CURRICULUM VITAE



Prof. Mohammad Salameh Qasem Al-Rsa'i

Professor of Science and Mathematics Education at Al-Hussein Bin Talal University, Jordan, with extensive experience in higher education, academic leadership, curriculum development, and educational research. I have served as Dean of Scientific Research and Graduate Studies and Vice President for Administrative Affairs. My research interests include differentiated instruction, curriculum and instruction, educational technology, and science and mathematics education. I have published research in educational journals, participated in international academic conferences, and contributed to public discourse on educational and social issues as a columnist for *Al-Rai* newspaper.

1. PERSONAL INFORMATION

- Date and Place of Birth: Ma'an, Jordan / 17 September 1970
- Nationality: Jordanian
- Marital Status: Married
- Affiliation: Faculty of Educational Sciences, Al-Hussein Bin Talal University, Ma'an, Jordan. Specialization: Educational Sciences – Curricula and Methods of Teaching Science and Mathematics
- Academic Rank: Professor
- Email: rsaaie@ahu.edu.jo; rsaaie.mohmed@gmail.com
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- Scopus: https://www.scopus.com/authid/detail.uri?authorId=55671922500

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2. EDUCATION

- B.Sc. in Physics, 1994, The University of Jordan .
- General Diploma in Education, 1997, Mutah University.
- M.A. in Curricula and Methods of Teaching Science, 2003, Amman Arab University for Graduate Studies.
- Ph.D. in Curricula and Methods of Teaching Science, January 2007, Amman Arab University for Graduate Studies.
- Dissertation Title: The Effect of Using Multimedia Computer-Based Instruction on University Students' Understanding of Physics Concepts.

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3. CURRENT POSITION

• Faculty Member / Professor of Curricula and Methods of Teaching Science and Mathematics, Al-Hussein Bin Talal University.

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4. PROFESSIONAL EXPERIENCE

• Physics Teacher for the Basic and Secondary Stages, Ministry of Education, 1994–2000.

• Physics Laboratory Supervisor, Faculty of Science, Al-Hussein Bin Talal University, 2000–2008.

• Part-time Lecturer, Faculty of Science and Faculty of Educational Sciences, Al-Hussein Bin Talal University, 2005–2007.

• Full-time Lecturer, Department of Curriculum and Instruction, Al-Hussein Bin Talal University, 2008.

• Assistant Professor, Department of Curriculum and Instruction, Al-Hussein Bin Talal University, 2009.

• Head of the Department of University Requirements Courses, 1 September 2009–1 September 2011.

• Vice Dean, Faculty of Educational Sciences, 1 June 2010–1 September 2010.

• Vice Dean for Student Affairs, 1 September 2011–1 June 2013.

• Director, King Abdullah II Fund for Career Qualification, Al-Hussein Bin Talal University, 2012–2013.

• Assistant to the University President and Director of Prince Al-Hussein Bin Abdullah Library, Al-Hussein Bin Talal University, 2013–2014.

- Sabbatical Leave, Tafila Technical University, 6 September 2014–5 September 2015.
- Dean of Scientific Research and Graduate Studies, Al-Hussein Bin Talal University, 1 October 2016–1 October 2020.
- Member, Scientific Research Council, Al-Hussein Bin Talal University, 1 October 2016–1 October 2020.
- Chair, Graduate Studies Council, Al-Hussein Bin Talal University, 1 October 2016–1 October 2020.
- Member, Appointment and Promotion Committee, 1 October 2019–1 October 2020.
- Editor-in-Chief, Al-Hussein Bin Talal University Journal for Research, 1 October 2016–1 October 2020.
- Member, Talal Abu-Ghazaleh Knowledge Forum.
- Lecturer in Thinking Skills.
- Writer for Al-Rai Jordanian Newspaper.
- Delivered academic lectures and workshops at universities, schools, and educational institutions.
- Chair of the Higher Advisory Committee of the Scientific Research Forum, Euro-Arab Organization for Environment, Water and Desert Research, for several terms, Turkey.
- President, Future Association for Education and Development – Southern Badia, 20 February 2014–present.
- Member, Board of Al-Hussein Bin Talal University Radio (Voice of the South).
- Chair and member of numerous academic and administrative committees at Al-Hussein Bin Talal University, Tafila Technical University, and Aqaba University of Technology.
- Member of several committees for the accreditation and quality assurance of higher education institutions.

