

CURRICULUM VITAE
PROF. MOHD SALLEH ABU
FACULTY OF EDUCATION
UNIVERSITI TEKNOLOGI MALAYSIA

BIODATA

Name : Mohd Salleh Abu
Date of Birth : 21 June 1958
Place of Birth : Batu Pahat, Johor
Postal Address : Faculty of Education
81300 UTM Skudai
Johor D.T.
MALAYSIA
Telephone : +607 5537851/+6019 7523500
E-mail : salleh@utm.my
Current Position: Senior Director
UTM Academic Leadership (UTMLead)
Universiti Teknologi Malaysia

CAREER HISTORY:

1983 -1993 Lecturer in Mathematics, Department of Science and Technical Education,
Faculty of Science, UTM
1993 Associate Professor at The Faculty of Education, UTM
1994 - 1995 Head, Department of Science, Mathematics & Computer Education, UTM
1996 - 1998 Head, Program of Science Education & Social Sciences, UTM
1998 - 2002 Deputy Dean (Academic), Faculty of Education, UTM
2002 - 2004 Head, Unit for Teaching and Learning, UTM
2002 - present Professor of Mathematics Education, Faculty of Education, UTM
2002 - 2016 Member of Senate, UTM

2004 - 2007	Director, Centre for Teaching & Learning, UTM
2007 - 2010	Dean, Faculty of Education, UTM
2010 - 2011	Sabbatical Leave
2011 - 2012	Dean, Research Associate (K-Economy), UTM
2012 - 2014	Dean, Faculty of Education, UTM
2014 - 2016	Senior Director, UTM Academic Leadership (UTMLead)

ACADEMIC QUALIFICATION:

1980	B.Sc. in Mathematics (Universiti Kebangsaan Malaysia)
1980	Dip. Ed. (Universiti Kebangsaan Malaysia)
1983	M.Sc. in Pure Mathematics (Sheffield University, UK)
1990	Ph.D in Mathematics Education (West London University, UK)

AREAS OF RESEARCH INTEREST:

1. Teaching and Learning in Mathematics (at secondary and tertiary levels).
2. T&L with Technology (designing, developing, prototyping and evaluating educational courseware in mathematics T&L involving the conceptual development and underlying theories, instructional design and technical aspects of educational courseware/software, the optimization of educational courseware/software in the T&L of mathematics and mathematics-related subjects).
3. T&L in Higher Education.
4. Engineering Education
5. Academic Leadership in Higher Education.

PUBLICATION: INDEXED JOURNALS

1. Mohd Salleh Abu and Zaid Zainal Abidin (2013) Improving The Levels of Geometric Thinking of Secondary School Students Using Geometry Learning Video Based on van Hiele's Theory. *Int. Journal of Evaluation an Research in Education* Vol 2, No. 1 March 2013. Inst. of Advanced Engineering and Science p16 - p22 (ISSN: 2252-8822)
2. Nourooz Hashemi, Mohd Salleh Abu, Hamidredza Kashefi, Mahani Mokhtar and Khadijeh Rahimi (2015) Designing Learning Strategy to Improve Undergraduates' Problem Solving in Derivatives and Integrals: A Conceptual Framework. *Eurasia Journal of Mathematics Science and Technology Education* Vol 11, No 2 April 2015. Int. Society of Educ. Res. (ISER) , Turkey p227-p238 (ISSN:1305-8223 ; IF = 1.016).
3. Sharifah Osman, Mohd Salleh Abu, Shahrin Mohammad and Mahani Mokhtar (2015) Integrating Pertinent Elements of Critical Thinking and Mathematical Thinking Used by Practicing Civil Engineers in Grounded Theory Analysis. *Journal of Social Sciences Research*

Vol 8, No 3 July 2015. Council of Innovative Research p1641-1650 (ISSN: 2321-1091 ; IF = 1.704)

4. Sharifah Osman, Mahani Mokhtar, Mohd Salleh Abu and Shahrin Mohammad (2015) Pertinent Elements of Critical Thinking and Mathematical Thinking used by Practicing Civil Engineers . *International Journal of Science: Basic and Applied Research* Vol 23, No 2. Global Society of Scientific Research and Researchers p381-p395 (ISSN: 2307-4531 ; IF=0.227)
5. Sharifah Osman, Salleh Abu, Shahrin Mohammad and Mahani Mokhtar (2015) Interrelation among Pertinent Elements of Critical Thinking and Mathematical Thinking in the Real-world Practice of Civil Engineering. *Malaysian Journal of Civil Engineering* Vol 27, No 2 Aug 2015 UTM p290-p304 (ISSN: 1823-7843)
6. Sharifah, S., Abu, M. S., Mohammad, S., and Mokhtar, M. (2016) Identifying Pertinent Elements of Critical Thinking and Mathematical Thinking used Civil Engineering in Relation to Engineering Education. *The Qualitative Report* Vol 21, No. 2 Nova Southeastern University, USA p212-227 (ISSN: 1052-0147 : IF = 0.220)
7. Rohani Abd Wahab, Abdul Halim Abdullah, Mahani Mokhtar, Noor Azean Atan and Mohd Salleh Abu (2016) *A Case Study on Visual Spatial Skills and Level of Geometric Thinking in Learning 3D Geometry* Man In India Vol. 96 p 489 -499 ISSN: 0025-1569 Serial Publication (P) Ltd: New Delhi, India.

