Emotions of Tenth Grade Students When Learning the Odd Function: A Cultural-Historical Semiotic Analysis. *Jamea'a*, 20 (2), 175-208. [https://staff.najah.edu/media/published\\_research/2017/09/25/ara-hnadi-dr-wajeh-daher.pdf](https://staff.najah.edu/media/published_research/2017/09/25/ara-hnadi-dr-wajeh-daher.pdf)
15. Abu-Thabet, I. (2016). Semiotic and social characteristics in algebra unit in the palestinian mathematics book (Grade 7). *Jamea*, 20(1), 121-146. [https://staff.najah.edu/media/published\\_research/2017/09/28/dr-wajeh-daher-ijteiad-ab-tabet.pdf](https://staff.najah.edu/media/published_research/2017/09/28/dr-wajeh-daher-ijteiad-ab-tabet.pdf)

In Hebrew:

16. Daher, W. & Abd-Al-Khalek, E (2007). Verbal knowledge of geometric shapes before formal geometry. *Mispar Hazaq 2000*, 13, 42-47. [http://mathcenter-k6.haifa.ac.il/mispar\\_chazak/13/daher&halek.pdf](http://mathcenter-k6.haifa.ac.il/mispar_chazak/13/daher&halek.pdf)



17. Abd-Al-Khalek, E, Daher, W. & Jaber, O. (2007). Preservice teachers' awareness of the need to teacher's knowledge types. *Jamea'a*, 11, 328-340.  
<http://www.qsm.ac.il/asdarat/jameia/11/heb--1--Ibtisam+wajeeh-new.pdf>
18. Otman, A'. & Daher, W. (2007). Mathematics teachers' teaching: the present situation and a model to change it. *Jamea'a*, 11, 364-373.  
<http://www.qsm.ac.il/asdarat/jameia/11/heb--4--3ali+wajeeh.pdf>
19. Daher, W. & Jazmawi, A. (2007). Approaches and perceptions preservice teachers towards electronic forums. *Jamea'a*, 11, 385-403.  
<http://www.qsm.ac.il/asdarat/jameia/11/heb--6--wajeeh+Akram.pdf>
20. Daher, W., Jaber, O. & Abd-Al-Khalek, E (2008). Teachers' knowledge: What factors affect it? *Jamea'a*, 12, 319-339.  
<http://www.qsm.ac.il/mrakez/asdarat/jameia/12/heb-6-wjeeh+othman.pdf>
21. Abd-Al-Khalek, E & Daher, W. (2008). Manipulatives for learning the triangle topic. *Mispar Hazaq 2000*, 17, 32-41.  
[http://mathcenter-k6.haifa.ac.il/mispar\\_chazak/17/Halek&Daher.pdf](http://mathcenter-k6.haifa.ac.il/mispar_chazak/17/Halek&Daher.pdf)
22. Baya'a, N. & Daher, W. (2010). Cellular Applets Supporting Function Learning in Middle School. *A'lee*, 42, 32-40.  
<http://highmath.haifa.ac.il/images/data2/alle42/alle42-4.pdf>
23. Daher, W. & Jaber, O. (2010). Teachers of geometry in the elementary school: their perception of geometry and teaching geometry, and their practices. *Jamea'a* (14), 323-344.

#### **Other scientific local articles:**

In Arabic:

24. Daher, W. (2006). Writing in the mathematics classroom. *Wamadat phi Al-Riyadiyyat*, 3, 28-31.
25. Daher, W. (2007). Principles and standards of the NCTM to teach and learn mathematics. *Wamadat phi Al-Riyadiyyat*, 4, 20-24.
26. Daher, W. (2008). Applets for teaching the various forms of the quadratic function. *Wamadat phi Al-Riyadiyyat*, 5, 23-33.

27. Daher, W. (2009). Teaching geometry in elementary and middle school using the wiki. *Wamadat phi Al-Riyadiyyat*, 6, 21-30.
28. Daher, W. (2011). Intuitive rules in teaching and learning mathematics. *Wamadat phi Al-Riyadiyyat*, 7. 12-17.
29. Anabousy, A.; Daher, W. & Baya'a, N. (2012). Geogebra in the Mathematics Classroom. *Wamadat phi Al-Riyadiyyat*, 8. 44-60.
30. Daher, W., & Anabousy, A. (2014). Mathematical activities that encourage the creative and critical thinking. *Wamadat phi Al-Riyadiyyat*, 10, 26-39.

