ENSURING EXCELLENCE IN EDUCATION: EXPLORING TEACHING STRATEGIES, CHALLENGES AND IMPACTS IN EDUCATION

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ABSTRACT

This study, titled "Ensuring Excellence in Education: Exploring Teaching Strategies, Challenges, and Impacts in Education," aims to explore the quality of teaching in the post-pandemic era. Using a purposive sampling technique, this qualitative study explored the (i) teaching strategies implemented in the post-pandemic era that promote quality teaching; (ii) challenges encountered by the teachers in implementing different teaching strategies in the post-pandemic era to promote quality teaching; and (iii) impact of the implementation of the different teaching strategies in the post-pandemic towards promoting quality teaching. Doing the thematic analysis guided by the principles of phenomenology, the results revealed that (i) teachers' perspectives about quality teaching, the effective teaching strategies the teachers employed in their post-pandemic classroom promoting quality teaching, the things the teachers do in order to identify and apply effective teaching strategies in their post-pandemic classroom promoting quality teaching; (ii) there were different challenges the teachers encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching, there were ways how the teachers overcome the challenges they encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching, there were lessons and insights the teachers share from the challenges they surpassed in implementing different teaching strategies in the post pandemic era to promote quality teaching and (iii) there were significant impact of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching, there were pros and cons of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching, there were things or aspects that should be improved to attain quality teaching. Finally, this study provided concrete and implementable insights for educators, school officials, and legislators. To ensure the delivery of high-quality teaching in the changing educational landscape after the pandemic, stakeholders in the education sector can work together by integrating evidence-based teaching strategies into professional development, classroom practices, institutional policies, and curriculum design.

Keywords: Excellence in Education, Teaching Strategies, Challenges and Impact in Education

INTRODUCTION

The quality of instruction has a significant impact on whether or not an educational system can be said to be effective and productive. It affects learners'

learning outcomes, academic achievements, and general school experiences in ways that are both direct and indirect. As educators and other education frontliners work toward the objective of increasing the quality of education, it has become crucial to understand the strategies, challenges, and benefits of updating teaching strategies (Avalos, 2020).

As Dias, et al. (2021) underscored, the dramatic shifts that have taken place in the worldwide landscape of education have resulted in an increased focus on the standard of education provided by different educational institutions. Basic education is currently positioned as a key driver of, as well as a marker for, competitiveness in the global information economy.

This study was a result of the massification, commodification, and more diversification of the learners and their learning styles after the COVID-19 pandemic has devastated the education sector of the country. Basic education has been completely revolutionized as a result of the implementation of neoliberal policies and the challenges brought by the COVID-19 pandemic (Cradler, et. al, 2020).

As a result, performance of teachers and quality in teaching is now more important than it has ever been, and institutional outputs are evaluated and compared on both the local and international arenas. Although the quality of teaching in basic education typically takes a backseat to research as a measure of institutional success, it has garnered greater attention as basic education schools strive to provide a high-quality student experience and produce high quality graduates (Dias, et al., 2021). This is because schools now want to provide a high-quality student experience and produce high quality graduates.

In this setting, several governments' programs through the Department of Education (DepEd) have attempted to reform basic education teaching by introducing policies and efforts to develop professionalism and enhance teaching standards. These reforms have been undertaken nowadays in basic education schools across the globe particularly in the Philippines (Avalos, 2020).

The implementation of the Enhanced Basic Education through K to 12 program, which is the key legislative instrument guiding the provision of basic education in the Philippines, mandates that academics should not only have relevant disciplinary knowledge but also skills in contemporary teaching, learning, and assessment. This is where we are located (Dias, 2021).

However, the manner in which this criterion is implemented in schools varies greatly and is often inconsistent. According to Heil, et al (2020), certain educational institutions do not offer any appropriate teaching-based professional development at all. Because the new performance-based model for basic education schools being implemented by the government is underpinned by four criteria, one of which is the quality of teaching within an institution, the need for such development in teaching is likely to become more pressing in the near future.

On the other hand, it is impossible to separate discussions concerning "quality" in basic education on a broader scale from those specifically pertaining to "quality teaching." According to Heil, et al. (2020), a relevant synthesis of the relevant literature in the subject found four primary conceptualizations of 'quality' in basic education: (1) quality as "purposeful," in which the emphasis is placed on standards and conformance;

(2) quality as "accountable," in which the emphasis is placed on the delivery of products and services; (3) quality as "exceptional," in which the word "exceptional" signifies distinction and exclusivity; and (4) quality as "transformative," in which the word "transformative" indicates positive changes in teaching practice and student learning.

Despite the fact that 'quality' can be conceptualized in a variety of ways, the researcher has found that the following categorizations are helpful in emphasizing the primary mechanisms that are currently being employed by the Philippine schools to address and/or improve teaching quality. These mechanisms are summarized below based on various authors and researchers:

The concept of quality as serving a 'purposeful' function is represented in both institutional and national standards, such as those established by the Philippine Professional Standards for Teachers (PPST). The framework lacks specificity and is often used to support probation and promotion rather than to guide instructional improvement. Despite the fact that the said standards offer a set of indicative criteria to clarify what constitutes quality teaching, the framework is not used to guide instructional improvement (Avalos, 2020).

These concepts have provided the researcher strong support to explore deeper on the implementation of strategies in teaching nowadays, including the challenges and their impacts in education.

METHOD

A qualitative methodology and research design was utilized for the conduct of this investigation. In this study, qualitative research was conducted in order to establish the significance that participants attach to the many research challenges that they have experienced in the past or are currently going through (Creswell, 2018).

For the purpose of making sense of or providing an interpretation of the research topic, the researcher did qualitative research (Aspers & Corte, 2019).

More specifically, the researcher examined the phenomenon in its natural setting in order to give a description of the routine or troublesome times. In addition, qualitative research is flexible, enabling the researcher to build and deconstruct the methodology according to the requirements of the study, so enabling it to go back and forth between different executions. Therefore, if the data are not saturated, which is a requirement for triangulation, the researcher can verify the credibility of the data by retracing her steps. This is only possible if the data are not completely complete. Creswell (2013) outlines a qualitative method of phenomenology that the researcher used to investigate people's lived experiences in relation to a phenomenon. This was done by the researcher. In a similar vein, the purpose of this qualitative research method is to shed light on certain events or circumstances.