PUBLICATION: INDEXED PROCEEDINGS

1. Napisah Muhamad Radzi, Mohd Salleh Abu, Shahrin Mohamad and Fatin Aliah Phang Abdullah (2012) Are Math-Oriented Critical Thinking Elements in Civil Engineering Workplace Problems Significant?: Insights from Preliminary Data and Analysis. *Procedia - Social and Behavioral Sciences Journal* Vol 56 p96 - p107. Elsevier. (ISSN: 1877-0428).
2. Syed Ahmad Helmi Syed Hassan, Khairiyah Mohd Yusof, Shahrin Mohamad, Mohd Salleh Abu and Zaidatun Tasir (2012) Methods to Study Enhancement of Problem Solving Skills in Engineering Students through Cooperative Problem-Based Learning *Procedia - Social and Behavioral Sciences Journal* Vol 56 p737 – p746. . Elsevier. (ISSN: 1877-0428).
3. Mohd Salleh Abu, Mohamad Bilal Ali and Tan Tong Hock (2012) Assisting Primary School Students to Progress through Their van Hiele Levels of Geometry Thinking Using Google SketchUp. *Procedia - Social and Behavioral Sciences Journal* Vol 64 p75 - p84. Elsevier. (ISSN: 1877-0428).
4. Syed Ahmad Helmi Syed Hassan, Khairiyah Moh d Yusof, Fatin Aliah Phang, Shahrin Mohamad and Mohd Salleh Abu (2013) Inculcating Team-Based Problem Solving Skills, Part 1: Enhancing Problem Solving Elements *Proceedings Res. In Eng. Education Symp. REES 2013*. P250 – p257. Res. Eng. Educ. Network (ISSN: 9781629931364)
5. Nourooz Hashemi, Mohd Salleh Abu, Hamidreza Kashefi and Khadijeh Rahimi (2014) Undergraduate Students; Difficulties in Conceptual Understanding of Derivation. *Procedia - Social and Behavioral Sciences Journal* Vol 143 p358 – p366. Elsevier. (ISSN: 1877-0428)
6. Rohani Abd Wahab, Mohd Salleh Abu, Abdul Halim Abdullah, Mahani Mokhtar and Noor Azean Atan. (2014). Improving Cognitive Visual Spatial Using Google SketchUp in Overcoming Learning Difficulties in Geometry. *Proceedings of The 1st International Education Postgraduate Seminar (IEPS2014)*. Vol. 2(1), 275-285. ISSN: 978-967-12174-6-7. Presented at IEPS (2014). 23-24 December 2014. Faculty of Education, UTM.

7. Nor Delyliana Admon, Mohd Salleh Abu, Noor Azean Atan, Abdul Halim Abdullah and Mahani Mokhtar. (2014). Promoting Higher Order Thinking Skills through Outside Classroom Strategy in Learning Mathematics. *Proceedings of The 1st International Education Postgraduate Seminar (IEPS2014)*. Vol. 2(1), 873-882. ISSN: 978-967-12174-6-7. Presented at IEPS (2014). 23-24 December 2014. Faculty of Education, UTM.
8. Mohamad Nizam Arshad, Mohd Salleh Abu, Abdul Halim Abdullah, Mahani Mokhtar dan Noor Azean Atan. (2014). Menggunakan Strategi Metakognitif Dalam Penyelesaian Masalah Matematik Tambahan. *Proceedings of The 1st International Education Postgraduate Seminar (IEPS2014)*. Vol. 1(1), 44-55. ISSN: 978-967-12174-6-7. Presented at IEPS (2014). 23-24 December 2014. Faculty of Education, UTM.
9. Sharifah Osman, Shahrin Mohammad and Mohd Salleh Abu (2015) A Preliminary Study on The Integral Relationship Between Critical Thinking and Mathematical Thinking among Practicing Civil Engineers *American Institute of Physics (AIP) Proceedings*. Vol 1660, 070030. American Institute of Physics (ISBN: 978-0-7354-1304-7)
10. Nurbiha A. Shukor, Mohd Salleh Abu and Norazlia Ahmad (2015) A Preliminary Studay on Socially Shared Regulation during Online Collaborative Learning. *Proceeding of 2015 IEEE Conference on e-Learning, e-Management and e-Services*. Sp. Ed. 1 – 7. ISBN: 15787730. Presented at 2015 IEEE Conference on e-Learning, e-Management and e-Services. 24-26 Aug 2015. IEEE Explore: USA
11. Nor Delyliana Admon, Mohd Salleh Abu, Mahani Mokhtar, Abdul Halim Abdullah and Noor Azean Atan. (2015). Enhancing Higher Order Thinking Skills through Mathematical Thinking in an Outside Classroom Learning Environment: A Theoretical Framework. *Proceedings of The 2nd International Education Postgraduate Seminar (IEPS2015)*. Vol. 1(1), 170-177. ISBN: 978-967-1217-48-1. Presented at IEPS (2015). 20-21 December 2015. Faculty of Education, UTM.
12. Mohamad Nizam Arshad, Noor Azean Atan, Mohd Salleh Abu, Abdul Halim Abdullah dan Mahani Mokhtar. (2015). Kemahiran Penaakulan Bagi Matapelajaran Matematik Tambahan Dalam Kalangan Pelajar Tingkatan Empat. *Proceedings of The 2nd International Education Postgraduate Seminar (IEPS2015)*. Vol. 2(1), 46-58. ISBN: 978-967-1217-48-1. Presented at IEPS (2015). 20-21 December 2015. Faculty of Education, UTM.
13. Mohamad Nizam Arshad, Noor Azean Atan, Mohd Salleh Abu, Abdul Halim Abdullah dan Mahani Mokhtar. (2015). Improving the Reasoning Skills of Students to Overcome Learning Difficulties in Additional Mathematics-A Meta Analysis. *Proceedings of The 3rd International Postgraduate Conference on Science and Mathematics 2015 (IPCSM2015)*. Vol. 1(1), 72-84. ISBN: 978-983-2084-08-2. Presented at IPCSM (2015). 10-11 October 2015. Faculty of Science and Mathematics, UPSI.

