

**SKILLS IN INTEGRATING ISLAMIC AND SCIENTIFIC
KNOWLEDGE:
AN ANALYTICAL STUDY**

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UNIVERSITI SAINS ISLAM MALAYSIA

**SKILLS IN INTEGRATING ISLAMIC AND
SCIENTIFIC KNOWLEDGE: AN ANALYTICAL
STUDY**

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Thesis submitted in partial fulfilment for the degree of
MASTER OF QUR'ANIC AND SUNNAH STUDIES

UNIVERSITI SAINS ISLAM MALAYSIA

February 2021

AUTHOR'S DECLARATION

بسم الله الرحمن الرحيم

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

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ACKNOWLEDGEMENTS

In the name of Allah Almighty, Most Gracious, Most Merciful.

First and foremost, I express my deepest gratitude to the Almighty Allah SWT for blessing me with the strength and courage to complete this academic thesis to fulfil the requirement of a degree in Master of Quranic and Sunnah Studies with Honours. Peace be upon His messenger companions and his family.

Next, I express special thanks and appreciation to my research supervisors, Dr. Tazul Islam, Dr. Robiatul Adawiyah Mohd @ Amat, and Dr. Syed Najihuddin Syed Hassan for their endless and continuing support, advice, and guidance in completing this academic research. May Allah Subhanahu wata'ala bless them.

My heartfelt thanks are dedicated to my beloved parents, Othman Mat Zin and Rohani Md Yaakob, and my beloved sister, Nor Fazliana, as well as my close friends who have been supported me through thick and thin.

Last-but-not-least, I am grateful to my lecturers, friends and colleagues for their assistance, guidance, and support in completing this thesis, and to all who have contributed in one way or another, directly or indirectly, to this thesis.

ABSTRAK

Penyelidikan ini mengkaji kemahiran-kemahiran dalam mengintegrasikan ilmu agama dan sains yang dikemukakan oleh sarjana terkemuka seperti al-Ghazali dan Al-Alwani serta seiring dengan pembolehubah-pembolehubah yang lain seperti Islamisasi ilmu pengetahuan, Model GIINA, dan kemahiran integrasi secara umumnya. Peningtegrasian ilmu juga dikenali sebagai kurikulum bersepadu yang menetengahkan pelbagai disiplin ilmu dalam bidang kajian. Kekurangan set kemahiran yang diperlukan dalam peningtegrasian ilmu dikenalpasti sebagai permasalahan kajian. Penyelidikan ini menggunakan kaedah gabungan kualitatif dan kuantitatif yang merupakan saling melengkapi dalam kajian berbentuk Pendidikan ini. Selain itu, penggunaan wawancara separa berstruktur di antara para pakar menghasilkan pengembangan satu set kemahiran dalam mengintegrasikan ilmu agama dan sains. Tambahan lagi, penggunaan soal selidik tinjauan di kalangan pelajar USIM pula mengukur tahap kemahiran peningtegrasian ilmu dalam mengintegrasikan ilmu agama dan sains yang akhirnya menunjukkan pemahaman, serta aplikasi peningtegrasian ilmu dalam kehidupan. Sejajar dengan visi yang dipromosikan oleh USIM dalam menghasilkan graduan yang holistik, seimbang, dan keusahawanan, kajian ini menggariskan kepentingan menekankan kemahiran yang diperlukan dalam mengintegrasikan ilmu agama dan sains. Hasil dapatan kualitatif, penyelidik telah mengenal pasti isu-isu utama yang berkaitan dengan kesepaduan ilmu agama dan sains, seperti: 1) kemahiran yang diperlukan untuk peningtegrasian ilmu; 2) kaedah-kaedah yang digunakan; 3) jenis pengetahuan yang diperlukan; 4) keupayaan pelajar; 5) persekitaran pembelajaran; dan 6) cabaran dan masalah. Di samping itu, kemahiran yang diperlukan adalah berdasarkan pemahaman: 1) ilmu agama dan sains; 2) hubungan trio; 3) kualiti nilai; 4) bacaan duo; dan 5) kemahiran menghafal. Dari sudut dapatan kuantitatif pula, tahap persetujuan antara responden cukup memuaskan dan menunjukkan efikasi diri yang terdapat dalam diri mereka. Oleh itu, penemuan hasil kajian menunjukkan pelajar dilengkapi dengan set kemahiran yang diperlukan untuk menggabungkan ilmu agama dan sains. Penemuan hasil kajian membolehkan pelajar melengkapkan diri dengan kemahiran yang diperlukan dalam mengintegrasikan ilmu agama dan sains.