Sampling Design

The researcher used purposive sampling. Meaning, only teachers served as research participants of the study. There were fifteen (15) research participants to be used in the study. Participants were chosen using purposive sampling based on the following selection criteria: (1) They are regular/permanent teachers of DepEd; (2) They

are teaching in the basic education (elementary level-K to 6) for at least five years already; (3) They have been implementing different innovative and new teaching strategies at the post-pandemic era for at least five years already.

Therefore, the exclusion criteria covered all those individuals who were outside the parameters and inclusions being described in the inclusion criteria such as the administrators, learners, parents and stakeholders.

Data Analysis

The researcher first coded the interview transcripts using the theoretical lens on which this study is based in order to conduct a thorough analysis of qualitative data. This is the phase of the analysis in which the researcher identifies topics, issues, similarities, and differences by interpreting the participants' narratives. This procedure can assist the researcher in comprehending the world and how participants construct reality in relation to their personal perspectives (Sutton & Austin, 2015).

After the codes had been identified and classified, the researcher begun the process of theming the data set, which is the process of assembling codes from transcripts in a coherent and meaningful way. As a result, when organizing the findings for presentation, the themes could be utilized as the heading of a section in the report, while the codes can be placed beneath, supported by the researchers' interpretation (Sutton & Austin, 2015). Reading the textual data from the interview transcripts and outlining the parts of the text that appear to be related to the predetermined codes described by the theory in the study are the steps in carrying out Colaizzi's descriptive phenomenological method. Based on the predetermined codes for clustering, the data codes would then be classified or thematized (Hsieh & Shannon, 2005; Assarroudi, Heshmati-nabavi, Armat, Ebadi, &Vaismoradi, 2018).

Process of Doing Phenomenology

In phenomenology, the investigation of what people experienced and the focus on how they came into contact with a phenomenon are central topics. According to Creswell and Poth (2017), it centers on increasing the knowledge of social, cultural, and psychological phenomena from the perspectives of those who are involved. This included gathering careful and comprehensive information about how people describe, feel, judge, remember, or discuss things with other people. Creswell and Poth (2017) also state that it focuses on increasing the knowledge of social, cultural, and psychological phenomena from the perspectives of those who are involved. Because of this, the approach that the research took was phenomenology, which is a method that permits the researcher to get an in-depth comprehension of a phenomenon by permitting informants to elaborate on their own lived experiences (Qutoshi, 2018).

In order to carry out an exhaustive analysis of qualitative data, the researcher first coded the interview transcripts by looking at them through the theoretical framework that serves as the foundation for this study. Interpreting the narratives provided by the participants is the activity that takes place at this stage of the analysis. This is the phase in which the researcher looked for themes, problems, similarities, and differences. According to Sutton and Austin (2015), this method can provide the researcher with

assistance in knowing the world as well as how the participants construct reality in reference to their own personal perspectives. After the codes had been identified and classified, the researcher begun the process of theming the data set, which is the process of assembling codes from transcripts in a coherent and meaningful way. As a result, when organizing the findings for presentation, the themes utilized as the heading of a section in the report, while the codes can be placed beneath, supported by the researchers' interpretation (Sutton & Austin, 2015).

Reading the textual data from the interview transcripts and outlining the parts of the text that appear to be related to the predetermined codes described by the theory in the study are the steps in carrying out Colaizzi's descriptive phenomenological method. Based on the predetermined codes for clustering, the data codes would then be classified or thematized (Hsieh & Shannon, 2005; Assarroudi, Heshmati-nabavi, Armat, Ebadi, &Vaismoradi, 2018).

In addition, the stages involved in applying Colaizzi's descriptive phenomenological approach include reading the textual data from the interview transcripts and outlining the sections of the text that appear to be related to the predetermined codes described by the theory in the study. These steps were taken in order to implement the method. The data codes would then be classified or thematized (Hsieh & Shannon, 2005; Assarroudi, Heshmati-nabavi, Armat, Ebadi, & Vaismoradi, 2018) based on the predetermined codes for clustering (Hsieh & Shannon, 2005; Assarroudi, Heshmati-nabavi, Armat, & Vaismoradi, 2018).

RESULTS AND DISCUSSION

Teaching Strategies Implemented by the Teachers in their Post-Pandemic Classrooms Promoting Quality Teaching

In this first research question, the study wanted to answer the specific questions referring to: a) teachers' perspectives about quality teaching; b) the effective teaching strategies the teachers employed in their post-pandemic classroom promoting quality teaching and; c) the things the teachers do in order to identify and apply effective teaching strategies in their post-pandemic classroom promoting quality teaching.

Table 1. Qualitative Analysis on the Teaching Strategies Implemented by the Teachers in their Post-Pandemic Classrooms Promoting Quality Teaching

Issues	Core Ideas	Codes/Categories/	Essential
Probed		Nodes	Themes
On the teachers' perspectives about quality teaching	 Continuous reflection and improvement Continuous adaptation to change When a teacher is creating an inclusive learning environment 	Constant adjustment, reflection and aim for development	Teachers' Adaptability Inclusive Education Competence

	 When a teacher treats every learner equal When the teacher provides conducive learning environment for learners A teacher has the right competence The teacher has proper competencies When the teacher has a good communication skills When a teacher is able to provide and deliver a lesson plan with clear objectives When a teacher is able to provide the learning needs of the learners 	Inclusivity in instruction Proper amount of competence	
On the effective teaching strategies the teachers employed in their post-pandem ic classroom promoting quality teaching	 Remote teaching/modular instruction Modular instruction (modules) Using other possible modes of learning Integration of technology ICT integration Interactivity and creativity of lessons through technology Use of video lessons Use of creative and collaborative activities Group activities Collaborative teaching Use of differentiated instruction 	Modalities of Learning ICT integration Group and interactive strategies	The essence of different modalities of learning especially when blended The role of ICT/ technology integration in daily lessons Collaborative activities/ strategies

On the things the teachers do in order to identify and apply effective teaching strategies in their post-pandem ic classroom promoting quality teaching	 Seek constant growth/improvement Be resourceful Identification of the strengths and weaknesses of the learners Pre-assessment tests Diagnostic tests 	Being open to constant professional growth/ improvement of competencies Pre assessment strategies	Professional growth/ upgrade of competencies The role of diagnostic test
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Teachers' perspectives about quality teaching

The analysis revealed three essential themes. It can be observed from the table that teachers perceived 'quality teaching' as being able to adapt with the current situation in such a way that the teacher can adapt to the new changes in the curriculum, teaching strategies and approaches and even assessment strategies. Moreover, it was revealed that the teachers perceived that quality teaching is about creating an inclusive education atmosphere inside and outside the classroom. Finally, the participants hared that quality teaching means competence among teachers.