**Book chapters:**

1. Daher, W., & Baya'a, N. (2011). Building Multimedia and Web Resources for Teaching Mathematical Concepts through their Historical Development. In G. Styliaras, D. Koukopoulos and F. Lazarinis (Eds.), *Handbook of bResearch on Technologies and Cultural Heritage: Applications and Environments*, 370-391. IGI Global.
2. Daher, W. (2011). Working in a wiki environment: preservice teachers' experiences and perceptions - the case of geometry. In S. Huffman, S. Albritton, W. Rickman, B. Wilmes (Eds), *Cases on Building Quality Distance Delivery Programs: Strategies and Experiences*, 217-231. IGI Global.
3. Daher, W. (2012). Virtual Interactions in Distance Learning. In H. H. Yang, S. C. Yuen (Eds.), *Handbook of Research on Practices and Outcomes in Virtual Worlds and Environments*, 514-535. IGI Global.
4. Daher, W. & Alfahel, E. (2013). The Interactive Boards in the Schools: Middle and High School Teachers' Uses and Difficulties. In H. Yang, Z. Yang, D. Wu & S. Liu (eds.), *Transforming K-12 Classrooms with Digital Technology*, 306-319.
5. Baya'a, N. & Daher, W. (2015). The Facebook as an Educational Environment for Mathematics learning. In G. Mallia (ed.), *Social Classroom: Integrating Social Network Use in Education* (pp. 406-425).
6. Daher, W., & Baya'a, N. (2015). Students' behavior, perceptions and emotions when learning mathematics with cellular phones. In H. Crompton, & J. Traxler

(Eds.), *Mobile learning and STEM: Case studies in practice* (pp. 162-172). New York: Routledge.

**Research reports that underwent external review:**

1. Daher, W. & Baya'a, N. (2010). Learning mathematics through activities in the cellular phone environment. Mofet Institute, Tel-Aviv.
2. Daher, W. (2011). The wiki as an environment for developing knowledge types of preservice teachers in geometry. Mofet Institute, Tel-Aviv.
3. Ganayem, A.; Baya'a, N. & Daher, W. (2013). The Development of College Instructors' Technological Pedagogical and Content Knowledge. Mofet Institute, Tel-Aviv.
4. Daher, W. (2015). Pre-service teachers' creativity in problem solving with and without technology.

**Research reports that underwent internal review:**

5. Daher, W. & Baya'a, N. (2011). Mathematics teachers' behavior in the mobile phone environment.

**Artistic production in different media:**

1. Daher, W. (1994). Wandering without destination.
2. Daher, W. (2008). The city voices. Ogarit center, Ramallah.

## Conferences and Study days

### **International Conferences (Abstract conferences and full paper conferences):**

**For full papers conferences see above in the section: Publications in conferences.**

1. the conference "Opening gates in teacher education: meeting the challenges in education and teaching. A virtual conference in Mofet institute, February 13-15, 2006. A lecture titled: "synchronous and asynchronous learning and teaching: the factors that influence preservice teachers preferences".
2. REAP International Online Conference 2007: Assessment design for learner responsibility, 29-31, May, 2007. A case study titled "Fostering Participation in Electronic Forums". (Virtual participation).  
[http://www.reap.ac.uk/reap07/Portals/2/CSL/feast%20of%20case%20studies/Fostering\\_participation\\_in\\_electronic\\_forums.pdf](http://www.reap.ac.uk/reap07/Portals/2/CSL/feast%20of%20case%20studies/Fostering_participation_in_electronic_forums.pdf)
3. The fifth international conference: teacher education on crossroads, Beer-Sheba' and Tel-Aviv, June 25-28, 2007. A lecture titled: "teachers' knowledge: what factors influence it?"
4. The fifth international conference: teacher education on crossroads, Beer-Sheba' and Tel-Aviv, June 25-28, 2007. A poster titled: "Approaches and perceptions of preservice teachers towards the electronic forums".
5. The fifth international conference: teacher education on crossroads, Beer-Sheba' and Tel-Aviv, June 25-28, 2007. A poster titled: "The awareness of preservice teachers for the need to teachers' knowledge types".
6. The fifth international conference: teacher education on crossroads, Beer-Sheba' and Tel-Aviv, June 25-28, 2007. A poster titled: "mathematics teachers' teaching: the present situation and a model to change it".
7. The 3rd International Conference on Interactive Mobile and Computer Aided Learning. Amman-Jordan, 16-18, April, 2008. A lecture titled "Managing Online Courses: Problems and Worked-Out Solutions".

