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Innovative Education and Family Businesses: The Key to Adaptability and Reducing School Dropout Rates

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Abstract. *This study explores the impact of innovative and digital methods on students' motivation and engagement in the learning process of economic subjects, using a quasi-experimental research design (AB). The participants were students from a technical high school, and the research was conducted in two stages: traditional teaching and digital teaching. The results show that there is a high level of students' motivation and engagement during the digital-based stage of the study, and how it is important to satisfy the needs for autonomy, competence, and relatedness to induce intrinsic motivation. Besides its educational implications, this study also establishes a link between new approaches used in education and those used in small family businesses. Just as modern technologies help to create experiential and authentic learning in the classroom, digitalization and the implementation of technological innovations are necessary for family businesses to remain adaptable and growing. The application of online media, digital tools for managing resources, and innovative marketing can enhance team work and interaction with customers. In education, digital tools help students better grasp economic principles, the same way as family businesses leverage technology to improve performance and support growth. Innovation integration fostles both educational success in the form of reducing school dropout rates and the robustness of small businesses. The findings of this study emphasise the significance of using innovative approaches in improving the experiences of participants whether they are students or entrepreneurs. Therefore, economic education and family businesses can both enhance their levels of participation, cooperation, and flexibility through the use of current and individualized strategies.The results highlight the importance of innovation as a pillar of progress and success in both fields.*

Keywords: Innovative Education, Digital Technologies, Family Businesses, Intrinsic Motivation, Adaptability, School Dropout.

Introduction

The access to education, technology and new ways of teaching are very beneficial for the students and better for the results; however, the traditional way of teaching does not motivate the students properly and often results in high dropout rates in technical high schools. This could be an answer to these challenges through the active involvement and integration of the learners in the use of digital technologies. The aim of this study was to explore the impacts of the new digital teaching methods on learners' motivation and participation in the economic courses. The study employed a quasi-experimental AB design where two stages were analyzed; the first stage was traditional teaching with no technology as the control and the second stage was digital learning as the treatment. It was established that students' motivation and participation was better in the digital based learning environment as compared to the traditional one. The theory of self-determination

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(Ryan, R. M., & Deci, E. L., 2000) postulates that students' motivational needs for autonomy, competence, and relatedness must be met.

Beside the educational purpose, this study suggests a transition from using digital revolution in teaching to transforming family businesses. Just as the use of technology enhances learning processes and makes them more exciting and effective, the small family businesses also gain from the digital transformation that enhances their capacity to adapt, compete and sustain growth. Family businesses can also improve their resource management, customer relations and marketing strategies to make them more digital to enhance their competitiveness and resilience. This integrated approach highlights the role of digital revolution in learning and business. Pedagogical strategies that embrace the current pedagogical practices to make learning active and practical prepare students to excel in class and in the society including business and professions. This study also focuses on the positive impact of digitalization on motivation, engagement, and learning, which in turn leads to better educational performance and economic growth.

Literature review

The issue of school dropout and the digital transformation of small family businesses have been extensively studied in recent years, particularly in the context of technological advancements and socio-economic changes. This section examines the existing literature on innovative and digital methods for reducing school dropout and their application in the development of small family businesses. Recent studies emphasize the effectiveness of using technology in education. Researchers show that a better understanding of some abstract concepts, such as economics, can be grasped through multimedia resources (Ruth Colvin Clark, Richard E. Mayer, Will Thalheimer, 2007). Moreover, the feedback given in digital systems like Kahoot or World wall, which is instant, enhances students' performance and aids in self-regulated learning (Hattie, J., & Timperley, H., 2007). Moreover, these studies suggest that, experiential learning itself focuses on aiding the bridging of gaps between the theory and the practical aspects of a classroom setting inclusive of hands-on learning (Kolb, 2015)which considerably lowers the rate of school dropouts as students feel engaged and motivated towards their studies. In this direction and with the use of application of experiential learning processes, students are positively impacted as they understand the significance of education beyond the classrooms and even acquire relevant skills that are essential in meeting daily challenges. In addition, active learning promotes the social and emotional aspects of the learner such as collaborative arms, critical and problem solving in a rapidly changing environment (Kolb, 2015).