The theme on 'teachers' adaptability' was evident in the following IDI which states that:

Lessons and insights that educators may have gained from the challenges faced in implementing teaching strategies in the post-pandemic is on Adaptability of teachers. Adaptability of teachers nowadays encompasses the knowledge and skills on Technology Integration, Student-Centered Approaches, Inclusivity, Effective Communications, Balancing Technology and Traditional Methods, Building a Supportive Community is Essential, Well-being is a Priority. (IDI, Q1.1.1)

On the theme pertaining to inclusive education, IDI9 said that:

A teacher must be inclusive. Encouraging inclusive education as a teacher means establishing a classroom climate that welcomes, supports, and engages all students, irrespective of their talents, backgrounds, or differences. (IDI9, Q2.2.1)

Furthermore, IDI15 supported on the theme "positive impact to learners on understanding concepts" by stating that:

Teachers are important factors in determining the learning and achievement level if pupils/ learners. Quality teaching means possessing competencies to teach effectively. Thus, we teachers must adopt efficient teaching practices and methods. (IDI15, Q1.1.1)

The results on teachers adaptability gain support from the findings of Alenezi (2021) which stated that when it comes to the educational landscape, the quality of instruction is greatly affected by how adaptable teachers are. In his study, it was revealed that teachers' efficacy in the classroom is proportional to their flexibility in responding to a wide range of student requirements, classroom environments, and external factors. The general effectiveness of instruction and students' educational experiences are profoundly affected by this flexibility. Teachers' capacity to adjust to their pupils' ever-changing requirements is a key indicator of their adaptability. Teachers in today's dynamic classrooms need to be nimble enough to adapt their lessons, resources, and pedagogy to the wide range of student interests, abilities, and needs. A more welcoming and interesting classroom can be the result of a teacher who is able to change their approach based on their students' needs, interests, and strengths.

Being able to quickly adjust to new situations, Alenezi (2021) added that teachers who can adapt swiftly to changes in the curriculum, disruptions in technology, or other unanticipated events show resilience, which is crucial for maintaining a steady flow of high-quality instruction are those who possess quality teaching skills.

On the theme about inclusive education, Alhaisoni (2021) supported it by stating that the quality of instruction is greatly affected by inclusive education, which is defined as the process of including students with a variety of skills, backgrounds, and needs into regular classrooms. This method of teaching seeks to build inclusive classrooms where every student feels welcome and valued, regardless of their individual characteristics. The influence of inclusive education on teaching is palpable in many ways; it affects pedagogy and the learning process as a whole. The advocacy of differentiated instruction stands out as one significant effect. Teachers in inclusive classrooms are sensitive to their students' unique needs and work to meet those needs in a variety of ways. This calls for a wide range of assessment tools, teaching approaches, and course materials to cater to students' individual needs and interests. Teachers become more flexible and creative in their material delivery as a result of expanding their toolkit of instructional methods.

Finally, on the theme competence among teachers, Ali (2020) stressed that the level of instruction and, by extension, the educational experience that students have is heavily influenced by the proficiency or competence of teachers. Several facets of instruction, student involvement, and classroom success are impacted by teachers' ability. In terms of instructional effectiveness, there is a basic impact. A thorough familiarity with the material they teach is a hallmark of an effective educator. Because of their extensive background in the subject matter, they are able to explain concepts in a way that students can understand, making the learning process more engaging and

thorough. Teachers who are really good at what they do can adapt their methods, materials, and strategies to fit the requirements of their pupils, no matter how diverse those needs are.

Ali (2020) added that having a competent teacher and a well-managed classroom go hand in hand. Skilled teachers are able to create and sustain an encouraging and orderly classroom setting. They are able to maintain order in the classroom, guide students toward positive behavior, and encourage an atmosphere of mutual respect and teamwork. The overall quality of education is improved when teachers are competent in creating a classroom environment that is conducive to teaching and learning.

Effective teaching strategies the teachers employed in their post-pandemic classroom promoting quality teaching

The thematic analysis on this part of the study was also able to reveal three essential themes. These themes include the essence of different modalities of learning especially when learning is blended, the role of ICT/technology integration in daily lessons and the value of collaborative activities and strategies in different lessons. The said themes were evident in the different IDI statements stated below:

For the theme "the essence of different modalities of learning especially when learning is blended," IDI2 revealed that:

To promote quality teaching in the post-pandemic era classes, I employed blended learning, a combination of in-person and modular learning, both teaching strategies provide flexibility and personalized learning, which also needs the participation and assistance of the parents. (IDI2, Q1.1.2)

On "role of ICT/technology integration in daily lessons", IDI1 revealed that:

Effective teaching strategies that educators might consider, especially in the post-pandemic era where remote or hybrid learning has become more prevalent includes Technology Integration, Flexible Learning Modalities, Interactive Assessments, Collaborative Learning. (ID1, Q1.1.2)

On the theme "collaborative activities/strategies," IDI5 revealed that:

One of the effective teaching strategies that I used in my post-pandemic era that promotes quality teaching are by using strategies and techniques that focuses on students learning, example of those are hands on activity, collaboration work, experimentation and etc. (IDI5, Q1.1.2)

These findings are congruent with the findings of Bashir, et al. (2020) who stated that incorporating a variety of learning modalities in today's post-pandemic classrooms improves instruction, provides students with a more well-rounded education, and meets their individual needs and preferences. Embracing different ways of learning helps

teachers better cater to their students' unique needs by recognizing that people learn and absorb information in unique ways. Increased student engagement is one notable result. Teachers can make the classroom more engaging and active for students by using a variety of modalities, including visual aids, hands-on exercises, group work, and multimedia tools. The quality of instruction is improved when students are actively involved in their own learning, which increases their curiosity and excitement.

Additionally, Bashir, et al. (2020) stressed that the use of several learning modes in teaching this post-pandemic classroom, teachers can better meet the needs of their pupils when they take into account the fact that each student has their own unique combination of learning preferences, strengths, and styles. A more tailored and fruitful learning experience is achieved when instructors are able to adjust their methods of instruction to meet the needs of their students.

