



## POSTER

### **Award: Gold Award**

Zahari Hamidon & Mohamad Zahili Ramly (2020). Application of Micro-learning In Structured OER (SOER) for Online Learning. The Virtual National e-Content Development Competition 2020 11th- 20th OCTOBER 2020 Organized by Institute of Continuing Education & Professional Studies (ICEPS), UITM, Malaysia. DOI: 10.13140/RG.2.2.34681.39525



# ABSTRACT

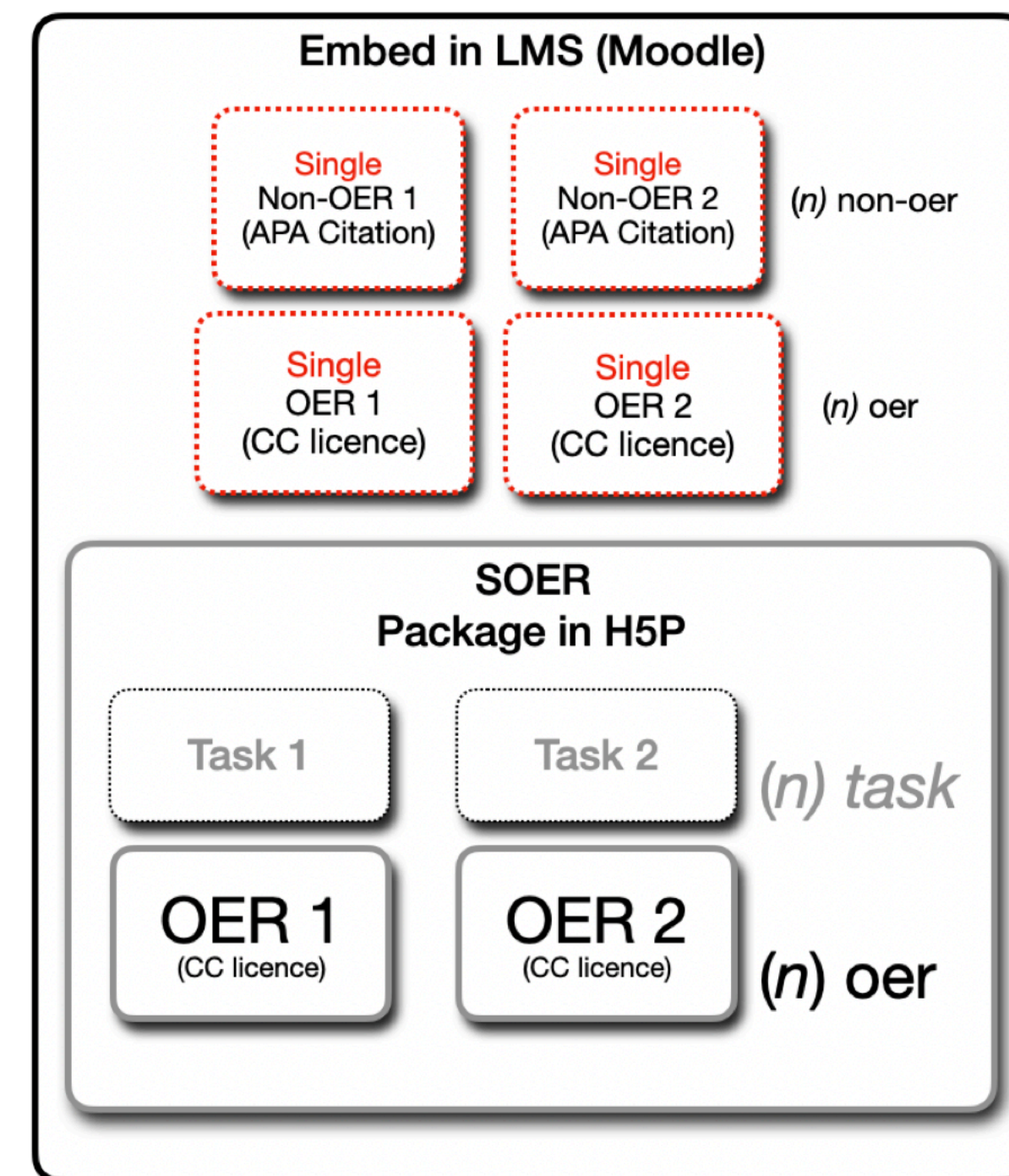
In today's world, learners who are rapid in a self-pacing, tight schedule, and involves in a multiple tasks job are in favour to types of learning that is short with a quickly absorbs learning resources at a specific learning point. The content delivery relies on the complexity of the concept of the content itself. The learning structure needs to reflect the *ordered relationship of intellectual skill* (as stated by Jonassen, Hannum & Tessmer, 1989 p. 38). The tasks laid out in the learning structure depend on the complexity of the content. The content that reflects the skill and knowledge needs to be organized in an orderly and logical manner based on the level to create a clear learning path. The need for direct guidance is crucial in online learning. Kirschner, Sweller, and Clark (2006) conversely define direct guidance instruction as "providing information that fully explains the concepts and procedures that students are required to learn." (As stated in Hmelo-Silver, Duncan & Chinn, 2007) The project aims to design a MOOC course that will be delivered entirely online. The project is also intent on exploring the microlearning techniques applied in the course design. Most of the content in the courses are OER that are structured (structured OER) through a scaffolding technique. The numbers of topics are limited to two (2) subjects for each course. Most of the content in the learning structure contains OER by creative commons (CC) license that can be shared, reused and remix. Microlearning techniques are used to formulate the framework of the entire instructional system from enrolment to certification. The outcome of this project is an initial learning prototype on an instructional design course delivered via a Moodle-based learning management system, so-called as TippingMind School of Learning (TMSOL)..