PUBLICATION: NON-INDEXED JOURNALS

1. Radzi N. M., Abu M. S and Mohamad S (2010) How to Accelerate the Development of Math-Oriented Critical Thinking Skills among Prospective Civil Engineers. *Int. Journal of Eng. and Technical Education* Vol. 1, Dec 2010.
2. Abu, M. S. and Abidin, Z. Z. (2012). Keberkesanan Video Pembelajaran Geometri Berasaskan Teori van Hiele Mempertingkatkan Peringkat Berfikir Geometri Pelajar Sekolah Menengah Pertama di Parepare. *Jurnal Teknologi Pendidikan Malaysia*, 2(3) Sept 2012 p5 - p17 (ISSN: 2289-1366).

3. Mohd Salleh Abu and Zaid Zainal Abidin (2013) Improving The Levels of Geometric Thinking of Secondary School Students Using Geometry Learning Video Based on van Hiele's Theory. *Int. Journal of Evaluation an Research in Education* Vol 2 No. 1 March 2013. Inst. of Advanced Engineering and Science p16 - p22 (ISSN: 2252-8822)
4. Fatin Aliah Phang, Mohd Salleh Abu, Mohammad Bilal Ali and Salmiza Salleh (2014) Faktor Penyumbang Kepada Kemerosotan Penyertaan Pelajar dalam Aliran Sains: Satu Analisis Sorotan Tesis. *Sains Humanika* Vol 2 Issue 4 p63 – p71. UTM Press (ISSN: 2289-6996)
5. Chiang Kok Wei and Mohd Salleh Abu (2016) Review of Secondary School Students with Learning Difficulties in Geometry. *Jurnal Pendidikan Nusantara*. Special Edition Apr 2016. Universiti Teknologi Malaysia & Universitas Muhammadiyah Makassar (ISSN: 2289-9375).
6. Nor Delyliana Admon, Noor Azean Atan, Mohd Salleh Abu, Abdul Halim Abdullah and Mahani Mokhtar. (2016). Higher Order Thinking Skills among High Achievers in Mathematics. *Malaysian Journal of Higher Order Thinking Skills in Education*. Vol.1(3), 82-94. ISSN: 2462-2397. Johor, Malaysia: Faculty of Education, UTM

PUBLICATIONS: ACADEMIC BOOKS

1. Mohd Nor Mohamad and Mohd Salleh Abu (1996) *Nombor Kompleks: Teori dan Contoh Pengiraan*. KL: Dewan Bahasa & Pustaka and Penerbit UTM.
2. Mohd Salleh Abu and Zaidatun Tasir (2001) *Pengenalan Kepada Analisis Data Berkomputer: SPSS 10.0 for Windows*. KL: Venton Publishing
3. Mohd Salleh Abu and Zaidatun Tasir (2003) *Pengenalan Kepada Analisis Data Berkomputer: SPSS 11.5 for Windows*. KL: Venton Publishing
4. Yudariah Mohamad Yusof, Mohd Salleh Abu et al. (2005) *Diagnostik dan Pemulihan: Kesalahan Lazim Bagi Beberapa Tajuk Matematik Sekolah Menengah*. Skudai: Penerbit UTM
(*Note: This book receives The Awards of Anugerah Persatuan Matematik & Sains Malaysia (PESAMA) 2005 for the Original Manuscript of Academic Book category*)
5. Radin Omar Radin Sohadi, Mohd Salleh Abu, Wahid Razally, Jamaluddin Badusah, Ahmad Yusoff Buyong, Haslinda Hashim and Nor Azizah Tamsi (2006) *Pembangunan Kemahiran Insaniah (Soft Skills) Untuk Intitusi Pengajian Tinggi Malaysia*. Serdang: Penerbit UPM.
6. Rio Sumarni Sharifuddin, Mohd Salleh Abu and Abdul Kadir Marsono (2009) *Creating Your Own Teaching Portfolio*. JB: Nasmax Sdn. Bhd.
7. Rohani Abd Wahab, Noor Azean Atan, Abdul Halim Abdullah, Mahani Mokhtar dan Mohd Salleh Abu. (2016). *SPPD-SUM Strategi Pembelajaran Geometri Tiga Dimensi Pelan dan Dongakan Menerusi Perisian Dinamik SketchUp Make*. ISBN: 978-967-0194-53-0. Johor Bahru: Fakulti Pendidikan UTM.
8. Nor Delyliana Admon, Noor Azean Atan, Mahani Mokhtar, Abdul Halim Abdullah and Mohd Salleh Abu. (2016). *Strategi Pemikiran Matematik Luar Bilik Darjah Kebarangkalian (ProbAct) Edisi Guru*. ISBN: 978-983-42794-7-9. Johor Bahru: Fakulti Pendidikan UTM.
9. Nor Delyliana Admon, Noor Azean Atan, Mahani Mokhtar, Abdul Halim Abdullah and Mohd Salleh Abu. (2016). *Kebarangkalian (ProbAct): Strategi Pemikiran Matematik Luar Bilik Darjah*. ISBN: 978-983-42794-8-6. Johor Bahru : Fakulti Pendidikan UTM.