On the theme about the role of ICT/technology integration in daily lessons, Avalos (2020) emphasized that the quality of education can be dramatically improved with the incorporation of technology or information and communication technology (ICT) into the post-pandemic classroom. The seamless integration of technology into classrooms has an impact on teaching practices, student engagement, and the educational experience as a whole, especially as technology keeps becoming better. In addition, the use of ICT allows for more customized and differentiated lessons. Adaptive learning platforms made possible by technological advancements enable teachers to personalize lessons for each student. A more inclusive and successful educational experience is achieved through this personalization, which allows students to go through the material at their own speed, receive focused assistance, and interact with it in ways that suit their learning styles.

On the theme collaborative strategies, Chiu (2020) supported it by stating that the quality of instruction is much improved when teachers use collaborative strategies. This creates an atmosphere where students and teachers actively participate in learning together. Collaboration in the classroom goes beyond the monolithic lecture format by placing an emphasis on student-teacher dialogue and collaborative problem-solving. By improving the educational experience and leading to better results, this method affects many facets of teaching.

Teachers' strategies used to identify and apply effective teaching strategies in the post-pandemic classroom promoting quality teaching

The participants in this study revealed two themes that were referred to the teachers' strategies used to identify and apply effective teaching strategies in the post-pandemic classroom promoting quality teaching. Such themes are the professional growth/upgrade of competencies among teachers and the role of diagnostic/pre-assessment test.

The theme on "professional growth/upgrade of competencies among teachers" gain support from IDI6 who stated that:

Engaging in diverse teaching strategies often leads to professional growth for teachers, enhance their skills and adaptability in addressing teaching challenges. Therefore, teachers like me should always seek for professional improvement and upgrade our teaching competencies for us to give what our learners deserve. (IDI6, Q1.1.3)

Furthermore, on the theme about the role of diagnostic/pre-assessment test, IDI6 shared that:

I regularly conduct pre-assessment/diagnostic tests to my pupils for me to identify what effective teaching strategy can be applied to my learners. Furthermore, I assess my pupils' learning style, needs and progress everytime I started a topic to discuss. (FGD6, Q1.1.3)

These findings corroborate with the findings of Cradler (2020) which stated that instructional efficacy, student results, and the learning environment as a whole are all affected by teachers' endeavors to improve their competencies and participate in ongoing professional development. A commitment to quality and an understanding of the ever-changing nature of education are reflected in this dedication to continuous learning. Actively seeking to improve their skills, teachers should keep up with the latest research, trends, and creative pedagogical approaches in the field of education. Educators are able to improve their methods of instruction, adopt techniques supported by research, and adjust to changing educational environments through continuous learning. Students benefit from a higher-quality educational experience as a consequence of a more efficient and applicable method of instruction.

On the other hand, for the theme about the role of the diagnostic tests, Curry (2020) emphasized that instructional design, student evaluation, and the quality of the learning experience are all profoundly affected by the use of diagnostic tests in the classroom. Teachers can use the results of these tests to better tailor their lessons to each student's needs by gaining insight into their areas of strength and improvement. Teachers can gain valuable insights into each student's prior knowledge, skills, and understanding through diagnostic assessments. By using this data, teachers may create classes that are just right for their students, meeting their individual requirements while still providing them with tough and approachable teachings. Improved instructional efficacy and a more personalized, responsive classroom are outcomes of teachers' capacity to modify their pedagogical approaches in light of diagnostic findings.

In addition, Curry (2020) stated that diagnostic assessments are essential for revealing where students are missing knowledge or have misunderstandings. Educators can identify students' areas of strength and growth by methodically testing their baseline knowledge. Teachers can intervene with targeted remediation to avoid misconceptions from building up and promote a more comprehensive comprehension of the subject matter if they address these gaps early on. By proactively ensuring that training is tailored to each student's unique needs, this strategy enhances the quality of teaching.

The challenges encountered by the teachers in the implementation of different teaching strategies in the post-pandemic classroom to promote quality teaching

The second research question of this study aimed to explore the challenges encountered by the teachers in the implementation of different teaching strategies in the post-pandemic classroom to promote quality teaching. Specifically, it sought to explore the following areas: a) the different challenges the teachers encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching; b) the ways how the teachers overcome the challenges they encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching and; 3) the lessons and insights the teachers can share from the challenges they surpassed in implementing different teaching strategies in the post pandemic era to promote quality teaching.

Table 2. Qualitative Analysis on the Challenges Encountered by the Teachers in the Implementation of Different Teaching Strategies in the Post-pandemic Classroom to Promote Quality Teaching

Issues Probed	Core Ideas	Codes/Categories/ Nodes	Essential Themes
On the different challenges the teachers encountered in implementin g different teaching strategies in the post pandemic era to promote quality teaching	 Challenges in terms of support for teachers and students Support for learners and students in terms of instructional materials Support for students and learners in terms of constant trainings Support system Maintaining students' engagement in learning Addressing learners' poor engagement Poor reading skills of students Poor reading abilities of students Problems on reading 	Support for learners and teachers in different relevant aspects of learning Maintaining learners' poor engagement Poor reading skills of learners	Support system Learners' engagement Reading skills
On the ways how the teachers	 Choosing the best teaching strategies for the type of learners 	Selecting and using relevant teaching	Suitable teaching strategies

overcome the challenges they encountered in implementin g different teaching strategies in the post pandemic era to promote quality teaching	 Find and apply suitable teaching strategies Employ teaching strategies that suits the needs of the learners Apply teaching strategies that address the learning styles of the learners Being adaptive Teachers must adjust on the current trends of teaching Being adaptive, flexible and patient Teachers should be adaptive to hit the learning targets Involving the parents Parental involvement Calling the attention of the parents for them to be involved in the learning of their children	Teachers must be adaptive Parents must be involved in their kids' learning	Teachers' adaptability Parental involvement
On the lessons and insights the teachers can share from the challenges they surpassed in implementin g different teaching strategies in the post pandemic era to promote	Understand the diversity of the learners Understand the diverse needs of learners Resiliency of teachers is important Be patient and resilient	Understanding the different needs of learners Teachers must be resilient	Attending to the diverse needs of learners Resiliency of teachers

quality teaching		
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Different challenges the teachers encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching

The thorough thematic analyses for this research question generated three themes pertaining to the different challenges the teachers encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching. Specifically, these identified themes were about the challenges particularly on the support system that the learners and teachers need for effective and efficient learning, challenges on maintaining learners' engagement to learn and the challenges pertaining to the poor reading skills of the learners.