Research has also focused on the application of artificial intelligence (AI) and big data in dropout prevention. In its 2022 report, the International Telecommunication Union(ITU, 2022)considered the use of predictive models developed with the help of artificial intelligence to identify students at risk of leaving school and the interventions that can be made. These findings are in line with those of the Organization for Economic Co-operation and Development (OECD) (OECD, 2021) which indicated that AI systems are capable of proactively identifying and solving student educational gaps that may lead to dropping out.Small family businesses play an important role in the world economy and represent a significant percentage of the labor market(Poza, 2013).As education is progressing, the digital revolution of micro family businesses has become one of the most important areas of research.

The study established that the high-tech and economically agile companies are likely to embrace AI which enhances their flexibility and productivity.In the book "Entrepreneurial Family Businesses – Innovation, Governance, and Succession"(Veland Ramadani Esra Memili Ramo

Palalić Erick P. C. Chang, 2020), researchers analyzed the fundamental aspects of family businesses, focusing on three pillars: innovation, governance and succession. New generations can bring modern ideas, new visions, contributing to the implementation of innovative technologies and processes that allow family businesses to adapt and thrive in the long term (Dyer, 2019).

MIT Sloan School of Management (Baskin, 2023) elaborated on these findings in a study that presented a strategic map for family businesses that are digitizing. The study outlined some of the key elements of the strategic map, which included articulating a digital thesis, encouraging innovation culture, and ensuring that digital initiatives are consistent with the company's long-term plans. (Bornhausen, A.M., Wulf, T., 2024) added to this analysis by exploring the part played by non-family managers in fostering digital innovation, arguing that their presence minimizes family business conflicts and enhances decision making on technology adoption.

These findings were further supported by (Pasquale Del Vecchio, Giustina Secundo, Antonello Garzoni, 2024) which explored how digital transformation can enhance the robustness of family businesses. The study discovered that companies incorporating digital tools into their business models experienced improvements in financial performance, customer engagement, and market adaptability.

COVID-19 Pandemic

The Inter-American Development Bank (Gomez, 2021) underscored the effectiveness of technology in remediating school dropout, stressing that very little investment in technology translates into high returns in student participation and achievement.The pandemic de COVID-19 hastened the incorporation of digital technologies in education through an imposition of a shift from face-to-face instruction to virtual mode of instruction within a very short period.

This shift showcased the necessary aid and attention that needs to be employed in innovative and digital, with regards to engagement, in learning contexts to curb school dropout.Studies show that interactive platforms, such as Google Classroom, Zoom, and Kahoot, became essential tools for teaching and learning during the pandemic (Dhawan, 2020).The pandemic also demonstrated that traditional teaching methods need to be adapted in a flexible and innovative way to meet the current needs of students. Similarly, small family businesses, being exposed to vulnerabilities and risks, managed to successfully adapt by adopting significant innovations in their products, services, and internal processes, implementing resilience plans and becoming models of success (Sabel, 2021).The research carried out by (Nadine Kammerlander, 2015)have shown that, in certain situations, family businesses are growing and actually represent many of the most innovative firms in the world, more so than non-family businesses, due to their flexibility and ability to react quickly in times of crisis.

At first glance, preventing school dropout and the digital transformation of family businesses appear to be two separate research areas. However, both have overarching issues of strategic digital marketing and innovation. Both areas place an emphasis on the role of technology in solving complex issues, whether it is retaining students in school or maintaining business viability in the family business. In the Inter-American Development Bank (Gomez, 2021) show that with new technologies, skills are required digitally and in particular, long-lasting growth is placed in education and business as a priority.

Moreover, the Organization for Economic Co-operation and Development (OECD, 2021) outline that Artificial intelligence and big data are crucial for forming accurate foresight-based decisions and they indicate that there is a need for educational and family business institutions to

adopt digital solutions. This is an example illustrating modern approaches to understanding the role of digitalization as an integrative development tool for various fields of activity.

Methodology

Through action research, the purpose of this study is to explore the students' motivation and participation in economic subjects with the help of technology and new teaching methods. The study employs a quasi-experimental design based on the AB scheme. The researcher wants to understand the motivation and engagement of the students at different times during the learning process; one time with traditional teaching and the other time with innovative digital methods. The following describes the selection of the sample, the implementation process, the measured parameters, and the instrumentation used for the research.