10. Mohamad Nizam Arshad, Noor Azean Atan, Mohd Salleh Abu, Abdul Halim Abdullah dan Mahani Mokhtar. (2016). *Strategi Pembelajaran Penaakulan Berfokuskan Metakognitif*. ISBN: 978-983-42794-6-2. Johor Bahru : Fakulti Pendidikan UTM.

PUBLICATION : BOOK CHAPTERS

1. Tan Wee Chuen, Hanafi Atan, Mohd Salleh Abu, Baharuddin Aris, Omar Majid and Zuraidah Abd Rahman (2009) Learning Object and Concept Map Approach. In: Wong Su Lu, Mas Nida Md Khambari, Abu Daud Silong and Othman Talib (Eds). *Technology and Education: Issues, Empirical Research and Applications*. p247 – p268. Serdang: Penerbit UPM.
2. Mohd Salleh Abu, Fatin Aliah Phang, Mohamad Bilal Ali and Salmiza Saleh (2013). Science Education Policy in Malaysia. In Lokman Mohd Tahir and Hamdan Said (Eds.) *Educational Issues, Research and Policies*. p113 - p128. Penerbit UTM Press. (ISBN 978-983-52-0881-2).
3. Zaini Ujang, Rose Alinda Alias, Baharuddin Aris and Mohd Salleh Abu (2013) Pengenalan. In Zaini Ujang, Rose Alinda Alias and Baharuddin Aris (Eds). *Akademia Baru Inovasi Pembelajaran*. p1 – p5. Penerbit UTM Press. (ISBN 978-983-52-0883-6).
4. Mohd Nihra Haruzuan, Noraffandy Yahya, Mohamad Bilal Ali and Mohad Salleh Abu (2014) Perspectives on Learning Technology: A Review of Theoretical References. In Advances in Applied Psychology and Education. p257 -277. Research India Press, New Delhi. (ISBN: 978-93-5171-0042)
5. Nor Delyliana Admon, Mohd Salleh Abu, Noor Azean Atan, Abdul Halim Abdullah and Mahani Mokhtar. (2015). *Enhancing Higher Order Thinking Skills in Learning Probability through Outside Classroom Strategy*. Mohd Nihra Haruzuan Mohamad Said & Norazrena Abu Samah. *Emerging Technology and Strategy for Learning*. ISBN: 978-983-52-1180-5. (pp. 41-49). Johor Bahru: UTM Press.
6. Nourooz Hashemi, Mohd Salleh Abu, Hamidreza Kashefi, Mahani Mokhtar and Khadijeh Rahimi (2016) The Importance of Generalization in Teaching Integral Concepts. In Zaleha Ismail and Mohaini Mohamed (Eds.) *Contemporary Approaches in Teaching and Learning Mathematics*. P1 – p12. Penerbit UTM Press, Johor Bahru (ISBN: 978-983-52-1204-8).

PAPERS PRESENTED IN INTERNATIONAL SEMINARS, CONFERENCES, etc.:

1. Syed Helmi Syed Hassan, Khairiyah Mohd Yusof, Mohd Salleh Abu and Shahrin Mohamad (2011) An Instrument to Assess Students' Engineering Problem Ability in Cooperative Problem-based Learning. Presented at *118th American Society for Engineering Education (ASEE) Annual Conference & Exposition*. 26 – 29 Jun3 2011. Vancouver, Canada.
2. Shahrin Mohamad, Khairiyah Mohd Yusof, Mohd Salleh Abu and Syed Helmi Syed Hassan (2011) Engineering Education in Malaysia – An Overview. Presented at *18th Korean Society of Engineering Education (KSEE) Annual Conference*. 24 – 25 November 2011. Jeju, Korea.
3. Syed Helmi Syed Hassan, Khairiyah Mohd Yusof, Mohd Salleh Abu and Shahrin Mohamad (2012) Enhancing Problem-based Problem Solving Skills among Engineering Students through Cooperative Problem-based Learning. Presented at *Int. Conf. on Teaching and Learning in Higher Education (ICTLHE)*. 10 – 12 April 2012. Seremban, Malaysia.
4. Mohd Salleh Abu, Mohamad Bilal Ali and Tan Tong Hock (2012) Assisting Primary School Students to Progress through Their van Hiele Levels of Geometry Thinking Using Google

Sketch-up. Presented at *Int. Educational Technology Conference (ITEC)*. National Central University, Taiwan. 11 – 13 July 2012.