On the theme "support system," IDI1 stated that:

One common challenge that educators like me faced in implementing teaching strategies in the post-pandemic era is the support system that the learners and teachers need to teach and learn better. This support in crucial in order to promote quality teaching in a post-pandemic era. (ID1, Q2.1.)

On the challenge about maintaining learners' engagement, IDI4 stressed that:

Such challenges that I encounter in teaching in the post-pandemic classroom include addressing learners' poor engagement in in-person or virtual environment. (IDI4, Q2.1)

On the challenge particularly on the poor reading skills of the students, IDI5 stated that:

Some challenges that I encountered are students' readiness in reading and low comprehension. When students struggle with understanding, defining, or pronouncing terms, that is when I find the task most challenging. Their reading comprehension suffers because of the learning gap that happened during the pandemic. (IDI5, Q2.1.)

These themes particularly on the support system that the learners and teachers need to teach and learn better gain support from the findings of Dias (2021) which indicated that creating a setting that is good for learning and teaching requires a strong support system. In determining educational quality, this system—which includes both students and educators—is crucial. Fundamentally, a supporting infrastructure takes into account the

interdependence of teachers' and students' experiences within the learning ecosystem and attends to their diverse requirements.

Concurrently, Dias (2021) added that a strong support system is just as important in creating a setting that is favorable for kids to learn in. When given the tools and support they need, teachers go above and beyond their traditional duty of information dissemination to become successful facilitators of learning. Counseling services, extracurricular activities, and treatments that are adapted to each student's unique learning style are all part of providing enough support. A healthy and inclusive learning environment is fostered when students are acknowledged, listened to, and given support.

On the theme maintaining learners' engagement to learn, it was supported by Heil (2022) and stated that the quality of instruction and student achievement is heavily impacted by how well students are able to remain engaged in the learning process. Involvement on the part of students makes learning more than just receiving information; it becomes an exciting and life-altering adventure. Keeping students interested is fundamentally related to how effective a teacher is at delivering their lessons. Different students have different learning preferences, and teachers that use a variety of methods to engage their pupils in the learning process are able to meet their needs. Teachers can create an engaging learning environment that keeps students' attention by using technology, combining hands-on activities, and fostering collaboration on projects. This not only improves understanding but also fosters an authentic desire to learn and grow.

Finally, on the challenge pertaining to the poor reading skills of the learners, Istanto (2020) posited that as a result of its domino impact throughout many fields of study, low reading comprehension is a major barrier to effective instruction. From understanding course material to learning new things on one's own, reading is a fundamental ability that supports almost every facet of education. Every aspect of a student's educational experience is affected when they have difficulty reading.

Ways how the teachers overcome the challenges they encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching

In this specific part of the study, the researcher investigated the ways how the teachers overcome the challenges they encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching.

Specifically, the themes being discovered revealed that some of the ways how the teachers overcome the challenges they encountered in implementing different teaching strategies in the post pandemic era to promote quality teaching include finding and applying suitable teaching strategies, teachers' adaptability and parental involvement.

The discovery of the first theme particularly on suitable teaching strategies has been supported by the statements of the IDI2 who stated that:

I focus on the needs of my students, particularly on selecting and using strategies that are suitable to their learning styles. I also go deeper on how to help them improve their skills, especially on writing, numerical and literacy. I used worksheets, interactive video lessons and performance-based instruction to ensure quality learning. (IDI2, Q2.2.2).

On the theme about teachers' adaptability, IDI13 emphasized that:

COVID-19 pandemic had changed a lot from in person classes to modular delivery learning. Teachers, parents, and learners need to adapt the change. Specifically, teachers must adapt to changes in any filed (curriculum, class management, teaching strategies, approaches, etc.). Dedication is the virtue to maintain strong relationships to the learners to in able to deliver lesson content remotely. (IDI3, Q2.2.2)

On the theme "parental involvement," IDI5 supported that:

I overcome those challenges by having parent involvement in learning. I call the attention of the parents for them to be oriented on their roles as our partners in ensuring learning for their children. (IDI5, Q2.2.2)

The findings denoting to the theme on the selection of suitable learning for the students agree with the findings of Jimenez (2021) which stated that one of the most important factors influencing the standard of instruction in classrooms is the choice of effective pedagogical practices suitable to different types of learners. The key to releasing students' latent abilities and establishing a classroom climate that promotes productive learning lies in the hands of teachers, who should be equipped with a wide range of instructional strategies.

Furthermore, Jimenez (2021) added that meeting the needs of individual pupils relies heavily on the selection of suitable teaching methodologies. Teachers that use differentiated education take into account their students' unique strengths, interests, and backgrounds when designing lessons. Every kid, despite their individual skills and weaknesses, has a fair chance to thrive in a classroom that encourages diversity.

Nevertheless, on the theme teachers' adaptability, Juste (2021) stressed that in the ever-changing world of education, the capacity of educators to adapt is paramount in determining the standard of instruction and student achievement. Teachers who can quickly adjust to new situations are invaluable in today's classrooms, where students come from many walks of life and where pedagogical approaches are always changing. Among the most noticeable effects of flexible teaching is the capacity to meet the various educational requirements of pupils. There is a wide range of skills, experiences, and approaches to learning represented in every single classroom. Also, in a world where everything is always changing, children look up to teachers who can roll with the punches. Their emphasis on perseverance, adaptability, and lifelong learning is indicative of a growth mindset. In order to provide kids with the mindset and abilities

they'll need to thrive in a dynamic and unpredictable global environment, it is essential that they see examples of adaptation in the classroom.

Finally, on the theme parental involvement, Kim (2019) pointed out that the level of instruction and student achievement are both greatly affected by the level of parental involvement. When parents and teachers work together, they have a profound impact on their children's education, which in turn affects their social development, academic success, and propensity to continue learning throughout their lives. Parental participation has a good effect on students' academic success, which is a major impact. Students typically exhibit higher levels of motivation and a more optimistic outlook on learning when parents take an active role in their education by supervising homework, going to parent-teacher conferences, and being involved in extracurricular activities. A sense of accountability and dedication to academic achievement can flourish when parents and guardians set high standards for their children's education and provide a nurturing atmosphere that supplements what instructors do in the classrooms.

Involvement of parents as further discussed by Kim (2019) in his study also helps to create a more well-rounded curriculum that takes into account students' social and emotional needs in addition to their academic performance. Parents who are active members of their child's school community have a better understanding of their child's academic performance, social relationships, and mental health. A more holistic and adaptive approach to student development is achieved when the family and school work together, since this allows for the early detection and intervention of areas like behavioral problems and emotional difficulties.