8. Ubiquitous Learning: an International Conference, Chicago, USA, 17-19, November, 2008. A lecture titled "Semiotic Tools for Evaluating Electronic Mathematical Texts". (Virtual participation).
9. 4th International Conference on Interactive Mobile and Computer Aided Learning, 22-24, April, 2009, Amman-Jordan. A lecture titled "Students' Perceptions of Mathematics Learning Using Mobile Phones".
10. The sixteenth International Conference on Learning, University of Barcelona, Spain, 1-4 July, 2009. A lecture titled "Students' Learning by Means of Spreadsheet Simulations: The Case of Probability". virtual participation.
11. Technology Sixth International Conference. Free University Berlin, Germany, 15-17 January 2010. Virtual lecture titled "Mathematics Community Building and Life Cycle in the Cellular phone Environment".  
<http://techandsoc.com/conference-2010/sessions/>
12. 17<sup>th</sup> International Conference on Learning. Hong Kong Institute of Education, Hong Kong, 6-9 July 2010. Virtual lecture titled "Relations among the Educational Constructs of Elementary School Geometry Teachers".  
<http://thelearner.com/conference-2010/sessions/>
13. International Conference on Information Communication Technologies in Education (ICICTE). Corfu, Greece, 8-10 July 2010. A lecture titled "A Model for non-traditional teaching and learning of mathematics".  
[http://www.icicte.org/ICICTE\\_2010\\_Proceedings.zip](http://www.icicte.org/ICICTE_2010_Proceedings.zip)
14. The Fifth International Conference on Interdisciplinary Social Sciences. University of Cambridge, Cambridge, UK, 2-5 august 2010. Virtual lecture titled "Elementary School Geometry Teachers' Conceptions of Geometry and Teaching Geometry and Their Practices". <http://thesocialsciences.com/conference-2010/sessions/>
15. The third international online conference: Opening gates in teacher education- education and teacher education in the age of globalization. Mofet Institute, Tel-Aviv, January 25-26, 2011. A lecture titled "Google sites for building electronic units for teaching mathematics".

16. The third international online conference: Opening gates in teacher education-education and teacher education in the age of globalization. Mofet Institute, Tel-Aviv, January 25-26, 2011. A discussion forum titled "Internet sites that integrates technology and history for teaching mathematics".
17. The third international online conference: Opening gates in teacher education-education and teacher education in the age of globalization. Mofet Institute, Tel-Aviv, January 25-26, 2011. A workshop titled "Computer programs for teaching mathematics in the cellular phone environment".
18. The third international online conference: Opening gates in teacher education-education and teacher education in the age of globalization. Mofet Institute, Tel-Aviv, January 25-26, 2011. A discussion forum titled "The cellular phone in the school and in the mathematics classroom: in or out?"
19. The third international online conference: Opening gates in teacher education-education and teacher education in the age of globalization. Mofet Institute, Tel-Aviv, January 25-26, 2011. A lecture titled "Elementary school geometry teachers perceptions of Geometry and its teaching"
20. The third international online conference: Opening gates in teacher education-education and teacher education in the age of globalization. Mofet Institute, Tel-Aviv, January 25-26, 2011. A lecture titled "Preservice teachers support argumentation in first and second grades?"
21. The International Conference on Information Communication Technologies in Education (ICICTE 2011). Rhodes, Greece, 7 – 9 July, 2011. A lecture titled: "From social communication to mathematical discourse in social networking: The case of the Facebook".
22. The International Conference on Education and New Learning Technologies. Barcelona, Spain, 2-4 July, 2012. A lecture titled: "Interdisciplinary Phenomena in Social Networking Sites: The case of the Golden Ration in the Facebook".
23. The Nineteenth International Conference on Learning. London, UK, 14-16 August, 2012. A virtual lecture titled: "University and High School Students' Perceptions of the Nature of Science: The Effect of Gender, Class, Specialty and Reported Ability in Science".

24. Interactive Mobile and Computer Aided Learning (IMCL2012), Amman, Jordan, 6-8 November, 2012. A lecture titled: "Mathematics Teachers' Readiness to Integrate ICT in the Classroom: The Case of Elementary and Middle School Arab Teachers in Israel".
25. The 6<sup>th</sup> International Conference on Teacher Education: Changing Reality through Education David Yalin College, Jerusalem, Israel, July 2-4, 2013. A lecture titled: "Social Networking Sites: A Tool for Social, Cultural, and Mathematical Discourse".
26. The 6<sup>th</sup> International Conference on Teacher Education: Changing Reality through Education David Yalin College, Jerusalem, Israel, July 2-4, 2013. A poster titled: "TPACK Workshop as an Incentive to Change College Instructors' Perceptions and Behavior Regarding the Integration of ICT into Teaching".
27. The 6<sup>th</sup> International Conference on Teacher Education: Changing Reality through Education David Yalin College, Jerusalem, Israel, July 2-4, 2013. A poster titled: "Interactive boards: Teachers' practices".
28. The 6<sup>th</sup> International Conference on Teacher Education: Changing Reality through Education David Yalin College, Jerusalem, Israel, July 2-4, 2013. A chair of a session titled: "Technology in teaching and learning".
29. The 6<sup>th</sup> International Conference on Teacher Education: Changing Reality through Education David Yalin College, Jerusalem, Israel, July 2-4, 2013. A lecture titled: "Pedagogic Training as a Catalyst for Teachers' Integration of ICT".
30. The 11<sup>th</sup> International Conference on Technology in Mathematics Teaching (ICTMT11), The University of Bari Aldo Moro, Bari – Italy, 9-12 July, 2013. A lecture titled: "Pre-Service Teachers' Perceptions of the Integration of ICT in the Mathematics Classroom".
31. The Twelfth Biannual conference on Elementary Mathematics Teaching (SEMT '13), Prague at Charles University, Faculty of Education, 18-23 August, 2013. A lecture titled: "Model eliciting activities for promoting fractions' utilizing".
32. The INTE International Conference on New Horizons – 2014. Paris, France, June 25-27, 2014. A lecture titled: "The development of college instructors' technological pedagogical and content knowledge"

