

INTEGRATING PROJECT BASED LEARNING WITH DIGITAL PLATFORMS: IMPACTS ON CREATIVITY AND ENGAGEMENT

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ABSTRACT

This study explores the integration of project-based learning (PBL) with digital platforms, specifically social media, and its impact on creativity and engagement in creative media courses. A quantitative research approach was employed, using a structured questionnaire with a 5-point Likert scale to assess the levels of creativity, engagement, and learning outcomes among 150 undergraduate and postgraduate University students. Participants were recruited through stratified random sampling. The findings reveal a significant positive correlation between the frequency of social media use for academic purposes and the reception of constructive feedback ($r = 0.650, p < 0.01$), indicating the platform's role in enhancing project quality. Additionally, the study highlights the importance of social media in providing access to additional resources ($r = 0.308, p < 0.01$) and fostering peer learning ($r = 0.508, p < 0.01$), which enhances student engagement and idea exchange. The results emphasize the dual nature of social media in PBL, serving as a valuable tool for collaboration and feedback, but its impact may vary based on individual usage and experiences. This study provides valuable insights into the role of digital platforms in fostering creativity and student engagement in project-based learning environments.

Keywords: Project-Based Learning, Social Media, Digital Platforms

INTRODUCTION

Project-based learning (PBL) with digital platforms is a shift in the current paradigms within higher learning, impacting students' creativity. As a result of better technological development, innovation of devices, and an ever-more virtual society, academic institutions have gradually allowed social media to support learning environments. This shift can be viewed as a response to the increased use of a student-centered approach focusing on engaging participation and learning (Dunn 2013, p482). As for other forms of technology use in education, the availability of resources like the social networking site Facebook further enhances the traditional forms of teaching. It improves other forms of learning by making them more accessible, flexible, and collaborative (McCarthy, 2010; Oh et al., 2018).

Modern social network tools are essential in students' everyday lives and valuable for effective educational processes. They enable sharing ideas, group problem-solving, and access to several other resources beyond the four walls of classrooms (Curtis, 2014). By engaging learners in active participation, social media has good consistency with independent and student learning (Ziegler, 2007). This is especially true in project-based learning activities, where students are expected to build constructions of knowledge through meaningful tasks. PBL is an effective teaching method that stimulates creativity, critical thinking, and interest in highly diverse forms, particularly in creative media design (Boeree, 1897; Lenz et al., 2015). This way, with the learner's involvement in experiential learning cycles, PBL promotes acquiring and utilizing knowledge, developing interpersonal skills, and generating students' learning ownership (Blumenfeld et al., 1991; Kolb, 1984). However, conventional PBL approaches may require face-to-face communication, so they are ineffective in computer-enhanced digital classrooms (Park, 2011). Such challenges are handled by incorporating social media into PBL since it affords flexible, easily accessible, and creative means of learning and motivation over extended periods (Heikkinen, 2012).

This paper examines the effectiveness of integrating project-based learning (PBL) with using facilities, mainly social media, in creating the desired creativity and interaction among students. Modern technological breakthroughs of the 21st century have inclined higher educational institutions to use social media as a

constructionist approach to enhancing learner involvement in the improved divergent learning environment. Such change reflects the current increased focus on learner-centered instructional practices that call for the utility of authentic, engaged, and social learning processes (Dunn, 2013). Facebook and Instagram are available and versatile forms of extending pedagogy by offering students multiple and frequent interactions and group work (McCarthy, 2010; Oh et al., 2018).

One of social media's most significant strengths with students, educators, and peers is interacting in a virtual platform that transcends the physical classroom (Greenhow & Lewin, 2015). Some of the factors that implement the use of a course management system include a web board and newsgroup, which enable students to post their feedback, ideas, and/or resources on a particular project, participate in real-time chat, Bulletin boards, and Instant messages, which also help the students to develop the natural motivation to continue going on with project based activities. Through such interactions in social media, the students are provided with a means by which they can be actively engaging and foster a sense of communalism that is hard to cultivate within the PBL environment (Rasiah, 2014). To design students, social media has other values in that it creates a virtual platform where they can display their work to a worldwide audience. Using social sites where students display their work and portfolios allows students to get feedback from more people, including other students, professionals, and teachers, and promotes creativity among students (Greenhow & Lewin, 2015). However, research on integrating social media within project-based learning is still relatively sparse, especially within design disciplines. The presented study focuses on determining the strengths and limitations of integrating social media into the framework of PBL in creative education to enhance the application of learning theories and optimize the learners' achievements.