This research sample consisted of one focus group of 121 high school students, ages 14 to 19. The group of students was divided into one study group, and the focus group was researched in two different times of learning:

Phase I: Traditional teaching – In this phase, students learned from a teacher who gave lessons without the use of modern technologies, and face-to-face methods and textbooks were the only resources available.

Phase II: Teaching with the help of digital technologies – In this phase, the teacher was able to use modern teaching technologies such as online educational platforms, interactive applications, educational games and simulations.

At the end of each learning phase, a questionnaire was distributed to evaluate students' motivation, and the motivation was assessed before and after the implementation of modern technologies. The questionnaire was developed for the purpose of the study and was based on Self-Determination Theory by (Ryan, R. M., & Deci, E. L., 2000) to understand the effect of students' autonomy, competence and relatedness need satisfaction on their intrinsic motivation.

Studied Variables

The research includes the following variables that were identified and measured:

a. Motivation of the students: This was the main dependent variable and was measured using a self-administered questionnaire at the end of each learning phase. Learning motivation was defined in two aspects: intrinsic motivation (learning for the sake of learning itself) and extrinsic motivation (readiness to receive external rewards).

b. Type of teaching method: This was the independent variable which was further divided into two groups: traditional teaching and digital technology enabled teaching. The purpose of this variable was to examine the impact of different teaching methods on students' motivation.

c. Engagement: This was measured by observing students' in-class participation and activity as well as their participation in online activities.

d. Autonomy, competence, and relatedness: These three basic nutrients are required to motivate intrinsic motivation as postulated by Self-Determination Theory (SDT) as proposed by (Ryan, R. M., & Deci, E. L., 2000). The study aimed to determine the extent to which these needs were met by the teaching methods employed in each phase.

The data were entered into the SPSS software for statistical analysis, including calculations and graph generation. Both questionnaires were entered, analyzed, and interpreted using this software.

Data Collection Instruments

To collect data, the study employed two distinct questionnaires, each administered at the end of the two research phases, aimed at evaluating the students' level of motivation. The instruments were designed to align with the objectives of the research and to enable a clear comparison between traditional and innovative teaching methods. The questionnaires were developed based on the Self-Determination Theory (Ryan, R. M., & Deci, E. L., 2000), which emphasizes the importance of meeting the needs for autonomy, competence, and relatedness in enhancing intrinsic motivation. Each questionnaire consisted of 31 questions, carefully designed to assess various dimensions of motivation and engagement in the learning process.

The initial questionnaire attempts to assess the self-reported motivation of students during this phase regarding level of effort made in study activities and the satisfaction derived from the traditional forms of teaching. The motivational levels addressed comprised intrinsic motivation (such as curiosity about the subjects), extrinsic motivation (such as a focus on grades and rewards), and non-motivation (lack of interest). Each question in the questionnaire used a Likert scale of 1 (strongly disagree) to 5 (strongly agree).

In Phase II – which included teaching with the use of modern digital technologies, the second questionnaire was given out. In this phase, online portals with educational materials, interactive applications for knowledge control, educational games, reality-based simulations, and even online group work for students were used. There were 31 questions in the questionnaire, which were framed the same way as the questions in Phase I. These particular areas were the impact of digital technology on intrinsic motivation, enjoyment of learning through technology, construction of autonomy in learning, self-control over one's learning pace, and active digital engagement while productive skill development.

Results and discussions

A comparative analysis of student motivation based on teaching methods—traditional versus modern—highlights significant differences in their perception and engagement in the educational process. Based on the two applied questionnaires, the first referring to traditional methods and the second to innovative and digital methods, we conducted a detailed statistical evaluation to understand the impact of each approach on students.

An analysis of central tendencies indicates that, in the case of traditional teaching, the average responses range between 4.0 and 4.4, while for modern methods, they vary between 3.8 and 4.6. Although at first glance traditional methods appear to have a higher average, it is important to note that in this context, higher values reflect negative perceptions, as the questions were formulated so that a higher score indicates a lack of engagement and demotivation. In the case of modern methods, the higher average reflects a positive impact on student motivation. The median, which is 5 in both questionnaires, shows that most students had similar opinions for each teaching method; however, the significance of the responses differs. The standard deviation, ranging between 1.0 and 1.6 for traditional methods and between 0.9 and 1.4 for modern methods, suggests greater variability in responses for traditional teaching. This could indicate a more uneven experience among students, whereas, in modern teaching, responses closer to the mean suggest a broader consensus on the benefits of this approach.