33. The Ninth Congress of European Research in Mathematics Education (CERME 9). February 4-8, 2015. Prague, the Czech Republic. A lecture titled: "Discursive positionings and emotions in a small group's learning of geometric definitions".
34. The 17th International Conference on Innovation in Education (ICIE 2015). July 9-11, 2015. Prague, the Czech Republic. A lecture titled: "Integrating HOTS Activities with Geogebra in Pre-Service Teachers' Preparation".
35. Thirteenth International Congress on Mathematical Education (ICME13), July, 24-31, 2016. Hamburg, Germany. A lecture titled "Professional development school as a catalyst for in-service teachers' integration of ICT".
36. Thirteenth International Congress on Mathematical Education (ICME13), July, 24-31, 2017. Hamburg, Germany. A lecture titled "Flexibility of pre-services teachers in problem posing in different environments".
37. PME40, August 3-7, 2016, Szeged, Hungary. A short oral titled "Low achieving students' routines in learning the equivalence concepts".
38. PME40, August 3-7, 2016, Szeged, Hungary. A short oral titled "Coping with the erroneous use of the intuitive rule "more a – more b: using mathematical cases.
39. The Tenth Congress of European Research in Mathematics Education (CERME 10), February, 1-5, 2017. A lecture titled "Using dynamic and interactive technological tools to support conceptual learning of equations among low-achieving students".
40. The Tenth Congress of European Research in Mathematics Education (CERME 10), February, 1-5, 2017, Dublin, Ireland. A lecture titled "Positioning and emotions in learning algebra: The case of middle- achieving students".
41. The Tenth Congress of European Research in Mathematics Education (CERME 10), February, 1-5, 2017, Dublin, Ireland. A lecture titled "Professional development school as a catalyst for in-service teachers' integration of ICT".
42. The 13th International Conference on Technology in Mathematics Teaching – ICTMT 13, 3 to 6 July, 2017, Lyon, France. A lecture titled: Pre-service teachers' preparation as a catalyst for the acceptance of digital tools for teaching mathematics and science.



43. The 13th International Conference on Technology in Mathematics Teaching – ICTMT 13, 3 to 6 July, 2017, Lyon, France. A lecture titled: The effect of collaborative computerized learning using GeoGebra on the development of concept images of the angle among seventh graders.
44. The International Conference on Education in Mathematics, Science & Technology (ICEMST), May 18 - 21, 2017, Ephesus Kusadasi, Turkey. A lecture titled: In-service mathematics teachers' integration of ICT as innovative practice.
45. The International Conference on Education in Mathematics, Science & Technology (ICEMST), May 18 - 21, 2017, Ephesus Kusadasi, Turkey. A lecture titled: The effect of meta-cognition on positioning and emotions in authentic mathematical activities.
46. The International Conference on Research in Education and Science (ICRES), May 18 - 21, 2017, Ephesus-Kusadasi, Turkey. A lecture titled: Psychosocial variables that affect students' effort in mathematics.

**Local conferences:**

47. National conference – preparing the primary school mathematics teachers, Oranim College, February 2, 2003. The lecture was titled "early childhood preservice teachers write mathematically".
48. The annual fourth conference of MEITAL: computing the academic teaching. Ben Gurion University, June 8, 2005. The lecture was titled "semiotic analysis of electronic mathematical texts".  
The presentation is at:  
[http://meital.iucc.ac.il/conf/ppt/semiotic\\_mathematical.ppt](http://meital.iucc.ac.il/conf/ppt/semiotic_mathematical.ppt)
49. the Chais conference about the learner in the technological age, Open University, Raa'nana, March 1, 2006. A lecture titled: "Feedback types in the electronic forums".  
The presentation is at: [http://telem-pub.openu.ac.il/users/chais/2006/04/Daher-%20feedback\\_in\\_electronic\\_forums.ppt](http://telem-pub.openu.ac.il/users/chais/2006/04/Daher-%20feedback_in_electronic_forums.ppt)  
The article is at: <http://telem-pub.openu.ac.il/users/chais/2006/04/pdf/chais-11-daher.pdf>

