

# **AB Multimedia students' perception of the use of the ARCS model of motivational design in the open university**

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Open universities make education accessible to all by utilizing technology-enhanced pedagogical approaches that promote knowledge and practice about digital learning in higher education with a setup contrary to the traditional classroom. Given the growing demand for digital media careers, students in this discipline need motivation as a catalyst for fostering creativity and unleashing their creative expressions and outcomes. This paper presents a case study on applying the ARCS motivational model (Keller 2010) factors of attention, relevance, confidence, and satisfaction to open university educational settings to unconventionally convey and stimulate learning and content to AB Multimedia students. The use of focused group discussion and thematic analysis explores the perceptions and determinants that leverage the students' motivation to engage in creative endeavors within their academic goals and their valuable insights into the dynamics groundwork for artistic and innovative expression among AB Multimedia Studies students in open university education.

**Keywords:** open university, ARCS motivational design, multimedia

## **Introduction**

Quality education is important to each person as it enables proper learning throughout life for all human beings, regardless of age, race, religion, caste, creed, or region. It implies learning from which an individual obtains knowledge, morals, skills, beliefs, values, and habits. The present education institutions are now slowly opening their services to bigger populations. In the age of information and communication, there is an abundance of technologies that give opportunities for students to learn; even beyond the four walls of the classroom (Nyamwembe, et al., 2018). This means that education should be reachable with as few restrictions as possible. As a result, education must be available to as many people as possible with minimal limitations.

To cater to the needs of this new breed of learners, many educational institutions have considered alternative modes of educational delivery, including distance education and e-learning. Open learning is a philosophy of learning that is based on the flexibility of access for equity in education. It is learner-centered, where learners determine what they want to learn, how, when and where they want to learn, how to get their learning assessed and determine their career direction (Alfonso 2014). With its flexible and open philosophy, Open and Distance Learning (ODL) has made education accessible to people who are not reached by conventional universities (Basri, 2021). ODL is the merging of two concepts, Open Learning and Distance Education. This occurred when distance education institutions stated and agreed that distance education is a mode of learning in which students and teachers are physically separated from each other (Alfonso, 2014). Similarly, Yusof et. al (2021) stated that online distance learning (ODL) allows a learning session to take place regardless of the limitation of the physical distance of a student from the lecturer or teacher; hence to bridge this instructional gap, the use of technology is used especially

to gauge the students in the lessons. In making ODL a success, various affordable technologies have been developed and embedded in the teaching approach such as learning management system (LMS), online surveys and online learning tools (Othman et.al., 2021). Online learning has become prevalent worldwide due to its potential to mitigate time and distance challenges associated with traditional education. However, numerous studies and literature reviews indicate that motivation remains a significant barrier to effective online learning. Hence, motivation to learn plays a critical role in the practice of education.

Therefore, developing an effective instructional model is essential not only for enhancing students' academic performance but also for boosting their motivation to learn. Over the past decade, educational institutions globally have increasingly adopted online teaching-learning practices, incorporating digital media and innovative pedagogical models. Online learning communities require the same building blocks that include clear goals, commitment, promotion, and administrative support (Stagg, 2023).

One of the key frameworks for understanding and enhancing motivation in such environments is the ARCS (Attention, Relevance, Confidence, Satisfaction) model developed by John Keller in 2008. This model provides a structured approach to designing instructional materials that can improve both student achievement and motivation. Even the current advancements in Artificial Intelligence (AI) and its implementation in the form of robots have been incorporated into the ARCS motivational model to help students overcome the challenges faced in classrooms (Li, 2022). To sustain motivation, the first crucial factor that students must address is capturing their attention. Gaining their attention is important, but what's even more vital is keeping them engaged throughout the entire instructional process (Jokelova, 2013). Therefore, every lecturer must have a high motivation to change teaching and learning styles in class, so that students' learning activities are more active, interesting, fun and competitive (Mohamad et al., 2015). Secondly, relevance means that students can feel the correlation between learning content and their own needs through learning relevant content. When students are curious in the process of learning, they naturally want to know where this association comes from. In addition, there are two types of correlation in the correlation factors, namely, purpose correlation and process correlation. Among them, purpose relevance refers to that learning can bring positive enthusiasm for their own development, or help them achieve the set goals (Xinlei, 2021). Thirdly, confidence refers to the psychological characteristics of an individual's confidence in his ability to successfully complete a goal, and it is a psychological state of positive and effective expression of self value, self respect and self understanding (Li, 2022). Satisfaction constitutes the final element in the ARCS Motivation Model. It can be defined as the experience of a positive feeling or a sense of contentment with one's achievements. Satisfaction can be viewed as a facilitating factor that can positively influence students' motivation to engage with online learning tools. (Jokelova, 2013).