# Application of Micro-learning In Structured OER (SOER) for Online Learning

SOER framework comprises of three layers

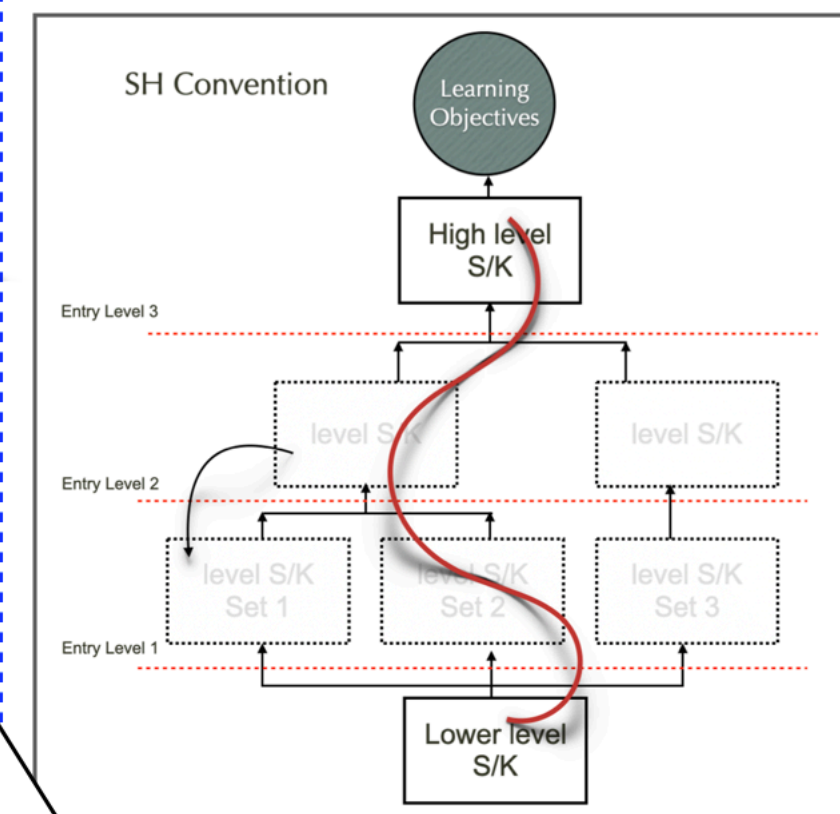
- Layer 1 as a foundation of the learning structure is the LMS (Moodle)
- Layer 2: Structure OER (SOER) - a combination of OERs package in H5P. All OERs are task analysed according to an appropriate Instructional strategy.
- Layer 3: Single OER (cc license) and Non-OER, are task analysed according to an appropriate Instructional strategy, is sometimes combined with SOER.