The objective of the study to explore how the use of digital platforms influences key aspects of PBL by analyzing correlations between social media use and various educational outcomes, the study seeks to identify the benefits and challenges of utilizing digital platforms in PBL, providing insights into optimizing their effectiveness in enhancing creativity, engagement, and learning experiences.

LITERATURE OF REVIEW**Interaction in the Creative Media Curriculum via Project-Based Learning**

One issue common in creative media courses is keeping students focused on their creativity and not getting bored quickly. Project-based learning (PBL) is a good solution in this case because students must find solutions independently. Students can create productions like live-action and animations to show their problem-solving skills. The films they produce are utilitarian and realistic and reflect the ideas they have gained, the actual problem-solving products (Blumenfeld et al., 1991). The final assignments encourage group analysis, through which the learners describe the procedures they used to address realistic issues, the things they gained in the given approaches, and the areas to enhance in the subsequent project.

PBL is a learning model that is dependent on the idea of structuring education around projects (Thomas, 2000). It has become a common approach to encourage students to study independently. Kolb (1984) observed that PBL provides students with a complete extent of experiential learning, beginning with experience, perception, cognition, and behavior. PBL students participate in concrete experience, organization, analysis, and experimentation, or what is called the COAE cycle (Ma, 2016). This cycle revs motivation by dealing with meaningful issues and allowing the students to assume responsibility for their work. With these opportunities, immersed in genuine actualities, students develop practical solutions over and above their stock of knowledge, learning through their interactions. Blumenfeld et al. (1991) stressed that such projects help achieve the goal because they allow students to apply superimposed information to their thinking processes. As such, enhanced cognitive structures enable students to assume personal learning responsibilities to fashion and manage their learning processes with reduced direct instructional help from teachers (Lenschow, 1998).

Effectiveness of Social Media to Student's Learning Experience

Collins & Halverson (2010) and Wodzicki and co-authors (2012) agree that embracing social media in higher learning fosters collaboration

in learning and student and faculty interaction. Most college students today are from the generational group known as Generation Z, born between 1995 and 2012. These students are fully aware of the use of technology and social media daily, according to Singh 2014. By the definition of Palfrey and Gasser (2013), this generation sees the world differently; they have a less rigid approach to personal and private lives, friends, information, communication, creativity, threats, and work. They approached social media as a necessity and accepted it as a valuable academic tool. They view social media as a helpful means of creating increased interaction and communication among students and faculty members, which plays a role in eradicating barriers that have, for instance, existed between students and faculty. To these students, social media brought a sense that their teachers are more available and responsive to the interactions within the classroom. Mazer et al. (2007) opined that creating a positive relationship between students and instructors can have a positive effect on student learning since teachers are viewed as having a causal effect on the student's learning and achievement in the affective realm at the interpersonal level, according to Rodriguez-Keyes et al., (2013). As Shen et al. (2006) pointed out, these works suggest that increased teachers' participation in social media influences students' motivation, active participation, the level of material learned, and their perceived intention of future use of these resources. Other benefits of the social media implementation for education are teacher-student communications, students sharing and giving feedback to each other, and thus, the students' motivation is increased significantly.

Student Motivation with the Help of Social Networks in PBL

Sharing knowledge and ideas with participants within a learning community increases students' induced motivation to learn (Koh et al., 2010; Rasiah, 2014). Blumenfeld et al. (1991) pointed out that including high-pedagogical, meaningful projects is not enough to motivate students to learn all the necessary knowledge and skills. The studies also prove that social media has an important place in promoting motivation among students and improving the climate among young

people in learning. Such creative tools can transform the learning limits and cultivate the student teaching construction (Celik et al., 2014).

Thus, creative media courses provide the students with artistic outcomes, and the external factors, for instance, observing their fellow students' creations getting some public attention, may enhance the students' internal motivation and promote desirable lasting impacts. Students' participation can be enhanced by giving them feedback and reviews from peers they found in the internet. In this case, understanding implies students' desire to learn, their participation in learning activities and their belongingness to a school and its fellow students (Axelson & Flick, 2010). Newsgrouping services enable the students to build affinity within the virtual community to display their work. Two key interactions occur in this space: Others can see students' work, and students can see their peers' works, too. The online environment becomes a feedback loop of work where information presentation and content quality are enhanced by conversing with other students and instructors. Using social media in lessons, teachers and students improve their relations; thus, the students are bound to give a positive experience with the teacher. Like

cooperative learning, PBL involves sharing sessions compared to didactic learning; students build solutions and knowledge from experience. The use of social media correlates with the goals of PBL through promoting learners' interactions within their groups. Incorporating social media platforms into teaching and PBL can mean more ways to target students due to its approach and direct involvement.

