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# TEACHING STRATEGIES AND LEARNING SATISFACTION IN AN ONLINE DISTANCE EDUCATION

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**ABSTRACT:** Enhancing the learning process with appropriate teacher's teaching strategies and students' learning satisfaction may contribute to better outcomes and performances. This study aimed to determine the relationship between teachers' teaching strategies and learning satisfaction of Education students' in Misamis University, Ozamiz City, using the descriptive-correlation design. Random sampling was used getting the 101 Education students' who served as respondents. Adapted Teaching Strategies questionnaire (Mercado & Lim 2008) and Learning Satisfaction in Online Distance Learning questionnaire (Almusharraf & khahro 2012), were used as research instrument. Majority of the respondents were female, aged 21-23 years old and 3rd year Based students. Teachers had very high level of utilization of the different teaching strategies. Students' had very high level of students' learning satisfaction.

There was a significant difference in students' learning satisfaction when grouped by their year level. There was a highly significant relationship between the teachers' teaching strategies in terms of planning instructions and learning satisfaction, selection of course activities and learning satisfaction, related assessment activities and learning satisfaction, and the students' learning satisfaction. Therefore, there is a good teachers' teaching strategies and have students' learning satisfaction.

## KEYWORDS: Learning Satisfaction, Online Distance Education, Teaching Strategies

## I. INTRODUCTION

Online distance education is more than just uploading educational content; it is a learning process that gives learners agency, responsibility, flexibility, and choice; it is a complex process that necessitates careful planning, design, and goal-setting to create a practical learning ecology (Bozkurt & Sharma, 2020). Teachers were compelled to transfer what they had on hand with their expertise and abilities to save a study year in the case of COVID-19 lockdown, and the transfer of teachings and courses needed to be adequately planned and coordinated (Howell, 2001; Mseleku, 2020) The change in the learning system forces the system school should apply the distance education or online learning (Rasmitadila et al., 2020). Every school publicizes the teacher's expectations, and the schools are closing their doors (Nasr, 2020).

Following the COVID-19 epidemic, deploying online distance learning at almost every level and type of educational institution globally became mandatory. Most higher education institutions worldwide now regard online emergency remote teaching as one of the most effective teaching options for dealing with the pandemic's global education issue (Karakose, (2021). The COVID-19 outbreak cleared the path for digital learning to be implemented at all school levels as an emergency alternate education system. In this light, more innovative and interactive "online learning" practices will aid in the resilience and preparedness of educational systems in the face of future crises and uncertainties (Noor et al., 2020; Pokhrel & Chhetri, 2021). Because the bulk of educational institutions were closed due to COVID-19, and no solution appeared to be on the horizon, several institutions implemented online learning. As a result, online education has rescued stagnant classroom learning and has become a critical lifeline for the global education sector. Several schools and higher education institutions with the necessary digital infrastructure and resources began using meeting platforms like Cisco Webex, Google Meet, Jio Meet, Zoom, and others to conduct classes (Chaddha, S. (2020).

Most educational establishments adopted the e-learning method through online education, and teaching was done on digital platforms. It results in a significant shift from face-to-face to online instruction. A new educational model involving the integration of information technology in education appeared out of nowhere. It altered the way people were taught. It allowed professors to communicate with students via chat groups, video meetings, and document sharing (Gangwani & Alfryan, 2020). However, to use these digital tools, all faculty and students must have devices and an internet connection. It became critical to contact students via video

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solutions like Panopto, Webex, and Zoom and keep them interested by deploying effective teaching practices. It puts more pressure on teachers to be knowledgeable about their roles and to have the abilities needed to favorably impact student participation in an online learning environment (Gangwani & Alfryan, (2020).

Teachers in the twenty-first century have enormous obstacles in teaching a generation born and growing up in the digital age. In terms of the net generation, not only has their online activity altered, but so have their learning methods, ways of thinking, and brain activities. Due to COVID-19, school closures and the implementation of online education will occur in the middle of March 2020 (Szabó, (2020). Teachers nationwide are scrambling to figure out how to keep teaching their students despite physical contact being no longer feasible. Again, class and social divisions significantly influence how well instructors can teach schoolchildren throughout the pandemic." According to Lawton, a teaching strategy is a generalized plan for a lesson(s) that includes structure expected learner behavior in terms of instructional goals and an overview of planned techniques necessary to achieve the strategy." Teaching strategies are approaches for assisting students in learning required course information and developing attainable future goals. Teachers in public (premier private) schools are tech-savvy and have access to digital infrastructure and Internet access at home, which is vital for engaging with students and sharing course materials. Some of these premier institutes have experimented with learning management solutions, which provide facilities like online homework submission, online evaluation, and other learning features (Chaddha, S. (2020).

Teachers employ various tools, including public communication platforms (Dingding Group, WeChat Group, QQ Group), cloud classrooms for corporate education, and Tencent Classroom for online instruction. These many types of online education complement one another and ensure that online teaching is of high quality during the pandemic. Simultaneous teaching is frequently emphasized in the ministry's program as joint lectures or through media like videoconferencing and live chats. Access to information is eased in asynchronous teaching by providing messages and files to students, commonly via social media programs or email. Teachers can pick online teaching tools such as PowerPoint, Seewo whiteboard, and Seewo EN5 when using "Dingding" for live sessions based on their personal needs and habits. After the live broadcast, the teacher can arrange accurate remedial assignments based on the student's responses to the class (message interaction during the live broadcast). (Zhao et al., (2020).

Brilliant teachers' expertise is assumed to focus more on student learning and pedagogical issues, making them more adaptable to new approaches to promote learner flow. The knowledge reserve, teaching level, and teaching style of the teacher will all impact online learning satisfaction (Xiao & Li, 2021). Because of its complexity, satisfaction is a challenging motivating construct to assess. In educational contexts, satisfaction can be measured by things as specific as a 'one-time' learning experience or as broad as an instructor's communication approach with students. Because online learning satisfaction is complex and multidimensional, many factors will likely influence it (Yalcin, 2017).

According to research on online learning, the quality of interaction is the most critical component in determining learning satisfaction. Numerous studies emphasize the value of instructor feedback, but predictive studies have also discovered that student engagement might predict online learning satisfaction. It is well known that having a good attitude toward technology results in greater satisfaction with the online learning experience. Similarly, motivation that sparks a student's interest might influence satisfaction, but it is a two-way process. The importance of active participation (engagement) in a course should not be underestimated, as it has been proven to be one of the most critical aspects of learning achievement (Kovačević, 2021).

Learners in higher education frequently interact with many forms of e-content, including e-books, ejournals, simulations, presentations, animations, databases, websites, audio-video productions, discussion forums, and immersive content, notably during the COVID-19 epidemic. Students' easy access to e-content is a primary determinant of student satisfaction in online learning, with student-content interaction being the most crucial element among all types of interaction that contributes to student satisfaction. Several studies have looked into the factors of student satisfaction with online learning. Accordingly, the role of the instructor, teacher-student interaction, nature of the course structure, course content, the role of technology, learner motivation, learner efficacy, self-regulated learning, learning environment, and assessment methods are some of the critical determinants of student satisfaction (Hettiarachchi et al., 2021).