50. MEITAL fifth annual conference: computing in the academic teaching, June 27, 2007. A poster titled "preservice teachers manage online courses"
51. The national conference in primary mathematics education. David Yalin College, July 1, 2009. A lecture titled "unusual mathematics in first and second grades".
52. The conference of the society of information technology in education, the school in the virtual age. Hermlen Ort College, Natanya, July 1-2, 2009. A lecture titled "the cellular phone, history and internet cooperate in mathematics teaching".
53. The conference of the educational process at the twenty one century, An-Najah University, Nablus, October 17-18, 2009. A lecture titled "the characteristics of middle school students' learning of mathematics using cellular phones".
54. The first research conference in Al-Qasemi Academic College of Education, 16 April 2011. A lecture titled: Teachers' perceptions of the interactive board for teaching and learning.
55. The first research conference in Al-Qasemi Academic College of Education, 16 April 2011. A chair of a session titled: "the third educational session".
56. The National conference on mathematics education in the primary school, July 3, 2011. A lecture titled: "Teaching Algebra for grades one and two".
57. The second research conference in Al-Qasemi Academic College of Education, May, 20, 2012. A lecture titled: "Interactive boards' uses in the secondary schools".
58. The Annual Conference for the Teaching of Mathematics in the Upper School: Learning and teaching mathematics in the 21<sup>st</sup> century, Mars 20, 2013. A lecture titled: "Using technological tools to solve real life problems".  
[http://highmath.haifa.ac.il/images/data2/kenes\\_20.03.2013/notebook-site.pdf](http://highmath.haifa.ac.il/images/data2/kenes_20.03.2013/notebook-site.pdf)
59. The Eleventh Annual Conference of Metal: New Technologies and their Evaluation in Online Teaching and Learning: Trends and approaches in Higher Education, June 20, 2013. A poster titled: "Mathematics Teachers' Methods: Comparing a Computerized Environment versus a Traditional One".

**Study days:**

60. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, 2002. The lecture was titled "Reading and writing in the mathematics classroom".
61. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, 2003. The lecture was titled "integrating history of mathematics in the mathematics classroom".
62. National center of mathematics teachers, Al-Quds, April 13, 2003. A workshop called "Mathematical games in the internet".
63. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, 2004. The lecture was titled "Math games in the internet".
64. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, May 28, 2005. The lecture was titled "Teaching mathematics visually".
65. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, June 3, 2006. The lecture was titled "Researches in geometry education for the early childhood".
66. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, February 2, 2007. The lecture was titled "Online mathematics".
67. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, April 28, 2008. The lecture was titled "Using spreadsheets to teach mathematics".
68. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, March 16, 2009. The lecture was titled "Research that can be utilized by the geometry teacher".
69. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, May 17, 2010. The lecture was titled "technology in geometry education".
70. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, May 16, 2011. The lecture was titled: "Social networking in math education".

71. The study day of the mathematics department in Al-Qasemi College. Al-Qasemi Academic College, April, 17, 2012. The lecture was titled: "Mathematics teachers' preparation for the twenty first century.

**Scientific Activity:**

**Editing of a book or journal:**

I was the editor in chief of peer reviewed Jamea'a journal published by Al-Qasemi Academic College of Education. The journal publishes articles in three languages: Arabic, Hebrew and English.

**Reviewing scientific publications:**

I reviewed articles in several journals, including the following:

*International Journal of Science and Mathematics Education*  
*The International Journal of Science, Mathematics, and Technology Learning*  
*The International Journal of Learning*  
*Ubiquitous Learning: An International Journal*  
*The Australasian Journal of Educational Technology*  
*Journal of Religion and Health*

**Participating in the editorial board of a journal:**

I was in the editorial board of Jamea'a journal in the years 2008-2012

## Teaching

### **Courses taught in the different institutions:**

#### **An-Najah University: 2009-2017**

(1) Computers in Education for the under-graduate level, (2) computers in education for the post-graduate level, (3) designing teaching media and aids, (4) mathematics and its teaching for the elementary school I, (5) mathematics and its teaching for the elementary school II, (6) modern issues and directions in teaching mathematics for the under-graduate level, (7) modern issues and directions in teaching mathematics for the post-graduate level, (8) mathematics teaching methods for the middle school, (9) mathematics, its nature and its teaching, (10) assessment in mathematics teaching, (11) pedagogic supervising for mathematicians, (12) seminar in thesis writing.

#### **Al-Qasemi Academic College of Education (the last five years)**

(1) Models for professional development of mathematics teachers, (2) Thinking styles and their nurturing by mathematics teaching, (3) Problem solving in mathematics education, (4) Cognitive aspects in teaching and learning mathematics, (5) Affective aspects in teaching and learning mathematics, (6) Guiding workshop for the final project workshop, (7) Collaborative ICT learning of mathematics, (8) Discourse analysis in mathematics education.

#### **Oranim College: 1999-2002**

(1) Introduction to mathematical logic, (2) advanced Euclidean geometry, (3) introduction to combinatorics, (4) statistics, (5) trigonometry, (6) advanced group theory.