5. Sharifah Osman, Shahrin Mohamad and Mohd Salleh Abu (2014) A Preliminary Study on the Integral Relationship between Critical Thinking and Mathematical Thinking among Practicing Civil Engineers. Presented at *International Conference on Mathematics, Engineering and Industrial Applications (ICoMEIA 2014)*. Unimap Malaysia. 27 – 29 May 2014.
6. Nurbiha A. Shukor, Norazlina Ahmad and Mohd Salleh Abu (2015) A Preliminary Study on Socially Shared Regulation During Online Collaborative Mathematics Learning. Presented at The 2015 IEEE Conference on e-Learning, e-Management and e-Services (IC3e). UTHM, Melaka 10-11 Aug 2015.
7. Nor Delyliana Admon, Noor Azean Atan, Mahani Mokhtar, Abdul Halim Abdullah and Mohd Salleh Abu (2015) Enhancing Higher Order Thinking Skills through Mathematical Thinking in an Outside Classroom Learning Environment: A Theoretical Framework. Presented at *The 2nd International Education Postgraduate Seminar 2005*. Johor Bahru, Malaysia.
8. Mohd Nizam Arshad, Noor Azean Atan, Mahani Mokhtar, Mohd Salleh Abu and Abdul Halim Abdullah (2015) Meningkatkan Kemahiran Penaakulan Matematik Berfokuskan Metakognitif Di Kalangan Pelajar. Presented at *The 2nd International Education Postgraduate Seminar 2005*. Johor Bahru, Malaysia.
9. Rohani Abdul Wahab, Noor Azean Atan, Abdul Halim Abdullah, Mahani Mokhtar and Mohd Salleh Abu (2015) Pembelajaran Geometri Tiga Dimensi: Pelan dan Dongakan Menggunakan Sketchup Make. Presented at *The 2nd International Education Postgraduate Seminar 2005*. Johor Bahru, Malaysia.
10. Jacinta Johnny, Noor Azean Atan, Mahani Mokhtar, Mohd Salleh Abu and Abdul Halim Abdullah (2015) Reasoning Skills among Students: A Meta-Analysis. Presented at *The 2nd International Education Postgraduate Seminar 2005*. Johor Bahru, Malaysia.

POSTGRADUATE SUPERVISION (YEAR 2000 ONWARDS ONLY):

Masters Degree (Full Research - completed):

1. Tan Wee Chuen (2000) The Design and Development of *VATrans* Prototype Courseware Based on The Synchronization of Visualization and Analytical Thinking (M.Ed. (Maths)).
2. Tai Ai Lee (2000) The Design and Development of *DisAP* Prototype Courseware Based on The Guided Discovery for The Learning of Areas and Perimeter (M.Ed. (Maths)).

Masters Degree (Mixed Mode - completed):

1. Chu Hong Heng (2000) Pendekatan Aktif Penyelesaian Masalah dan Keberkesanannya Dalam Membantu Pelajar Mempelajari Matematik Tambahan (M.Ed. (Maths)).
2. Liew Chin Yin (2000) Optimizing Multimedia Applications to Help Students Overcoming Difficulties in Learning Negative Numbers (M.Ed. (Maths)).
3. Nora Sairan (2005) Strategi 3M-Metakognitif Bagi Membantu Pelajar Mempelajari Penyelesaian Masalah Dalam Matematik Tambahan (M.Ed. (Maths)).
4. Tan Tong Hock (2011) Assisting Primary School Children to Progress Through the van Hiele's Levels of Geometry Thinking Using Google Sketch-Up (M.Ed. (Maths)).

5. Chiang Kok Wei (2012) Easing Learning Difficulties in Circles Among Fourth Formers Students Using van Hiele-Oriented Learning Instructions (M.Ed (Maths)).
6. Hafizah Mohd Hanafiah (2106) Sistem Pengurusan Maklumat Bidang Kepakaran Staf Akademik UTM (M.Ed (Educ. Tech)).

Masters Degree (Course Work - completed):

1. Haspiah Basiran (2006) Modul Pembelajaran Menggunakan Kalkulator Grafik bagi Membantu Pelajar Mempelajari Persamaan Kuadratik (M.Ed. (Maths)).
2. Mazniha Berahim (2008) Pembelajaran Kognitif Berpandu Menggunakan MATLAB bagi Mempelajari Penyelesaian Masalah Dalam Perkomputeran Linear (M.Ed. (Maths)).
3. Omar Ali (2009) Perlaksanaan Pengajaran Matematik Dalam Bahasa Inggeris Sekolah Menengah (M.Ed. (Maths)).
4. Nurul A'iin Morsid (2012) Menangani Kesukaran Pembelajaran Dalam Topik Garis Lurus Dalam Kalangan Pelajar Tingkatan Dua Menggunakan Geometer's Sketchpad (M.Ed (Maths)).
5. Azlin Bustamam (2012) Easing Learning Difficulties in Transformations among Form Two Students Using Geometer's Sketchpad (M.Ed (Maths)).
6. Noor Izana Ab. Halim (2012) Menangani Kesukaran Pembelajaran Dalam Bulatan Di Kalangan Pelajar Tingkatan Dua Menggunakan Geometer's Sketchpad (M.Ed (Maths)).
7. Mastura Ahmad (2013) Mempertingkatkan Kepercayaan Diri dan Keyakinan Pembelajaran Pelajar Tahun 6 Dalam Topik Bentuk dan Ruang Menggunakan Perisian Berasaskan Google Sketch-Up (M.Ed (Maths)).
8. Ariffin Baserrany (2013) Analisis Pola Ke Atas Pilihan Keutamaan Program dan Kualiti Kemasukan Pelajar Program Ijazah Sarjana Muda Kejuruteraan Mekanikal di UTM (M.Ed (Ed. Admin)).
9. Mohd Hairudin Shahari (2013) Kebolehpasaran Graduan Sarjana Muda Mekanikal di UTM (M.Ed (Ed. Admin)).
10. Farizan Ismail (2013) Pendekatan Model Bar bagi Membantu Pelajar Tahun Enam Mengatasi Penyelesaian Masalah Matematik Berayat (M.Ed (Maths)).
11. Dhinapriya Balachandran (2013) Easing Learning Difficulties in Shapes and Spaces Among Primary School Children Using to Google Sketch-Up (M.Ed (Maths)).
12. Leong Hsueh Yan (2014) Creative Reasoning Mathematical Writing to Improve Conceptual Understanding and Creative Reasoning in the Learning of Differential Calculus. (M.Ed (Maths)).
13. Che Norleyanti Che Omar (2015) Improving Students' Problem Solving Skills using Peer Collaborative Approach of Mixed Multiple Intelligences. (M.Ed (Maths)).
14. Chan Tak Choon (2015) Teachers' Perceptions on the Use of Virtual Learning Environment in Mathematics Teaching. (M.Ed (Maths)).
15. Izzatul Fahimah Zakaria (2015) Tahap Pemikiran Geometri van Hiele Dalam Kalangan Pelajar Tingkatan Empat Di Daerah Baro, Sarawak. (M.Ed (Maths)).

