











implemented, would be more appropriate due to the significant position the status of teacher has in Saudi culture. ‘Diffusion of Innovations’ [20] is a perspective that appraises the effective implementation of technology in social systems, while ‘TPACK (Technological Pedagogical and Content Knowledge)’ [22] focuses on types of information and awareness instructors are required to have in order to use technologies such as MOOCs in education, and ‘SAMR (Substitution, Augmentation, Modification, and Redefinition)’ [23] is a charter specialised in measuring the impact of technology implementation in educational tasks.

Diffusion of Innovation attempts to explain the processes influential in acceptance or rejection of the deployment of any innovation in the education curriculum, as social systems such as a group of students or a school can resist or be very open to this change. This theory investigates how a new technology can permeate through a population and emphasises on the lines of communication, opinion leaders, and gate keepers when this is done [21]. This theory also expounds that certain innovations might be better accepted than others when exposed to various groups. In the current study, students were very welcoming to new systems such as MOOCs which would mean that this innovative method would diffuse [21] in Majmaah University with ease, as far as learners are concerned.

TPACK concentrates on the role of personal characteristics on the integration of technologies in education. The disposition of the teacher is very important in this theory. The theory suggests teachers must be trained in three types of knowledge for effective technology integration into their classrooms: technological, pedagogical, and content knowledge [22]. It seems TPACK is very relevant for effective usage of MOOCs for Saudi Arabia as the transition between traditional teacher dominated classes to digital MOOCs education still needs the facilitation of teachers. Indeed, TPACK is quite applicable for the successful utilisation of Hybrid MOOCs in Majmaah University, due to the evolution from traditional teacher dominated conventional lectures to digital MOOCs, requiring the approval of teachers, their full cooperation, but also their competency.

SAMR is a theory attempting to assess the undertakings which integrate technology in education. The point this theory is trying to make is that there is a need to define and elaborate what constitutes an effective or successful form of learning for that particular technology. If there is a clear definition in the way a certain technology can be most effective, then that way of implementing it can be used for relevant disciplines [23]. For example, simulation software can be effective for game development but not necessarily for teaching history. Laboratory equipment is useful for teaching chemistry but not essentially for art. Documentaries are supportive for

teaching history, but perhaps not very much for medicine. In this study, MOOCs are already being used in an appropriate manner in Majmaah University which is for education of undergraduate students. In addition, the Hybrid MOOC used are in Arabic language which adds to its suitable usage. MOOCs are beneficial for all subjects in Majmaah University, unless there are requirements of lab work or clinical tools needed.

As this study understands it, challenges to Hybrid MOOCs adoption in education can be reduced if certain known impediments are dealt with. Issues which cause irritation for students such as bad internet connection must be fixed. In addition, alignment must be seen between online and offline contents. It would be helpful if students get quick and complete feedback as well. Nevertheless, all these issues seem to be more related to how Hybrid MOOCs are implemented and maintained rather than a matter directly with the MOOCs themselves, since MOOCs themselves were very well accepted in the current context, i.e. at Majmaah University. The study showed that Hybrid MOOCs, as a new method, are accommodated well by participants of the study, but implementation strategies can be improved. The problems students mentioned, such as challenges in studying with Hybrid MOOCs, do not represent students’ disavowal of Hybrid MOOCs as a method, but their concerns related to the fact that basic steps can make the implementation of this innovation more effective in their education which is a good sign. It appears that the theory of TPACK, emphasising teachers’ understanding of the subject they are teaching, their general proficiency in pedagogy, and their adeptness with MOOCs, is very pertinent in facilitating the implementation processes of this educational technology. The technical staff of the education facility MOOCs is being implemented in can also help in improving internet speed. The students’ answers in the questionnaires and interviews indicate that once they get acquainted with this new method, it becomes very easy. The teacher plays a critical role in how fast and easy students adapt to this new technology. The qualitative and quantitative findings of this study are good news for the long-term usage of Hybrid MOOCs in the Kingdom of Saudi Arabia as Majmaah is a main city and Majmaah University one of the main public institutions of higher education in the country.

## 6. Conclusion

This study is unique and first of its kind, to the authors’ knowledge, in investigating the obstacles and challenges faced by students when Hybrid MOOCs with Flipped Classrooms are implemented within the higher education of Saudi Arabia. Mixed methods approach was employed in this research, consisting of interviews and questionnaires. When it comes to challenges related to MOOCs platform, it was found

that poor connection was a major challenge for studying via MOOCs, which is not precisely related to MOOCs as an educational tool. Moreover, the interviews disclosed that there were social challenges at the initial stages of using Hybrid MOOCs with Flipped Classrooms, such as fear of participation, embarrassment, and shyness. This is understandable as the students just graduated from high school, this was their first semester in higher education, and it was the first time they had been exposed to this teaching method. The implications of the current research are broad since it reveals that the country is perhaps prepared for a transformation in its education system from the traditional to MOOCs, as are countries with similar educational contexts. This study can be a significant model for further studies done in the developing world as well.

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