Learning satisfaction refers to a learner's overall contentment with what they have learned, as measured by their rating of educational services or the program's quality (Yae-Ji & Seung-Hoo, 2021). Communication, student participation in online conversations, flexibility, workload, technology assistance, instructor pedagogical skills, and feedback are all aspects that go into determining student satisfaction in online learning. Three learning theories underpin satisfaction with online learning: social cognitive theory, interaction equivalency theorem, and social integration theory. Students develop knowledge in a social environment while interacting with others, participating in activities, and receiving feedback. Student satisfaction is influenced by their relationships with other students, instructors, and content (Elshami et al., 2021). As a result, as numerous types of interactivity are implemented within the learning environment, satisfaction with the learning experience rises. Online courses featuring combined asynchronous and synchronous components are increasingly popular among students (Filiz & Konukman, (2020).

Students prefer synchronous meetings because they allow for real-time discussion, questioning, feedback, and reflections, which improves student satisfaction with online learning. They appreciate the ease with which they may access online learning materials and videos. In reality, students are dissatisfied if online synchronous video conferencing is available. The absence of specific content challenges in understanding learning materials and technological difficulties, such as internet connection, sound quality devices, or supportive software, negatively impact student satisfaction with online learning (Garris & Fleck, 2020).

#### **Review of Related Literature**

Body language, facial expressions, and the teacher's voice are essential teaching tools in traditional classroom instruction. However, as the course moves to online teaching, these tools are challenging to use onscreen, and only "voice" can be fully functional, limiting body language and facial expressions. Therefore, in online classes, teachers need to slow down their speeches properly so that students can earn important knowledge points. The technical requirements for online education are much higher than traditional face-to-face education for inexperienced teachers. Teaching assistant support is critical, given that most faculty members at our University need more support to operate an online education platform. The instructor should be in extensive contact with the teaching assistant before the class to ensure an understanding of each class's goals, knowledge framework, and educational activities. In this way, the teaching assistant can effectively support online education. In addition, teaching assistants can use post-class email, WeChat, and other social platforms to provide consultations and answer questions to students who need more time for school. (Bao, 2020).

Online learning is becoming more prevalent in education, allowing students to complete their studies and academic tasks. This research explores the factors influencing students' satisfaction with online tutorials. One of the most exciting issues that needs to be studied is determining the factors influencing students' satisfaction with online tutorials. This research aims to analyze these factors and determine what can be improved to improve their satisfaction. (Harsasi & Sutawijaya, 2018).

Faculty satisfaction is considered an essential factor of quality in online courses. A study was conducted to identify and confirm factors affecting online faculty satisfaction at a small research university and to develop and validate an instrument that can be used to measure perceived faculty satisfaction in the context of the online learning environment. The online faculty satisfaction survey (OFSS) was developed and administered to all instructors who had taught an online course in fall 2007 or spring 2008 at a small research university in the USA. One hundred and two individuals completed the web-based questionnaire. Results confirm that three factors affect faculty satisfaction in the online environment: student-related, instructor-related, and institution-related factors. (Bolliger & Wasilik, 2009).

Nowadays, separate instruction occurs over the web, with innovation intervening in engagement and communication. Since value-based removal in online removal learning will continuously depend on technologically mediated communication or interaction, this perspective of mechanical intervention ought to be considered to induce the complete picture. For this reason, we present an unused scale for measuring value-based separation between understudies and learning innovation (TDSTECH), comprised of two interrelated measurements. Unwavering quality merged, and discriminant legitimacy proposes an appropriate scale. Preparatory inferential investigations are conducted with numerous direct relapse and intercession investigations. Relapse models show that TDSTECH is this populace's most critical indicator of fulfillment. This may have vital suggestions for specialists attempting to plan and encourage fulfilling online separate learning encounters. Moreover, go between investigation uncover. (Weidlich & Bastiaens, 2018).

This was a preparatory ponder towards paperwork that included the foundation of interaction and fulfillment scales through a substance legitimacy study. A relapse examination was performed to decide the commitment of indicator factors to understudy fulfillment. The impacts of understudy foundation factors on indicators were investigated. It appears that learner-instructor interaction, learner-content interaction, and Web self-efficacy were significant indicators of understudy fulfillment. Learner-content interaction clarified the most considerable one-of-a-kind fluctuation in understudy fulfillment. Moreover, sexual orientation, course level, and time spent online per week appeared to have an impact on learner-learner interaction, Web self-efficacy, and self-regulation. (Kuo et al., 2013).

This ponder examines how social and motivational qualities may impact students' online learning encounters. Based on an audit of social hypotheses of learning and inquiries about personal characteristics related to inspiration, four builds were included: social capacity, learning objective introduction, seen errand esteem, and self-efficacy. A show was produced to portray the energetic connections among these builds and the resulting degree of learning fulfillment. Calculate examinations highlight four measurements of social capacity: social presence-students, social presence-instructors, social route, and composed communication abilities. Applying auxiliary condition modeling to information from a test of 110 online understudies shows the

significance of students' seen errand esteem, self-adequacy, and social capacity for fulfillment in online learning. (Lin et al., 2008).

This ponder concludes that mixed learning can be considered a proficient approach to removing learning in terms of students' learning encounters, student-student interactions, and student-instructor interactions and is likely to rise as transcendent instruction shows in the future. (Tayebinik & Puteh, 2013).

With the COVID-19 pandemic, which was influential all over the world in early 2020, emergency distance education applications started. Universities in Turkey also suffered from this situation and quickly started their distance education applications using their facilities. Different applications carried out by universities have had different reflections on education. For example, while some universities provided compulsory live classes, others did not. Students are the most critical component of this process. In this respect, this study aimed to examine university students' views about emergency distance education during the COVID-19 pandemic. In this qualitatively designed study, 32 students from 4 universities were asked for their views. An online questionnaire with open-ended questions was used as the data collection tool. The data were analyzed using the content analysis method, and the themes were created. As a result, two of the four universities used Microsoft Teams as a distance education system, while others preferred Moodle and ALMS software. The students who used Microsoft Teams, an integrated system where live lessons can be held, were more satisfied with this process. In addition, the students' views about the distance education system, the positive and negative aspects of the system, live course practices, communication with the instructor, getting feedback, socialization, motivation, academic performance, comparison with traditional teaching, etc. were reported and interpreted within the scope of the theories of Uses and Gratifications and Diffusion of Innovations. It was seen that almost all university students were anxious before the introduction of distance education; the worries of those who took live lessons and used an integrated system were removed entirely. In this respect, within the scope of the distance education system, the elements of live lessons and interaction have great importance for students. (Durak & Cankaya, 2020).