Methods

The study used a quantitative research approach to assess the factors that influence learners creativity and motivation, when using project-based learning, supported by technology integration. An online questionnaire is used, and participants are selected from 150 undergraduate and postgraduate universities students pursuing creative courses. The participants are then purposively recruited into the study using a stratified random sampling technique that involved gender, academic years and disciplines. Data was collected using a structured questionnaire. a 5-point Likert format to measure respondents' levels of engagement and creativity concerning PBL activities with incorporation of social media.

Results

Table 1

Demographic profile of the respondents

Valid	Frequency	Percentage
Gender		
Male	61	40.7
Female	89	59.3
Age		
20-25	53	35.3
26-30	50	33.3
31 or above	47	31.3
Year of study		
First Year	34	22.7
Second Year	57	38.0
Third Year	49	32.7
Fourth Year	10	6.7

Table 01 showed the demographic profile of the respondents reveals a relatively balanced gender distribution, with 40.7% of participants identifying as male and 59.3% as female. In terms of age, many respondents are between 20-25 years old (35.3%), followed by those aged 26-30 (33.3%), and 31 or above (31.3%). Regarding the year of study, most participants are in their second year (38.0%), with a notable proportion in their first year (22.7%) and third year (32.7%) and the (6.7%) of respondents were in their fourth year.

Correlations

		How often do you use social media for academic purposes	Using social media for collaboration with peers has enhanced my engagement in the course	Social media allows me to receive constructive feedback that helps improve my projects.	Social media platforms provide me with access to additional resources and materials related to my projects.	I am more confident in presenting my work after sharing it on social media	Social media allows me to learn from my peers by viewing their projects and ideas.	How likely are you to recommend the use of social media in future creative media courses?	Do you believe that social media enhances the quality of your learning experience in creative media courses?	What do you think are the benefits of using social media in project-based learning?
How often do you use social media for academic purposes	Pearson Correlation Sig. (2-tailed) N	1 150								
Using social media for collaboration with peers has enhanced my engagement in the course	Pearson Correlation Sig. (2-tailed) N	-.160 .051 150	1 150							
Social media allows me to receive constructive feedback that helps improve my projects.	Pearson Correlation Sig. (2-tailed) N	.650** .000 150	.080 .331 150	1 150						
Social media platforms provide me with access to additional resources and materials related to my projects.	Pearson Correlation Sig. (2-tailed) N	.308** .000 150	.463** .000 150	.164* .045 150	1 150					
I am more confident in presenting my work after sharing it on social media	Pearson Correlation Sig. (2-tailed) N	.031 .703 150	-.478** .000 150	.241** .003 150	.418** .000 150	1 150				
Social media allows me to learn from my peers by viewing their projects and ideas.	Pearson Correlation Sig. (2-tailed) N	.508** .000 150	-.308** .000 150	.134 .101 150	-.183* .025 150	.149 .069 150	1 150			
How likely are you to recommend the use of social media in future creative media courses?	Pearson Correlation Sig. (2-tailed) N	.310** .000 150	.084 .304 150	.671** .000 150	-.006 .946 150	-.326** .000 150	.390** .000 150	1 150		
Do you believe that social media enhances the quality of your learning experience in creative media courses?	Pearson Correlation Sig. (2-tailed) N	.268** .001 150	.165* .044 150	.310** .000 150	-.151 .066 150	-.092 .260 150	.184* .024 150	.439** .000 150	1 150	
What do you think are the benefits of using social media in project-based learning?	Pearson Correlation Sig. (2-tailed) N	.524** .000 150	-.622** .000 150	.235** .004 150	-.115 .159 150	.174* .033 150	.574** .000 150	.252** .002 150	-.163* .047 150	1 150