Comparing the most significant responses from each questionnaire, the results show a clear difference between the two methods.

Table 1. Comparison of Student Motivation in Traditional vs. Digital Teaching

Q12 I am more motivated to be actively involved in class.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.8	.8	.8
	3	17	14.0	14.0	14.9
	4	26	21.5	21.5	36.4
	5	77	63.6	63.6	100.0
	Total	121	100.0	100.0	

Source**:** Data collected from conducted surveys**.**

For example, regarding the statement about classroom engagement in the case of lessons conducted using innovative and digital methods, "I am more motivated to actively participate in class," a total of 77 students out of 121 respondents, representing 63.6% of all respondents, stated that they are in total agreement.

Figure 1. Distribution of Responses on Motivation in Digital Teaching

Source**:** Data collected from conducted surveys.

In the case of traditional teaching, regarding the statement "I am not motivated to actively participate in traditional classes", a total of 71 students out of the 121 participants in the study stated that they are in total agreement, highlighting that traditional teaching does not motivate them to actively engage in learning.

Table 2. Student Engagement Levels Based on Teaching Method

Q11 I am not motivated to be actively involved in traditional classes.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	9.1	9.1	9.1
	2	13	10.7	10.7	19.8
	3	10	8.3	8.3	28.1
	4	16	13.2	13.2	41.3
	5	71	58.7	58.7	100.0
	Total	121	100.0	100.0	

Source**:** Data collected from conducted surveys.

By comparison, a significant difference can be observed in the level of student motivation for active participation in class, depending on the teaching method. For lessons conducted using innovative and digital methods, 63.6% of students (77 out of 121) declared that they feel very motivated to actively participate in classes. In contrast, for traditional teaching, 71 students from the same group (approximately 58.7%) stated that they are not motivated to actively engage, considering this statement total agreement.

These results highlight that innovative and digital methods are much more effective in stimulating students' active engagement, while traditional teaching seems to have a negative impact on their motivation. The difference in perception emphasizes the need to adopt modern methods that better capture students' interest and encourage their involvement.

At the same time, it can be observed that the perception of preparation for the future has increased. In response to the statement, "I feel that traditional teaching does not contribute enough to prepare me for the future," a total of 74 out of the 121 respondents, representing 61.2%, stated that they strongly agree with the fact that traditional teaching does not sufficiently contribute to their preparation for the future.

Table 3. Correlations between Teaching Methods and Perceived Future Readiness

Q29 I feel that traditional teaching does not contribute enough to prepare me for the future.					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	1	6	5.0	5.0	5.0
	2	6	5.0	5.0	9.9
	3	11	9.1	9.1	19.0
	4	24	19.8	19.8	38.8
	5	74	61.2	61.2	100.0
	Total	121	100.0	100.0	

Source**:** Data collected from conducted surveys.

Table 4. Impact of Modern Methods on the Tendency to Drop Out of School

Q31 I feel that modern teaching contributes significantly to my future preparation

		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	2	1	.8	.8	.8
	3	6	5.0	5.0	5.8
	4	33	27.3	27.3	33.1
	5	81	66.9	66.9	100.0
	Total	121	100.0	100.0	

Source**:** Data collected from conducted surveys.

Similarly, in the case of the questionnaire applied in Phase II, in response to the statement, "I feel that traditional teaching does not sufficiently contribute to my preparation for the future," a total of 81 students out of the 121 respondents, representing 66.9% of all respondents, stated that they strongly agree with this statement, thus highlighting the importance of using digital technology in teaching.