Distance learning has come a long way over the past 150 years. From the initial days of text-based correspondence courses by mail to the immediate learning powered by the Internet and online courses, distance learning is a much more interactive and engaging learning experience in 2019. The third generation of distance education, online learning, has delivered powerful learning models and frameworks, like Community of Inquiry and Adolescent Community of Engagement. These models and frameworks help educators create meaningful teacher-to-student interactions. Additionally, they provide researched approaches to designing robust, authentic learning opportunities where student-to-student discussion and communication deepen the learning experience. As researchers have moved into the third decade of the third generation of distance learning, a more nuanced approach to student online learning has emerged. Researchers have begun to examine supporting student success at each level of the K-20 online educational experience and are finding different learner needs at each level. This literature review aims to review the history of distance education to create a historical background of the development of this learning avenue, which has become very common today. With a historical perspective, this review will look at the current factors in this generation of distance education (online learning) that have impacted successful student outcomes.d with students' enthusiasm for online learning. (Agostinelli, 2019).

This ponder explores discernments and educating encounters of the instructors on the separate instruction amid the Covid- 19 widespread. The case considers that the plan was connected to this ponder. This consideration was carried out with 15 instructors. The information was obtained through a semi-structured meet shape. For examination, a substance investigation was conducted. Concurring to come about, most of the instructors see removing instruction as a technology-oriented handle instead of a modern instructing show. Engagement of understudies had a crucial part in teachers' fulfillment. The instructors kept conventional education methods amid removed courses. For the instructors, separate instruction was less effective than formal instruction due to the need for communication and interaction quality. Discernments influence behavior, and the quality of removed instruction applications influences the discernments, so deciding the discernments of the instructors and taking the vital measures in this heading is pivotal to upgrading the system's quality. (Durak & Çankaya, 2020).

This paper reports the results of a questionnaire study administered to the students (N=424) enrolled in one of Japan's few online distance universities. Satisfaction with learning was explored by examining student opinions and learning preferences regarding five aspects of distance learning identified as necessary: 1) teacher interaction, 2) content interaction, 3) student interaction, 4) computer interaction, and 5) student autonomy. In addition, student responses to three open-ended questions were included in the analysis. The results indicated students were generally satisfied with their learning, and that specifically, learning satisfaction was higher for students who: 1) could persevere in the face of distance learning challenges, 2) found computers easy to use, 3) found it easy to interact with instructors, and 4) did not prefer social interaction with others when learning. (Bray & Dlugosh, 2008).

Bandura within the framework of social-cognitive personality theory. The article provides an overview of modern studies examining learners' academic self-efficacy, including those involved in distance learning. The

relationship between students' academic self-efficacy and academic achievement is analyzed. Separately, teachers' self-efficacy and collective efficacy and their relationship with students' academic success are considered. (Shilenkova, 2020).

This study presents the results of the study of satisfaction with the psycho-didactic component of the educational environment as an indicator of threats to the psychological health of schoolchildren in three groups: parents, teachers, and heads of educational organizations. The total number of respondents in the sample was 16,808 people. Satisfaction with the educational environment in the following characteristics was studied: satisfaction with 1) the content of education, 2) the conditions of training, and 3) the techniques of training and education used in educational organizations. A pairwise comparison of the results obtained in three groups of respondents revealed statistically significant differences in all characteristics. At the same time, parents showed the highest degree of satisfaction with the psycho-didactic component of the educational environment in the schools. Teachers and school heads are less satisfied with the psycho-didactic component of the educational environment and, therefore, see more risks and threats to the psychological health of children (Vachkov & Vachkova, 2018). Demonstration means performing an activity so learners can observe how it is done to help prepare learners to transfer theory to practical application. Moreover, the demonstration strategy involves the teacher showing learners how to do something (Adekoya & Olatoye, 2011).

The affordances of the implementation included the arousal of the student's interest and participation, flexibility, time conservation, the ability to track student progress, and the improvement of interaction, collaboration, and communication opportunities. The challenges were increased workload, course and time management, overlaps, and creating harmony between the face-to-face and online environments. The results show that the critical issues involved context, the pedagogical framework, instructor competency, and technical issues in the blended course design. (Gedik et al., 2013).

Teachers and educational institutions are attempting to find an appropriate strategy to motivate and engage students in learning. Institutions are encouraging gamification in education to improve intrinsic motivation and engagement. However, the student's perspective of the issue must be investigated more. This research study aimed to explore graduate students' perspectives on using gamification techniques in online learning. (Alabbasi, 2017). Online or web-based peer assessment is a valuable and effective way to help learner examine their learning progress, and teachers need to be familiar with the practice before they use it in their classrooms. (Wen & Tsai, 2008).

Many teachers use online professional development websites, but more is needed about what teachers learn from them. This study investigated the use of video-based online learning websites by teachers with over 37,000 members. We used web analytics to investigate user choices for video resources and used website comment coding to analyze teachers' responses to videos. According to the survey results, teachers often watch video clips for immediate use rather than looking back and responding to the video by actively evaluating the teaching method. The video, in which the student is the only prominent actor, elicited the most thoughtful reaction from the teacher. (Bates et al., 2016).

The online and mixed groups comprised 30 and 32 potential teachers, respectively. Mixed-group teacher candidates developed and shared information on multimedia projects by communicating with colleagues and teachers in the WizIQ and Facebook environments when they were not at school. Meanwhile, online group teacher candidates only communicated with teachers and colleagues in the WiziQ and Facebook environments. The results show that the blended learning approach is more effective than the online learning approach. (Bicen et al., 2014).

This white paper aims to analyze the role of digital technology in two specific contexts. That is, how teachers, tutors, and students can play a role in creating interactive digital lessons and how digital technology can play a role in teaching distance learning courses (Borba et al., 2018).

Online learning is the latest model of providing education. Online learning is defined as using the Internet to access learning materials, connect with teachers and other learners, and seek assistance during the learning process to gain information and use the experience to develop. Replacing traditional learning with online learning is highly unlikely, but it is a valuable alternative during such pandemics because of its flexibility, affordability, and accessibility (Martin et al., 2020).

Undergraduate and postgraduate were surveyed to find their perspectives about online education in Pakistan. The study's findings highlighted that online learning cannot produce the desired results in underdeveloped countries like Pakistan, where a vast majority of students need access to the Internet due to technical and monetary issues. The lack of face-to-face interaction with the instructor, response time, and absence of traditional classroom socialization were among some other issues highlighted by higher education students. (Adnan & Anwar, 2020).

The research findings revealed that the students are satisfied with the university staff and faculty members who agreed on specific online platforms to use, grading systems, assessment options, training workshops, online technical support, and more. The research findings also showed that participants were most

delighted with Google Hangouts for lecture delivery, followed by Google Classroom and LMS (Moodle) for course management and assessments. Concerning the students' online learning experiences, the COVID-19 situation within this study context was handled adequately. This study calls for further research into integrating professional development workshops and practical training courses for online learning and teaching to endorse innovative teaching techniques and alternative assessment plans for instructors, learners, administrators, and policymakers. (Almusharraf & Khahro, 2020).

