

PRIOR TO BECOMING A RESEARCHPRENEUR, ESTABLISH AND UPHOLD A VISION AND MISSION

OIC TODAY talks to Dr Mah Boon Yih, a Senior Lecturer at Academy of Language Studies at Malaysia's UiTM and the Founder of WeCWI. Dr Mah elaborates about his experience of formulating a framework that facilitates the learning process through enhancement of its components related to instructors and learners.

The advancement of the internet in this "infowhelm" age offers a new paradigm shift in teaching and learning processes such as searching, downloading, streaming, posting, tweeting and scooping. Both instructors and learners nowadays can access massive and open online educational resources at their fingertips. Instead, as implemented in the contemporary higher education system, the drawbacks of a learning management system (LMS) in terms of interface design, system development, user experience and interactive functionality have hindered its effectiveness and usage in blended and online learnings. Because being able to create an online teaching platform is listed as one of the 21st century digital skills every instructor should possess, Dr Mah keeps inspiring the educators towards developing and designing their preferred web-based instructional platforms as an alternative to LMS via web-based instruction (WBI).

According to Dr Mah, WBI is referred as a delivery mode of transferring the knowledge via an adaptive technology enabler tool. To be an education innovator or EdNovator, a creative designing mind is a prerequisite. EdNovator is Dr Mah's advocated instructional vision which is capable of designing the learning path via a self-developed instructional platform together with the integration of any related web resources into his or her own course. Students can learn more effectively in a personalised learning environment aided by advanced information and communication technology (ICT), where the self-instructional materials have been found beneficial to improve their academic performance. Dr Mah was recognised as a global e-learning expert at the International University Carnival on E-learning 2017 (IUCEL 2017), below is his eminent quote that has also served as his instructional mission:

"To be an EdNovator, spark your innovation with a creative mind and empower your teaching with an adaptive learning technology."

Problems Targeted Research via Performance Analysis and Qualitative Systematic Review of Literature: SIL and Learner's Domain

To identify the second language (L2) writing predicaments among the undergraduates in Malaysia, a performance analysis of an English writing course's results was conducted



in two consecutive semesters at Universiti Teknologi MARA (UiTM), a local public university with the highest population of students. As highlighted by Dr Mah, performance analysis is useful in helping to meet the instructional goals through the identification of knowledge gap. Based on the analyses of course assessment components, report assessment items, language and content assessment items, as well as their weightings, the results revealed the poor performance in both language and content perspectives. Before considering the potential solutions, a qualitative systematic review of literature was conducted on the related studies of both instructors and learners' writing needs and challenges as well as UiTM English courses.

Since the results and findings of the past performance analysis and studies indicate poor language and cognitive developments faced among L2 learners, all identified causes of poor writing skills were further assembled holistically and categorised into three distinctive domains: system (S), instructor (I), and learner (L). SIL was initiated by Dr Mah, which is illustrated as a chain diagram formulated based on the nine L2 writing challenges classified into S, I, and L domains. By focusing on the biggest domain of SIL, system, it includes lecture time, institutional e-learning system and ICT research. Classroom practice, ICT interest and L2 writing approach are the aspects of the instructor perspective. From a learner perspective, it covers reading habits, language proficiency and first language. In addition, a sequence of deductive remedial actions is recommended by considering the elements within the S to I, and finally to the L to tackle these poor writing skills.

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Further investigation was conducted to detect the writing barriers faced by the L2 learners per se by narrowing down to SIL's learner domain through conducting a systematic literature review. After analysing the related literature on writing predicaments of UiTM students, seven perspectives of poor writing skills were identified. These include writing complexity, literacy, proficiency, critical thinking, information literacy, interlanguage, and writing anxiety. Based on these writing problems, different writing needs of learners and instructors from UiTM campuses were also examined from the local past studies.

