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ORIGINAL

The innovative teaching strategies of educational soft skills cultivation affect students' performance and sense of efficiency

Las estrategias innovadoras de enseñanza de la educación de las habilidades blandas afectan el rendimiento de los estudiantes y el sentido de la eficiencia

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ABSTRACT

Introduction: organization and time management are critical soft skills in education, as learning is frequently arranged around test and assignment deadlines. Guiding students to use long-term projects with milestones and smaller goals can help them improve their planning abilities. The Lack of self-confidence, fear of making errors, fear of being mocked, and lack of faith in own expertise or talents. This study is intended to identify how the instruction tactics for educational soft skills cultivation affect students' performance.
Method: a total of 120 students were collected for this study. The data were split into two groups such as Group A and Group B, respectively. Interaction, flipping the classroom, decision-making, cooperation, engagement in professional work, and collaborative learning are all strategies of educational soft skills that are increasingly regarded as critical for success in dynamic work situations. The data were examined with SPSS software.
Result: the findings indicate while there was no discernible increase in Group B, students in Group A showed a considerable improvement in soft skills, which encompass all strategies.
Conclusion: the research reveals a positive association between academic achievement and the improvement of performance-related soft skills. The study emphasizes how crucial it is to include cutting-edge teaching techniques in the curriculum to help students develop critical soft skills.

Keywords: Students; Soft Skills; Performance; Strategies; Teaching.

RESUMEN

Introducción: la organización y la gestión del tiempo son habilidades blancríticas en la educación, ya que el aprendizaje se organiza con frecuencia en torno a los plazos de prueba y asignación. Guiar a los estudiantes a usar proyectos a largo plazo con hitos y metas más pequeñas puede ayudarles a mejorar sus habilidades de planificación. Falta de confianza en sí mismo, miedo a cometer errores, miedo a ser burlado y falta de fe en su propia experiencia o talentos. El objetivo de este estudio es determinar cómo las tácticas de instrucción para el cultivo de habilidades blandas afectan el desempeño de los estudiantes.
Método: se recogió un total de 120 estudiantes para este estudio. Los datos se dividieron en dos grupos como grupo A y grupo B, respectivamente. La interacción, voltear el aula, la toma de decisiones, la cooperación, la participación en el trabajo profesional, y el aprendizaje colaborativo son todas estrategias de habilidades blaneducativas que se consideran cada vez más como crítica para el éxito en situaciones de trabajo dinámicas. Los datos fueron examinados con el software SPSS.
Resultado: los hallazgos indican que aunque no hubo un aumento perceptible en el grupo B, los estudiantes

del grupo A mostraron una mejora considerable en las habilidades blandas, que abarcan todas las estrategias. Conclusión: la investigación revela una asociación positiva entre el rendimiento académico y la mejora de las habilidades blandas relacionadas con el desempeño. El estudio enfatiza lo crucial que es incluir técnicas de enseñanza de vanguardia en el plan de estudios para ayudar a los estudiantes a desarrollar habilidades blandas críticas.

Palabras clave: Estudiantes; Habilidades Blandas; Rendimiento; Estrategias; Enseñanza.

INTRODUCTION

Schools need to create a synergistic relationship between educators and the workplace to consistently increase student achievement and creativity. The idea is that, in the age of economic information, society needs creativity and adaptability to remain competitive.[1] The strategic expansion of educational institutions, particularly for instructors, will involve augmenting their knowledge reserves to provide greater opportunities for progress and innovation.[2] Teachers should be guided and involved in raising student achievement for educational institutions to remain competitive and adaptable. Teachers need to feel powerful. Schools could consequently materialize into true organizational learning.[3] Organizational learning views teachers as both tools of civilization and one of the primary components of school improvements.

With the swift changes of this industrial revolution, human resources must be competent, agile, flexible, and sensitive. Rapid changes in the social, political, technical, and economic spheres are affecting education.[4] To adjust to the ever-changing circumstances and settings, schools have to be adaptable to compete in the global human resources market, schools and other educational institutions need to maintain a good and supportive atmosphere.

The way that schools function as organizational learning spaces is crucial for educational establishments that function in rapidly changing and unpredictable situations.[5] Therefore, the ability to adapt quickly to change is a prerequisite for the formation of human resources and is expected of students who excel in and win international human resources competitions. A new symbol that represents the financial worth of a school will be created from intellectual capital, which is the collective knowledge of all teachers and the institution.[6]

Economic, social, political, and technical developments occur rapidly in the field of education. Universities must be adaptable to change with the times and the circumstances.[7] To compete and perform well in the global human resource market, higher learning, and other educational organizations require an atmosphere that keeps growing positively. The idea is an information-based economy, to thrive in a competitive environment emergent knowledge societies should be innovative and flexible.[8] Significant funding, continuing professional development, and training are necessary for the execution of such initiatives, and these are frequently not accessible in educational contexts. Due to the changing nature of classroom contexts and outside influences that could influence the durability of the gains in soft skills, evaluating the long-term efficacy and scalability of these techniques presents additional difficulties.