**Bet beirl college: 2001-2004**

(1) Personal use of computers, (2) integrating computers in math and sciences, (3) integrating math in early childhood, (4) Logo

## **Positions**

### **An-Najah National University**

#### **1 Positions:**

- 1.1 Member of the editorial board of the humanities journal of An-Najah National University 2014-2015, 2016-2017
- 1.2 Member of the scientific committee for the educational conference in the faculty of educational sciences at An-Najah National University

### **Al-Qasemi Academic College of Education**

#### **2 Department chair:**

- 2.1 Head of mathematics department 2006-2010

As the head of mathematics department I tried to encourage and participate with the lecturers of the department to write scientific articles and attend local and international conferences, where part of the teachers did this indeed. As a result of this policy the mathematics department had been awarded excellency in the departments' evaluation: second place in the academic year 2006-2007 and first place in the academic years 2007-2010.

- 2.2 Head of mathematics education M.Ed. program 2012-2017

My goal is to promote the program, so it receives the final approval of the Council for Higher Education. Part of this promotion is done through encouraging and participating with the lecturers of the department to write mathematics education articles and attend local and international conferences. This would make them aware to the different and various trends and theories in mathematics education, so they would be able to lead their students to carry out and report their projects.

### 2.3 Head of the research center 2014-2016

My goal is to promote college instructors' research and publishing in international as well as local journals. Another goal is to encourage instructors' participation in international conferences. This could be done by providing them with the means to do that, especially methodological consulting and financial support.

### 3 **Other positions:**

#### 3.1 Member of the research center committee 2010-2014

As a member of the research center committee, I tried to promote college to have significance presence in local as well as international conferences. This actually happened in the last two conferences in Mofet institute, where the college was awarded the first place in last international virtual conference and second place in the last international teacher education conference.

#### 3.2 Editor in chief of Jamea'a journal of educational and social sciences 2012-2014

During the time that I worked as the editor of chief of Jamea'a journal, this journal turned from a journal for all the subjects to a journal for educational sciences and sociology. Furthermore, the journal was a yearly one. In the current year it became biannual with tow two issues published, and next year it will become tri-annual , with three issues published. It is hoped that the journal will eventually publis four issues each year.

### 4 **Other academic and administration positions :**

4.1 Member of the steering committee of the national center of high school mathematics teachers

4.2 Member of the steering committee of the national teachers center for mathematics in the elementary school

In the two committees we tried to promote a policy that encourages the use of technology, as well as other educational tools, in the mathematics classroom.



### **4.3 Initiating and organizing conferences, seminars and training courses**

During the four years of my work as the head of the mathematics department I initiated study days, with the collaboration of supervisors from the ministry of education, which turned to be study days for all the mathematics teachers in the district. These days dealt with innovative issues in mathematics education, as the integration of technology and as the new mathematics curriculum.

## **Projects and Innovations**

### **1. A list of projects and innovations**

#### **1.1**

##### **2001-2002 distance learning**

I brought the Highlearn distance learning platform to Al-Qasemi Academic College of Education in order to use the platform to teach mathematics education courses. This encouraged other lecturers use the platform to teach their courses. At the beginning these courses were partially distance learning courses, but gradually full distance learning courses appeared. Today there are more than thirty distance learning courses in the college, and all the courses have accompanying site.

#### 1.2

##### **2002-2003 Writing in the mathematics classroom**

The goal of this project was to make writing in natural language a way of learning and teaching in the mathematics classroom, starting from kindergarten and up to college and university. The students were exposed to the several types of writing in the mathematics classroom and were expected (1) to keep a diary in which they write about their learning of mathematics (2) to write in their everyday regular courses about their understanding of mathematics (3) to use writing in their teaching training schools. In the following years, students began to do research involved with using writing in the mathematics classroom.

#### 1.3

##### **2003-2004 Internet sites for the history of mathematics**

The project involved building internet sites about the history of math. It included information about Arab mathematics and lessons that use the mathematics that these mathematicians developed. This project was presented in the conference "Browsing the internet 5 - we are the internet age – Approaches in teaching and learning, June 1, 2004.

#### 1.4

##### **2006-2008 Using web 2.0 technologies in teaching mathematics**

In this project, second year students in the mathematics department built collaboratively internet sites using the wiki and blogs. These internet sites included (1) mathematics

lessons (2) reflections on their learning of mathematics (3) discussions regarding the lessons and the reflections.

The wiki pages can be approached at <http://wiki.qsm.ac.il>

The blogs pages can be approached at <http://www.jeeran.com>. Hala Taha, a leader in Jeeran wrote about this experience in the sites:

<http://blog.jeeran.com/archive/2007/1/139529.html>

<http://halataha.jeeran.com/archive/2007/1/139565.htm>

1.5

### **2007-2009 Using cellular phone in teaching mathematics**

This project was carried out by me and Dr. Nimer Baya'a. Its goal was to examine methods in which we can use the cellular phone in teaching mathematics. This project was presented in the conference "Browsing the internet 7 that was held in Mofet institute.

