


The Effect Of Digital Content Creativity, Innovation Climate, And Curriculum Flexibility On Pedagogical Innovation

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ABSTRACT

Penelitian ini bertujuan untuk mengakui peran kreativitas konten digital, lingkungan inovasi, dan kurikulum fleksibel sebagai faktor utama inovasi dalam pengajaran. Para penulis menunjukkan bahwa lembaga pendidikan sedang mengalami peningkatan kualitas pembelajaran yang didorong oleh teknologi, yang berarti bahwa hal-hal ini harus digunakan pada saat yang paling dibutuhkan dan tepat. Oleh karena itu, penelitian ini dirancang dengan pendekatan kuantitatif-eksploratif dengan 150 pendidik sebagai responden yang dipilih melalui teknik pengambilan sampel bertujuan. Data dikumpulkan melalui kuesioner skala Likert lima poin dan regresi linier berganda digunakan untuk analisis data. Para peneliti mengungkapkan bahwa selain tiga variabel independen, faktor-faktor lain juga memiliki pengaruh yang baik dan signifikan terhadap inovasi pengajaran. Dari sudut pandang teoretis, penelitian ini memperkaya literatur inovasi pendidikan yang ada dengan menggabungkan faktor-faktor kreativitas digital, iklim inovasi organisasi, dan fleksibilitas kurikulum. Temuan penelitian ini telah membimbing lembaga pendidikan tentang bagaimana meningkatkan langkah-langkah inovasi pedagogis mereka secara lebih efektif dengan mengandalkan kreativitas konten digital, membangun budaya inovasi, dan memiliki kurikulum yang fleksibel.

The research aims at making the role of digital content creativity, innovation environment, and flexible curriculum as the main factors of innovation in teaching to be recognized. The authors indicate that educational institutions are going through a tech-driven quality learning upgrade, which implies that these things have to be used in the most demanded and at the right time. Therefore, the study designed a quantitative-explanatory approach with 150 educators as respondents selected through the purposive sampling technique. Data was collected through a five-point Likert scale questionnaire and multiple linear regression was used for data analysis. The researchers revealed that besides the three independent variables, other factors also have a good and significant influence on teaching innovation. From a theoretical viewpoint, the research enriches the existing educational innovation literature by bringing together factors of digital creativity, organizational innovation climate, and curriculum flexibility. The findings of the study thus have guided educational institutions on how to increase their pedagogical innovation measures more effectively by relying on digital content creativity, building an innovation culture, and having a flexible curriculum.



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INTRODUCTION

Modern education systems, which are undergoing rapid transformations because of technology, social shifts, and the need for new skills in the digital and technological age, are in dire need of pedagogical change (Riyanti et al., 2023). When educators and educational institutions are regarded as 'pedagogical innovators', it means they can come up with and apply teaching techniques that are creative,

ups and downs, and learner-centered. The characteristics of a new generation consisting of digital, critical, and collaborative learners are demanding learning styles that are not only outside the box but also interactive (Safrida et al., 2023). Pedagogical innovation plays a crucial role in stimulating student participation, getting knowledge, and nurturing critical and creative thinking. The learning process without changes in pedagogy risks being stagnant and alienated from the actual needs of the workplace and society, hence this innovation is regarded as a significant foundation of quality education (Sadikin et al., 2023). Therefore, the educational institutions that will make pedagogical innovation a rule will be the most ready ones as far as dealing with global challenges and keeping education still relevant in the period of digital transformation.

