

CELEBRATING  
COMMERCIALISATION  
YEAR 2014

# iiindex 2014

AN INTERNATIONAL EXPOSITION ON RESEARCH AND INNOVATION

invention  
innovation  
& design  
exposition 2014

INNOVATEUR  
wannabe!  
2014

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UNIVERSITI TEKNOLOGI MARA  
MALAYSIA

*Bridging  
the valley of death :  
advancing the  
commercialisation  
of research*

RESEARCH BOOK

# iiindex2014

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innovation  
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## FOREWORD

The Honourable Minister of Science, Technology and Innovation (MOSTI) has launched 2014 as Malaysia Commercialisation Year 2014 (MCY2014) with the theme Science Technology and Innovation (STI) for Wealth Creation. In line with this theme, Invention, Innovation, Design & Exposition 2014 (iidex2014) is an annual exposition organized by UiTM and is the ultimate platform to highlight and commercialise new inventions and innovations. Researchers and inventors will exhibit their products which cater to the needs and wants of the community and the country.

The iidex2014 creates a new dimension by fusing two competitive concepts, a competition among innovative products and a competition to invite Innovateur Wannabes to perform live pitching of their products to the audience. The iidex2014 focuses on comprehensive commercialization and creating opportunities for entrepreneurs to carry out R&D as well as to provide avenue to commercialise their products. Through expositions such as iidex2014, MOSTI hopes to inculcate the culture of commercialisation of new technology designed and created by Malaysians.

I wish to congratulate all the participants of the iidex2014 and this is the opportunity for all researchers to show their ideas and exhibits their products and creativity. Apart from showcasing their products, innovators will have the opportunity to provide a window to the industry for business matching during the exposition.

Tan Sri Dato' Sri Sallehuddin Mohamed  
Pro-Chancellor, Universiti Teknologi MARA

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## STAD: STRATEGIZING TRAINING OF ADULT LEARNERS THROUGH DIVERSITY

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In the 11th Malaysian Plan, the Prime Minister announced the urgent need for Malaysia to be driven by a strong economy based on innovation and creativity. The New Economic Model forged the strategies for the nation to aspire towards leveraging the economic chain through first class innovative and creative human capital. These needs have propelled professional training of the existing workforce and learning facilitation of the students in continuing or post secondary education. Targeting the numerous trainers in any training institutions and academics in the higher education learning institutions, this project presents a comprehensive online module which focuses on the professional training and development of adult learners. The added value of this project are twofold; first it provides a holistic content coverage and second it suits professional development training and learning facilitation at the workplace and tertiary education respectively. Several theories underpin the development of this module namely; adult learning theories, self directed learning theories, reflective teaching theories, and organizational training theories. The holistic content coverage is presented in a structured and orderly topics which comprise the following topics: a) Knowing your trainees and adult learners b) Playing your role as the trainer and learning facilitator c) Optimizing diversity among the trainees and adult learners d) Presenting training for impact through trainees' diversity e) Providing engaging and active learning facilitation through learners' diversity f) Assessing your training and facilitation impact While topics a, b, and c are general to either trainers or academics, topic d caters the needs of any trainers and topic e caters the need of any academics. This in itself ensures the practicality of the online module of two types of professional development; workplace training and academic learning. In describing the cosmetic and physicality aspects of the project, its accessibility via online facilities is an advantage. The presentation of the module in a user friendly website encourages easy access regardless of time and place. The website is designed with the targeted audience in mind. Several related articles are provided as links enabling them easy downloading for their own training sessions. Besides the articles, there are also inventories which they could complete to gauge their strengths as trainers and learning facilitator. Best of all, all the articles and inventories are based on past research and most importantly, they have all been published in indexed journals. The testimonies of several potential users which were drawn from the market survey and pilot test of the website further confirm the reliability of the website: 'STAD: Strategizing training of adult learners through diversity'. This part of the website content completes the holistic content coverage. This project has potential in its practicality and feasibility. Its practicality is determined by its holistic content coverage which focuses on real and meaningful use and transferability of training and learning facilitation ideas. Its feasibility is ensured by its appearance in a user friendly website. Accessibility is ensured thus enabling a wide access and big number of users and visitors to the website. This in turn, promises good commercialization opportunities.