A Hybrid E-Learning Framework for Arabic Language Flipped Classroom
Kerangka E-Pembelajaran Hibrid Untuk Kelas Berbalik Bahasa Arab

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ABSTRACT

This study examines the design of a blended flipped classroom approach through a hybrid e-learning framework for undergraduate Arabic language studies. This involves the design, development and production of e-learning platforms, where e-simulation activities and gamification subject resources, support mechanisms (pre-class) and subject resources that addresses informative learning, collaborative and reflective learning (post-class) that enhance and extend the engagement, interactivity and agency in the context of e-learning environments. The proposed framework embeds a more holistic Arabic learning with providing students some excitement on the topic to be learned prior to the class and the post e-learning platform serves to facilitate student involvement in applying the knowledge acquired with self-assessment practices at their own pace and time anywhere. This largely means that the 4 hour per week Arabic face-to-face class can now be extended further from interactive instructional delivery to deeper learning in terms of students' understanding and focus more on the selective key pillars by showing the link through relatedness of being more effective.

Keywords: Hybrid E-Learning, Blended Learning, Mobile Learning, Arabic Language Studies, Flipped Classroom

Makalah ini membincangkan tentang reka bentuk kerangka pendekatan kelas berbalik hybrid untuk pembelajaran Bahasa Arab di peringkat sarjana muda. Ia melibatkan reka bentuk, pembangunan dan penghasilan pelantar e-pembelajaran yang mengandungi aktiviti e-simulasi dan gamifikasi, mekanisme sokongan dan sumber subjek dapat menghasilkan pembelajaran bermaklumat, kolaboratif dan reflektif. Kerangka ini boleh digunakan untuk meningkatkan keterlibatan pelajar, interaktiviti dan agen pembelajaran dalam konteks persekitaran e-pembelajaran Bahasa Arab. Kerangka yang dicadangkan mencantumkan kaedah pembelajaran bahasa Arab yang lebih holistik dengan penerapan elemen keseronokan dalam topik yang dipelajari sebelum kelas. Pelantar e-pembelajaran pula yang digunakan di luar kelas berfungsi untuk memudahkan penglibatan pelajar dalam mengaplikasi pengetahuan yang diperolehi dengan amalan penilaian kendiri mengikut ketetapan masa mereka sendiri. Ini bermakna bahawa sesi bersemuka kelas Bahasa Arab selama 4 jam seminggu boleh diperkembangkan

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lagi, daripada penyampaian yang bersifat interaktif menjurus kepada pembelajaran bermakna untuk membantu pemahaman pelajar.

Introduction

This applied research project aims to develop mobile learning and incorporate a flipped classroom through embedding a hybrid e-learning framework for the pre and post 4 hour class session for undergraduate Arabic language studies. As the first phase of implementation of this pre-and-post blending e-learning framework, the e-simulation activities and gamification are proposed to be incorporated in the pre-class session.

The rapid evolution of technology has facilitated the ease of the information availability and connectivity to Arabic learning sources. Hence, the role of Arabic lecturers in higher education, being subject experts and a central source of knowledge is transformed to being adept facilitators and orchestrators of andragogical and autonomous learning. This enables the Arabic face-to-face class session to take a further well-blended instructional strategy of an extended level of interactive lecture by incorporating experiential, participative, social and collaborative learning through active-learning approaches. This involves the design, development and production of e-learning platforms, where simulation *(hands-on activities)*, subject resources, support mechanisms *(pre-class)* and subject resources that addresses informative learning, collaborative and reflective learning *(post-class)* that enhance and extend the engagement, interactivity and agency in the context of e-learning environments.

The pre-post e-learning framework embeds a more holistic learning with providing students some excitement on the topic to be learned prior to the class and the post e-learning platform serves to facilitate student involvement in applying the knowledge acquired with self-assessment practices at their own pace and time anywhere. This largely means that the Arabic 4 hour per week face-to-face session can now be extended further from interactive instructional delivery to deeper learning in terms of students' understanding and focus more on the selective key pillars by showing the link through relatedness of being more effective.