Examining the effects of hard skills, soft skills, organizational growth, and inventive capacity on the performance of university lecturers was a primary goal of the study.[9] Among other factors, soft skills have the most impact on lecturers' performance. It suggested a paradigm for raising university lecturers' performance through improved organizational learning, and hard, soft, and inventive skills. It could enhance instructors' readiness for the new age of learning 4.0.

As the primary educational trend and a crucial part of instructional training, and teachers' continual professional growth, article discussed soft skills.[10] To extrapolate the fundamental theoretical and methodological requirements for preparing a highly qualified professional, an expert in the ongoing learning system, and a professional education instructor with soft skills were defined.

Research investigated how Chinese foreign students and local students both saw project-based learning (PBL) contributions to the development of creative thinking.[11] Although they were in different classes, the participants enrolled in the same PBL program instructed by the same professors. It provided a five-stage PBL method for creative growth that could be customized for higher education courses and stressed the significance of cultural awareness in course creation and delivery for students from other nations.

Assessing the influence of both hard and soft skills on the originality of private college instructors in organizational culture was the primary goal of the study.[12] After controlling for corporate culture, the study's findings indicated that both hard and soft skills significantly and favorably affect lecturers' capacity for creativity. The study could prepare professors better for the 4.0 education age.

Through the use of organizational learning, study aimed to assess the relationship between teachers' creativity capacity and their performance as well as the impact of their hard and soft skills on that capacity.[13] Research indicated that both hard and soft skills have a good and considerable impact on teachers' capacity

for creativity, in both direct and indirect ways through organizational learning. Additionally, instructors' performance was positively and significantly impacted by their capacity for invention.

Study constructed an example of exceptional university students' professional module-based communication skills by examining students' communication-related soft skills and their ability to communicate throughout the technical section.[14] The Higher Learners Competent Model (HLCM) which was created by analyzing the data could enable pupils to enhance their soft skills, particularly their ability to communicate.

To determine the effects of the problem-based learning strategy supported by Web 2.0 technologies on the academic performance and critical thinking skills of teacher candidates.[15] The implementation process was used for the course on evaluation and assessment. The development of higher-level behaviors, according to teacher candidates, boosted their ability to learn and made them feel more prepared for the teaching profession.

The purpose of research was to establish a widely applicable e-learning paradigm with seven stages for professional and personal growth logically connected to a self-management method.[16] The idea that an individual was engaged in self-education and self-improvement processes according to the evolution influence of the educational environment was made feasible by its application to the understanding of the overall educational process.

Through the use of a quantum teaching model, a form of cooperative learning, study was focused on improving students' cooperative thinking abilities.[17] It was necessary to work on enhancing the collaborative thinking abilities of primary school students. The majority of elementary school students found it challenging to develop their abilities. It concludes that using the quantum teaching approach in education learning could assist students become more collaborative learners. The purpose of this study is to ascertain the effects of instructional strategies for cultivating soft skills in the classroom on students' performance.

METHOD

This study involved the collection of 120 students in total. Group A and Group B were created from the division of the data. Increasing numbers of individuals are realizing the need for educational soft skills including cooperation, interaction, flipping the classroom, decision-making, engagement in professional work, and collaborative learning for success in rapid work environments.

Contribution of this paper

- A total of 120 students were collected.
- Data were split into two groups Group A and Group B.
- The study highlights how important it is to incorporate innovative teaching methods into the curriculum to support students in acquiring essential soft skills.

Organization of this paper

The remaining study aspects could be classified into the following categories: We discuss more about the relevant work in section 2. Section 3 discusses the methods. The experimental results are presented in section 4. Section 5 discusses the conclusion.

Dataset

The English language assessment course was split into two classes. The participants in the study were all the language-testing students. The course has 120 students enrolled. One of the courses was designated as Group A and the other as Group B because this study used a quantitative technique. The Group A consisted of 57 students, whereas the Group B consisted of the remaining 63 students. The minimum attendance requirement imposed by the institution was 80 %. Students who failed to satisfy this condition were not included in the study, allowing 108 students to take the final test. As a result, there were 57 individuals in Group A and 51 in Group B.