ABSTRACT

This research investigates skills in integrating Islamic and Scientific knowledge which propounded by prominent scholars such as Al- Ghazali and Al-Alwani and aligns with the other variables which are Islamisation of knowledge, the GIINA Model, and the skills of integration in general. The integration of knowledge is well-known as an integrated curriculum that promotes multidisciplinary research. The lack of skill sets is identified as the main problem regarding the integration of knowledge. Being a mixed- method research, this study adopts qualitative and quantitative methods, as both methods are complementary to educational research. Significantly, the use of a semi-structured interview among experts resulted in the development of a skill set, whereas the use of a survey questionnaire among USIM students defines the level of skills integration in the integration of Islamic and scientific knowledge, which indicates comprehension, as well as the application of the integration of knowledge in life. In line with the vision promoted by USIM for the development of a holistic, balanced, and entrepreneurial graduate, this study highlights the importance of highlighting the skills needed to integrate Islamic and scientific knowledge. For the qualitative results, the researcher identified key issues related to the integration of Islamic and scientific knowledge, such as 1) skills required for integration; 2) methods used; 3) types of knowledge required; 4) student capacity; 5) a favourable learning environment; and 6) challenges and problems. In addition, the skills required are based on understanding: 1) Islamic and scientific knowledge; 2) trio- relationship; 3) supreme values; 4) a reading of both sources; and 5) memorising skills. From a quantitative point of view, the degree of agreement between the respondents is sufficient and the self-efficacy among them has been demonstrated. Outcomes, therefore, enable students to be well- equipped with the requisite skills to integrate both Islamic and scientific knowledge.

Keywords: Integration of knowledge, Islamisation of knowledge, the GIINA Model, and Skills of integration

الملخص

يهدف هذا البحث في مهارات دمج المعرفة الإسلامية والعلمية التي طرحه العلماء أمثال الإمامين الغزالي والعلواني -رحمهما الله- تمشياً مع المتغيرات الأخرى وهي أسلمة المعرفة، وهي أسلمة المعرفة، ونموذج جينا (GIINA)، ومهارات الدمج التكاملي بشكل عام. إلى جانب ذلك، يُعرف دمج المعرفة بأنه المنهج المتكامل الذي يشجع على تعدد التخصصات في البيئة الأكاديمية. إن الافتقار إلى مجموعة المهارات هي بيان إشكالية البحث. يعتمد هذا البحث على المنهج الكيفي النوعي والمنهج الكمي. وقد استخدمت الباحثة في المنهج الكيفي مقابلات شبه منظمة لجمع البيانات على للخبراء من المحاضرين، كما أنها استخدمت في المنهج الكمي الاستبانة الموزعة بين طلبة جامعة العلوم الإسلامية الماليزية (USIM). تشير نتائج البحث الكيفي إلى تحديد القضايا الرئيسة المتعلقة بالدمج التكاملي للمعرفة الإسلامية والعلمية، وهي: (1) المهارات المطلوبة للتكامل؛ (2) الطرق المستخدمة؛ (3) أنواع المعرفة المطلوبة؛ (4) قدرة الطالب؛ (5) بيئة تعليمية مواتية؛ و(6) التحديات والمشاكل. بالإضافة إلى ذلك، تستند المهارات المطلوبة على فهم: (1) المعرفة الإسلامية والعلمية؛ (2) العلاقة الثلاثية؛ (3) القيم العليا؛ (4) القراءة الثنائية. و(5) مهارات الحفظ. ومن الدراسة الكمية، اكتشفت الباحثة أن درجة الاتفاق بين المجيبين كافية وقد تم إثبات الكفاءة الذاتية بينهم. وبالتالي، فإن النتائج تمكن الطلبة من أن يكونوا مجهزين جيداً بالمهارات اللازمة لدمج المعرفة الإسلامية والعلوم وهذه الدراسة في نهاية مطافها، تحدد مستوى مهارات التكامل في تكامل المعرفة الإسلامية والعلمية، مما يشير إلى الفهم وتطبيق دمج المعرفة في الحياة، تماشياً مع الرؤية التي تتبعها الجامعة في تطوير خريج كلي ومتوازن وريادي. وكذلك هذه الدراسة اكتشفت أهمية التركيز على المهارات اللازمة للدمج التكاملي بين المعرفة الإسلامية والعلمية

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ABBREVIATION

Abbreviations	Expansion
GIINA Model	Graduate Model for the Integration of Naqli and Aqli Knowledge
IIUM	International Islamic University Malaysia
USAS	Universiti Sultan Azlan Shah
KUIS	Kolej Universiti Sains Islam Selangor
KUIN	Kolej Universiti Insaniah
UKM	Universiti Kebangsaan Malaysia
USIM	Universiti Sains Islam Malaysia
FPQS	Faculty of Quranic and Sunnah Studies
FSU	Faculty of Law and Syariah
FEM	Faculty of Economy and Muamalat
FST	Faculty of Science and Technology
KUIM	Kolej Universiti Islam Melaka
IKIM	Institut Kefahaman Islam Malaysia
FPSK	Faculty of Medicine and Health Sciences