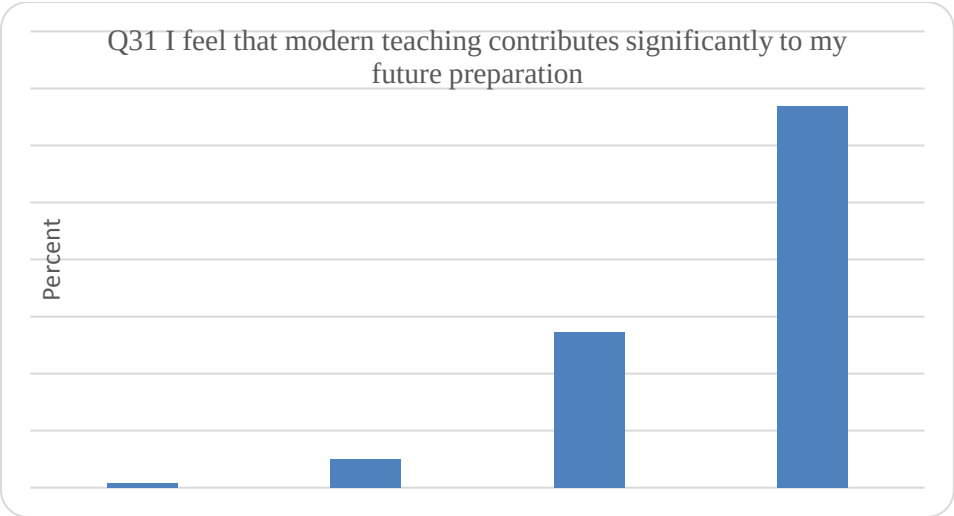

Figure 2. Distribution of Responses on Lack of Motivation in Traditional Teaching

Source**:** Data collected from conducted surveys.

Tabel5.Comparison of perceived contribution of traditional vs. modern teaching to future readiness

Q32 I feel that modern methods help me combat the tendency to drop out of school by increasing my motivation for education.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.8	.8	.8
	2	1	.8	.8	1.7
	3	10	8.3	8.3	9.9
	4	24	19.8	19.8	29.8
	5	85	70.2	70.2	100.0
	Total	121	100.0	100.0	

Source**:** Data collected from conducted surveys.

The results in the table are the responses to the statement: “I think that with the help of the modern methods it is easier for me to fight the tendency of dropping out of school due to low interest in education.” The responses are most likely based on a Likert scale from 1 to 5, where 1 is “Strongly Disagree” and 5 is “Strongly Agree”.

One person (0.8%) chose 1 and another person (0.8%) chose 2, meaning they strongly and moderately disagree respectively. Eight people (6.6%) gave a neutral response and chose 3. About 24 participants (19.8%) chose 4 which means they agree with the statement. About 85 people (70.2%) chose 5, which shows that they have a high level of agreement with the statement.

When looking at the overall trends it can be seen that almost 90% of the respondents agreed that modern methods assist them in staying motivated and not dropping out of school. Only a few respondents had comments that were contrary to the statement or open-ended. These results show that the modern educational methods are considered to have a positive effect on students’ motivation.

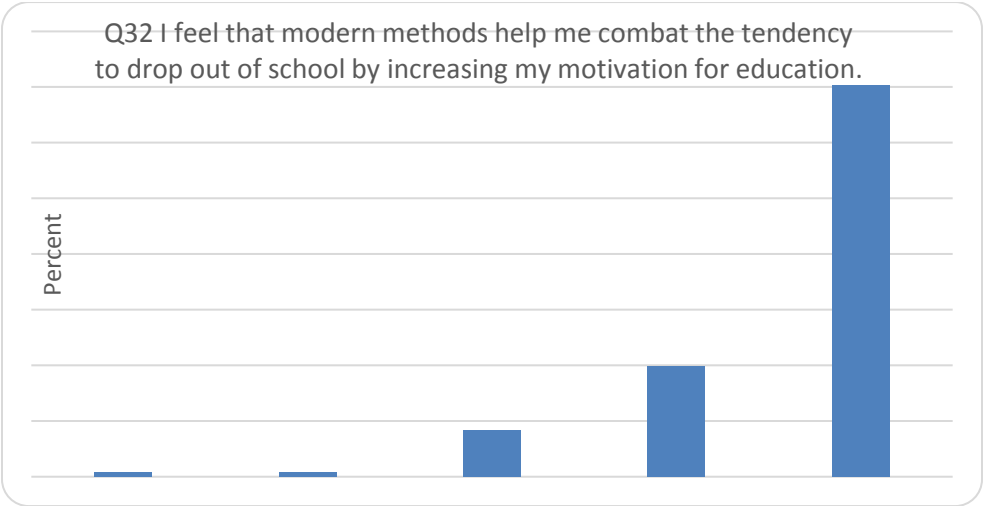

Figure 3. **Statistical Correlations between Teaching Methods and Student Motivation**
Source**:** Data collected from conducted surveys.