Masters Degree (Course Work – in progress):

1. Mariah Ulfah Mohd Zamrihan (in progress) Learning Instructions using Geometer's Sketchpad to Elevate Students' Visualization and Conjecturing in the Learning of Transformations. (M.Ed (Maths)).

2. Norhayati Samuri (in progress) Using Mathematical Thinking in Solving Word Problems in Mixed Operations among Year 5 Students. (M.Ed (Maths)).
3. Siti Nor Fatimah Abu Hanifah (in progress) Pembelajaran Kolaboratif Matematik Menengah Rendah Menggunakan Persekitaran Pembelajaran Maya Frog (M.Ed (Maths)).
4. Azlil Abdullah (in progress) Mempertingkatkan Kemahiran Aritmatik Di Kalangan Pelajar LINUS Menggunakan Pendekatan Pembelajaran Koperatif (M.Ed (Maths)).

Doctoral Degree (Completed):

1. Baharuddin Aris (2000) The Use of Information Technology in Education: Using an Interactive Multimedia Courseware Package to Upgrade Teachers' Knowledge and Change Their Attitudes. (Ph.D. (Educational Tech.) at Robert Gordon University, Aberdeen, Scotland. A joint supervision with Prof. H. I. Ellington of RGU, Scotland).
2. Md. Sefai Jusoh (2006) Pembangunan Model *CoLC* Menggunakan Gabungan Pendekatan Konstruktivisme dan Pembelajaran Koopertif Bagi Membantu Pelajar Mempelajari Topik Pecahan (PhD (Maths Ed.)).
3. Tan Wee Chuen (2006) A Learner Oriented Web-Based (LOWB) Educational Software Designed to Assist Students in The Learning of Computer Hardware (PhD (Educ. Tech.)).
4. Mohd Bilal Ali (2009) A Web-Environment Personalized Learning Based on The Capitalization of Individual Multiple Intelligence (Ph.D (Educ. Tech)).
5. Syed Ahmad Helmi Syed Hassan (2012) Enhancing Problem Solving Skill of Engineering Students through Cooperative Problem-Based Learning (PhD (Eng. Educ.)).
6. Zaid Zainal (2013) Mempertingkatkan Peringkat Kemahiran Berfikir Geometri Pelajar Lulusan SMP Menggunakan Model Video Pembelajaran Geometri Berasaskan Teori van Hiele (PhD (Maths. Ed.)).
7. Nourooz Hashemi (2015) Modified Generalization Strategies in Problem Solving of Derivatives and Integrals among Undergraduates (PhD (Maths. Ed.)).
8. Sharifah Osman (2016) Integral Relationship between Critical Thinking and Mathematical Thinking among Practicing Civil Engineers (Phd (Eng. Educ.))

Doctoral Degree (in progress):

1. Chiang Kok Wei (in progress) van Hiele-Oriented Learning Instructions to Elevate Spatial Visualization and Overcome Learning Difficulties in 3-Dimensional Geometry (PhD (Maths. Ed.)).
2. Nor Delyliana Admon (in progress) Menjana Kemahiran Berfikir Aras Tinggi Melalui Pembelajaran Kolaboratif Luar Bilik Darjah Dalam Pembelajaran Kebarangkalian (PhD (Maths. Ed.))
3. Mohd Nizam Arshad (in progress) Meningkatkan Pemikiran Penaakulan Matematik Berfokus Metakognisi Dalam Topik Pembezaan (PhD (Maths. Ed.))
4. Rohani Abdul Wahab (in progress) Pembelajaran Geometri Tiga Dimensi Melalui *Sketch-up Make* Bagi Meningkatkan Kemahiran Visual Spatial dan Tahiaf Kemahiran Geometri Pelajar Students (PhD (Maths. Ed.))
5. Jacinta a/p Johnny (in progress) Elevating Mathematical Reasoning Skills among High Achievers (PhD (Maths. Ed.))

6. Najua Syuhada Ahmad Alhassora (in progress) Instrument Measuring Teachers' Competencies in Inculcating Mathematical Higher-Order Thinking Skills among Secondary School Students (PhD (Maths. Ed.))