Research instruments

In our research, we employed an online interview process to assess and select teachers for educating students in soft skills, focusing on interaction, decision-making, and cooperation. Each candidate was evaluated by a panel including a professor, who rated their proficiency using a Likert scale ranging from 1 to 5. A rating of "1" indicated poor and a rating of "5" indicated excellent proficiency. This technique enables to assessment and contrast of candidate's competencies in these crucial domains. After analyzing the interview scores, the teachers who were judged, as most capable of helping students develop their soft skills were identified and chosen, guaranteeing a thorough and well-informed selection process based on evaluations of teaching abilities.

Strategies of educational soft skills and their descriptions

Flipping the classroom

Flipping the classroom is the term used in education to describe the inversion of conventional teaching

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methods.[18] Students study the topic on their own time outside of the classroom, as opposed to learning new content in class and doing assignments at home. The rest of the class, which is directed by the teacher, is devoted to group projects, discussion, and knowledge application.

Engaged in professional work

Unavailable in professional work usually means actively taking part in duties related to one's career to be used as a professional using acquired soft skills like teamwork, interaction, and flexibility in a real-world or virtual workplace while discussing methods for improving educational soft skills.[18] Through realistic experience, analysis, and reflection, this interaction enables individuals to build an ideal, of these abilities eventually equipping them to successfully steer and achieve their selected professional pathway.

Interaction

Through the intentional section and processes, it aimed to enhance learning nontechnical, interpersonal skills and abilities using education soft skill initiatives. It included problem-solving skills, role-playing, cooperative learning, and reflective training.[19] A supportive learning environment must be established to implement these techniques. Soft skill training must be integrated into the curriculum, providing practice opportunities, and feedback.

Cooperation

To achieve a common goal when it comes to creating soft skills, cooperation is the ability to cooperate and work with others.[19] Overall, it encourages empathy, teamwork, and work involvement in group environments. When students learn to accept differences in perception, resolve problems, and extensive contributions to the group's objectives.

Collaborative learning

The relationship of the students in structured group activities with shared learning shows collaborative learning practice for the growth of educational soft skills.[20] This approach increases academic knowledge while preparing students for real-world situations where group effort and teamwork are crucial for achievement.

Decision making

Making decisions in educational soft skill development programs involves selecting options or actions that can support gaining abilities such as critical thinking, interaction, and teamwork.[21] Setting goals, acquiring pertinent data, evaluating possibilities, and drawing logical conclusions that support learning objectives are all necessary processes. Strategies for making decisions that provide the growth of soft skills usually place a high value on problem-solving, empathy, and adaptability. Students can manage complexity and contribute to their academic and social surroundings by using these techniques.

Regression analysis

Regression analysis could be used to statistically investigate the connection between one or more independent variables and a dependent variable. Regression analysis fits a mathematical model to the observed data to anticipate the dependent variable of the independent variables based on the values. It is extensively utilized in trend analysis, forecasting, and assessing predictor strength.

There are two types of tests used in the teaching strategies of educational soft skills.

t-test

This test determines if a predictor variable coefficient in a regression model deviates considerably from zero. It assists in establishing if a certain predictor affects the dependent variable in a way that is statistically significant.

F-test

By comparing the variation described by the model's predictors compared to the variance that cannot be explained, this test determines the overall significance of a regression model. It facilitates establishing the statistical significance of the regression model as a whole.

RESULTS

We evaluated the innovative teaching strategies of educational soft skills cultivation by using SPSS version 29.0. The findings indicate that Group A and Group B, show a considerable improvement in soft skills.

To ascertain the effects of many factors, a regression analysis was used (Flipping the classroom, cooperation, engaged in professional work, collaborative learning, decision making, and interaction) on an outcome variable

for Group A is shown in Table 1 and Figure 1. The results are summarized in the table that is offered. All the predictor variables, standard errors, p-values, and coefficient estimates (all<0,001) demonstrate a substantial influence for each variable. This significance shows that the variances in the outcome variable could be explained by the individual contributions of each other. To illustrate their significance in the context under investigation, the following strategies have positive effects on the outcome, flipping the classroom (coefficient estimate (CE) =0,530), decision making (CE=0,820), cooperation (CE=0,610), engaging in professional work (CE= 0,755), interaction (CE=0,675), and collaborative learning (CE=0,690). The influence of these abilities and procedures on the assessed outcome is highlighted by these findings.