As the first stage of implementation of this hybrid e-learning framework, the e-simulation business activities and gamification aspects are proposed to be implemented as one of the pre-class learning task which facilitates the students to have a deeper comprehension and ability to

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relate to the logicality of the theoretical concepts and frameworks in order to improve understanding of concepts with application context, encourage deep learning and enable accessibility of information on a global scale which enhances diversity and broad training. Moreover, to facilitate Arabic learning to take place anytime, anyplace, we need to shift the mind set of "real value" of coming to class to gain tacit knowledge and experiences which may not necessarily be fully obtained from textbooks alone.

Arabic Language Pedagogies

a)   Flipped Classroom
In an Arabic flipped classroom approach, the activities which are usually performed within the class and those tasks which are performed outside the class are switched or flipped. Generally, in such an approach, instead of students listening to the a lecture, they are tasked to some assigned series of recorded lectures, video clips, assigned problems and reading materials before coming to the class to be engaged through in class active and experimental learning using case-studies, problem-based activities, simulations, games and experiments. The key guiding notion of flipped classroom is performing the "hands on" and problem solving within the class period with the guidance of the tutor. There are a few advantages of the flipped classroom advocated by Kathleen Fulton (2012):

1) The flexibility for students to learn at their own pace.
2) Performing the solving of issues in class provides lecturers better insight into student difficulties and learning styles.
3) The ease of more easily customizing and updating of the curriculum and providing it to students 24/7.
4) Usage of the classroom time more effectively and creatively.
5) Reports by lecturers who have adopted this approach show that there are increased levels of student achievement, interest and engagement.
6) The new approaches are supported by the learning theory.
7) Flexibility and appropriateness of the use of technology for "21st century learning".

b)   Learning through e-simulation activities and gamification
An activity is thus a game when it comprises of the attributes within a predefined framework. Through numerous studies on games, five attributes have emerged that encapsulate the concept of "game" (Sauve et al., 2005): player or players, conflict, rules, predetermined goal of the

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game, and its artificial nature. A game is for fun if it is not used in an educational or didactic context (De Grandmont, 2004). To understand the definitive aspect of games, the definition of educational and didactic games should be examined. Sauve et al. (2007) stated that the purpose of an educational game is only implicitly centred on learning since the purpose is hidden from the player and the notion of pleasure which it engenders is rather extrinsic. In contrast, the purpose of a didactic game is clearly focused on the task of learning and that is explicitly identified, appealing to the intrinsic pleasure of performance. In both cases, the contributions towards learning from the games are achieved through the influence of interaction with one's environment which is defined as a process of new behaviour or knowledge acquisition.

Salopek (1999) and Dickey (2005) claimed that the predetermined goal of a game refers to the end of the game and to the notion of winning, victory or reward. It indicates how the game ends for educational games, it includes the objectives which the players seek to attain (Sauve et al., 2007). Learning by games enables transfer of learning, creation and acquisition of new knowledge, nurturing of expected attitudes and behaviours and development of problem-solving, anticipation, function-movement relationships, abstraction, spatial representation, strategy-building, and lateralization (Whelan, 2005). The games must comprise of appropriate tools incorporated for such types of learning to materialize. Scholars (Barnet at. al., 2005; Griffin & Butler, 2005; Schwabe & Goth, 2005; Shreve, 2005; Virvou et. al., 2005' Ward & O'Brlen, 2005) highlighted that all educational games should comprise tools such as interactivity channels, instant feedback, active participation by the learner, communication between players, challenge, motivation, repeated practice, player control of their learning and teamwork. These tools allow the use of socio-constructivist pedagogy inherent in games that respond to the needs of the new generation of learners. This is exactly what is required to tackle the current issue of engaging new generation of business students to have the knowledge transfer optimized.

"Gamers" comprise a large majority in the new generation. This group has an exploratory approach and short attention span during learning, which could be referred to having a cognitive style characterized by multitasking while learning (Asakawa & Gilbert, 2003; Bain & Newton, 2003; Prenskv, 2005). Shaffer et al. (2004) reported that during the game, the learner plays first, understands after, and then generalizes in order to apply this learning in a new situation. Drawing from a constructivist approach, the authors affirm that the learner becomes

active during the game and participates in the construction of his knowledge. Today's adolescents prefer to learn through experimentation rather than by direct instruction. As their interest span is short, they easily and quickly move from one setting or activity to another. They also tend to expect a quick response similarly to how they respond rapidly to questions (Sauve, et. al, 2007). In summary these new generation learners expect interactivity, kinesthesis, active visualization and immediacy.