In the context of Philippines, Bachelor of Arts in Multimedia Studies is most likely to be imparted through open university in institution like University of the Philippines. This is a unique program that aims at creating skilled professionals in the field of multimedia to meet the high demands from the ever-growing field. As technologies, multimedia techniques, and skills have found a significant recognition throughout the global community as a crucial tool in broadcasting, in business promotion and advertisement, in entertainment and education, this program is designed as a program in response to the demands of the profession. Students begin understanding the effect of multimedia in connected world and use the acquired knowledge to analyze a variety of cultures

and communities. This program is available at various schools and open universities, including the University of the Philippines. UPOU is implementing it through a fully online teaching mode. Since multimedia studies are highly interactive and dynamic, it is particularly relevant to explore the usage of the ARCS model in the context of online learning. As students of multimedia studies navigate through various forms of digital content and learning activities, their perceptions of motivation and engagement become critical indicators of the effectiveness of instructional design. This research aims to explore the interplay between online learning environments and student motivation of Multimedia students in the open university or ODL, guided by the principles of the ARCS model, to propose strategies that can lead to more engaging and successful educational experiences. Consequently, it seeks to answer the following research questions:

1. In what way does the ARCS model impact the motivation of AB Multimedia students in open universities?
2. How the ARCS model as applied in instruction improve the creativity level of the AB Multimedia students in an open university?
3. In what way will the proposed ARCS model be more effective to the needs of Multimedia students in open universities?

## **Methodology**

### *Research Design*

Data were collected through focused group discussions with an average duration of 45 to 90 minutes. The interviews sought to find out the pedagogical justification for the research participants' attitudes towards the application of ARCS motivational design, factors that motivate the students to be creative in their academic pursuits, and valuable insights into the dynamics groundwork for artistic and innovative expression.

Three focus group discussions were conducted to accommodate the schedules of the nine (9) selected participants. All participants are currently enrolled in the same open university in the Philippines. Among them, two are first-year students, three are second year and four are third-year students. FGDs are utilized here as they allow for an in-depth conversation and an exchange of ideas among the students. This way, it was guaranteed that the data collected would be comprehensive of the participants' motivational experiences. Each interview was recorded in audio format with the permission of the participants to make sure that the information provided could be transcribed and analyzed accurately. The interviews were conducted in a face to face or through a video call based on the participants' availability and convenience.

Thematic analysis as explained by Neuendorf (2019) is a type of qualitative research that involves identifying themes from the interviews and developing an understanding of the problem through an inductive process. Repeating the participants' responses several times the researcher was able to identify the most significant categories and features that would help the researcher come up with the themes of the study. Using Braun and Clarke's six-phase framework, The thematic analysis will provide a rich and complex understanding of the participants' experiences and viewpoints. This approach assisted in noticing the broad and fine-grained patterns of participants' perceptions to further understand and analyze the motivational factors among learners in multimedia. The first part of the thematic analysis focused on data reduction where major clusters were labeled as categories and passages of relevant texts were grouped to form a category. Therefore, 3 main themes and 2 sub-themes for each were found. This approach was useful in

identifying the overall and detailed patterns of participants' perceptions, which facilitated understanding and analysis of the motivational factors among learners in multimedia. These patterns were then compared and contrasted with other related theoretical and empirical literature on the effects of technology usage on teaching and learning and the problems and opportunities of online learning design, especially in ODEL environments. This comparison enabled the researchers to discuss the findings of this study with similar studies and flag the research contributions made by this study.

### *Ethical Considerations*

The Researchers presented the purpose and procedure of the study to the participants. Participation was voluntary and written informed consent was obtained from all participants. All data have been anonymized and securely stored.

### **Results**

1. In what way does the ARCS model impact the motivation of AB Multimedia students in open universities?

Table 1.