An analysis of correlations between variables in each questionnaire confirms this trend. In the case of traditional methods, strong correlations were found between low participation and future job readiness ($r = 0.87$), low motivation towards homework and the perception of being a spectator in class ($r = 0.85$), as well as between passive learning and low levels of participation ($r = 0.86$). These relationships show that traditional methods are related to a general lack of motivation which can lead to poor academic achievement and dropping out of school. In contrast, for modern methods, correlations are positive: Extrinsic and intrinsic motivation are positively related with high levels of participation ($r = 0.88$), the use of technology in learning is linked with the perception of being prepared for the future ($r = 0.85$), and increased levels of classroom interaction are related to higher levels of homework motivation ($r = 0.83$). These correlations indicate that modern methods do not only make the students interested in the subject but also make the learning process more active.

These outcomes have important implications for dropout rates. Disengagement and the perception that schooling is not important are some of the reasons why students leave school, particularly in the poor areas. Survey data collected from students in relation to traditional approaches shows that a large number of students may be bored in class and believe that school does not prepare them for future challenges and thus are likely to drop out of school. On the other hand, modern methods that aim at increasing participation and linking theory with practice may enhance student retention rate through making the students to feel that they are being recognized and that school is worthwhile.

The p-values obtained from the independent samples t-test show that the differences between the two questionnaires are highly significant ($p < 0.0001$). This evidence supports the hypothesis that students viewed the modern way of teaching in a more favorable light than the traditional way because they thought it was more applicable, participative, and fun. In this investigation, all of them turned out to be very low ($p < 0.0001$). These results clearly show that there are clear and important differences in the perception of traditional and contemporary pedagogical models.

These results show that students are more inclined toward the modern teaching methods. They reported higher levels of interactivity, the use of technology and active participation in the

learning process. The observed differences are not random but reflect a real and relevant shift in students' preferences towards the modern educational methods.

This shift is necessary not only for enhancing the educational process but also for combating school dropout. Thus, using new techniques and technologies, students' engagement in learning is enhanced, and the lessons become more relevant and meaningful to them. Research proves that conventional and uninterested ways of teaching lead to students' apathy, pessimism, and even dropping out of school. Therefore, the implementation of educational technologies and practices can directly influence the retention rates and ensure that students are well-equipped for the world of work.

Also, the necessity to develop digital and entrepreneurial skills from the primary school level is important for future small business owners and would-be entrepreneurs. Technology enables process automation, communication with customers and increased market presence, which are vital for the growth of small businesses. Such education from modern methods may help in developing a pool of young entrepreneurs who are ready to venture into business and embrace innovation and digitalization. Therefore, implementation of new technologies and approaches helps to make the learning process not only more productive, but also contribute to the creation of a sustainable economy. Future small business owners must be creative and flexible in their approach to the use of technology in order to survive in the current business environment. The system has to address such issues by providing students with theoretical and practical skills that are relevant to the current workplace. Therefore, the results of this analysis support the need for change in the teaching methods not only for the sake of learning but also to fight against school dropout, support small businesses and prepare young people for the digital economy.

These changes have a great impact on the rates of school dropout. Another of the major reasons that make students leave school especially in the poor areas is disinterest and the perception that schooling is useless. Based on the survey conducted using questionnaires, traditional approaches, passive lessons, and students who are passively learning in class may contribute to a large extent to students who believe that school does not and will not reward them in the future and are likely to drop out of school. On the other hand, modern methods that are more active and apply theory into practice can help decrease the rates of students leaving the system as they give the students a feeling of being needed and the education being useful.

These results are significant in that they indicate that students viewed the modern way of teaching in a better light than the traditional one because they considered it to be more applicable, participative, and fun. All of them were very low in this investigation ($p < 0.0001$). These results strongly suggest that there are prominent and significant differences in the perception of traditional and contemporary teaching models. These results show that students are more willing to use the modern teaching methods than the traditional one. They reported higher levels of interactivity, the use of technology, and active learning in the process. The observed differences are not random but reflect a real and relevant shift in students' preferences towards the modern educational technologies.

This shift is important not only to enhance the learning process but also to combat school dropout. Thus, using new techniques and technologies, students' engagement in learning is enhanced, and the lessons become more interesting and relevant to them. Hence, this research found that rigid and non-interactive teaching strategies help in student disengagement, hopelessness, and even dropping out of school. Therefore, the use of educational technologies and practices may directly affect the retention rates and ensure that students are ready for the workplace.