With an ever-growing array of technologies that deliver educational content and offer the potential to support online communication and interaction, distance learning offers the opportunity to move to more authentic online learning and education than ever before. However, educational institutions must take advantage of this opportunity faster, especially in language teacher education. This article presents a case study of a course that attempts to convert many of the features of a successful face-to-face (f2f) program into e-learning media. A vital element of this course was an activity-based framework based on an interactive learning approach aimed at maintaining the interactive capabilities of f2f learning. From course development, delivery, and evaluation, data shows how the online environment creates an e-learning community with various learning opportunities. (Baker and Watson, 2014).

Although the shift to online learning has already become part of many education systems in the world, the level of use and the way technology is used to achieve the quality of distance or online learning is considered to vary. This level depends on many factors related to the various parties involved in implementing this learning format and integrating technology in education systems before the school closure period due to the COVID-19 pandemic. For years, numerous studies have focused on identifying factors that make technology integration successful in classroom teaching and learning. The same factors are assumed to influence the level of use of technology in the processes of shifting learning from school to a distance or online format and the quality of learning in both formats. (Duraku & Hoxha, 2020).

The same factors related to teachers' perspectives on teaching methodology, which have proven to influence the level of technology integration in the classroom, are also expected to have an impact on the successful implementation of online learning since the shift from school to the online format incorporates the concept of "flexible learning." According to this concept, regardless of whether they are online, the applied teaching methodologies should aim to stimulate learning and independence among the students, and the courses should be designed to support their individual needs (Huang et al., 2020). Online learning helps teachers during the COVID-19 pandemic, but it felt ineffective; 80% of teachers feel dissatisfied with online learning. This research was expected to be an evaluation material for various parties, including education policymakers, in conducting online learning. Besides, this research can also facilitate other researchers to develop research on online learning, especially in elementary schools. (Fauzi & Khusuma, 2020).

As online learning grows, institutions and instructors have become more interested in knowing what factors influence students' learning and satisfaction in online learning environments. This becomes more important for them when studies show high dropout rates and lower retention in online courses than in face-to-face traditional courses. (Ghaderizefreh & Hoover, 2018).

Today's educational institutions are expected to create learning opportunities independent of time and place to offer easily accessible learning environments and interpersonal communication opportunities. Accordingly, by using teaching technologies, higher education institutions develop strategies to meet these expectations through teaching strategies, such as e-learning, blended learning, mobile learning, etc. Decisionmakers in education mainly shape these new technology-based teaching strategies. This study seeks to analyze the factors that affect learners' mode of teaching and learning delivery preferences. In this study, blended and online learning is considered as preferences of learners' mode of teaching and learning delivery. The factors discussed in this research are cognitive learning strategies, e-learning readiness, and motivation. The data were obtained from the pre-service teachers at the end of the academic semester when they experienced online and blended learning. Data were analyzed using optimal scaling analysis. The analysis method provides a twodimensional centroid graph that shows the variable categories' correlations. According to study findings, there is a correlation between the preferences of the learning environment and the constructs of self-efficacy, e-learning motivation, and task value. The motivational variables are more effective in the learning environment preference. The students with high task value, e-learning motivation, and self-efficacy preferred studying in blended learning environments. Cognitive strategies, self-directed learning, learner control, and test anxiety factors are independent of the learners' learning delivery preferences. (Keskin, 2019).

Students' satisfaction plays a vital role in ensuring effective online learning. This study investigated the association between social presence and students' satisfaction with online discussions in the Learning Management System (LMS) platform conducted at a private university in Malaysia. Both correlation and two-step hierarchical linear regression were performed to analyze the online survey data. The instruments used to measure the summated social presence and satisfaction scores were the Community of Inquiry (CoI) framework and satisfaction scale, respectively. The results revealed that the correlation between both variables was significantly positive. Students who declared a relatively high level of satisfaction were likelier to report a high

level of interaction with their peers in online conversation and a high level of social presence. Social presence contributed the most to predicting the level of course satisfaction amongst the students. (Nasir, M. K. M. (2020). Students achieve online learning self-efficacy based on previous experiences with technology. They may require training and assistance to use learning tools and platforms before starting an online course (Heckel & Ringeisen, 2019).

Motivation alludes to the learner's intrinsic motivation to learn. It includes the satisfaction inherent in the activity and the intention to achieve a goal. Motivation refers to the perceived relevance of an activity that impacts behavioral intention. Motivated students will engage in self-regulatory activities that help them achieve their goals (Kemp et al., 2019).

Online learning can play a vital role in teaching and learning during the Corona Virus Disease 2019 (COVID-19) pandemic. However, learners' satisfaction is paramount in effectively implementing online learning, especially in institutions where it is newly adopted (Sharma et al., 2020).

The COVID pandemic made us realize the importance of online training for our pediatric postgraduate students. Students' satisfaction levels with online learning were comparable to the previous studies. Apart from gaining knowledge, the present study revealed the impact of online learning on the morale of our students by creating a diversion from the ongoing pandemic situation. Online teaching is feasible and cheap and must be part of the postgraduate training in India beyond the prevailing lockdown. (Agarwal & Kaushik, 2020).

The COVID-19 pandemic has disrupted the normal functioning of various activities worldwide, including learning and education. The shift towards online education during the pandemic of COVID19 has led many studies to focus on perceived learning outcomes and student satisfaction in this new learning environment. This study examines the determinants resulting in students' perceived learning outcomes and their influence on student satisfaction. The data was collected from South Korean and Indian undergraduate students to gain a cross-country study. The study found that interaction in the classroom, student motivation, course structure, instructor knowledge, and facilitation positively influence students' perceived learning outcomes and student satisfaction. There is no significant difference in the students' perceived learning outcomes and student satisfaction in the two countries. The study will be helpful for educationists and academics to identify the factors that will enhance student learning outcomes and satisfaction levels in online classes during the coronavirus pandemic. (Baber, 2020).

One hundred thirty-two post-secondary students completed surveys soliciting their preferences for learning environments, reasons for their preference, motivational orientation towards learning, and learning strategies used. Findings indicated that most students preferred traditional learning environments. This preference was based on how well the environment matched their learning style and engaged them as students. Discriminant analyses indicated significant differences in motivational beliefs and learning strategies; students who preferred traditional environments showed a mastery goal orientation and a greater willingness to apply effort while learning. Students who preferred less traditional environments presented as more confident that they could manage a non-traditional class. (Clayton et al., 2010).

Findings indicate that instructor-student dialogue, student-student dialogue, instructor, and course design significantly affect students' satisfaction and learning outcomes. However, extrinsic student motivation and student self-regulation have no significant relationship with user satisfaction and learning outcomes. Finally, intrinsic student motivation affects learning outcomes but not user satisfaction. The findings suggest that course design, instructor, and dialogue are the strongest predictors of user satisfaction and learning outcomes. (Eom & Ashill, 2016).