The concept of "digital content creativity" encompasses the teacher's capability to produce and handle learning materials that are completely digital and cover the entire process spectrum at the same time (Riyanti & Rukiyanto, 2024). Among other things, this includes making multimedia-based materials, interactive videos, and digital simulations; and the creative application of online learning platforms. Some of the benefits of using digital content creatively are active student participation, making learning more enjoyable, and turning the learning experience into a more profound one. When thinking about new ways to teach, the digital content creativity can be pointed out as the primary reason for the development of new learning methods that are more contextual and flexible than the traditional ones (Aswadi & Lismayanti, 2019). This is why teachers who possess digital content creativity are usually more willing to try out new methods and the use of more experimental pedagogical approaches. An innovative environment is an excellent place for the sharing of ideas and collective learning, which in turn, boosts the institution's innovation capacity. On the other hand, a stiff and unsupportive environment may stifle the imagination of the educators and consequently the progress of the pedagogical innovation (Kamaruddin et al., 2023). Thus, the climate of innovation constitutes the organizational context that sets the pace of the growth and sustainability of pedagogical innovation. The innovation climate development is an important condition for the successful application of the pedagogical innovations in the educational institutions (Kushariyati et al., 2024). Curriculum flexibility is a term used to indicate how much the curriculum can be modified with respect to content, methods, and learning modes to accommodate the students and the learning environment (Gusliana et al., 2024). The flexible curriculum permits the instructor to change the materials, select the most suitable learning styles, and bring in the innovations in teaching in a way that fits the context. Curriculum flexibility gives the teachers the opportunity to use project-based learning methods, work closely with the students, and apply the digital technology without being restricted to a fixed course structure (Hanayanti et al., 2025). On the other hand, it is through curriculum flexibility that teachers' innovations are mostly obtained hence, introducing new practices and techniques (Lahiya et al., 2025; Wahdiniawati et al., 2023).

The main aim of this research is to investigate the role of digital content creativity, innovation climate, and curriculum flexibility in pedagogical innovation. One of the major theoretical contributions of the study will be to merge the existing literature in educational management and learning innovation by looking at digital ease, organizational climate, and curriculum design from different angles. A conceptual model illustrating the factors of pedagogical innovation in a modern educational setting will also be the result of this study. The researchers see the outcomes of this study as giving a point of reference to both the managers and educators in the educational institutions on the strategies they should be implementing in order to promote pedagogical innovation. The research findings are expected to influence the policy related to the management of digital content creativity, innovation climate, and flexible curriculum. As a result, this research is a strategic guide towards enhancing the quality of learning and the sustainability of educational innovations.

METHOD

The digital content creativity, the innovation climate, and the curriculum flexibility were together as factors influencing the teaching innovations under qualitative and quantitative explanatory research approach. The methodology of the survey graciously provided the teachers working at the formal education institutions with the chance to share their views through a pre-designed 5-point Likert scale questionnaire. One specific method in sampling was applied for the selection of the sample, and the respondents were required to meet the following conditions: (1) being current teachers who are directly involved in the learning process, (2) having not less than one-year teaching experience, (3) digital

content being part of the learning activities, and (4) the institutions have policies for innovation development or curriculum flexibility. There were 150 respondents who were answered to the questionnaires, and this amount of sample was determined as sufficient for the multiple linear regression analysis application. The tools were validated in the study via item-total correlation returning a coefficient of > 0.30 with significance < 0.05 , while their reliability was measured by Cronbach's Alpha indicating a value of > 0.70 . Then the classical assumption tests of the data were performed which contained normality tests (Kolmogorov-Smirnov), multicollinearity tests (VIF values < 10 and tolerance > 0.10), and heteroscedasticity tests (Glejser test) to verify the model. The main analysis was implemented through the use of multiple linear regression, substantiated by the SPSS statistical software, thus ensuring a high level of accuracy and scientific validity for the research findings regarding both distance and time.

RESULT AND DISCUSSION

The outcomes of the F-test point towards the utilization of the regression model in the current research being equally important, with a p-value of 0.000, which is substantially lower than the significance level of 0.05. Hence, the factors of digital content creativity, innovation climate, and curriculum flexibility have a significant impact on the pedagogical innovation, working together. The R^2 value of 0.70 represents that the three independent variables of the model have accounted for 70% of the variation in pedagogical innovations, while the remaining 30% is due to the factors not covered in this study. The results of the t-test show that each independent variable has a positive and significant regression coefficient at a significance level of < 0.05 . Therefore, all the research hypotheses are confirmed, and the research model is very powerful in predicting and explaining the concept of pedagogical innovation.