In addition, the need to develop digital and entrepreneurial skills from the primary school level is crucial for future small family businesses and budding entrepreneurs. Technology also helps in process automation, communication with customers and increased market presence, which are crucial for small businesses. Such education from modern methods could help build generations of young entrepreneurs who are ready to embrace innovation and digitalization in business. Thus, applying modern technologies and working methods makes the learning process not only more effective, but also contributes to the creation of a sustainable economy. The future small business owners must be innovative and flexible in their approach towards the use of technology to remain competitive. The system has to address such issues by providing students with theoretical and practical skills appropriate for a dynamic job market. Therefore, the results of this analysis support the need for change in the teaching methods, not only for their educational values but also to fight against school dropout, support small businesses and prepare young people for the digital economy.

Another important dimension of this analysis is the link between education and the local economy, particularly in the context of small family businesses. In communities where these businesses represent the primary source of income, young people who do not feel motivated by school often choose to drop out to work alongside their families. This phenomenon is exacerbated by traditional methods, which do not provide students with applicable skills for the real world. In contrast, modern methods, which include the use of technology, the development of critical thinking, and project-based learning, can equip young people with relevant skills for managing and developing a business. Thus, integrating innovative methods in education can not only reduce school dropout rates but also support the local economy by preparing future entrepreneurs more effectively.

In conclusion, the comparative analysis of the two questionnaires highlights the clear advantages of modern teaching methods. These methods improve student engagement, reduce factors contributing to demotivation, and create a more attractive and efficient learning environment. Furthermore, correlations between variables suggest that innovative methods contribute not only to academic success but also to the development of essential skills for the future. Therefore, integrating these methods into the educational system could have long-term benefits, both for school performance and the local economy, providing young people with better opportunities to reach their full potential.

Limitations of the research include the small sample size of 121 students, which restricts the generalizability of the findings. The short duration (one module) of the intervention may have influenced the outcomes, as it might not have been sufficient to assess the long-term impact. Additionally, the accuracy of the results could be affected by the subjectivity of the students' responses to the questionnaire. Other external factors, such as the general stress levels of the students or changes in the school environment, may also have influenced the results.

Conclusion

In the context of innovative education and family businesses, the study highlighted a significant impact of digital methods on students' intrinsic motivation, considering the need for adaptability and reducing school dropout rates. Compared to traditional teaching methods, the use of digital technologies was associated with a substantial increase in student engagement in the educational process, which can positively impact their success in economic education.The study revealed that modern technologies facilitate experiential learning by providing students with the opportunity to apply economic concepts in a real and practical setting. For example, simulations, interactive educational platforms, and digital tools supported a deep understanding of economic subjects,

stimulating active engagement and the development of student autonomy. These results are consistent with Self-Determination Theory (Ryan, R. M., & Deci, E. L., 2000), which emphasizes the importance of satisfying students' fundamental needs—autonomy, competence, and relatedness—through the use of educational technologies.Students who used digital methods experienced increased autonomy in the learning process and perceived themselves as more competent in applying economic knowledge. This fostered greater motivation and a higher commitment to learning, thereby contributing to the reduction of school dropout risks. Furthermore, the integration of technologies in economic education was associated with increased collaboration among students. Digital environments facilitated authentic and collaborative learning, where students were encouraged to solve problems in teams, promoting the development of social and cognitive skills necessary in a dynamic economic context.Therefore, the study underscores the importance of widespread implementation of innovative technologies in economic education, not only to enhance student motivation but also to support applied learning and the development of skills necessary for quick adaptability in the face of economic changes. In the context of family businesses, these methods can significantly contribute to the formation of a more prepared workforce capable of facing economic and social challenges.

The results of the study suggest that the long-term success of students can be supported by the integration of modern teaching methods and advanced educational technologies. Furthermore, it is essential for educational systems to adapt their methods and implement innovative solutions that reduce school dropout rates and support the training of a future generation capable of quickly integrating into business environments and contributing to economic development.

However, future research should focus on the long-term effects of using these methods, expanding across various educational environments, and examining the socio-cultural and economic variables that influence their effectiveness. Additionally, evaluating the continued impact on student motivation and performance throughout their entire education will be crucial to better understanding the benefits of these innovative technologies in economic education and family businesses.

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