- Professor of Curriculum and Instruction, Aqaba University of Technology, 2020–2021, on sabbatical leave.
- Member, Educational Technology Association.
- Member, National Team for the Development of Scientific Research in the Humanities and Social Sciences.
- Vice President for Administrative Affairs, Al-Hussein Bin Talal University, 4 October 2022–4 October 2025.
- Member, Appointment and Promotion Committee, Al-Hussein Bin Talal University, 4 October 2022–4 October 2025.
- Trainer of university faculty members in various academic and professional development areas

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5. RESEARCH PUBLICATIONS

1. Al-Rsa'i, M., Al-Ani, R., & Al-Qadri, S. (2008). The Effect of Using Multimedia Computer-Based Instruction on Understanding Physics Concepts at the University Level. **Journal of the Faculty of Education**, United Arab Emirates University, No. 25.

2. Al-Rsa'i, M. (2009). Teaching Using Technology in Higher Education. **Journal of the Association of Arab Universities**, Special Issue No. 5 (2009), "Patterns of Modern University Teaching."

3. Al-Subhiyeen, E., Al-Rsa'i, M., & Abu-Tayeh, K. (2009). Investigating the Effectiveness of a Training Program Based on Teaching and Assessment Strategies for Lower Basic-Stage Teachers on Their Performance and Their Students' Achievement. **Damascus University Conference**, 25–27 October 2009.

4. Al-Zoubi, T., Al-Rsa'i, M., & Abu-Tayeh, K. (2010). Investigating Common Alternative Physics Concepts among Physics Students at Al-Hussein Bin Talal University and Their Relationship to Gender, Academic Level, and Cumulative GPA. **Umm Al-Qura University Journal of Educational and Psychological Sciences**.

5. Al-Zoubi, T., Al-Rsa'i, M., & Abu-Tayeh, K. (2011). Physics Students' Beliefs about Laboratory Work and Their Effect on Understanding Physics Concepts and the Nature of Science. Refereed research, **Al-Hussein Bin Talal University Conference**, 2011.

6. Al-Rsa'i, M. S. (2012). The Degree of Knowledge that Faculty Members in Colleges of Science and Engineering Possess Regarding Ways and Methods of Using Computers and Modern Technology in a Constructivist Learning Environment. **Journal of Turkish Science Education**, 9(3). Scopus (Q1).

7. Al-Rsa'i, M. S. (2013). Promoting Scientific Literacy by Using ICT in Science Teaching. **International Education Studies**, 6(9). Scopus (Q3).

8. Al-Rsa'i, M. S. (2014). The Effect of Computer Simulation on Al-Hussein Bin Talal University Students' Understanding of Electricity and Magnetism Concepts and Their Attitudes toward Physics Learning. **International Journal of Educational Research and Technology**, 5(1).

9. Al-Rsa'i, M., Al-Helalat, K., & Saleh, R. (2018). The Effectiveness of the Developed Science Curriculum for First Grade in Jordan in Building Learners' Health Behavior from the Perspectives of Educational Supervisors and Teachers. **Educational Journal, Kuwait University**, 32(128), Part 1.

10. Al-Rsa'i, M., Al-Helalat, K., & Saleh, R. (2021). The Degree to Which the Jordanian Interactive National Kindergarten Curriculum Includes Scientific and Health Concepts According to International

Standards**. Educational Journal, Kuwait University**, 35(138). DOI: 10.34120/0085-35-138-017-2021.

11. Al-Faqir, S., Al-Subhiyeen, E., & Al-Rsa'i, M. (2014). Health Education Concepts Included in Geography Textbooks for the Upper Basic Stage in Jordan. Journal of the Faculty of Education, **Ain Shams University**, No. 38, Part 2.

12. Al-Subhiyeen, E., & Al-Rsa'i, M. (2017). The Role of School and Educational Curricula in Achieving Community Security from the Perspectives of Educational Leaders in Jordan. **Dirasat: Human and Social Sciences**, University of Jordan. Scopus (Q4).

