Asia Research Network Journal of Education
Vol. 5, No. 2, pp. 65-78, May – August 2025

Student-Centered Insights into Remote Education: Needs, Challenges, and Adaptations

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Received: 15 Apr 2025 Revised: 30 May 2025 Accepted: 1 June 2025

Abstract. The Department of Technology Teacher Education implemented a new learning modality called Remote Teaching and Learning (RTL) during the pandemic. This study employed a mixed-methods research design to examine students' perceptions of their experiences with remote learning across seven key areas: learning modality, school health measures, academic needs, student engagement, relationships, cultural awareness, and school resource officers. A total of 197 students from various academic levels and specializations, ranging from freshmen to seniors, participated in the survey. Quantitative data were collected through structured questionnaires, which provided measurable insights into student experiences. For qualitative insights, open-ended questions were included in the survey, and responses were analyzed using thematic analysis to identify recurring patterns and emerging themes. This dual approach enabled a comprehensive understanding of students' remote learning experiences. Findings indicate a positive perception of remote learning, but challenges in technological proficiency, social interaction, and parental support persist. University safety protocols were effective, fostering a secure learning environment. Academic assistance remains a concern, requiring stronger support systems, leadership, and training. While students remain engaged, focus and attendance issues exist. Faculty observations highlight strong student-adult relationships and meaningful technology-based interactions. Effective communication between parents and faculty is crucial. Promoting cultural awareness requires leadership and professional development. Aligning with Sustainable Development Goals, this study advocates for a flexible, student-centered approach to post-pandemic education.

Keywords: Remote Teaching and Learning, Open and Distance Education, Student Support, Barriers, Administrative, Feedback

1. Introduction

The COVID-19 pandemic brought about an unprecedented global disruption in education, leading to the widespread closure of schools and a sudden shift to homeschooling. This new modality of teaching and learning posed significant challenges, particularly for students who were unaccustomed to remote or online education. Transitioning to this unfamiliar format not only required adaptation but also brought a range of academic and emotional difficulties. According to Tiwari and Khan (2021), the pandemic resulted in substantial educational disruption and increased levels of stress and anxiety among students. One major concern was the reduction in teacher support and

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timely feedback, which disproportionately affected low-achieving students (Mælan et al., 2021). These students, already at a disadvantage, were more likely to experience setbacks in their learning due to the lack of structured guidance and personalized attention. Moreover, teachers themselves were thrust into a critical role during the pandemic, serving as front-line responders in the academic sector despite having limited or no prior experience with online instruction. As Gudmundsdottir and Hathaway (2020) noted, many educators struggled with how to effectively engage and follow up with their students in a virtual environment. The lack of preparedness and professional development in digital pedagogy further complicated the transition. In response to the crisis, schools adopted various approaches such as online learning, flexible remote instruction, and modular delivery methods. However, the abrupt nature of these changes, coupled with additional caretaking responsibilities at home, created a uniquely stressful and demanding context for students. These pressures contributed to a rise in amotivation and disengagement, as learners struggled to maintain focus and stay committed to their academic tasks. From the students' perspective, the challenges of remote learning were multifaceted. Beyond the academic strain, students faced technological barriers and often lacked adequate support at home. Issues such as limited access to devices, unreliable internet connectivity, and the absence of a conducive learning environment made it difficult for many to thrive. The availability of immediate technical support and user-friendly online tools became essential for helping students manage their learning tasks effectively.

This research investigates factors influencing student support in the design of remote teaching and learning (RTL). Teachers must ensure that all students, regardless of their access to resources, can participate in courses. Equitable access to education includes not only learning guides and offline resources but also continuous student support systems, which are available 24/7. Simpson (2012) defines student support as activities that help students succeed beyond just course materials, categorizing it into cognitive, organizational, and emotional support (Simpson, 2015). Parental involvement is also crucial, as parents provide the resources, financial support (e.g., internet access), and emotional guidance that help students manage their learning at home during the pandemic. The challenges of the lockdown, particularly for students with limited resources, will be addressed by this study.