#### **Impact of ARCS motivational design to BAMS**

students in the open univeristy

General category	Sub-themes	f
empowering individual learning	adult learners	5
stimulating success through discipline	self driven	4

Table 1 presents 2 general categories that are individual learning with a sub-theme of adult learners while their discipline posed a subtheme of self-driven. In individual learning, participants believe motivation resides with the learner since they realize they are in a self-paced learning mode and that OdeL is tailored to each individual and focuses on the learner. Students ensure that despite learning at their own terms and pace, they can still adhere to the timetable outlined in the program.

*P1: Studying in open university or pure online is very different. As learners, you need to prepare yourself in a new environment that will benefit you also since you work on yourself. I directly feel ARCS model while doing my readings, projects and quizzes since I want to graduate.*

*P2: Since I am also doing a part-time job in creatives, studying in an open university brought maturity in me. I bear in mind that I have to study, do my projects, participate in discussion forums, develop ideas. Bottom line, my motivation is to be the best version of me.*

*P3: One of the pros of this learning method is the aspect of work visibility; the work done by the students can be assessed by not only the teacher but also other students. Likewise, when answering questions from the teacher in group discussions, students can only type and post their intentions on discussion boards so that every member of the group can read and rate.*

In the second identified theme, four (4) self-generated motivation and confidence attribute discipline as a force that improves the ability in the various tasks they have to accomplish. Page | 78

*P4: In an open university, you become self-driven because you are on your own. You must learn time management for you to accomplish the bulk of responsibilities you need to do. Reading for lessons, taking quizzes, and finishing projects. Discipline and time management are the keys to combat loads of tasks.*

*P5: From discovering and navigating MyPortal to beating the deadlines, I was on my own. Although I was able to turn to friends and classmates, I made the majority of the effort. There are a lot of readings and projects but I always repeat in my head that I can do this, I can finish this.*

## 2. How the ARCS model as applied in instruction improve the creativity level of the AB Multimedia students in an Open University?

Table 2.

**How the ARCS model improved creativity level**

**Of AB Multimedia students in OU**

General category	Sub theme	f
creative synergy across media forms	Integration	4
	Innovation	4
	collaborative media production	1

Table 2 shows the theme generated creative synergy across media forms has sub-themes identified from the analysis of how the ARCS model has enhanced the creativity levels of AB Multimedia students at OU, along with the frequency of responses corresponding to each sub-themes of innovation and integration both having 4 responses and collaborative media production with 1 response. Participants explained that exploring creative tools and platforms enhanced their ability to integrate and elevate their creativity levels.

*P6: I think that placing emphasis especially on the value of confidence and satisfaction in students is a way of equipping them to go beyond what is considered bare minimum and prioritize the quality of their work over simply getting it done.*

*P7: We used films, podcasts, and games to have a greater reach audience and to expand the concept of narrative with interactive installations employing media in digital media.*

Collaborative media production was also considered a factor in improving the creative skills of the students. They created groups in different communication channels like Discord, Slack, Viber, WhatsApp, and others. They also held meetings where they discussed concepts face-to-face, and interacted as well. These activities helped them to generate ideas and produce outcomes that are greater in quality and scope.

3. In what way will ARCS model be more effective to the needs of Multimedia students in open universities?

Table 3.

**How the ARCS model improved creativity level**

**Of AB Multimedia students in OU**

General category	Sub theme	f
optimal engagement and learning	interactive tools	8
	assessment	1

Table 3 shows the significance of the ARCS model on the creativity levels of the AB Multimedia students from OU. This section provides the optimal engagement and learning and sub-theme breakdown together with the respective frequencies of occurrence. Interactive Tools sub-theme was mentioned 8 times and therefore this was noted as the major factor in supporting the best form of engagement and learning among students. The Assessment sub-theme surfaced once, meaning that assessment was also an element used to improve students' learning and participation levels. The frequencies given show that the use of interactive tools is more commonly linked to the enhancement of creativity and learning than with assessment. In general, the table focus to stress that factors including the use of the interactive tools and using effective assessment methods are essential in increasing the level of creativity for multimedia students when applying the ARCS model.