13. Al-Rsa'i, M. (2017). Developing a List of Science Teachers' Competencies in Information and Communication Technology and Measuring Their Availability among Pre-Service Teachers. **Al-Hussein Bin Talal University Journal for Research**, 2(2).

14. Al-Subhiyeen, E., & Al-Rsa'i, M. (2017). University Students' Attitudes toward Selected Controversial Social, Political, and Religious Values and Issues**. Dirasat: Human and Social Sciences**, University of Jordan, 43(3). Scopus (Q4).

15. Al-Jazi, H., Al-Rsa'i, M., Saleh, R., & Al-Helalat, K. (2016). The Degree to Which Life Skills Are Included in Science Textbooks for the First Three Grades in Jordan**. Dirasat: Educational Sciences**, University of Jordan, 43(Supplement 5).

16. Saleh, R., Al-Rsa'i, M., & Al-Helalat, K. (2017). The Degree to Which Health Concepts Are Included in Science Textbooks for the First Three Grades in Jordan According to International Standards. **Dirasat: Educational Sciences, University of Jordan**, 44(2).

17. Saleh, R., Al-Rsa'i, M., & Al-Helalat, K. (2016). The Degree to Which Nutritional and Health Concepts Are Included in Vocational Education Textbooks for the First Three Grades in Jordan. **Dirasat: Educational Sciences**, 43(Supplement 3).

18. Al-Rsa'i, M., Saleh, R., Al-Helalat, K., & Al-Jazi, H. (2018). The Effect of Teaching Using Electronic Inquiry-Based Presentations on Sixth-Grade Students' Understanding of the Concept of the Cell in Amman. **Zarqa Journal for Research and Humanitarian Studies**, 17(3).

19. Al-Rsa'i, M. (2018). Knowledge Theory in Ibn Rushd Literature and Reflection Thereof on His Educational Philosophy. **International Journal of Progressive Education**, Hacettepe University, Turkey, 14.

20. Abu Tayeh, K., Al-Rsa'i, M., & Al-Shugairat, M. (2018). The Reasons for the Decline of the Results of Jordanian Students in TIMSS 2015**. International Journal of Instruction**, Turkey. Scopus (Q1).

21. Al-Rsa'i, M., Al-Helalat, K., & Saleh, R. (2017). Science Process Skills Acquisition and Its Relationship with Academic Level and Students' Attitudes toward the Laboratory. **Journal of Studies in Education**, 7(3), 194–208.

22. Al-Shugairat, M., & Al-Rsa'i, M. (2019). Technology-Driven Differentiated Instruction in Science Teaching. **International Journal of Education**, 2(11).

23. Al-Rsa'i, M., Khoshman, J., & Abu Tayeh, K. (2020). Jordanian Pre-Service Physics Teachers' Misconceptions about Force and Motion. **Journal of Turkish Science Education**, 17(4). Scopus (Q1).

24. Saleh, R., Al-Rsa'i, M., & Al-Helalat, K. (2020). The Extent to Which the Vocational Education Curriculum for Seventh Grade in Jordan Meets International Standards in Nutrition and Sports. **Jordanian Journal of Educational Sciences**, 17(3).

25. Al-Shugairat, M., & Al-Rsa'i, M. (2020). The Reality of Using the Interactive Whiteboard in Teaching Mathematics in Ma'an Governorate Schools from Teachers' Perspectives. **Al-Hussein Bin Talal University Journal**, 6(2), 563–594.

26. Al-Shugairat, M., & Al-Rsa'i, M. (2020). The Effect of Using the Edraak Educational Platform on Academic Achievement in Mathematics among Tenth-Grade Students and Their Attitudes toward It**. Journal of Educational and Psychological Sciences**, 4(48).

27. Al-Malkawi, O., & Al-Rsa'i, M. (2021). The Reality of Integrating Information and Communication Technology in Teaching Mathematics in Public Schools in Ma'an Governorate. **Al-Hussein Bin Talal University Journal**, 7(Supplement 1).