Krumsvik (2020) emphasized the need for educational researchers to explore the educational consequences of the COVID-19 crisis, especially for marginalized populations such as low-income students who may lack reliable internet or digital devices. This study aims to understand the lived experiences of students in remote learning, focusing on how these challenges impact their educational needs, adaptive strategies, and overall success.

By examining the effectiveness of remote learning systems, the appropriateness of teaching strategies, and the institutional support available to students, the research aims to provide insights into improving student retention, promoting self-directed learning, and aligning remote education with the Sustainable Development Goals. Ultimately, this study advocates for a student-centered, flexible approach to post-pandemic education.

Objectives

The specific objectives of the study are as follows:

1) To examine the demographic profile of students enrolled in online courses within the Department of Technology Teacher Education, identifying key characteristics such as year level, gender, diverse ethnic background, and dialect that may influence their learning experiences.
2) To investigate the perceptions and experiences of students regarding the work-from-home learning environment during the pandemic, focusing on the following areas:

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A. Learning Model/Modality: Assessing students' views on the effectiveness and challenges of various online learning models.
B. School Public Health Measures: Evaluating students' awareness and perceptions of health protocols implemented by the school during remote learning.
C. Academic Needs: Identifying the academic support and resources students require to succeed in an online learning context.
D. Student Engagement: Analyzing factors that influence student engagement and participation in virtual classrooms.
E. Student Relationships: Exploring the impact of remote learning on peer interactions and relationships among students.
F. Cultural Awareness and Action: Investigating students' understanding of cultural diversity and inclusivity in the online learning environment.
G. Role of School Resource Officers: Examining the involvement and support provided by school resource officers in facilitating a safe and conducive online learning atmosphere.

3) To propose targeted intervention programs for both students and teachers aimed at enhancing student success in remote learning settings, addressing identified challenges and fostering a supportive educational environment.

2.Methodology

2.1 Research Design

This study utilized the descriptive type of research using quantitative and qualitative data to assess the students' experiences and perceptions encountered while learning at home. This study was conducted at Mindanao State University in southern Mindanao. Quantitative data collected from questionnaires while, thematic analysis is employed through open-ended questions to get the qualitative data of this study.

2.2Research Participants

The respondents of this study were drawn from the College of Education, specifically from the Department of Technology Teacher Education (DTTE) at University in Mindanao in the Philippines. This region is known for its rich cultural diversity and is home to various ethnic groups, which is reflected in the student population of the department. A total of one hundred ninety-seven (197) students participated in the study, encompassing a range of academic levels from freshman to senior years. The distribution of respondents by specialization is as follows: Home Economics 117(35%), BT Livelihood Education – Industrial Arts 107 (33%), and BT Technical-Vocational Teacher Education – Drafting Technology 106 (32%). Among these students, 70% are female and 30% are male, indicating a predominance of female students in the department.

2.3 Research Instruments

An adapted survey questionnaire from Panorama's Back-to-School Surveys for Distance, Hybrid, or In-Person Learning was employed to gather data. The first part of the questionnaire solicits the respondents' demographic profile, which consists of some preliminary self-background information. The second part describes the students' experiences during remote teaching and learning in terms of a.) Learning Model/Modality, b.) School Public Health Measures, c.) Academics, d.) Engagement, e.) Relationships, f.) Cultural Awareness and Action, and g.) School Resource Officer and the corresponding open-ended questions for each case. The statements of the questionnaire are in the form of

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a Likert, which is rated on a scale of a minimum of 3 and a maximum of 9. Hence, the choices of each statement vary. In gathering these data, these structured questionnaires were administered online through Google Forms. In this phase, the researchers take careful details of why and how the respondents perceive and experience such learning in the remote teaching and learning modality.

3.Findings

This study explored students' demographics, perceptions, and experiences in a work-from-home (WFH) academic setup during the pandemic, with a focus on their engagement, relationships, academic needs, and feedback on remote teaching and learning (RTL) models. The results are summarized including students' demographic profile, perceptions and experiences in a WFH setup, and *thematic analysis of the open-ended questions*

3.1 Students' Demographic Profile

The primary objective of this study is to explore the demographic profile of the students in the department. The researchers aimed to gather self-reported information from each student to connect their backgrounds to their overall academic standing while experiencing distance, hybrid, or in-person learning during the pandemic.