#### **Theoretical Framework**

This study was anchored on Gardner's theory of multiple intelligences (1983) and Cardozo's satisfactory learning theory (1965).

Gardner (1983) developed the Theory of Multiple Intelligences. Gardner's multiple intelligences theory can be used to plan instruction, select activities, and develop related assessment strategies. The application of multiple intelligences has many uses in the classroom. Students apply what they learn in class to suit their dominant intelligence and preferred learning style. Students learning processes are improved when dominating intelligence and learning styles are combined (Yavich & Rotnitsky, 2020). Gardner claimed that each person has unique abilities and tendencies in many domains and various types of intelligence mixed in various ways. It is essential to create exercises that cover all forms of intelligence for a teacher to promote intellectual abilities in their students. Some learning issues, such as inattentiveness, undesired behaviors, alienation from a lesson, and the impression of failure, may go away if the teacher considers these types of intelligence and designs lessons and daily schedules accordingly (Dolati & Tahriri, 2017). According to Gardner, people build these intelligences through engaging in culturally valued activities, which assist them in creating distinctive mental patterns. Multiple intelligences theory states that there are numerous forms of intelligence, not only two ways that IQ tests can identify. The theory of multiple intelligences has significantly influenced educational practices and research, especially in education, and it has altered educators' perspectives on learning and intelligence (Ferrero

et al., 2021). Students can determine their skills and shortcomings and gain knowledge from them by exploring their learning styles and varied intelligence types. To properly establish their goals, plan activities that can educate the various bits of intelligence, and create student-centered activities, teachers must also have a solid understanding of their students' learning styles and multiple intelligences (Sener & Çokçaliskan, 2018). The Theory of Multiple Intelligences supports this study because teachers discover that students will be more active, responsive, and productive learners by focusing on the main learning intelligences. Also, teachers can support all sorts of intelligences in each student and promote an individualized learning process that will allow each learner to use their unique skills and display learning.

The Learning Satisfactory Theory of Cardozo (1965) originated from the customer satisfaction theory, which Cardozo advanced. Learning satisfaction results from the processes that occur during the student's participation in teaching and learning sessions. Furthermore, contentment can be considered a comparison of expectations and perceived service with pleasure or dislike. Satisfaction is a happy emotion that occurs after a person's wants and desires have been met. It is the feeling a person experiences when they have had a performance or an outcome that has exceeded their expectations. As a result, satisfaction can be defined as an experience of receiving expected results. Student satisfaction is a multifaceted process driven by various institutional and personal considerations. Students' satisfaction can be defined as a short-term attitude from an appraisal of students' educational experiences, services, and facilities.

On the other hand, student satisfaction is linked to the value of the learning experiences. Student satisfaction is influenced by their relationships with other students, instructors, and content. As a result, as numerous types of interactivity are implemented within the learning environment, satisfaction with the learning experience rises. Student satisfaction is improved by involving students in official extracurricular activities in addition to their academic program. This theory supports this study by explaining that satisfaction is a happy emotion if a person has exceeded expectations.

#### **Conceptual Framework**

The instructor's process measures effective teaching strategies to communicate that content rather than the course content itself. With such a wide range of teaching strategies available, each instructor can choose the ones that have been demonstrated to be the most effective: online searching, book-related research, and in-class activities. Understanding the background of the students, as well as the environment they come from and their learning goals, is crucial to determining the usefulness of teaching strategies. Students have varying abilities when it comes to demonstrating their knowledge, which leads to the desire to use a variety of learning styles to meet the needs of all students and equalize their learning opportunities (Abdelalim et al., 2020).

According to relevant research, they respect learning styles, adopt varied teaching tactics, and increase their repertory influence more efficiently by utilizing various sources. Management of cognitive processes in pupils, as well as the efficiency and quality of education in general. In this regard, the instructor must know their pupils' learning styles to accommodate them in choosing the most appropriate teaching strategies (Gajić, 2020).

The teaching strategy should be altered to meet the students' demands and the instructional scenarios' requirements. Most teaching tactics are similar in local or international teaching theories or practices. This entails fine-tuning or transforming the course's content, shifting from a textbook to a teaching system, which is a creative undertaking and a crucial link in the teaching process. To improve teaching efficacy, teachers should place the entire lesson in a real-life setting and use terminology, procedures, and evaluations that are more easily comprehended. This will ensure that the teaching topic is current and fascinating and that the teaching task is done in a harmonic, comfortable, and energetic environment (Lin, 2018).

An effective online teaching strategy is to present specific discussion questions to learners for their responses. The discussion questions should be part of the course curriculum and designed to initiate interactive dialogue between learners and teachers. Answering the questions should require research on the part of the student and collaboration with fellow students and should be problem-based. The instructor should establish parameters for the length of response, designation of appropriate resources, format of response, and timeframe for response. Planning instruction is a method by which the teacher addresses the various needs of pupils by employing suitable curriculum, instructional strategies, resources, and data during the planning phase. The Selection of course activities is all the tasks, projects, discussions, and other activities that encourage students to practice what they have learned and demonstrate their understanding of a unit or module's content. Assessment-related strategies refer to the instructors' various tools and methods to assess their students.

Students' satisfaction with online learning has been demonstrated as one of the five pillars to examine when assessing the quality of a product education via the Internet. Learners' subjective perceptions of their learning experience and how well their learning environment supports academic success are referred to as learning satisfaction. It is about how you feel, how you see things, and how you think about them. Learners' expectations of online learning environments are high (Chee, 2020).

Learning satisfaction is dynamic when students believe their hopes and experiences are consistent. In other words, students who are satisfied with their learning activities are more likely to be prepared to learn online. Students experience learning satisfaction when their expectations are realized, or the reality they encounter exceeds their expectations. (Ramadhanu et al., 2020).

The technology satisfaction model (TSM) is one of the most essential models validated effectively in explaining students' satisfaction in Asian higher educational settings. Moreover, student satisfaction is also a decisive, influential factor involved in a platform or system's net benefits (Jiang et al., 2021)

Students' satisfaction is a crucial topic when assessing online learning. Online learning satisfaction is complex and multidimensional, so various factors are expected to influence it. Studies in online learning show that the quality of interaction is the main factor of learning satisfaction. Many studies emphasize the importance of instructors' feedback, but predictive studies also found that interaction between students could predict online learning satisfaction (Horzum, 2017).

Satisfaction connotes online users' emotional assessment of their experience and the intrinsic positive outcome emanating from behavior that fulfills their expectations. Such emotions are triggered mainly by diverse attributes, which, when understood, can facilitate strategies to improve students' performance and online learning quality. Evidence from a previous study suggests that e-learning attributes are essential in stimulating students' satisfaction with e-learning in a university (Agyeiwaah, 2021).