28. Al-Rsa'i, M. (2021). Jordanian Science Teachers' Perspectives on Obstacles to Differentiated Instruction. **Elementary Education Online**, 20(2), 67–73. Scopus (Q3).

29. Al-Zboon, H., Gasaymeh, M., & Al-Rsa'i, M. (2021). The Attitudes of Science and Mathematics Teachers toward the Integration of Information and Communication Technology (ICT) in Their Educational Practice: The Application of UTAUT. **World Journal of Education**, 11(1).

30. Al-Rsa'i, M., & Al-Helalat, K. (2021). The Effect of the Predict–Observe–Explain (POE) Inquiry Model on Developing Practical Skills among Life Sciences Students at Al-Hussein Bin Talal University. **Al-Hussein Bin Talal University Journal**, 7(2).

31. Al-Salameen, T., & Al-Rsa'i, M. (2021). Evaluation of the Collins Science Curriculum for Fourth Grade from the Perspectives of Teachers and Supervisors in Ma'an Governorate. **Al-Hussein Bin Talal University Journal**, 7(2).

32. Krishan, I. Q., & Al-Rsa'i, M. S. (2023). The Effect of Technology-Oriented Differentiated Instruction on Motivation to Learn Science. **International Journal of Instruction**, 16(1). Scopus (Q1).

33. Al-Rsa'i, M., & Al-Jazi, A. (2023). The Reality of Scientific Research at Al-Hussein Bin Talal University from Faculty Members' Perspectives and Their Perceptions of Mechanisms for Its Development. **Al-Hussein Bin Talal University Journal**, 9(3).

34. Abu Labba, I., & Al-Rsa'i, M. (2024). The Effect of Using the Bybee Model on Developing Scientific Passion among Eighth-Grade Female Students in Science. **Al-Zaytoonah Jordanian University Journal for Educational Sciences**, 1(3).

35. Al-Rsa'i, M,. ,Abushwemeh, Z., & ,Krieshan, E. (2025). Requirements for managing differentiated classrooms among Jordanian science teachers**.** I**nternational Journal of Evaluation and Research in Education**. Open source preview, 14(5), 4164–4172.(Q2).

36. Al-Rasa'i, M & Al-Jazi, S. (2026). The effect of teaching science using the flipped learning method on developing scientific passion among tenth-grade female students. **Saudi Journal of Educational and Psychological Studies**. 7(2).

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6. CONFERENCES

1. Second Conference on Planning and Development of Education and Scientific Research in Arab Countries, 24–27 February 2008, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. Paper: "Technology in Higher Education: A New Vision."

2. Towards Better Investment in Educational and Psychological Sciences in Light of Contemporary Challenges, 25–27 October 2009, Faculty of Education, Damascus University. Paper: "The Effect of Using Computer-Based Multimedia on Understanding Physics Concepts among University Students."

3. National Conference on Developing Curricula and Methods of Teaching, Learning, and Scientific Research, 15–17 June 2010, Amman, Jordan.

4. Educational Sciences in Light of Contemporary Developments, Al-Hussein Bin Talal University, 20–21 June 2011.

5. ICT Culture in Education, Delhi, 27–29 September 2012.

6. Special Libraries Conference, "Enhancing the Needs of the Knowledge Society," Doha, March 2014.

7. 10th International Conference on Learning, Education and Pedagogy (LEAP), Dubai, 19–20 February 2017.

8. 2nd Inter-regional Research Conference on Science and Mathematics Education: Interfacing Arab and Asia Pacific Science and Mathematics Education Research, American University of Beirut, Beirut, Lebanon, 8–9 December 2018.

9. Fifth International Conference of the College of Education, United Arab Emirates University, 4–5 November 2019. Paper: "Developing a Model Based on Differentiated Instruction in the Regular Classroom"

10. Education, Engineering Education and Instruction Technology Conference (EEEITC 21), Qatar University, 22–23 February 2021.

11. Human and Intellectual Capital in Managing Public and Private Sector Crises and Achieving Development Conference, Istanbul, Turkey, 13–16 March 2022. Paper: "Strategies for Investing in the Globalization Movement to Develop Human Resources in the Arab World."