The results revealed that the students in the department come from a diverse ethnic background, primarily residing in the neighboring provinces of Lanao del Norte in the Mindanao Islands. The year-level distribution of the respondents is as follows: 15% Freshmen, 22% Second year students, 24% third year students, and 39% fourth year students.

The majority of these students speak Bisaya (47.7%) and Cebuano (40.1%), while a smaller percentage identifies as Meranao, Higaonon, Hiligaynon, and Waray, collectively accounting for 12.2%. Notably, many students have adopted the Bisaya dialect (60.9%) and Cebuano (15.2%) due to their integration into predominantly Christian communities in the region.

This demographic context is crucial for understanding the unique challenges and experiences faced by these students during the transition to remote learning, particularly in light of the cultural and linguistic diversity that characterizes the student body. The findings from this study will provide valuable insights into how these factors influence academic performance and engagement in various learning modalities during the pandemic.

3.2 Perceptions and Experiences of Students in a Work-from-Home Setup During the Pandemic

a) Learning Model/Modality, N =197

Result presents the perceptions and experiences of students regarding the learning model/modality during the pandemic. Among the 197 respondents, a significant 60.0% expressed a preference for learning at home or at the university, indicating a strong inclination towards flexible learning environments. Conversely, only 1 respondent (0.5%) reported being dissatisfied with the amount of time spent communicating with their professors.

When asked about their satisfaction with interactions with college friends, 88 respondents (44.7%) reported being "Extremely Happy," while 66 respondents (33.5%) indicated they were "Quite Happy." This suggests that social connections remain a vital aspect of their educational experience, even in a remote learning context.

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Regarding the use of distance learning technology, 34 respondents (17.3%) found it "Very Easy," while 27 respondents (13.7%) reported that it was "Somewhat Difficult" to navigate tools such as computers, tablets, video calls, and learning applications. This highlights a notable divide in technological proficiency among students, which can impact their overall learning experience.

Addressing these technological challenges is essential for ensuring equitable access to online learning, ultimately fostering a more inclusive educational environment. The study underscores the importance of flexibility, social interaction, and technological support in enhancing the remote learning experience, which can lead to improved academic success and overall well-being for students while studying remotely at home.

b) University/College Public Health Measures

The results regarding students' perceptions of University/College Public Health Measures during the pandemic reveal important insights into the effectiveness and reception of safety protocols. A majority of respondents (154) indicated that the implemented COVID-related safety measures were appropriate, with an overall mean score of 3.17 suggesting that students generally feel the measures are adequate. However, a notable minority expressed concerns, with 23 students feeling there were too many measures and 18 believing more should be implemented.

This feedback highlights the need for ongoing communication and assessment of health protocols to ensure they meet the diverse needs of the student body. The mixed responses indicate that while many students find the measures manageable, there is a segment that may feel overwhelmed or inadequately protected, which could impact their overall sense of safety and well-being on campus.

Furthermore, the ease of following these protocols, with an overall mean score of 4.81 categorized as "slightly easy," suggests that most students are able to comply with the safety measures without significant difficulty. This compliance is crucial for maintaining a healthy campus environment and minimizing the risk of COVID-19 transmission.

Thus the result of the study underscores the importance of balancing safety measures with student comfort and compliance. By addressing the concerns of those who feel either overwhelmed or underprotected, educational institutions can foster a safer and more supportive environment, ultimately enhancing students' overall well-being and academic success during these challenging times.

c) Academic Needs

Result shows the Perceptions And Experiences Encountered By 197 Students regarding individuals' certainty levels regarding their ability to do well in college.

In Item 1, The majority of respondents fell into the categories of "Somewhat sure," "Quite sure," and "Slightly sure," as indicated by the higher percentages in those categories. Relatively fewer respondents expressed extreme certainty ("Extremely sure") or extreme uncertainty ("Not at all sure"). The mean score of 2.79 suggests that, on average, respondents leaned towards being "Somewhat sure" about their ability to do well in college.

Overall, this table provides a snapshot of individuals' confidence levels regarding their college prospects.