Table 1. t-test for Group A

Variables	Coefficient estimate (CE)	t- value	Standard error	p-value	Interpretation
Interaction	0,675	4,500	0,150	< 0,001	Significant, predictor has a significant effect.
Flipping the classroom	0,530	4,417	0,120	< 0,001	
Decision making	0,820	7,455	0,110	< 0,001	
Cooperation	0,610	4,357	0,140	< 0,001	
Engaged in professional work	0,755	5,593	0,135	< 0,001	
Collaborative learning	0,690	5,520	0,125	< 0,001	

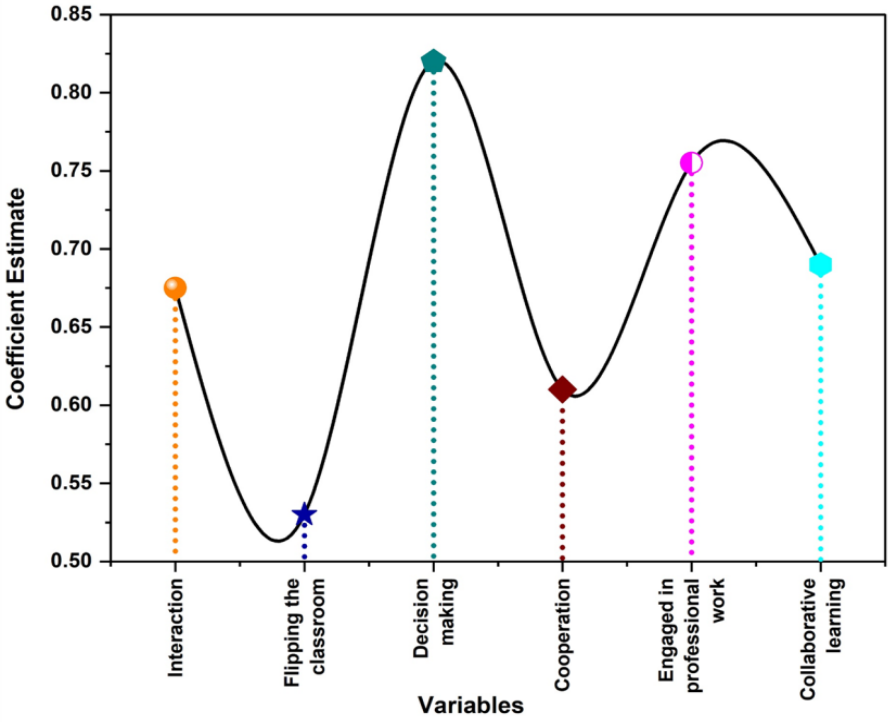

Figure 1. CE performance for Group A

The data for Group A is given in table 2, which demonstrates that the mean square (MS=130,083) and degrees of freedom (df =6) of the sum of squares (SS) assigned to the model (780,50) can be separated in the "Regression" row. When everything is considered, the regression model is statistically significant, as shown by the F-value (15,789) and matching P-value (< 0,001). The SS attributable to error (468,30) with (df =57) and MS= 8,214 is reflected in the "Residual/error" row. The remaining variability in the data after the regression model was successfully represented by this residual error.

Table 2. F- test for Group A

Source of variation	df	SS	MS	p-value	F- value
Regression	6	780,50	130,083	< 0,001	15,789
Residual/ error	57	468,30	8,214		

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All the predictor variables in this regression study show statistically significant effects on the outcome variable for Group B as shown in figure 2 and table 3. Interaction (CE= 0,425), cooperation (CE= 0,410), flipping the classroom (CE= 0,310), collaboration learning (CE= 0,450), engaged in professional work (CE= 0,495), decision making (CE= 0,520) are the impacts that are shown by the coefficient estimates, which also explain their direction and strength. The importance of each predictor is confirmed is confirmed by its standard error, t-value, and p-value (all<0,005). The result highlights the significance of these techniques and skills in the framework of the research by indicating that it has a positive impact on the outcome variable.

Table 3. t-test for Group B

Variables	Coefficient estimate (CE)	t- value	Standard error	p-value	Interpretation
Interaction	0,425	2,656	0,160	0,010	Significant, predictor has a significant effect.
Flipping the classroom	0,310	2,385	0,130	0,020	
Decision making	0,520	4,160	0,125	< 0,001	
Cooperation	0,410	2,733	0,150	0,008	
Engaged in professional work	0,495	3,414	0,145	0,001	
Collaborative learning	0,450	3,333	0,135	0,002	