LMS (Learning Activity Management System)

LMS is a learning design system with a particular focus on sequencing of collaborative learning activities. LMS guides practitioners through the process of learning design (Dalziel, 2003). Users can pick and mix different types of learning activities using a 'drag and drop interface'. LMS is an integrated system for authoring, running and monitoring learning designs.

To achieve a well-blended, holistic and practice-oriented business education, more interactive, experiential, dialogue and action-learning pedagogical approaches, together with a well-blended e-learning platform are encouraged. This shift in the approach of instruction will enable more holistic and practice-grounded oriented management skills to be ingrained into students. By shifting the learning to students, it deepens their ability to develop self-awareness and relate the practicality in applying the concepts acquired. By facilitating a caring, supportive and encouraging learning environment, students are encouraged to learn from making mistakes, sharing their failures openly, taking risks and gaining valuable insights with open debates with those with differing perspectives. This interactive and reflective learning framework embedded with the pre and post e-learning model is crucial to facilitate the shift in holistically achieving an optimal learning process.

Methodology

The proposed framework allows the Arabic face-to-face class to be shifted to emphasize more on how deeper learning on key essentials can be examined through various approaches of active learning. The Arabic pre-class (before attending the face-to-face session) e-learning activities allow learners to get some hands-on feel on the topic through the e-simulation activities and gamification, get them started thinking about the contextual part of contents and having them excited on what they could expect to learn in the class. There would be varying e-activities having students to hands-on the management concepts through platforms, for example

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e-games, e-simulating management activities, viewing some short-videos, having to read short magazine or newspaper articles, some debate discussions via facebook, instagram or via other social media platforms, reflection journals, posting a blog etc. to relate to the topic which will be covered.

For a few selected topics, students will also be asked to view a series of Arabic recorded lectures, broken down to separate segments (max of 7-8 minutes) with a quick reflective quiz to answer. For these topics, the flipped-classroom concept will be brought in to facilitate the sessions. However, this applies to only 25% of the topics covered. The remaining 75% of the syllabus will have designated pre-learning activities which gets the students to have some ideas on the topics before the face-to-face interactive class where no one way lecture is adopted. Instead, key concepts will be delivered in a more interactive manner, where deep learning occurs. However, the post e-learning platforms will facilitate a series of short e-recorded lectures which facilitate as a refresher and further extend beyond classroom learning which can be viewed at students' own time and pace. Moreover, there will also be other e-learning activities *(*discussion forums, case study debate with question and answer sessions etc.) to facilitate collaborative learning with formative self-assessment (quizzes, self-tests etc.).

As the first phase of implementation, in this project, the concept of gamification and e-simulation activities are focused to be designed, to be incorporated as part of the pre-class session. The e-simulation activities that are proposed to be included as part of the pre-class activity serve as a platform for the students to learn and acquire key concepts effectively through a fun and yet interesting manner. This makes their interest in the topic deepens and wanting them to find out more during the face-to-face class. From a learning perspective, this platform would engage them largely because they are able to hands-on and acquire knowledge in a manner that would easily engage them.

Findings Of The Study

Table 1 presents the conceptual framework (hybrid e-learning model*)* that embeds the e-learning pedagogical strategies for pre-and-post classes to achieve effective learning for Arabic language students in higher education. For this project, as the phase one implementation, the design and implementation of the e-simulation activities and gamification is proposed to be incorporated as part of the pre-class e-learning platform.

Table1: Arabic Language Flipped Classroom: Hybrid E-Learning Framework

Pre Class E-Learning Platform	4 hours face-to-face class	Post Class E-Learning Platform
-LMS (Learning Management System) [To be developed in house] Informative learning (Arabic Short video clips, recent articles, noticeboards, resource sharing, image gallery). **-OER (Open Educational Resources)** [To be developed in house] A series of e-recorded lectures. **-Social Media** [To be developed in house] Debate discussions, reflection journals, posting a blog link etc. to relate to the topic which will be covered.	**-Experiential, Participative, Social & Collaborative Learning** Pedagogical strategy Interactive Lecture (with the adoption of a certain degree of flipped classroom concept) with Active Learning Approaches **-Gamification and e-Simulation Management Activities** Getting students involved through hands-on activities. [To be developed by vendor, outsourced]	**LMS (Learning Management System)** -Collaborative learning (Discussion Forum) -Reflective Learning (Question and Answer Session; e-assessment, Quizzes, mind maps) [To be developed in-house]

The study aims to achieve the following key outcomes by enhancing the learning experience of students pursuing Arabic language studies. Phase A (Design of e-simulation of business management activities/games) is designed:

a. To engage and excite students on the contents to be learned through e-learning hands-on experience.

b. To facilitate an e-platform to make them understand difficult concepts much easier through simulated activities and games.

c. To enable students to learn through a fun and interesting manner which enables them to be deeply involved in learning the concepts.