The study has indicated that the inventiveness of digital content significantly and positively impacts pedagogical innovation. To put it another way, the educators' ability to create digital learning content which is highly creative is a prerequisite for the occurrence of pedagogical innovation; thus, it is a crucial factor. The digital content that is unusual, engaging and pertinent can elevate the standard of learners' education regardless of the learning techniques they apply. Digital Content Creators who are highly imaginative are likely to be more adventurous in experimenting with different teaching styles. Moreover, creating digital content gives rise to the proper technology integration in the classroom where technology is not only a supporting tool but a key component of the pedagogical design. This indicates that using technology with creativity expands the area of teacher's innovation in making the learning experience attractive and relevant. However, when the digital content creator is restricted in creativity, the opposite effect is produced, namely less progressive pedagogical practices and consequently a tedious learning process. Therefore, it is reasonable to invest in the educators' capability of producing creative digital content as it is one of the most powerful means of driving pedagogical innovation.

The results of the study indicate that the innovation climate factor was the most important factor in the teaching innovation process. Educational institution's creativity, collaboration, and experimenting had developed into the main driving force of teachers' acceptance of the new learning styles. In this case, the teachers are able to feel that they could experiment with new teaching methods and that they do not have to worry about making mistakes. The support of the managers, their openness to new ideas, and teamwork among the colleagues are the factors that increase the inventiveness of the teachers. The result suggests that the teaching innovations do not merely depend on the individual teachers' abilities but the organizational context is also a powerful factor. The more the organization has a good innovation climate the harder and the shorter the adoption of new ideas. On the contrary, a controlling and non-affirmative atmosphere can kill the idea and restrict the area of pedagogical innovation. Hence, the establishment of an innovation climate is a crucial factor in the support of pedagogical innovation in schools.

The outcomes of the study indicate that the training of the present curriculum has been a major factor in causing the development of new teaching methods. The teachers' discretion in determining the students' needs and the most suitable way of delivering it according to the features of the learning space is what the curriculum flexibility involves. The teachers are allowed to use modern teaching methods such as project-based learning, peer learning, and digital technology effectively in the classroom with a flexible curriculum. The research findings indicate that the change in the curriculum gives the teachers the freedom to be more creative and to apply different teaching styles. On the other hand, very strict

curricula might result in the suppression and hindrance of pedagogical innovations. In addition, flexibility in the curriculum allows for continuous adaptation to the students' needs as well as to the demands of future skills. Thus, curriculum flexibility remains the most important structural factor in educational institutions that continuously support the existence of pedagogical innovation.

CONCLUSION

The current research clearly demonstrates that the new teaching methods are positively and significantly boosted through the digital content creativity, innovation climate, and curriculum flexibility. The inference derived from the results is that educational innovation is a combination of a proficient teacher's personal traits along with a supportive organization and a flexible curriculum. Digital content creativity is an integral part that not only makes learning easier but also engages the students through the technologically creative approach. A favorable innovation environment encourages teachers to try out and slowly take in new teaching methods and thus it becomes a routine practice. However, the flexible aspect of the curriculum allows teachers to change their teaching styles according to students' needs and the educational environment changes. To sum up, these three elements act as major factors in the pedagogical innovation process, thus stressing the importance of a system-wide approach in the area of educational innovation. The investigation advocates that schools and other educational institutions should provide ongoing training and mentoring for teachers as a means to upgrade their skills in producing creative digital learning content. The management in education should be the one creating a favorable atmosphere for innovation by promoting teamwork, acknowledging new ideas, and being tolerant of the mistakes made during the process of pedagogical innovation. Moreover, it is anticipated that the curriculum supervisors will slowly allow for curriculum flexibility along with maintaining educational quality standards. Such policies that provide teachers with the autonomy to modify the learning approaches and resources will consequently lead to more contextualized and adaptive pedagogical innovations.

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