RESEARCH WORK (PRINCIPAL INVESTIGATOR):

1. The Status of Research in Science and Mathematics Education in Malaysia (RMC Vote No.: 3B074. Sub-Project Code: RJ13000073313B074). Funded by The Cluster of Science & Mathematics, National Council of Professors of Malaysia. Duration: 1 Nov 2010 - 28 Feb 2011. Total value of grant: RM20,000. .
2. Kajian Semakan Semula Keberkesanan *Malaysian Educators Selection Inventory* (MEdSI). RMC Vote No.: 4B038 Sub-Project Code: RJ13000073314B038. Funded by The Ministry of Higher Education, Malaysia. Duration: 15 June 2011 – 14 March 2012. Total value of grant: RM176,850.
3. Pola Pemilihan Program Akademik IPT oleh Pelajar Cemerlang SPM. Registered under Uscience USM Funded by The Ministry of Higher Education. Duration: 1 Dec – 31 May 2012. Total value of grant: RM148,000.

RESEARCH WORK (COLLABORATIVE RESEARCHER):

1. Development and Evaluation of USM Learning Object Repositories. Funded by Universiti Sains Malaysia (Research University Grant). Duration: Oct 2007 – Oct 2009. Total value of grant: RM591,907.
2. Employment Opportunity: A Critical Match Analysis of Community College Graduates. A FRGS BP&P 2011 project registered and collaborated with IMREC-UTM. Funded by The Ministry of Higher Education, Malaysia. Duration: 1 Oct 2011 – 31 March 2012. Total value of grant: RM110,000.
3. A Feasibility Study on the Development of Educuity: A Case Study. A FRGS BP&P 2011 project registered and collaborated with IMREC-UTM. Funded by The Ministry of Higher Education, Malaysia. Duration: 1 Oct 2011 – 31 March 2012. Total value of grant: RM80,000.
4. Pedagogical Practices of UTM Lecturers. Funded by UTM R&D Fund – DPP. Duration: 1 Nov 2012 – 31 Oct 2013. Cost Centre: A.J160000.7731.4J082. Total value of grant: RM15,000.
5. Curriculum Design for Cooperative Problem-Based Learning (CPBL) to Enhance Complex Problem Solving Skills among Mechanical Engineering Students.. Funded by UTM R&D Fund – DPP. Duration: 16 Oct 2013 – 15 Oct 2015. Cost Centre: R.J130000.7724.4J124. Total value of grant: RM34,000.
6. Framework for Developing Academic Change Agent Among Engineering Lecturers in Malaysia. Funded by RUG UTM. Duration: 1 Jan 2014 – 30 Sept 2016. Cost Centre: Q.J130000.2424.02G64. Total value of grant: RM40,00.
7. Recognition of Students' Patterns of Metacognitive Knowledge Strategies in Online Learning. Funded by RUG UTM. Duration: 1 July 2014 – 30 June 2015. Cost Centre: Q.J130000.2631.10J58. Total value of grant: RM20,000.
8. Impak Pelaksanaan Program Latihan Pembangunan Profesional Terhadap Kompetensi Staf Akademik di UTM. Funded by UTM R&D Fund – DPP. Duration: 1 July 2014 – 30 June 2016. Cost Centre: R.J130000.7716.4J138. Total value of grant: RM20,000.

9. The Use of Learning Analytics to Support Improvements in Teaching Practices. Funded by Gov. of Malaysia (MRUN-IRU). Duration: 1 Feb 2015 – 31 Jan 2018. Cost Centre: Q.J130000.3010.00M68. Total value of grant: RM200,000.00.

CONSULTANCY:

1. Projek Latihan Kaedah Penyelidikan dan Pembinaan Instrumen Kebolehpasaran Lepas IKBN Fasa 1. Project owner: Ministry of Youth & Sports. Total cost: RM49,800.00 Duration: 24 Feb – 23 July 2013. Vote No.: 708. Role: Consultant.
2. Projek Latihan Kaedah Penyelidikan dan Pembinaan Instrumen Kebolehpasaran Lepas IKBN Fasa 2. Project owner: Ministry of Youth & Sports. Total cost: RM20,000.00 Duration: 29 Sept – 28 Dec 2013. Vote No.: 744. Role: Consultant.
3. Pembangunan Sistem Repositori Abstrak Hasil Penyelidikan Pendidikan IPTA. Project owner: Malaysian Education Dean Council (MEDC). Total cost: RM20,000.00. Duration: 19 Oct – 21 Dec 2013. Vote No: 735. Role: Principal Consultant.
4. Projek Intervensi Tambah Opsyen (PITO) Guru 2103. Project owner: Teacher Education Division, Ministry of Education. Total cost: RM382,470.00. Duration: 19 Oct – 21 Dec 2013. Vote No.: 748. Role: Principal Consultant.

EXTERNAL EXAMINER (Panel of Accreditation of Post Graduate Academic Programs & Viva-Voce Examination)

1. Universiti Sains Malaysia (USM)
2. Universiti Kebangsaan Malaysia (UKM)
3. Universiti Perguruan Sultan Idris (UPSI)
4. Universiti Tun Hussin Onn Malaysia (UTHM)
5. Universiti Malaysia Terengganu (UMT)

PANEL OF ASSESSORS (Promotion & Tenure of Academic Staff)

1. Universiti Sains Malaysia (USM)
2. Universiti Kebangsaan Malaysia (UKM)
3. Universiti Perguruan Sultan Idris (UPSI)
4. Universiti Teknologi MARA (UiTM)
5. Universiti Tun Hussin Onn Malaysia (UTHM)
6. Universiti Teknikal Melaka Malaysia (UTeM)
7. Universiti Malaysia Terengganu (UMT)