Then the process will proceed with phase B (Design of other Pre-and-Post e-activities through LMS and series of e-lectures).

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Hybrid e-Learning Model for Arabic language (Phase A + Phase B)

    a. To equip Arabic language students with pre-learning, preparation and reflection time so that their class time is driven towards more value-adding activities, for example, more discussions on areas that needs to be related to more explicit practical examples, experiences and the tacit knowledge which may not be found in the textbooks or reading materials.

    b. To ensure more experiential, collaborative, social and interactive learning that enhances deeper learning through higher involvement of active learning activities during the Arabic language face-to-face class.

    c. To train and nurture Arabic language students to become better problem solvers and independent thinkers by enabling more engagement and participation by challenging norms. This enables them to develop their confidence and ability to become critical thinkers and problem solvers instead of just merely acquiring the theoretical without much deep learning.

    d. To train Arabic language students to become well prepared and ready to optimise their classroom time with their lecturers. The discussions are then extended beyond textbook knowledge where tacit knowledge and experiences would then be shared to achieve the true value-add in learning.

    e. To encourage Arabic language students to go through, reflect and assess their acquired knowledge. This also enables students to self-practice through these interactive e-activities (for example, discussion board, assessment quizzes, etc.)

The proposed model is essential and timely (due to students' changing learning behavioural traits and easy information availability) to address the rapid changing needs and requirements of students' learning style (example: students expect beyond the basic of contents delivery on a topic as they could read the textbooks and the theoretical information is readily available via Internet; the behavioural traits of today's students are shifting towards more participation and them wanting to be involved in the class discussions, etc.) as well as to nurture them holistically.

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As higher education is concern, providing students the knowledge and skills to become future leaders is crucial to enhance how knowledge can be delivered more effectively through re-designing the pedagogical approaches embedded with technology. Learning happens only when students are placed out of their comfort zones where they are made to think, examine and question the unknown. By doing so, they are made to go through the rationale and reasons behind the answers to the questions that they want to find out eventually.

This study enables the design and development of the e-simulation activities (phase A of the e-hybrid model) comprising the pre and post e-learning platforms achieves the shift in Arabic language students' learning styles and how they acquire knowledge. The shift is in having the basic information learned beyond the classroom (having the students to get enthusiastic in learning) as well as preparing before the class session and having post-class activities serve as a refresher and self-assessment tool. Moreover, implementation of the study enables more valuable time within the classroom for Arabic language students to perform deep learning through active, collaborative, experimental and social learning – this enhances the learning process for students as they are able to apply, be engaged and enable to reflect deeply what they have been taught.

To address the amount of pre and post time allocated for the e-learning platforms, the design of the e-learning platforms will be carefully thought through so that it does not contain too much information and is not too time consuming, but rather having the students to be "excited" and "experience" to relevant concepts through virtual reality games or activities. This should also facilitate them to find out more before attending class with some basic knowledge as well as to motivate the use of post e-platforms largely as a formative assessment platform where it serves to measure of their understanding of concepts learned.

Conclusion

To achieve a well-blended, holistic and practice-oriented Arabic language education, more interactive, experiential, dialogue and action-learning pedagogical approaches together with a well-blended e-learning platform are encouraged. This shift in the approach of instruction will enable more holistic and practice-grounded oriented management skills to be ingrained into Arabic language students. Moreover, this enables developing participants' key essential skills and abilities to serve human educational needs. By shifting the responsibility of learning to

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participants, it deepens their ability to develop self-awareness and relate the practicality in applying the concepts acquired. By facilitating a caring, supportive and encouraging learning environment, students are encouraged to learn from making mistakes, sharing their failures openly, taking risks and gaining valuable insights with open debates or dialogues with those with different perspectives. This interactive and reflective Arabic language learning framework embedded with the pre and post e-learning model is crucial to facilitate the shift in holistically achieving an optimal learning process.

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