After reviewing and analysing the findings of the related literature together with the support of the identified seven barriers to L2 writing, there was a high demand for developing a supplementary web-based

instruction (WBI) for students to acquire their writing competency. Before embracing WBI as a course's supplementary instructional tool, the course syllabus, course structure and assessment components had been scrutinised to ensure their appropriateness corresponding with the desired learning outcomes. Finally, a comprehensive WBI e-framework was generated, which tackles the seven perspectives of L2 writing predicaments in a more targeted, analytic and holistic way.

Problems Targeted Research's Outcome: Web-based Cognitive Writing Instruction (WeCWI)

L2 writing instruction is an area which has been commonly underrepresented since only a few studies direct their main focus to the discussion of instructional matters (Zhang, 2008). Owing to the awareness of the internet infusion in language classrooms, some writing instructors from different countries have been incorporating WBI as a hypermedia-based instructional programme (Khan, 1997) into the language courses (Chao & Huang, 2007). Due to the growing acceptance and positive findings of the application of web-based writing instruction in tertiary education, there is a pressing need to develop and design a WBI particularly for L2 learners from Malaysian universities. As emphasised by Dr Mah, the adoption of WBI must be grounded on a well-synthesised multi-disciplinary framework to tackle the seven L2 writing barriers effectively; hence, Web-based Cognitive Writing Instruction (WeCWI) was born eventually.

According to Dr Mah, the founder, WeCWI is a theoretical and pedagogical-based multidisciplinary framework formulated in the development and design of WBI with users' preferred interface design. It provides a remedy of writing barriers faced by L2 learners in higher education by integrating four main theoretical rationales—language acquisition, composition studies, cognitive theories and e-learning—towards literacy (complexity of writing and low literacy skills), language (interlanguage errors and low language proficiency), cognitive (lack of critical thinking and low information literacy), and psychological (L2 writing anxiety) developments. It is used to develop and design an online writing program based on the instructor's preferred web 2.0 platform such as blog to improve the learners' writing process and product.

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Based on its construct and the nature of the four main theoretical rationales, WeCWI contributes towards the scopes of instructional design and language development. For language development, it is further divided into linguistic and non-linguistic perspectives. In the linguistic perspective, WeCWI emphasises on literacy and language discoveries; the cognitive and psychological discoveries are the hubs in the non-linguistic perspective.

In the linguistic perspective, WeCWI draws attention to free reading and enterprises, which are supported by the language acquisition theories. Besides, the adoption of process genre approach as a hybrid guided writing approach fosters literacy development. Since literacy and language developments are interconnected in the communication process; hence, WeCWI encourages meaningful discussion based on the interactionist theory that involves input, negotiation, output and interactional feedback. Rooted in the e-learning interaction-based model, WeCWI promotes online discussion via synchronous and asynchronous communications, which allows interactions to take place among the learners, instructor and digital content.

In the non-linguistic perspective, WeCWI highlights the contribution of reading, discussion and writing towards cognitive development. Based on the inquiry models, learners' critical thinking is fostered during an information exploration process through interaction and questioning. Lastly, to lower writing anxiety, WeCWI is developing an instructional tool with supportive features using web widgets and hyperlinks to facilitate the writing process. To bring a positive user experience to the learners, WeCWI aims to create the instructional tool with different interface designs based on different types of perceptual learning styles.

Solutions Driven Consultancy: WeCWI Integrated Solutions

WeCWI was officially launched at The Digital Education Show Asia 2014 on 27 May 2014. As an award-winning hybrid e-framework resulted from its participation in multiple international innovation competitions and exhibitions, WeCWI, WeCWI Integrated Solutions, WeCI, and WeCLI had been copyrighted by MyIPO supported by RIBU, UiTM, in 2014 and 2016. WeCWI was first published by WASET in the International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering after being addressed in ICELD 2014 and ICLLT 2015 keynotes. In 2014 and 2016, two workshops entitled WeCWI Training Series: Instructional Design (macro) and WeCWI Enterprise: Write It Right were conducted at UiTM Penang Branch, Permatang Pauh Campus. In 2014, WeCWI was also featured in #DoMoreLah4Malaysia campaign organised by MDeC.