Lessons and insights the teachers share from the challenges they surpassed in implementing different teaching strategies in the post pandemic era to promote quality teaching

On the exploration for the lessons and insights the teachers can share from the challenges they surpassed in implementing different teaching strategies in the post pandemic era to promote quality teaching, it was found out that only two themes has arrived specifically referring to the lessons and insights that teachers should attend learners' needs regardless of their diverse background. Another theme is on the resiliency of the teachers. Teachers shared that they need to be resilient with the changes that are undergoing in the field in order for them to remain effective in the delivery of learning to the learners.

This findings on 'attending to the diverse needs of the learners' was clearly supported in the following IDI11 statements:

My own perspective about quality teaching is when you were able to provide the diverse needs of the students, especially in the teaching and learning process, wherein students won't feel left out just because they have a different learning style. As a teacher, we should be able to provide their needs despite their differences. (IDI11, 2.2.3)

Furthermore, IDI12 shared that:

Educators must quick to learn new technology skills and be resilient to continue serving the learners. (IDI5, Q2.2.3)

The above finding are relevant with the findings of Li (2020) which underscored that one of the most important things that schools can do to improve teaching and learning is to accommodate students' varied needs regardless of their background. A welcoming and equitable classroom is one that takes into account and accommodates students' wide range of skills, experiences, and learning styles. Addressing the needs of diverse learners has a big impact on promoting inclusion. Students in a diverse classroom bring a variety of backgrounds, skills, and worldviews to the table. Every student may thrive in a classroom if teachers make an effort to understand and respect their unique backgrounds and learning styles. To truly be inclusive, a school must actively include varied viewpoints into its curricula so that it represents the diversity of its student body, rather than merely recognizing them.

Additionally, Li stressed (2020) that in order to maximize individual learning results, it is crucial to satisfy the requirements of diverse learners. Not only do students have different levels of natural intelligence, but they also have different learning styles and strengths. Each kid has specific needs, and teachers that use varied education meet those needs by giving students multiple methods to learn. Recognizing that one-size-fits-all approaches could fail to engage many students, this method seeks to build a tailored and encouraging educational environment.

Moreover, on the resiliency of the teachers, Muelas and Navarro (2020), emphasized that in his research findings, it becomes clear that teachers' resilience is a key component that greatly affects the educational landscape particularly on teaching and learning quality. It is crucial for educators to be able to adapt, recover from failures, and maintain their dedication to the educational process because the teaching profession is hard, with different difficulties and dynamic surroundings. Teachers' ability to bounce back from adversity has far-reaching effects on their classroom climate. Teachers who are able to bounce back from adversity are better able to handle the stresses and unknowns of the classroom. Educators that are resilient show poise and persistence when confronted with changes in the curriculum, difficult student behaviors, or unforeseen circumstances. As a result, children are more likely to feel encouraged, comfortable, and motivated to actively participate in their learning in an atmosphere that is both steady and positive.

Also, they stressed that kids look up to their teachers as role models for healthy coping mechanisms, therefore it's important for teachers to be resilient too. A growth mentality, resilience in the face of adversity, and the capacity to adjust to new circumstances are all qualities that create a strong example for children. Life skills, such as persistence, adaptability, and taking the initiative to overcome challenges, are taught by resilient educators alongside academic curriculum. Students who learn resilience skills are better able to handle the challenges they face in school and in life generally.

Impact of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching

This research question focuses on exploring to the impact of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching.

Specifically, this part of the study sought to explore the a) the impact of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching; b) the pros and cons of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching and; c) the things or aspects that should be improved to attain quality teaching.

Table 3. Impact of the Implementation of the Different Teaching Strategies in the Post-pandemic Era Promoting Quality Teaching

Issues Probed	Core Ideas	Codes/Categories/ Nodes	Essential Themes
On the impact of the implementatio n of the different teaching strategies in the post-pandemic era promoting quality teaching	 Improved kids' performance Enhanced kids' participation Enhanced learning outcomes Improved communication skills Improved critical thinking skills of the kids Enhanced critical thinking skills Enhanced student reasoning skills 	Positive impact on learners' performance Positive impact on critical thinking skills of the kids	Positive learners' performance Enhanced learners' critical thinking skills
On the pros and cons of the implementatio n of the different teaching strategies in the post-pandemic era promoting	Pros Enhanced reading skills due to flexibility in learning Reading skills development due to technology integration Development of reading skills	Enhanced reading skills of the children	Reading skills development Equal access to technology

quality teaching	Cons The rise of learning barriers brought about by equal access to technology Erratic internet connection Internet connection constraints	Not everyone has equal access to technology/ internet, etc.	
On the things or aspects that should be improved to attain quality teaching	 Improvement of teachers' pedagogical skills Provision of training for teachers Teachers' trainings on teaching pedagogy Provision of high quality teaching materials Provision of relevant instructional materials 	Improvement of teachers' pedagogical skills Provision of quality IMs	Teachers' teaching pedagogy Quality instructional materials

The impact of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching

For this part of the exploration, themes pertaining to the impact of the implementation of the different teaching strategies in the post-pandemic era promoting quality teaching were discovered. Such impacts include positive learners performance and enhanced critical thinking skills of the learners. Specifically, on the theme 'positive learners' performance,' IDI2 supported that:

The results, outputs and impacts of implementation of the different teaching strategies in the post-pandemic era to the quality of teaching are; first, improve students' performance on classroom. Students are slowly coping up on the lessons and the skills they need. Second, enhance student participation, interactive and technology-based teaching strategies may result to a high participation among students. Lastly, self-learning, strategies promoting individualizing learning among students that cater diverse student needs and promotes deeper understanding of lesson.. (IDI2, Q3.3.1)

Furthermore, on the enhanced learners' critical thinking skills, IDI14 shared that:

The implementation of various teaching strategies in the post-pandemic era can lead to positive results and impacts on the quality of teaching. This may include enhanced students' engagement, improved accessibility through technology, increased adaptability of educators and a more personalized learning experience. Additionally, the use of innovative teaching methods can contribute to the development of critical thinking and problem-solving skills in pupils, preparing them for a rapidly changing world. Continuous assessment and feedback loops from both pupils and educators are essential to refine and optimize these strategies for sustained improvement. (IDI14, Q3.3.1)

The result particularly on the theme positive learners' performance gains support from the findings of Nikou (2019) which stated that a dynamic interaction between the efficacy of teaching methods, student involvement, and the learning environment as a whole determines how well students perform in class. Good performance is important not only for students' academic success but also for their personal growth, their level of motivation, and the success of instructional methods. A crucial reason why good student performance is important is that it shows how effective the teaching methods are. When children do well in school, it's usually a sign that the teacher's methods of teaching are working for their unique set of circumstances. As a concrete result, students' good performance confirms that the content is understandable, applicable, and helpful in achieving subject mastery.