MEMBERSHIP OF INTERNAL COMMITTEE/TASK FORCES:

1. Panel Member of Assessors, The Assessment of Staff Competency Level for The Malaysian Remuneration System (Education Scheme DS45 – DS54) (June 2003 – April 2004)
2. Head, Panel Member of Assessors for The Assessment of Staff Competency Level of The Malaysian Remuneration System (Education Scheme DS45 – DS54) (April 2004 – Nov 2005)

3. Senate Representative for The Select Committee for The Staff Appointment, Tenure & Career Advancement (Management & Professional Group) (April 2004 – January 2009).
4. Panel Member, The Committee of Graduate Employability (Nov 2004 – July 2010).
5. Panel Member, The Committee for Staff Development, UTM (July 2004 – July 2010).
6. Panel Member of UTM Key Performance Indicators (KPI) Main Committee (July 2006 – 2011)
7. Distinguished Academic Fellow of Kolej Rahman Putra UTM (Jan 2010 – Jan 2011)
8. Board Member of Doctoral Degree Program in Engineering Education, UTM (March 2007 – present).
9. Member of Champion Council for KFA on Human Capital (March 2011 – present)
10. Senate Representative of The Senate Standing Committee of Examination & Examination Results for Undergraduate Studies (January 2005 – January 2014)
11. Senate Representative of The Senate Standing Committee of Postgraduate Studies (Examination) (Dec 2011 - present)
12. Senate Representative of The Senate Standing Committee of Examination and Certification (23 January 2014 - present)
13. Member of Senate, Universiti Teknologi Malaysia (July 2002 - present)
14. Member of Task Force, UTM Human Resource Blueprint (March 2014 – present)
15. Member of Task Force, University Global Plan – Teaching & Learning Excellence (July 2014 – present)
16. Chairman of Task Force, Policy on Training and Professional Development for Academic Staff (July 2014 – present)
17. Chairman of Task Force, Quantification of Workload for Academic Staff (responsible for developing the quantification method and application system, May – Nov 2015)

MEMBERSHIP OF NATIONAL COMMITTEES:

1. Subject Matter Expert (SME) for The Review of Five Major ICT Initiatives and Ministry of Education (MoE) ICT Strategic Planning, Ministry of Education (March 2006 – Sept 2006).
2. Member of MoHE Special Task Force for the curriculum design and development of the program entitled 'Developing Soft Skills Among Students at Higher Education Institutions in Malaysia' (by the appointment of The Minister of Higher Education) (July 2006 – Dec 2007).
3. Committee Member of Malaysia Education Dean Council (June 2007 – present).
4. Vice Chairperson, Malaysia Education Dean Council (August 2009 – July 2010)
5. Vice Chairperson, Malaysia Education Dean Council (October 2012 – 2014)
6. Member of Protem Committee of Majlis Profesor Negara of Malaysia (April 2010)
7. Committee Member of Kluster Pendidikan & Pembangunan Modal Insan, Majlis Profesor Negara (April 2010 – present)

SUMMARY OF MAJOR CONTRIBUTIONS TO UNIVERSITY IN ADDITION TO BASIC CORE RESPONSIBILITIES (towards the establishment of new university policies/practices, establishment of new center/unit of excellence, , etc).

1. Founder of The Centre for Teaching & Learning (CTL), UTM.

2. (August 2002 - April 2005) Played leading roles in the:
 - a. Promotion of wider range of various student-centered learning approaches (cooperative, problem-based, project-based and case-based) across all disciplines.
 - b. Enhancement of various types of English Language Support Program (ELSP) designed to facilitate learning (in their area of specialization) in English.
 - c. Advancement of university-wide e-learning system.
 - d. Enhancement of Outcome-Based Education (OBE) across all disciplines of studies.
 - e. Establishment of University Policy on Teaching & Learning at UTM.
 - f. Improvisation of tool, procedure and system applications used for the assessment of individual lecturer's teaching performance (called Penilaian Pengajaran Pensyarah or PPP).
 - g. Establishment of electronic PPP (e-PPP).
 - h. Institution of UTM Graduate Attributes comprising of seven major components of generic skills to be mastered by all UTM undergraduates.
 - i. The revision of University Academic Grading System.
3. (June 2003 - 2010) Play a leading role in the institution of The Assessment of Staff Competency Level (ASCL) for The Malaysian Remuneration System (Education Scheme of DS45 – DS54) covering wide stages of ASCL; setting up, consolidation and implementation of procedures, content, delivery, assessment and reporting results of assessments and feedbacks from participants.
4. (July 2006 - Dec 2007) Played a leading role in the design, development and implementation of various programs designated to assist the inculcation of soft skills among all IPTA students nationwide.
5. (April 2004 - Jan 2014) Play leading role in the design, implementation and improvisation of university-wide Staff Development Program at UTM (academic and supporting staff).
6. (Feb 2014 - present) Played a leading role in the establishment of UTM Academic Leadership (UTMLead)

AWARDS RECEIVED:

1. Anugerah Kepujian Universiti (1995)
2. Anugerah Khidmat Cemerlang (1999)
3. Anugerah Perkhidmatan Cemerlang (2014)
4. Anugerah Jasa Bakti (2001)
5. Anugerah Persatuan Sains Matematik Malaysia (PESAMA) 2005 for the Original Manuscript of Academic Book category (2007)
6. Bintang Kesatria Mangku Negara (K.M.N.) (2009)