Dr Mah receiving a token of appreciation for his participation as a speaker in the OIC Higher Education Conference last year

From 2014 until 2016, WeCWI has garnered four international awards. WeCWI received the PIID 2014 Silver Award, which was recognised as an innovative idea in ICT Category. In the following year, WeCWI was awarded a Silver Award in IDEX 2015 as an innovative production in the Arts and Applied Arts Category. In December 2015, a WeCWI's consultancy project namely WeCWI Integrated Solutions, was honoured a Gold Award in PECPITA 2015 under the Education and Human Development Cluster. Once again, WeCWI Integrated Solutions was awarded a Silver Award in ITEX 2016 on 14 May 2016 in the Educational Items Category. After the participation in the EdTech Seminar 2016 on WeCWI: The Instructional and Technological Discoveries, 13 WeCWI-trained instructors were born as the first cohort. At present, WeCWI is further extended in research studies and solutions driven consultancy, namely WeCWI Integrated Solutions.

WeCWI Integrated Solutions was awarded a Silver Award in ITEX 2016 on 14 May 2016 in the Educational Items Category

WeCWI Integrated Solutions offers WeCWI Training Series, which consist of several professional courses targeted to both instructors and learners from pre-school to tertiary education. There are three solution channels: instructional design (all instructors), language development (language instructors), and WeCWI Enterprise (learners). To become a Web-based Cognitive Instructor (WeCI), an instructor is led to the instructional design channel that comprises four different courses: WeCWI: The Instructional Discovery, WeCWI:

The Technological Discovery, WeCWI: The Pedagogical Discovery and WeCWI: The Theoretical Discovery. For the language development channel, language instructors are trained to be the Web-based Cognitive Language Instructors (WeCLI) by joining the courses including WeCWI: The Literacy Discovery, WeCWI: The Language Discovery, WeCWI: The Cognitive Discovery, and WeCWI: The Psychological Discovery. WeCWI Enterprise is the channel that provides customisable courses based on the learners' needs to enhance their reading, writing and e-learning skills such as an e-portfolio.

There are two types of consultation for WeCI and WeCLI: group and individual consultations. Two packages are offered for group consultation: Starter and Developer, while the Innovator package is meant for individual consultation. WeCWI-trained Instructor is the instructor who has completed the two courses of instructional design on macro or micro perspective or two courses of language development on linguistic or non-linguistic perspective. WeCI is the instructor who has completed the four courses of instructional design on both macro and micro perspectives; WeCLI is the instructor who has completed the four courses of language development on both linguistic and non-linguistic perspectives. Each course participant will receive a training kit and be listed in the WeCWI directories as the WeCWI-trained Instructor, WeCI, or WeCLI based on the number of enrolled courses. In addition, WeCWI-powered Badge is awarded to be embedded on WeCI's and WeCLI's self-developed instructional sites after completing successfully the four courses of instructional design or language development. For WeCWI Enterprise, the consultation details are negotiable and customisable.

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As highlighted by Dr Mah at the beginning of 2017, institutes, companies or individuals who intend to organise or enrol in the courses of WeCWI Training Series can refer to the link <http://wecwi.blogspot.my/2016/11/wecwi-training-series-2017-calling-for.html> or direct contact Dr Mah Boon Yih via email at mahboonyih@gmail.com. These courses can serve as the internal and/or external staff development programmes or for self-development purposes. Besides, organisers or participants may propose any topics of courses related to WeCWI, which can be further tailored for organisational or personal needs.

Updates and Knowledge Sharing via Social Media: #WeCWI

As quoted from Prensky (2012), "...the very best thing we can do is more sharing." Dr Mah strongly encourages knowledge sharing through multiple social networks such as Facebook, LinkedIn, Twitter, Google+, Pinterest, Blogger, and Instagram. All WeCWI related posts come with the hashtag #WeCWI. He suggests that readers not only read, like/follow and share, but also comment and reply to the comment whenever there is an opportunity. These acts can maximise the potential of social interactivity. Thus, all educators and learners are welcome to connect, follow and like #WeCWI related posts on Facebook, LinkedIn, Twitter, Google Plus, Blogspot and Instagram. ■