The correlation analysis sheds light on the significant impact of social media on project-based learning in creative media courses. A strong positive correlation ($r = 0.650, p < 0.01$) between the frequency of social media use for academic purposes and receiving constructive feedback emphasizes the platform's role in enhancing project quality through interactive and collaborative feedback mechanisms. Additionally, the positive correlation with accessing additional resources ($r = 0.308, p < 0.01$) highlights how social media provides a rich repository of materials that support learning. Social media's collaborative nature is further evidenced by its strong association with peer learning ($r = 0.508, p < 0.01$), demonstrating its value in fostering idea exchange and engagement. However, the analysis also reveals some challenges. The negative correlation between confidence in presenting work and the likelihood of recommending social media ($r = -0.326, p < 0.01$) suggests that while social media enhances access and collaboration, it may not uniformly boost confidence in all learners. Similarly, while peer collaboration significantly enhances engagement ($r = 0.463, p < 0.01$), its mixed relationship with learning benefits ($r = -0.622, p < 0.01$) indicates potential variability in how students perceive the platform's overall utility. These findings highlight the dual nature of social media in creative media courses—it serves as a powerful tool for fostering collaboration, feedback, and resource sharing, but its effectiveness can vary based on individual experiences and usage frequency.

Discussion

The research findings show important findings on the strategic use of social media in project-based learning in creative media courses. In line with previous studies on social media use in an academic context, which pointed out the positive aspects of its impact (Manca & Ranieri, 2016), the study's results indicate that social media increases the quality of students' projects by encouraging the collaborative learning process. Participants described that ideas could be shared in Facebook groups, promoting an environment that allowed the student to learn from his peers' projects, which witnessed the concept of collaboration highlighted by Greenhow & Lewin (2016). This is particularly important because students' most learning assignments include interactions in the form of peer-to-peer learning through supplementing social media as a source of information and getting feedback on some of their assignments.

Hypotheses on the suitability of social media for education are also backed up by its usefulness in gaining access to further resources and material. From tutorials and articles to tiny threads on forums, students get the big picture of their projects, which is important for developing their critical thinking and creativity regarding project-based learning (Selwyn, 2016). In the same way, the positive relationship between the use of social media and the receipt of constructive criticisms strengthens the belief that social media makes the ability of Project-Based learning to promote the feedback-and-refine process due to its digital nature (Anderson & Dron, 2011).

Nevertheless, the analysis also reveals some subtle issues connected with utilizing social media in an academic context, pointing at specific advantages of this practice. One of the most important observations is the inverse correlation between the level of use of social networks and the degree of students' self-confidence when presenting their creations. This infers that although social media provides resources and feedback, it does not improve proportional students' confidence in submitting their ideas publicly or in formal contexts. Junco (2012) also pointed to the double-edged nature of SM - one positive for student engagement but a negative one because engaging in SM means students will encounter the works of their peers. Thus, this discovery makes it necessary to try to establish

how, besides the academic yields, social sites can be used to foster other elements of the learning process, such as the learners' emotions and psychological. That social media is helpful and unhelpful fits the variability of learning observed among students. A few students reported that they like that most platforms allow collaboration and resource sharing, though some said that these features may make them distracted or complicated. Given this, Liu et al. opine that the consequences of using social media for learning depend on the number of instances of social media use, the learning style of the learners, and the context of the course. Thus, there are specific challenges that instructors and course makers should meet while using social media in project-based learning schemes.

Therefore, the study highlights social media's value in Creative Media education programs focusing on collaboration, resource sharing, and feedback. Nonetheless, the conflicting results of confidence and the general view of the usefulness of SM reveal further that although SM can improve the learning process, it is not entirely efficacious. In her articles, teachers should be aware of the cultural background and demographic differences of the students they teach. This should enable them to embrace the benefits of social media while adapting ways and means of minimizing its negative impacts. The study should be expanded for future findings concerning various characteristics of social networking sites and specific activities that can enhance students' learning achievement and creativity self-confidence.

Conclusion

The correlation analysis underscores the significant role of social media in enhancing project-based learning within creative media courses. The findings highlight the positive impact of social media on collaboration, access to resources, and peer learning, all of which contribute to improving the quality of student projects. Social media also facilitates the exchange of ideas, enhancing student engagement and fostering a more interactive learning environment. The analysis also reveals some challenges, particularly in terms of boosting confidence in presenting work and the variability in how students perceive the overall effectiveness

of social media in their learning. While social media is a powerful tool for fostering collaboration and providing access to resources, its benefits can vary depending on individual experiences and how frequently students engage with the platform. These insights emphasize the importance of considering both the advantages and limitations of social media when integrating it into project-based learning, ensuring it serves as an effective tool for creativity and student engagement.

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