## SOER Framework

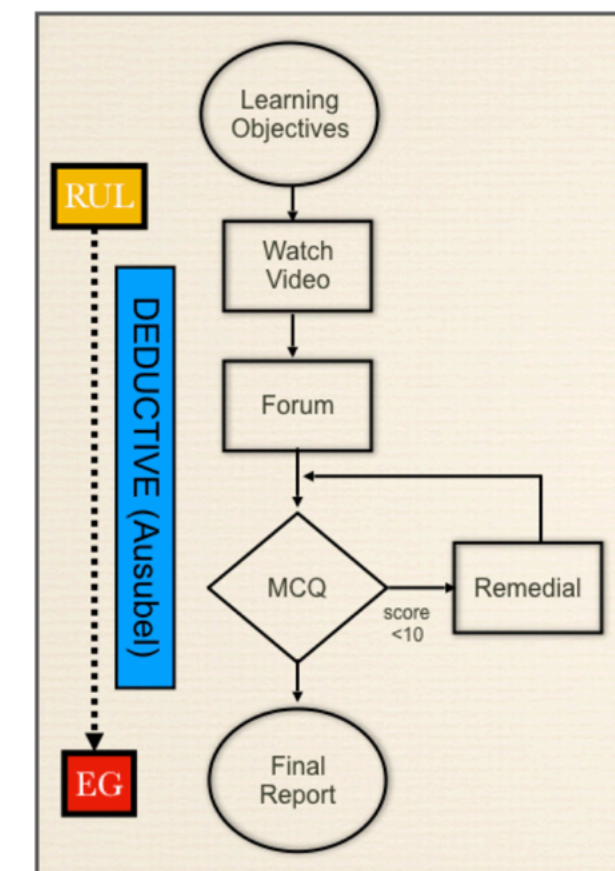


## Development

Identify Level of Skill and Knowledge



Lesson Design: Procedural Task Analysis for Instructional Strategy

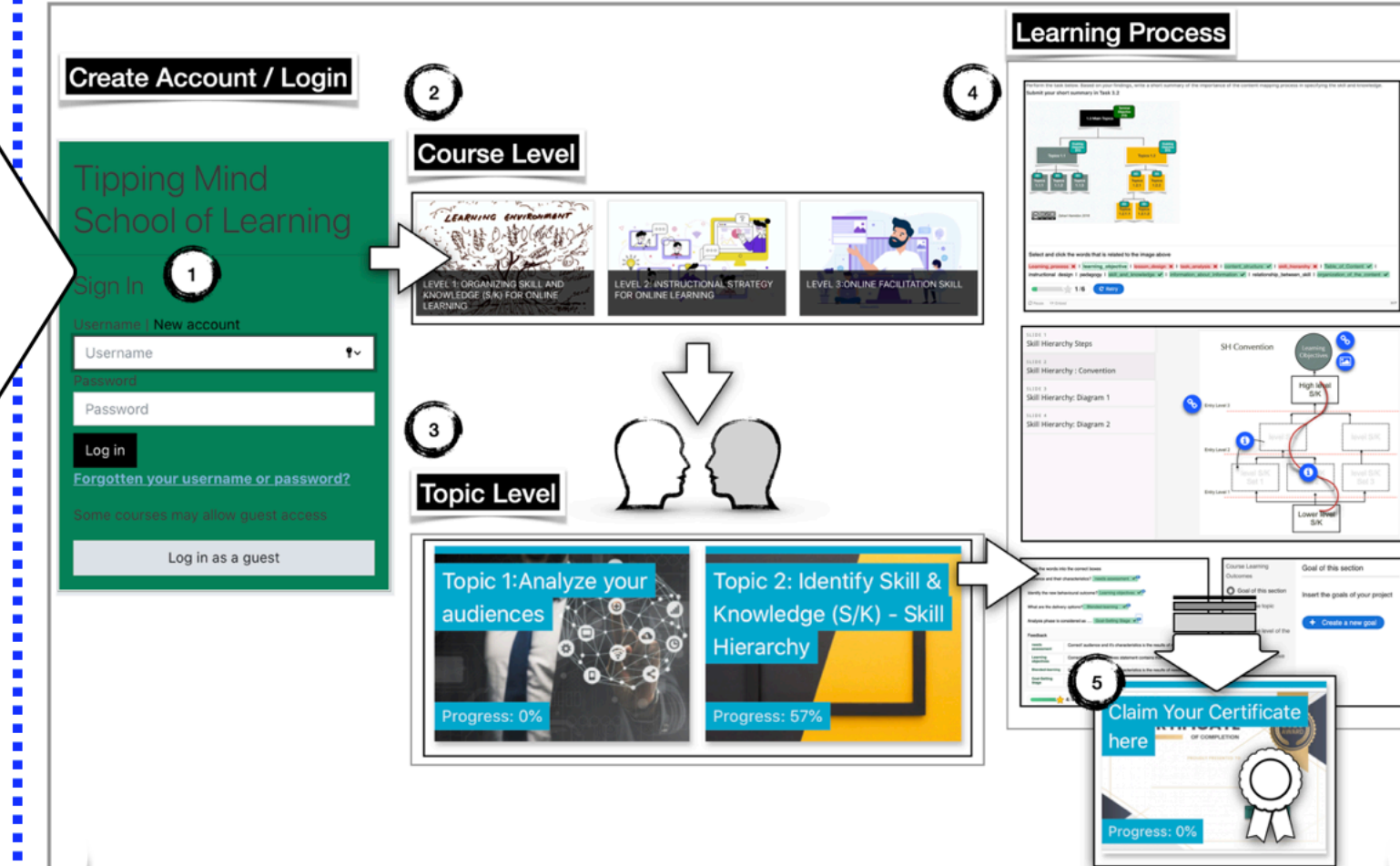


## Instructional System

Features of the Instructional System

- 1. Self - Enrolment
- 2. Self-paced learning through fully online learning on a minimum of two (2) topic for each course.
- 3. Medium learner's engagement with a medium level of interactivity
- 4. Formative and summative assessment: scores are captured from the tasks and stored in a grade book
- 5. Auto-issued Certificate

## Instructional System



## OBJECTIVES

- 1** Develop a framework of Structured Open Educational Resources (SOER) that is reusable and can be recycled across the content in the areas of social sciences
- 2** create the learning architecture that includes the SOER framework that enables educators to reuse and remix OER that follow Creative Commons licensing
- 3** design of the learning structure based on ideas in microlearning.

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