In addition, Nikou (2019) emphasized that active participation from students is strongly associated with high-quality learning outcomes. As a general rule, students are more invested in what they are studying when they are making progress toward their goals, whether that's through grade point average, class participation, or assignment completion. Creating a dynamic and interesting educational environment is a win-win for everyone involved. When students are motivated and engaged, they are more likely to participate, cooperate, and take responsibility of their learning.

On the theme about the enhanced learners' critical thinking skills, Pinto, et al. (2020) supported it by stating that a primary goal of education that goes beyond just imparting facts and figures is the development of students' critical thinking abilities; this is essential to the standard of education as a whole. As they practice and perfect this skills, kids grow into learners who are capable of solving difficult problems on their own and making positive contributions to the world. Improving one's critical thinking abilities is important for many reasons, not the least of which is the fact that it helps one to comprehend and remember more complex ideas. Students go beyond passively memorizing facts and instead actively question and analyze it when they practice critical thinking. Participation in the learning process, rather than passively receiving information, allows for a deeper understanding of the material, going beyond just memorization.

In addition they stressed that when students develop their critical thinking skills, they are better able to solve problems in innovative and creative ways. Having strong critical thinking skills is essential in today's fast-paced environment because of the need to find creative answers to complicated problems. Students who can effectively analyze data, draw conclusions, and provide answers are more prepared to face the academic, professional, and personal obstacles that life throws at them.

Pros and cons of the implementation of the different teaching strategies in the post-pandemic era

For this part of this study, two emerging themes were discovered with relevance to the Pros and cons of the implementation of the different teaching strategies in the post-pandemic era. Such themes are the: pros-reading skills development; cons-there is no equal access to technology.

The theme reading skills development is supported by IDI5 by stating that:

One of the advantages of the implementation of teaching strategies in the post pandemic classroom is that the developed and improved reading or comprehension among the learners due to the face to face classes conducted. (IDI6, Q2.2.1)

On the theme cons particularly the issue on equal access to technology, IDI supported it by stating that:

The disadvantages include: Technical Challenges- Some pupils or educated may face difficulties with technology. Inequity- Access to technology, internet connection and resources may vary, leading to disparities in learning experiences. Isolation- Remote learning can result in reduced social interaction and collaboration. Overreliance on Technology - Excessive dependence on digital tools may hinder traditional skill development. (FGD4, Q2.2.2)

These themes particularly on the reading skills development (pros) corroborates to the findings of Shi (2021) which stated that the benefits of using proven methods of teaching to help children improve their reading comprehension go far beyond just helping them become more literate. The encouragement of participation is one main advantage. Teachers can pique their students' attention and make studying more engaging and fun by using a variety of interactive teaching tactics. Students are able to actively engage in reading through activities like literature circles, guided reading, and shared reading, which create an environment that is conducive to pleasant and immersive reading. Furthermore, in order to meet the varied learning requirements of pupils, effective teaching practices are crucial. Teachers can better meet the needs of their students with varying interests, abilities, and learning styles by using differentiated instruction.

Shi (2021) added that teaching methods can play a role in helping students hone their critical thinking abilities. Students' cognitive capacities are enhanced through reading exercises that promote active inquiry, analysis, and reflection. To get students to read more deeply, analyze meaning, and make connections between what they already know and what they learn in class, teachers can use strategies. Students are better prepared for deeper engagement with a variety of texts in different contexts, and their reading comprehension is improved as a result of this training of critical thinking.

On the theme equal access to technology (cons), Tan (2019) supported it stressing that failing to guarantee that all pupils have equitable access to technology in the classroom and at home has far-reaching and complex negative consequences. The

widening achievement gap is one major negative aspect. Disparities in learning possibilities arise when certain pupils do not have access to technology, a phenomenon known as a digital divide. Students from low-income families, who may not have the financial resources to purchase the equipment their teachers need, are disproportionately impacted by this disparity, which reflects larger socioeconomic inequalities. As a result, the existing gaps in academic achievement are further exacerbated by this inequality.

Tan (2019) further added that equal access to technology also prevents pupils from acquiring the digital literacy skills that are crucial in today's world. Being how to use a variety of software programs, navigate digital platforms, and perform online research is essential in today's technology-driven environment. Students who don't have access to technology struggle to learn these abilities, which will hurt them in school and in their careers. A student's digital divide may exacerbate a systemic disadvantage that follows them through their academic career and beyond.

Aspects that should be improved to attain quality teaching

This part of the study discovered two themes that are commonly referred to aspects that should be improved to attain quality teaching. Such themes include suggestions to improve teachers' pedagogical skills in teaching and the provision of quality instructional materials.

The theme or suggestion focusing on improving teachers' pedagogical skills was supported by the IDI2 as narrated below:

Aspects that should be improved to attain quality in teaching may include pedagogical skills, enhance teaching methods and technique, and communication. These things comprises quality teaching and equates successful learning. (IDI2, Q3.3.1)

On the theme about the quality instructional materials, IDI3 said that:

Aspects that should be improved to attain quality in teaching may include pedagogical skills, enhance teaching methods and technique, and communication. These things comprises quality teaching and equates successful learning. (IDI3, Q3.3.2)

The findings on the suggestion for teachers' pedagogical skills development, is congruent with the findings of Tomar and Jindal (2021) which state that to ensure that students achieve their full potential in the classroom, it is essential that educators constantly refine their pedagogical practices. Instructional strategies, evaluation methodologies, and the art and science of effective teaching are all part of pedagogy, which is the guiding principle in the teaching-learning process. Teachers need to participate in continuous professional development to improve their teaching abilities in a dynamic educational environment characterized by technology progress and varied

student needs. Because education is dynamic and ever-evolving, it is essential that educators continuously improve their educational abilities. Flexibility is key in the face of changing student demographics, new technological developments, and paradigms in education. Teachers who invest in themselves professionally as educators will be better able to adapt to these shifts and meet the needs of today's students by making use of cutting-edge tools and techniques. Education must be flexible enough to change with the times so that it can meet the ever-changing demands of its pupils.

