Current literature shows that blended learning has inevitably permeated and transformed the landscape of educational practices. However, in the same vein, it also depicts less consideration given to the impending gaps in the blended learning experience, consequently indicating a paucity of evidence in the context of these technological interventions. This study aimed to examine and identify the Key Success Indicators (KSIs) for blended learning approaches. The research is delineated in seven research questions postulated to address the overall facets in blended learning: the powerful and the combined Effect Sizes (ESs), the definitions of blended learning, the types of technological intervention, the specific ratio or percentage of intervention, and the quality of indicators determined in the language related blended learning studies and other subjects related to blended learning studies. These research questions have guided this study to probe into the magnitude and power of ESs yielded from the 96 included samples by employing meta-analysis as an instrument of analysis. In addition to the ESs, this study also aimed to determine the key facets in blended learning approaches wherein the qualitative content analysis method was employed to analyse the samples. Besides that, two novel approaches were also employed as part of the data analysis to examine the categories of technological interventions and ratio of technology versus traditional approaches. The means of analyses enabled vital insights about the critical success indicators in a blended learning environment. Specifically, the findings from the seven research questions outline the KSIs as quantifiable measurements and guidelines in implementing the proposed Transformative Driven Mechanism (TDM) Framework that the researcher firmly believes possesses tremendous transformative potential in augmenting the quality of students’ learning experience and ultimately reshaping the entire teaching and learning landscape.

Developing learners’ critical reading skills at tertiary level is crucial because learners need the knowledge and skills to be able to read academic materials constructively throughout their university courses. However, L2 learners have difficulties in developing higher order thinking skills (HOTs) such as analyzing, synthesizing and evaluating, all of which are important for critical reading. Among the problems identified in this study are learners’ lack of performance in advance reading and critical thinking, learners’ motivation in acquiring the skills and the lack of useful learning supports which can facilitate knowledge acquisition and skills attainment of HOTs. There is an urgent need to seek effective tools that can be used to teach these skills in the classroom. For this purpose, technology has been found to assist learners’ vocabulary growth, improve learners’ reading comprehension and motivation, and increase their reading performance. This study applies a mixed-method (quantitative and qualitative approaches) at examining the use of a customized computer-mediated learning tutorial (CMLT) in the teaching of higher order thinking skills in ESL reading classrooms. One hundred and eighty-five (185) undergraduate learners who pursued their degree at Universiti Teknologi MARA, Malaysia participated in this study. The experimental group learners were given lessons and activities on Reading and Critical Thinking course through the use of a CMLT. Meanwhile, the control group learners were only exposed to standard textbooks as their reference for the course. The research intervention (CMLT) was developed based on the Instructional System Design model and Gagne Nine Events of Instruction. A pretest, posttest and the final examination were administered to find out learners’ performance in their Reading and Critical Thinking course. Surveys and interviews were also conducted to solicit information regarding learners’ perceived usefulness of the CMLT and their motivation in learning the course after they had been exposed to the intervention. In addition, statistical analyses were performed to determine learners’ performance before and after using the CMLT. Results of the findings showed that technology did assist learners in their reading and critical thinking course. The experimental group learners outperformed their counterparts both in their posttest and final examination performances. Moreover, the experimental group learners’ motivation showed improvements after they were exposed to the treatment. It is hoped that his study would help educators to use technology as an alternative teaching tool in developing L2 learners’ reading and critical thinking skills. There is also a need for language educators to work closely with instructional system designers in coming up with interactive multimedia templates that can be shared. Coming up with common templates will allow new contents to be added easily, modified and improved over time.