More information is found in the sites:

<http://golshim.macam.ac.il/golshim7/Documents/abstracts/p1m111.pdf>

[http://interlearn.blogspot.com/2008/06/blog-post\\_24.html](http://interlearn.blogspot.com/2008/06/blog-post_24.html)

The initiative site: <http://users.qsm.ac.il/cellmath/>

1.6

### **2008-2009 technology and history in mathematics lessons**

This project was carried out by me, Dr. Nimer Baya'a and Otman Jaber. Its goal was to prepare the preservice teachers for the age of technology, and at the same time to give them an alternative method to teach mathematics: using history in the mathematics classroom. Every preservice teacher built a site that included: technological means to teach mathematics, a historical mathematics story and a lesson that utilized the technological means and the historical story. The first phase of the projects involved Muslim mathematics and mathematicians, while the second phase takes into consideration the whole historical picture of mathematics development. In the third phase the preservice teachers go to schools to carry out the lessons in the sites.

The initiative site: <http://users.qsm.ac.il/islamath/>

1.7

### **2009-2010 Electronic Units in Mathematics**

This project was carried by me and Dr. Nimer Baya'a. Its goal was to work with third year preservice teachers who major in mathematics and computers in order to build Electronic units in elementary and middle school mathematics. The units were web-based and followed alternative teaching methods of mathematics, as integrating history or literature.

The initiative site: <http://sites.google.com/site/ictmath2010/>

1.8

### **2009-2010 Education for Argumentation**

This project was carried by me and Ibtisam Abd-El-Khalek. Its goal was to prepare third year preservice teachers who major in early childhood education in the argumentation culture. We were interested also in importing that culture to the early childhood classes. The Toulmin's argumentation model will be used in this project.

1.9

### **2010-2011 Building social networking sites for the learning of mathematics**

This project is carried by me and Dr. Nimer Baya'a. Its goal is to work with third year preservice teachers who major in mathematics and computers in order to build social networking sites for the learning of mathematics. In our case the social networking sites are built in the Facebook.

1.10

### **2010-2011 teaching and recording mathematics lessons that use technology and history**

This project is carried by me and Dr. Nimer Baya'a. In the frame of this initiative third year students will teach mathematics lessons that include technology and history. The students will also record these lesson and upload these lessons to the internet where teachers everywhere will use them as teaching tools or resources.

1.11

**2011-2012 Leading in-service mathematics teachers to integrate ICT in their teaching**

This project is carried by me and Dr. Nimer Baya'a, Dr. Nimer Baya'a and Mr. Otman Jaber. In the frame of this initiative the initiators with the help of third year students will teach mathematics lessons using various technological tools. This is in hope that the middle schools teachers in the training schools will adopt this integration in their classrooms.

1.12

**2012-2013 Building the Web Site: The Assistant for the Middle school Mathematics teacher**

This project was carried by me, Dr. Nimer Baya'a and Mr. Otman Jaber. In the frame of this initiative we built with the help of third year students, using google sites, web sites that include mathematics lessons for the middle school mathematics. The lessons are arranged according to the middle school mathematics curriculum. The site includes in addition to the lessons: technological tools, mathematical games and links to other materials.

1.13

**2012-2013: Building the Web Site "Geogebra in the Mathematics Classroom"**

This project was carried by me, Dr. Nimer Baya'a, Mr. Otman Jaber, Mrs. Ahlam Anabousy and Ms. Rawam Anabousy. The site includes different sections: a tutorial, activities, applets, articles and links.

1.14

**2013-2014: HOTS in mathematical activities**

This project was carried by me, Dr. Nimer Baya'a, and Mr. Otman Jaber. The project goals were to give the mathematics pre-service teachers tools to write mathematical activities that use HOTS (high order thinking skills), and to implement these activities in the middle school classrooms.

1.15

### **2016-2017: Meta-Cognition in mathematical activities**

This project was carried by me, Dr. Nimer Baya'a, and Mr. Otman Jaber. The project goals were to prepare the mathematics pre-service teachers to use meta-knowledge in their teaching as well as to help them support the students in the classroom use such knowledge.

### **2. Contribution to the education system and schools**

Part of the projects in which I participated dealt with building sites for mathematics lesson that integrate ICT. These sites serve teachers in schools, where they become an essential part of the mathematics lessons, especially those that integrate applets, Geogebra and the history of mathematics.