Hernandez (2021) added that creating inclusive and student-centered learning environments also requires the development of pedagogical abilities. Learning is a process, and every student has their own set of advantages, disadvantages, and preferences. Differentiated education allows teachers to meet the needs of students with a wide range of abilities and learning styles. This flexibility fosters a welcoming learning environment where all students, irrespective of their socioeconomic status or individual learning profile, are given the chance to succeed. In order to maximize learning results, it recognizes the significance of personalized assistance.

REFERENCES

Al-Otaibi, G. (2020). Language Learning Strategy use Among Saudi EFL Students and its Relationship to Language Proficiency Level, Gender and Motivation. Dissertation. Indiana University of Pennsylvania.

Alenezi, A. (2021). The relationship of students' emotional intelligence and the level of their readiness for online education: A contextual study on the example of university training in Saudi Arabia. The Education and Science Journal, 22(4), 89–109. doi: 10.17853/1994-5639-20201

Alhaisoni, E. (2021). Language learning strategy use of Saudi EFL students in an intensive English learning. Asian Social Science, 8(13), 115–127. doi: 10.5539/ass.p115.

Ali, M. (2020). Quality enhancement in teaching-learning strategies of Bangladesh: A qualitative assessment. International Journal of Advanced Trends in Technology: Management and Applied Science (IJATTMAS), 3(1), 121–147.

Bashir, S., Lockheed, M., Ninan, E., & Tan, J.-P. (2020). Facing forward: Schooling for learning in Africa. The World Bank. Available at: https://www.worldbank.org/en/region/afr/publication/facing-forward-schooling-for-learning

Avalos, B. (2020). Teachers for Twenty-First Century, Teacher Educatioa: Reflections, Debates, Challenges and Innovations (http://www.ibe.unesco.org/International/Publications/Prospect/prospectsOpenFiles/pr1ofc.pdf)

Chiu, M. (2020). Universals and specifics in learning strategies: Explaining adolescent mathematics, science, and reading achievement across 34 countries. Learning and Individual Differences, 17(4), 344–365. doi: 10.1016/j.lindif.2023.007.

Cradler, J. (2020). Research Implications for Preparing Teachers to Use Technology (http://caret.iste.org/caretadm/ news.documents/ProfDef.pdf)

Curry, L. (2020). A critique of the research on learning styles. Educational Leadership, 48(2), 50–56.

Dias, A. (2021). What are the Big Challenges of Education for the XXI Century: Proposals for Action, University of Columbia, Portugal (http://www.google.com/search?sourcenavclient&hl=id&g=What+are+the+Big+Ch allenges+of+Educ atio+XXI+Century)

Diaz, R. (2019). Use of learning strategies in the university. A case study. Propositos y Representaciones Monographic: Advances on Qualitative Research in Education, 7(1), 10–32.

DiPrete, C. (2020). The Rise of Women: The Growing Gender Gap in Education and What it Means for American Schools. NY: Russell Sage.

Heil, J. (2020), International Education and Teacher Preparation in the US, for Presentation at The National Conference "Global Challenges and U.S. Higher Education: National Needs and Policy Implications", Duke University, July 28, 2 023 (http://www.duke.edu/web/cis/globalchallenges/abstract.pdf)

Istanto, F. (2020). A Global Perspective, A Keyword for Design Education Facing XXI Century, for Presentation at International Design Conference, Dongseo University Corea, July 28, 2023 (http://puslit.petra.ac.id/expertise/authors/I/Istanto, %20Freddyo.htm)

Jimenez, L. (2021). The brief-ACRA scale on learning strategies for university students. Revista de Psicodidactica, 23(1), 63–69. doi: 10.1016/j.psicod. 2023.01.

Juste, M. (2021). Learning strategies in higher education. International Journal of Learning, 17(1), 259–274. doi: 10.18848/1447-9494/CGP/v17i01/813.

Kim, K. (2019). Female secondary students' and their teachers' perceptions of science learning environments within the context of science education reform in Saudi Arabia. International Journal of Science and Mathematics Education, 17, 1475–1496. doi: 10.1007/s107-018-09946-z.

Li, L. (2020). Learning styles: A review of validity and usefulness. Journal of Education and Training Studies, 4(10), 90–94.

- Montero, C. R., & Arizmendiarrieta, B. S. Y. (2020). The effectiveness of a learning strategies program for university students. Psicothema, 29(4), 527–532. doi: 10.7334/psicothema2016.
- Muelas, A., & Navarro, E. (2020). Learning strategies and academic achievement. Procedia Social and Behavioral Sciences, 165, 217–221. doi: 10.1016/j.sbspro.2023.12., Proceeding in CPSYC 2014.
- Nikou, S. (2019). Mobile-based micro-learning and assessment: Impact on learning performance and motivation of high school students. Journal of Computer Assisted Learning, 34(3), 269–278. doi: 10.1111/jcal.140.
- Pinto, G., Bigozzi, L., Vettori, G., & Vezzani, C. (2020). The relationship between conceptions of learning and academic outcomes in middle school students according to gender differences. Learning, Culture and Social Interactions, 16, 45–54. doi: 10.1016/j.lcsi.2017.11.
- Shi, H. (2021). Learning strategies and classification in education. Institute for Learning Styles Journal, 1, 24–36.
- Tan, R. E. (2019). Academic self-concept, learning strategies and problem-solving achievement of university students. European Journal of Education Studies, 6(2), 287–303. doi: 10.5281/zodo. 3235652
- Tomar, S., & Jindal, A. (2021). A study of effective learning strategies in relation to intelligence level across the science and arts academic streams of secondary level. IOSR Journal of Research and Method in Education (IOSR-JRME), 4(6), 41–50.
- Hernandez, P. (2021). Perceived emotional intelligence and learning strategies in Spanish university students: A new perspective from a canonical non-symmetrical correspondence analysis. Front Psychology, 8. doi: 10.3389/fpsyg.2017.08.
- Vermunt, J. (2019). A learning patterns perspective on student learning in higher education: State of the art and moving forward. Educational Psychology Review, 29(2), 269–299.
- Vettori, G. (2020). Upper secondary school students' conceptions of learning, learning strategies. The Journal of Educational Research, 113(6), 475–485. doi: 10.1080/671.2020.1861583