12. First Scientific Conference for Graduate Students, Educational Foundations Program, Kuwait University, 9–10 May 2022. Paper: "Theoretical Foundations of Differentiated Instruction: Liberal Education."

13. Arab International Conference on Quality Assurance in Higher Education, University of Tunis El Manar, Tunis, 8–9 November 2023. Paper: "Quality of Values Education in Distance Education."

14. Education Engineering and Technology Conference (EEITC), Qatar University, 24–27 February 2024.

15. 19th International Conference of the Educational Community, Turkey, 4–8 November 2025. Paper: "Investigating the relationship between teaching and social justice."

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7. RESEARCH INTERESTS

- Teaching Physics Using Computers and Multimedia.
- Planning Curriculum Materials Using Computers and Multimedia as Cognitive Tools.
- Differentiated Instruction.
- Health Concepts in Educational Curricula.
- Science and Mathematics Curricula.

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8. PERSONAL / TECHNICAL SKILLS

- International Computer Driving License (ICDL).
- Statistical Analysis Using SPSS.

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9. COURSES TAUGHT

1. Principles of Curriculum Planning.
2. Basic Concepts in Science and Methods of Teaching Science (1 & 2).
3. Basic Concepts in Mathematics and Methods of Teaching Mathematics (1 & 2).
4. Evaluation and Development of School Curricula.
5. Development of Scientific and Mathematical Concepts among Children.
6. Structure of Numbers and Methods of Teaching Them.
7. Principles of Education.
8. Foundations of Education.
9. Principles of Environmental Education.
10. Teaching Thinking (General Diploma in Education).
11. Educational Psychology (General Diploma in Education).
12. General Teaching Methods (General Diploma in Education).
13. Research Methods in Education (General Diploma in Education).
14. Instructional Design (M.A. in Curricula and Methods of Teaching).
15. Curriculum Planning and Development (M.A. in Curricula and Methods of Teaching).
16. Statistical Analysis in Educational Sciences (M.A. in Curricula and Methods of Teaching).
17. Contemporary Trends in Curricula (M.A. in Curricula and Methods of Teaching).
18. Research Methods in Education (M.A.).
19. Inquiry in Teaching and Curricula (Ph.D.).
20. Applied Models of Teaching Theory (Ph.D.).
21. Contemporary Models in Curriculum Development (Ph.D.).
22. Curriculum Implementation Strategies (Ph.D.).

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10. GRADUATE STUDENT SUPERVISION AND EXAMINATION

- Supervised a large number of Master's and doctoral theses and participated in the examination of numerous theses and dissertations at Jordanian and Arab universities.

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11. EDITORIAL AND ACADEMIC BOARDS

- Editor-in-Chief**, Al-Hussein Bin Talal University Journal for Research and Studies**.Jordan
- Member, Editorial Board, **Jordanian Journal of Applied Sciences – Humanities, Applied Science**, Private University.

• Member, Advisory Board**, Naqd wa Tanweer Journal**, Kuwait.
• Member, Advisory Board, **Jordanian Educational Journal**, Yarmouk University. Jordan
• Member, Scientific and Advisory Board, **Journal of Scientific Development for Studies and Research**.
. Member, Editorial Board, **Journal of Integrated Elementary Education (JIEEd)**. Indonesia

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12. PEER REVIEWER

• British Journal of Applied Science & Technology.
• International Journal of Educational Research and Technology.
• International Journal of Instruction.
• Elementary Education Online.
• Dirasat – Educational Sciences, University of Jordan.
• International Journal of Educational Sciences, United Arab Emirates University.
• Jordanian Journal of Educational Sciences, Yarmouk University.
• Zarqa Journal for Research.
• Jordanian Educational Journal.
• Journal of Educational and Psychological Sciences, Islamic University of Gaza.
• Educational Journal, Kuwait University.
• Journal of Scientific Development for Studies and Research.
. , Journal of Integrated Elementary Education (JIEEd).

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13. LETTERS OF APPRECIATION

• Numerous letters of appreciation and recognition from Al-Hussein Bin Talal University, Tafila Technical University, the Jordanian Ministry of Education, and various national institutions.