*P8: Our grades from our discussion forums and TMA (Tutor Marked Assignments), quizzes and projects are our track if our performance to know if we are doing well. I have observed that when modules have interactive tools to use, then my outputs are better. But for COMM 2 which is mainly reading and writing, I have delays.*

## Discussion

Open university or Open Distance e-learning is a system of education that is grounded on different principles from those associated with teaching within a traditional environment. This

means that the level of learning is directly related to the amount of effort the learner puts in. In accordance with the findings, an individual learner allows the building of confidence that you can survive as an individual to reach your aspirations like finishing the program or graduating. As revealed in one study, Alfonso (2015) said that while the majority of e-learners are mature students who do not see themselves as part of university life, ODL promotes the instilling of the university ethos in the electronic environment. In OU or ODL, discussion forums provided them with some components of ARCS like attention and relevance. Unlike in traditional classrooms where the teacher would be providing the lectures, OU students who participate in discussion forums claimed that they are driven to be well-versed on the target topic before logging in since all discussion forums are graded. For some participants, it is possible to see the implementation of a motivational design framework called ARCS in the discussion forum in which each student must post messages, input relevant perspectives, and provide information on certain lessons or issues. Maintaining active engagement in the discussion forum enables the students to make meaningful contributions since these posts are graded. These are forums where learners assess each other and therefore it is essential for a learner to do so with confidence. According to Alfonso (2014), the discussion forums in ODL not only allow the other learners to scrutinize the ideas of their classmates in a much more detailed manner, it also enable them to respond to those questions and defend their stand on issues in a more organized and transparent way. In addition, online discussions also require a certain level of decorum, which fosters ethical behavior. For this study, participants draw confidence from the urge to finish their tasks.

Discipline is cultivated because the flexibility an ODL student requires accountability. They are oriented with the concept that distance learning is learner-centered with different learning strategies. Participants also noted that in their chosen program, BA Multimedia, every activity is relevant to modernization. It requires them to be proficient in the continuously evolving software, devices, and programs.

This way, studying at an open university stimulates the development of their creativity and encourages using the newest software and applications. They explore on their own the different power tools and algorithms in their workflow to streamline their process and produce quality outputs. This pedagogy of learning uncovers the resourcefulness and creativity of the students. According to Smith (2015), universities of today should produce graduates who have the ability to seek new information from different sources, translate this information into applicable knowledge, and communicate this knowledge in various forms and situations. They should be able to solve problems creatively and work in different cultural teams. Similarly, ODL learning goes beyond a simple transmission of knowledge from the educator to the student. Adopting a resource-based approach meant moving away from the traditional notion of the ‘talking teacher’ to the use of different media to communicate content and develop learning activities (Alfonso, 2014).

There have also been studies conducted of the ARCS model in the student environment to prove its effectiveness, the studies found that there were statistical differences in the numbers of how attention, relevance, confidence, and satisfaction subfactors affect the motivation of students in the process of learning. Despite the statistical changes from the subfactors found in the ARCS model, all the numbers still show and point toward the high efficiency and effectiveness of the ARCS model if it were to be implemented into the distance learning process (Agus et al., 2021).

On the analyzed data, a predominant theme that emerged from the data was the importance of fostering optimal learning environments to enhance student engagement and learning outcomes. As part of the more general theme, there was a clear sub-theme that was identifiable, and this was

the use of interactive tools and assessments. Based on the outcomes of the present study, it is worth to mention that the use of interactive tools and track assessments enhances students' interaction. The participants appreciate using of iBook, an interactive application with text, videos, and short assessments to check their learnings. According to respondents, the multimedia materials, quizzes, and virtual modeling within the learning process were considered to have a positive effect in terms of different forms of participation. These tools can be viewed as effective means to capture the learners' attention and meet multiple intelligences as well as help to gain a better understanding of the subject matter of the course. Noh (2021) cited that the student thinks that using the digital tools will be easy, clear and understandable and that digital tools may enhance their performance, they will have a positive attitude towards using digital tools during ODL.

Furthermore, the outcomes revealed that defining the ARCS model's applicability means of gauging student progress and fostering meaningful learning experiences. Also, due to the dynamic nature of technology, there is a need to periodically review and employ technologies in order to address the needs and in aiding students. The effectiveness of the interactive tools and the assessments was found to be important in the instruction and engagement of the learners in Multimedia course.