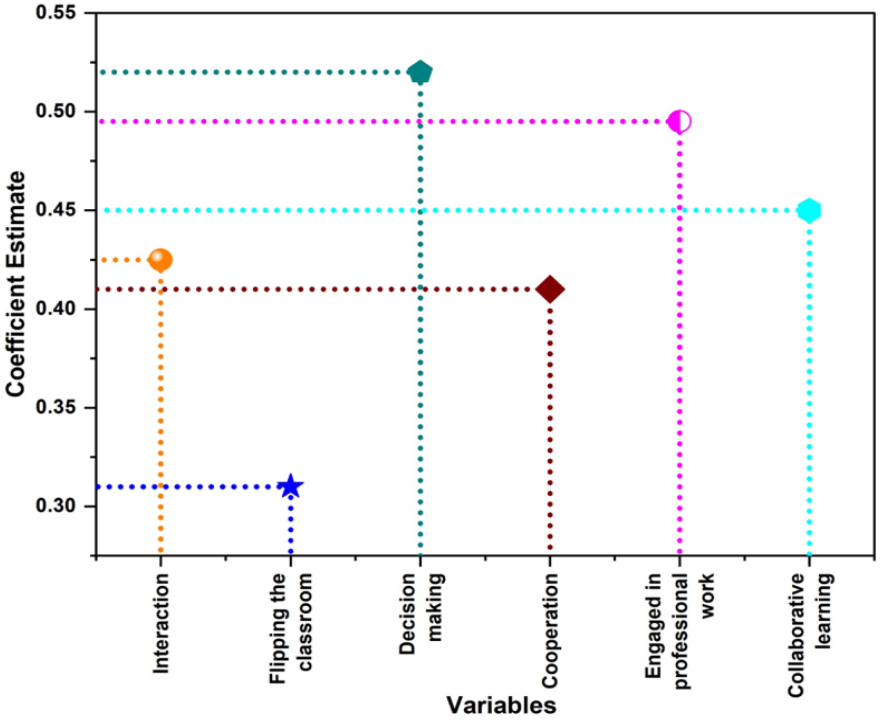

Figure 2. CE performance for Group B

The residual/error for SS= 457,80 attributable to unexplained variability in the data after the regression model was successfully taken into account, is shown in Table 4 for Group B. Its MS= 8,029 indicates the average degree of variability in the outcome variable that cannot be accommodated by the model's predictors. It has df= 57. Smaller values mean that the regression model fits the data more closely. This residual error term is crucial for determining if the model adequately captures all significant factors impacting the result.

Table 4. F- test for Group B

Source of variation	df	SS	MS	p-value	F- value
Regression	6	540,40	90,067	< 0,001	11,222
Residual/ error	57	457,80	8,029		

Group A outperformed Group B in terms of performance, which suggests an improvement in soft skills. This improvement includes every teaching strategy that has been used, indicating that it helps develop the

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necessary soft skills for education.

DISCUSSION

The result has a significant impact on student performance and efficiency when creative teaching approaches are estimated for developing educational soft skills. The efficiency of several methods like collaborative learning, decision-making, and classroom slipping is demonstrated by the regression analyses for both Group A and Group B. With the high coefficient estimates and low p-values indicating each method's robust, statistical importance to the development of soft skills, Group A performed more efficiently than the other group. Group B has benefited from the approaches but its performance was not as effective as Group A. It indicates that the use of creative teaching techniques has significantly improved the skills of the student and efficiency sense highlights their significance in learning environments. The major enhancements in the soft skills shown in both groups, demonstrate the efficiency of these approaches in developing fundamental skills, resulting in enhancing the general quality of education.

The possibility of variation in implementation across educators and institutions, which can result in uneven outcomes, is one of the main drawbacks of utilizing creative teaching methodologies to establish educational soft skills. The initial skill levels of the students, their motivation, and the particular subject matter being covered could have an impact on these effective tactics.

Longitudinal studies are required to evaluate the long-term effects of various instructional strategies on students' productivity and performance. Additionally, the scalability and flexibility of soft skills education could be improved by using technology and individualized learning strategies, which will increase its effectiveness and accessibility for a wider range of student demographics.

CONCLUSION

This study demonstrates the significant impacts that creative teaching methods play on a vital role in the achievement of students and their sense of efficiency. Group A showed a significant improvement in the soft skills importance for success in both education and job applications by utilizing an innovative method of teaching like collaborative education, flipping in the classroom, and group projects. When compared to Group B, it cannot demonstrate comparable benefits, the decision-making, cooperation, and effective communication abilities were significantly improved. The results highlighted the importance of including modern teaching methods in the educational program to develop critical soft skills. Student's general efficiency and academic achievement are positively impacted. These abilities were essential for student's future success in rapid working environments and the research validated the idea that creative teaching approaches were essential for developing these abilities.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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