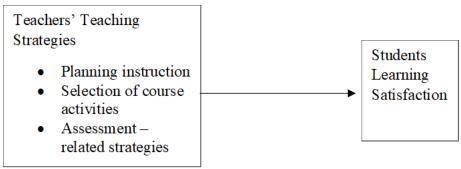


Figure 1. Schematic Diagram of the Study

## Statement of the Problem

This study determined the teaching strategies and learning satisfaction in online distance education at Misamis University, Ozamiz City, during the second semester of the 2021-2022 school year. The specific objectives of the study were To:

1. Identify the profile of the respondents in terms of their age, sex, course/program, and year level;

2. Determine the level of utilization of teachers' teaching strategies in terms of planning instruction, Selection of course activities, and assessment-related strategies;

3. Determine the level of students' learning satisfaction in an online education;

4. Explore the difference in the learning satisfaction of the respondents when their profile groups them and

5. Explore the relationship between the extent of teachers' teaching strategies utilization and students' learning satisfaction.

# II. METHODS

## **Research Design**

This study used a descriptive–correlational design. Descriptive research aims to accurately and systematically describe a population, situation, or phenomenon. It can answer what, where, when, and how questions, but not why questions. A descriptive research design can use various research methods to investigate one or more variables (McCombes, 2019). Descriptive statistics will be reported, and correlations between variables will be explored with parametric and nonparametric measures (Efthymiou, 2017). A correlation refers to a relationship between two variables. Correlations can be strong or weak and positive or negative. Sometimes, there is no correlation (Cherry, 2020). Descriptive and correlational designs are focused on describing and examining relationships of variables in a natural setting (Baker, 2017). It was characterized by an attempt to determine, describe, or identify the teaching strategies and learning satisfaction in online distance education.

This design explored the relationship between teaching strategies and learning satisfaction in online distance education.

#### **Research Setting**

The study was conducted in the College of Education Misamis University, Ozamiz City, in the second semester of the 2021-2022 school year. In the current school year, Mis amis University is implementing online distance learning to address the learning needs of students. The University's Education program was one of the first courses offered when Misamis Institute reopened in 1946, right after the war. The Education program was awarded Level I and II Accredited Status in 1988 and 1990, respectively. 2011 PACUCOA awarded the Bachelor of Elementary Education (BEEd) and Bachelor of Secondary Education (BSEd) Programs Level III Reaccredited Status valid until November 2014. The College of Education is the region's leading center of teacher education. Misamis University - Philippines is a privately owned, non-sectarian, non-profit educational institution. The only autonomous University granted by the Commission on Higher Education (CHED) in Northwestern Mindanao, an ISO 9001:2015 Management System Certified granted by Det Norske Veritas-Germanischer Lloyd Business Assurance and awarded by PACUCOA (The Philippine Association of Colleges and Universities Commission on Accreditation) as the Most Number of Accredited Programs in Region X.

#### Participants of the Study

The study's respondents were college education students at Misamis University, Ozamiz City. A total of 101 target student-respondents were considered as samples from the population of 200. They were selected through a random sampling technique. Random sampling is one of the simplest forms of collecting data from the total population. The sample members are chosen randomly and by chance in this sampling. As a result, the sample's quality is unaffected because each participant has an equal chance of being chosen (Bhardwaj, 2019).

#### Instruments

The following instruments were used in this study:

A. *Teaching Strategies.* An instructor uses the process to communicate with students and to involve them in active and cooperative learning activities during synchronous meetings (Heilporn, 2021). The indicators, such as planning instructions, Selection of course activities, and assessment-related strategies, consist of 5 statements each. This tool consists of 15 statements describing teachers' activities in their teaching strategies.

In interpreting the	e level of	t teaching s	trategies, the	e following sca	les were used:

Respondents	Interpretation
4.21-5.00	Very High
3.41-4.20	High
2.61-3.40	Average
1.81-2.60	Low
1.00-1.80	Very Low
	3.41-4.20 2.61-3.40 1.81-2.60

**B.** Learning Satisfaction. The learner's overall contentment with what they have learned is measured by their rating of educational services or the program's quality (Yae-Ji & Seung-Hoo, 2021). This tool consists of 15 statements describing students' different learning satisfaction.

In interpreting the level of learning satisfaction of students, the following scales were used:

Continuum	Responses	Interpretation
5 – Strongly Agree	4.21-5.00	Very High
4 – Agree	3.41-4.20	High
3 – Neutral	2.61-3.40	Average
2 – Disagree	1.81-2.60	Low
1 - Strongly Disagree	1.00-1.80	Very Low

#### **Data Collection**

The researchers secured a Letter of Request and Informed Consent Form from the secretary of the College of Education with the approval of the Dean of the College of Education at Misamis University for the conduct of the study. The research instrument was distributed to the College of Education students through an online survey. Data were retrieved, tallied, and analyzed using the Statistical Package for Social Sciences (SPSS) software.

#### **Ethical Considerations**

The researchers ensured that participation in this study was voluntary, informed, and safe for the research respondents. Participants were free to withdraw without negatively impacting their involvement and relationships with any researchers or research bodies involved. Participants can leave a program of this nature at any time. Confidentiality was also ensured; identifying information was excluded from reports or published documents. It is essential to consider how reports are worded to ensure that there is no opportunity for people to be identified, even though names are not used.

#### **Data Analysis**

The following statistical tools were used in the study:

*Frequency and percentage* were used in tallying the distribution of the respondent according to their profile in terms of their age, sex, course/program, and age level.

*Mean and standard deviation* were used to determine the level of teachers' teaching strategies and student learning satisfaction in online distance education.

A t-test was used to explore the difference between students' learning satisfaction and their grouped profiles.

Analysis of variance (ANOVA) was used to determine the respondents' age, program enrollment, and year level.

*Pearson's (r) Product Moment Correlation Coefficient* was used to explore the relationship between the extent of teaching strategies and learning satisfaction in online distance education.

## **III. RESULTS AND DISCUSSION**

#### Profile of Education Students in terms of their Age, Sex, Course/Program and Year Level

Table 1 shows the profile of education students in terms of their age, sex, course/program and year level. Findings revealed that majority of the students were aged 21-23 while students aged 30 years old and above were the least. When it comes to their gender the female showed a greatest number than their male counterpart. In terms of the course/program, the majority were BSED. In terms of year level the 3rd year students were of the greater percentage while the lowest were those from the 1st year level.

The tertiary education level, particularly in the Colleges of Education, is usually a time of developmental transition during which a person passes from childhood to adolescence. Students go through a lot of psychological and social stress at school during this time of development. They must deal with psychological development, cognitive changes, a sifting of social and parental expectations, conflicting demands for positions, difficulty forming relationships with parents and peers, school and subject choice, and a change in the school climate (Amoah et al., 2021).