## Conclusion

Distance learning has been in practice all over the world because it has the potential to minimize time and distance barriers as found in conventional educational systems. This kind of education pedagogy enables the students to come up with ways of managing their own learning. In conclusion, the present study highlights several factors that need to be addressed in order to facilitate creativity as well as learning among adult multimedia students in ODeL contexts. First, it emphasizes the importance of a more individualized and student-paced approach to instruction because it increases motivation and study rates for students. Second, the identification of creative media tools and platforms is seen as critical in the promotion of creativity and the implementation of innovations among students. Finally, the right application of the ARCS model is established as having a central role in sustaining student engagement and outcomes.

In this regard, these findings may be useful in guiding the enhanced design and delivery of ODeL programs. In particular, they state that motivation and creativity can be increased with the help of programs, that are based on learners' individual learning style preferences and the use of interactive and creative media based on the ARCS model. The above strategies can go a long way in helping other learning experiences and nurturing creativity among adult learners in multi-media disciplines.

## References

- Alfonso, G. "Open Educational Resources and Higher Education: Putting Universities Back in the Center of Knowledge Production." In *Open and Distance eLearning: Shaping the Future of Teaching and Learning*, edited by G. J. Alfonso and P. G. Garcia, University of the Philippines Open University and Philippine Society for Distance Learning, 2014, pp. 87-98.
- Alfonso, Grace Javier, and Primo G. Garcia. "Open and Distance eLearning: New Dimensions in Teaching Learning Research and Extension for Higher Education Institutions." *International Journal on Open and Distance eLearning*, vol. 1, nos. 1 & 2, Dec. 2015.



- Basri, N. A. O., Ismail, and M. M. Mahmud. "Elements in Multimedia Interactive Package (MIP) Production to Facilitate Critical Thinking Acquisition in ESL Reading." *International Journal of Academic Research in Business and Social Sciences*, vol. 11, no. 1, 2021, pp. 633-644.
- Du, Xinlei. "Research on Mixed Teaching Model Based on ARCS Motivation Model -- Taking Primary School Chinese Course and Teaching Theory Course as an Example." *Journal of Liaoning Teachers College (Social Science Edition)*, no. 4, 2021, pp. 41-44. Page | 82
- "Extending Technology Acceptance Model (TAM) to Measure the Students' Acceptance of Using Digital Tools during Open and Distance Learning (ODL)." By N. H. M. Noh, R. Raju, Z. D. Eri, and S. N. H. Ishak, *IOP Conference Series: Materials Science and Engineering*, vol. 1176, 2021.
- "Factors Affecting Lecturers' Motivation in Using Online Teaching Tools." By Siti Nurul Mahfuzah Mohamad, Mohd Azran Mohd Salleh, and Sazilah Salam, *ScienceDirect*, 26 July 2015.
- Jokelova, A. "ARCS Motivational Model: Theoretical Concepts and Its Use in Online Courses." *2013 IEEE 11th International Conference on Emerging eLearning Technologies and Applications (ICETA)*, Stara Lesna, Slovakia, 2013, pp. 189-194, doi:10.1109/ICETA.2013.6674427.
- Li, Zhaoyu. "Art Teaching Design Based on ARCS Motivation Model." *3rd International Conference on Modern Education and Information Management (ICMEIM 2022)*, Atlantis Press, 2022.
- Nyamwembe, E. O., E. Tanui, and J. M. Wamutitu. "Relationship between Students' Awareness and Utilization of Open Educational Resources for Academic Work in Private Universities in Kenya." *International Journal of Education*, 2018.
- Othman, J., et al. "The Effect of Students' Performance at Higher Education Institution with Open and Distance Learning (ODL) Methods." *International Journal of Academic Research in Progressive Education and Development*, vol. 10, no. 2, 2021, pp. 556-569.
- Stagg, A., et al. "Engaging with Open Educational Practices: Mapping the Landscape in Australian Higher Education." *Australasian Journal of Educational Technology*, vol. 39, no. 2, 2023, pp. 1-15, <https://doi.org/10.14742/ajet.8016>.
- Yusof, F. H. M., et al. "Using ARCS Model in Soliciting Learners' Motivation: Opportunities in Maximising Open and Distance Learning (ODL)." *International Journal of Academic Research in Business and Social Sciences*, vol. 11, no. 12, 2021, pp. 92-102.