## Developing learning materials

### 1 Learning materials for the use of teachers:

- 1.1 Baya'a, N. & Daher, W. (2008). The cellular phone in the service of the mathematics teacher. <http://users.qsm.ac.il/cellmath/>
- 1.2 Daher, W., Baya'a, N. & Jaber, O. (2009). Mathematics in Islamic eyes. <http://users.qsm.ac.il/islamath/>
- Baya'a, N., Daher, W.& Jaber, O. (2011). ICT mathematical units. <https://sites.google.com/site/ictmath2010/>
- 1.3 Baya'a, N., Daher, W.& Jaber, O. (2013). The assistant of mathematics teacher. <https://sites.google.com/site/tmathsite1/>
- 1.4 Baya'a, N., Daher, W.& Jaber, O. (2013). Geogebra: geometric constructions and mathematical discoveries. <https://sites.google.com/site/geogebraqsm/>

### 2 Learning materials published by agencies such as publishing houses:

- 2.1 Abd-Al-Khalek, E., Daher, W., Haddad, M. and Sukenek, M. (2000). Thing and enjoy: mathematical activities for fourth to sixth grades – the first part. The national center of elementary mathematics teachers, University of Haifa.
- 2.2 Abd-Al-Khalek, E., Daher, W., Haddad, M. and Sukenek, M. (2000). Thing and enjoy: mathematical activities for fourth to sixth grades – the second part. The national center of elementary mathematics teachers, University of Haifa.

### 3. Curriculums:

- 3.1 Courses that I developed:  
2008-2009 for the M.Ed. in teaching and learning in Al-Qasemi Academic College of Education: (1) Thinking styles and its nurturing in mathematics education, (2) Using models in mathematics teaching.

2010-2011 for the M.Ed. in mathematics education in Al-Qasemi Academic College of Education: (1) Cognition in mathematics education, (2) Evaluation in mathematics education, (3) Problem solving in mathematics education, (4) Models for professional development of mathematics teachers, affective aspects in the learning and teaching of mathematics.

### 3.2 Curriculums that I developed:

2010-2011: M. Ed. in mathematics education in in Al-Qasemi Academic College of Education

#### **4. Consultancy and academic and pedagogic review for teaching units, curriculums, books, etc.:**

I was the scientific consultant for the Arabic edition of the book 'Simple Arithmetic' for grade 1, Keneret Publishing Company.



## **Funds, awards and scholarships**

### **Funds:**

**2011-2014** 500,000 Shekel fund from the ministry of education for appropriating the college for the twenty first century:

The application for the fund was written by Dr. Asmaa Ganayem, Dr. Nimer Baya'a and me. In the frame of this fund new courses for the college students were prepared and infrastructure devices, like computers, were bought.

**2015-2019** 1,400,000 Shekel fund from Trump Foundation for preparing mathematics teachers to teach 4-5 units of mathematics:

The application was written by Dr. Bahaa Zoubi and me. In the frame of this fund a new program will be prepared for retraining excellent students to be high school mathematics teachers who teach 4-5 units of mathematics.

### **Awards:**

**2005-2006** An award from the mathematics department head for the excellent department lecturer.

**2006-2007** An appreciation certificate to the head of the mathematics department from Al-Qasemi Academy because the mathematics department obtained the second degree in the assessment criteria of the college departments.

**2007-2008** An appreciation certificate to the head and members of the mathematics department from Al-Qasemi Academy for obtaining the first degree in article publishing and projects.

**2008-2009** An excellence certificate for the head and members of mathematics department from the Al-Qasemi Academy for obtaining the first degree in the assessment criteria of the college departments.

**2008-2009** An excellence certificate in teaching electronic distance learning courses.

**2009-2010** An excellence certificate for the head and members of mathematics department from the Al-Qasemi Academy for obtaining the first degree in the assessment criteria of the college departments.

**Scholarships:**

**2007-2008** A scholarship from Al-Qasemi Academy (1.5 yearly hours) to carry out a project that involves using cellular phones to teach mathematics.

**2008-2009** A scholarship from Mofet institute to do a research about using the cell phone in learning and teaching mathematics in the middle school.

**2008-2009** A scholarship from Al-Qasemi Academy (1.5 yearly hours) to carry out a project that involves building internet site that included stories of mathematics history and lessons that utilize those stories.

**2009-2010** A scholarship from Al-Qasemi Academy (1.5 yearly hours) to carry out a project that involves building computerized mathematics learning units.

**2009-2010** A scholarship from Al-Qasemi Academy (1 yearly hours) to carry out a project that involves developing argumentation skills among third year early childhood preservice teachers and among the students whom they teach in the training schools.

**2010-2011** A scholarship from Al-Qasemi Academy to carry out a project that involves shooting videos of mathematics lessons which integrate technology.

**2010-2011** A scholarship from Al-Qasemi Academy to carry out a project that involves building Facebook sites which are related to historical mathematicians and mathematics phenomena.

**2010-2011** A scholarship from Al-Qasemi Academy to carry out a research on teaching mathematics with the mobile phone.

**2011-2012** A scholarship from Al-Qasemi Academy to carry out a research on the current situation of teachers in the Arab sector regarding their use of ICT in their teaching.

**2011-2012** A scholarship from Al-Qasemi Academy to carry out a research on mentoring inservice teachers to use ICT in their teaching.