One of an adolescent's most exciting and memorable experiences is college life. Students at college frequently develop novel coping mechanisms since they are prone to a range of stress-inducing situations. College students may encounter stressful situations because of their surroundings or their academic subject. College students are susceptible to a variety of stress-inducing scenarios, which causes them to constantly come up with new ways to cope with stress. College students may experience stress-inducing circumstances related to their environment or their course material (Yikealo et al., 2018).

#### Table 1

Profile of Education Students in terms of their Age, Sex, Course/Program and Year Level (n=101)

Age Frequency	Percent
(18-20 yrs. old) 18	17.82
· · · · · · · · · · · · · · · · · · ·	
(21-23 yrs. old) 58	57.43
(24-26 yrs. old) 13	12.87
(27-29 yrs. old) 4	3.96
(30 yrs. old and above)	8 7.92
Sex Frequency	Percent
Male 19 18.81	
Female 82 81.19	
Course Frequency	Percent
BEEd 41 40.59	
BSEd 60 59.49	
Year Level Frequer	ncy Percent
1st year 12 11.88	
2ndyear 20 19.80	

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3rd year 40	39.60
4th year 29	28.71

## **Utilization of Teaching Strategies**

Table 2 shows the teachers' utilization of teaching strategies in online distance education. The teachers' planning instructions obtained one of the highest means (M=4.62; SD=0.44), along with the Selection of course activities (M=4.62; SD=0.42) and related-assessment strategies (M=4.58; SD=0.47). This implies that teachers utilize varied teaching strategies for the different learning styles of students.

The result further indicates that teachers utilized varied teaching strategies to create a positive atmosphere and interactive learning environment using different apps, which led to students' active participation and enjoyment—moreover, providing student-centered lessons and activities based on active learning concepts connected to real-world applications. Teachers face many challenges adapting their curriculum and lessons to meet their new normal. The most essential thing for all teachers is to create safe ways for students to continue receiving the education they deserve.

Teachers used the platform to publish learning tasks online in real-time, monitor student assignment fulfillment in real-time, provide counseling, and answer queries. Students use computers and mobile phones to complete learning tasks on time, and they take advantage of online learning and homework submission (Zhao et al., 2020)

Teachers must be committed and skilled to do this. When students have learned something, teaching becomes more effective. Effective teaching provides the most significant opportunities for all students to learn. It also provides the required learning environment and opportunities for all students to learn by making sense of their experiences (Adebisi et al., 2018).

Teachers want pupils to feel safe and secure while providing opportunities for learning and development. Teachers must first determine their goals, create a curriculum, and assess how the online environment may support those goals and activities. Teaching is effective when a teacher can achieve the teaching objectives and assist learners in overcoming learning challenges, and as a result, teaching is booming.

#### Table 2

*Utilization of Teaching Strategies* (*n*=101)

Teaching Strategies	Mean	SD	Remar	ks	
Planning Instructions	0.44	Very H	ligh		
Selection of Course Activities 4.		4.62	0.42	Very High	
Related Assessment Strateg	gies	4.58	0.47	Very High	
Overall 4.61 0.44	Verv H	ligh			

*Note.* Teaching Strategies Scale: 4.21-5.00 (Very High); 3.41-4.20 (High); 2.61-3.40 (Average); 1.81-2.60 (Low); 1.00-1.80 (Very Low)

#### **Students' Learning Satisfaction**

Table 3 presents the students' learning satisfaction in online classes. It shows that students' satisfaction with online education is very high (M=4.45; SD=0.52). This revealed that students are actively engaged and satisfied with the mode of delivery in the new normal. Increasing student satisfaction requires combining synchronous and asynchronous approaches, adding new applications to engage students, and providing prompt feedback. Satisfied students were more active in online learning activities and felt at ease in online learning environments with various teaching approaches.

Student satisfaction is influenced by their relationships with other students, instructors, and content. As a result, when different types of interactivity are applied in the learning context, satisfaction with the learning experience rises. Student enjoyment is improved by involving students in official extracurricular activities in addition to their academic program (Elshami et al., 2021).

Students' satisfaction is their fulfillment and enjoyment with various components of the learning service they received in an online learning program. From this perspective, learning service components may directly impact satisfaction (Horzum, 2017). Because student learning satisfaction is linked to academic performance, it is critical. Even though learning outcomes are comparable, the question of student satisfaction with their e-learning experiences remains. Synchronous meetings are popular among students because they

allow for real-time conversation, questioning, feedback, and reflections, which improves student satisfaction with online learning (Zeng et al., 2021).

Students' preparation and motivation depend highly on their satisfaction and positive perceptions of the learning process. Satisfaction refers to a student's motivation, learning, certainty, and retention. It culminates student-teacher efforts and demonstrates students' enthusiasm for their studies. Student satisfaction results from good interactions between the instructor and the pupils. To improve students' satisfaction with online classes, the instructor must be more innovative in planning and delivering course content.

#### Table 3

Students' Learning Satisfaction (n=101)

Variable Mean SD Remark

Learning Satisfaction

4.45 0.52 Very High

*Note.* Learning Satisfaction Scale: 4.21-5.00 (Very High); 3.41-4.20 (High); 2.61-3.40 (Average); 1.81-2.60 (Low); 1.00-1.80 (Very Low)

#### Test of Difference between Students' Learning Satisfaction and their Grouped Profile

Table 4 presents the significant difference between students' learning satisfaction and their grouped profile. Regarding learning satisfaction and age, learning satisfaction and sex, and learning satisfaction and their course, the p-value is more significant than the 0.05 significance level. However, the p-value is less than the 0.05 significance level for learning satisfaction and year level. This implies that students in every year level have their learning satisfaction.

Interaction in online learning often translates to students' engagement in their academic activities before positively affecting students' satisfaction. Learning satisfaction represents learners' feelings and attitudes toward the learning process or the perceived level of fulfillment attached to one's desire to learn caused by the learning experiences (Kim & Kim, 2021).

The data presented in Table 4 implies that learners at every year level have learning satisfaction. Students were most satisfied with their courses when professors were available, clarified the learning process steps, and provided helpful assignment feedback.

#### Table 4

Test of Difference between students 1	Learning Sails	action and their Grouped Profile					
Variables	f-value p-val	ue Remarks					
Learning Satisfaction and their Age 1.	46 0.16	Not Significant					
Learning Satisfaction and their Sex 1.	24 0.27	Not Significant					
Learning Satisfaction and their							
Course 0.10	0.75	Not Significant					
Learning Satisfaction and Year Level 2.99 0.04 Significant							
Note: p<0.01 (Highly Significant); p	<0.05 (Signific	cant); p>0.05 (Not Significant)					

Test of Difference between Students' Learning Satisfaction and their Grouped Profile

#### Test of Relationship between Utilization of Teaching Strategies Students' Learning Satisfaction

Table 5 presents the relationship between using teaching strategies and students' learning satisfaction in the College of Education at Misamis University. It shows a highly significant relationship between using teaching strategies and students' learning satisfaction. Specifically, there was a highly significant relationship between planning instructions and learning satisfaction (r = 0.61, p = 0.00), Selection of course activities and learning satisfaction. The shift of classroom practices from teacher-centered to student-centered has empowered the students to express their satisfaction and dissatisfaction with their learning experiences.

Student satisfaction has been defined as "a short-term attitude resulting from an evaluation of students' educational experience, services, and facilities. Student satisfaction might be negatively affected by online courses compared to traditional ones. Online learning has been reported to hurt students' satisfaction and performance. A previous study investigating student satisfaction indicated a significant positive correlation between learning satisfaction and academic performance. The degree to which students were satisfied with e-learning has been acknowledged to mediate students' learning experiences. Learning satisfaction is a crucial indicator of students' learning performance; moreover, gauging it is essential in understanding students' perspectives of their learning experiences (Aldhahi et al., 2022). Therefore, it has become essential for teachers to satisfy their students by offering services that help them fulfill their expectations from their learning experiences and the education system.

Results revealed that teachers demonstrate strategies and satisfactory instructional quality teaching online distance learning. Teachers possess the necessary knowledge and skills to navigate students learning experience toward achieving the expected course outcomes. Teachers having strategies helps students to understand the process of learning. Strategies help students to bypass their areas of weakness and to perform at the level at which they are capable. Strategies promote flexible thinking and teach students the importance of shifting their approaches to different tasks.

## Table 5

Test of Relationship between Utilization of Teaching Strategies and Students' Learning Satisfaction

r-valu	e p-value	Remarks	
0.61	0.00	Highly	
		Significant	
0.59	0.00	Highly	
		Significant	
0.72	0.00	Highly	
		Significant	
	0.61 0.59	0.61 0.00 0.59 0.00	0.610.00Highly Significant0.590.00Highly Significant0.720.00Highly

*Note:* p<0.01 (*Highly Significant*); p<0.05 (*Significant*); p>0.05 (*Not Significant*)

## IV. SUMMARY, FINDINGS, CONCLUSION, AND RECOMMENDATIONS

#### Summary

This study explored the teaching strategies and learning satisfaction in online distance education and identified the profile of the respondents in terms of their age, sex, course/program, and year level. Determine the level of utilization of teachers' strategies in terms of planning instruction, Selection of course activities, and assessment-related strategies. Determine the level of students' learning satisfaction in an online education. Explore the difference in the learning satisfaction of the respondents when their profile groups them. Explore the relationship between the extent of teachers' teaching strategies utilization and students' learning satisfaction. A descriptive correlational design was used with 101 education students as research respondents. Adapted questionnaires were used through random sampling selected. Data were obtained by distributing digital instruments like Google Forms to students. Frequency and percent, mean and standard deviation, t-test, ANOVA, and Personal product-moment correlation coefficient were used as statistical tools.

## Findings

- The following were the salient findings of this study:
- 1. Majority of the respondents were female, aged 21-23 years old and 3rd year Based students.
- 2. Teachers had very high level of utilization of the different teaching strategies.
- 3. Students' had very high level of students' learning satisfaction.
- 4. There was a significant difference in students' learning satisfaction when grouped by their year level.
- 5. There was a highly significant relationship between the teachers' teaching strategies in terms of

planning instructions and learning satisfaction, selection of course activities and learning satisfaction, related assessment activities and learning satisfaction, and the students' learning satisfaction.

## Conclusions

Based on the findings of this study, the following conclusions were drawn:

- 1. Education students were millennials at their adolescent age.
- 2. The teachers utilized varied teaching strategies online.
- 3. The students are satisfied with the use of technology as a tool to continue the learning process.
- 4. The students have different learning satisfaction regarding their year level.
- 5. The effectiveness of teachers' teaching strategies and the student's satisfaction with their education were closely related.

## Recommendations

The following were the recommendations of this study:

- 1. The University may continue providing the students with a complimentary data plan to access the learning and ensure they are guided and understand their lessons well.
- 2. The education department can provide the students with safe online learning methods.

3. The teachers can adapt and innovate a wide range of teaching strategies using technology to ensure that all students attain their best results.

- 4. Students may engage more in their online activities by attending classes regularly and actively participating in the discussions.
- 5. Parents can continue supporting the students to ensure they are making the most of their virtual learning experience.

Appendix A Questionnaire on

TEACHING STRATEGIES

(Adapted from Mercado & Lim)

Instructions: Below are the various teaching strategies. Please indicate as how to often use these strategies. Please indicate your response by checking the column based on the following scale:

5 – Always 2 - Seldom						
	m	2 - Seldom		– Always	5	

4 – Often

1 - Never

-	
3 –	Sometimes

Statements	5	4	3	2	1
A. Planning Instructions					
1. The teacher use discussion strategy for the subjects that he/she teaches					
2. The teacher able to make the subjects interesting					
3. The teacher always involve students in classroom activities					
4. The teacher facilitates and monitors appropriate interaction among students					
5. The teacher explains what students will learn					
B. Selection of course activities					
1. Provide students-centered lessons and activities that are based on concepts of active learning and that connected to real world applications					
2. Use appropriate strategies to designed to accommodate the varied talents and skills of the students					
3. Use teaching methods to address a variety of students learning style					
4. Use effective strategies and techniques that actively engage students in the learning process					
5. Provide activities that encourage students to participate					
C. Related assessment strategies					
1. A variety of assessment techniques are used					
2. A rubric is used to determine if learning outcomes are being met					
3. A rubric is used to assess the quality of interaction					
4. Student work is evaluated					
5. Student obtain immediate feedback					

Appendix B

## Questionnaire on

## LEARNING SATISFACTION

(Adapted from Almusharraf & Khahro)

Instructions: Below are the statements of learning satisfaction. Please indicate your level of agreement by checking the column based on the following scale:

5 - Strongly Agree

2 - Disagree

4 – Agree

1 - Strongly Disagree

3 – Neutral

Statements			3	2	1
1. I am satisfied with how the instructor makes online learning					
2. I am satisfied with the instructor various online teaching approaches					
3. I am satisfied with the instructors' follow-up					
4. I am satisfied with the gained knowledge and skills					
5. I am satisfied with the course in modality delivery					
6. I am satisfied with the teaching session because it was taught well					
7. I am satisfied with the teaching session because it was interactive					
8. I am satisfied to the technology used					
9. I am satisfied because the teacher clearly define the course objectives					
10. I am satisfied because the teacher promote classroom participation					
11. I am satisfied because the teacher answers questions and problems during the class					
12. I am satisfied because the learning materials distributed are helpful					
13. I am satisfied because my feelings, concerns and opinions are being respect					
14. I am satisfied because I feel encouraged and feel free to share my ideas in class					
15. I am satisfied because the teacher encourages me in my studies					

# CURRICULUM VITAE

## **Personal Background**

i ei sonai Dackgi ounu				
Name	:	Girly V. Alcozar		
Birthdate		: April 22, 1990		
Address		: Tabid, Ozamiz City		
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		March 2002		



## CURRICULUM VITAE

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