In item 2, 53.3% of respondents answered "Yes," indicating that they feel they are getting all the help they need with their college work. 33.5% of respondents stated they needed a little extra help, and 13.2% expressed a need for much extra help. The overall mean score of 1.93 suggests that, on average, respondents lean toward needing much extra help.

This data indicates that while a majority feel they are receiving adequate support, a significant portion still require additional assistance, with a smaller portion indicating a

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need for substantial support. There may be room for improvement in the support systems provided to students to ensure their academic success.

Item 3, Math: 53 respondents (26.9%) expressed a need for help with math. 41 respondents (20.8%) indicated they do not need help with any subjects. 27 respondents (13.7%) require social studies/history assistance 27 respondents (13.7%) need help with English, 14 respondents (7.1%) expressed a need for help with science, and 13 respondents (6.6%) indicated a need for help with reading.

Math is the subject for which most respondents require assistance, followed by social studies/history and English.

Item 4 presents respondents' satisfaction levels regarding the amount of time they spend in enrichment or extracurricular activities at their college or university. There are 65 respondents (33%) indicated they are pretty happy with their time spent in enrichment or extracurricular activities. 59 respondents (29.9%) expressed being somewhat happy and 46 respondents (23.4%) stated they are pleased.However, 22 respondents (11.2%) reported being slightly happy and 5 respondents (2.5%) indicated they are unhappy. The overall mean score of 3.20 suggests that, on average, respondents are somewhat happy with the amount of time they spend on enrichment or extracurricular activities. This data suggests that most respondents are satisfied with their level of involvement in enrichment or extracurricular activities, with a significant portion expressing varying degrees of happiness. These activities are likely to contribute positively to their college or university experience.

Item 5 represents the frequency that students have access to the necessary technology (such as a laptop, tablet, or computer) for their online college work. There are 77 respondents (39.1%) reported having access to the required technology almost always; 51 respondents (25.9%) indicated that they have access sometimes; 46 respondents (23.4%) stated they have access often; 22 respondents (11.2%) reported having access once in a while, and 1 respondent (0.5%) indicated that they do not need to do their schoolwork online. The overall mean score of 3.45 suggests that, on average, respondents reported having access to the necessary technology sometimes for their online college work, while others may experience varying degrees of inconsistency. Ensuring consistent technological access to support compelling online learning experiences is essential.

Item 6 presents the ease or difficulty individuals experience when connecting to the internet to access their college work. There are 20 respondents (10.2%) needing help connecting to the internet for college work; 22 respondents (11.2%) reported it is somewhat difficult; 33 respondents (16.8%) stated that it is neither difficult nor easy; 37 respondents (18.8%) find it slightly difficult; 18 respondents (9.1%) reported it is slightly easy; 40 respondents (20.3%) find it somewhat easy; 26 respondents (13.2%) said it is easy, and 1 respondent (0.5%) indicated that they do not need to do their schoolwork online. The overall mean score of 3.69 suggests that, on average, respondents perceive connecting to the Internet to access their college work as relatively easy, others experience varying degrees of difficulty. Colleges and universities must ensure reliable internet access to support students' academic endeavors effectively.

These findings highlight the need for colleges to enhance academic support services, improve access to technology, and foster initiatives that build student confidence. By addressing these areas, institutions can create a more equitable and supportive learning environment, ultimately contributing to students' academic success and overall well-being.

d) Student Engagement

Item 1 presents the amount of effort individuals are putting into their classes at the present moment. There are 80 respondents (40.6%) reported putting much effort into their classes; 74 respondents (37.6%) indicated they are putting in great effort; 32 respondents (16.2%) stated they are putting in some effort; 9 respondents (4.6%) reported putting in a

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small quantity of effort; and 2 respondents (1.0%) indicated they are making almost no effort. The overall mean score of 4.09 suggests that, on average, respondents reported putting much effort into their classes. This data indicates that most respondents are putting considerable effort into their classes, with a significant portion reporting a great deal of effort. It suggests a generally positive attitude towards academic engagement among the surveyed individuals.

Item 2 presents the perceived difficulty or ease individuals experience when trying hard on their college work at the present moment. 63 respondents (32.0%) reported that it is neither difficult nor easy for them to try hard on their college work; 43 respondents (21.8%) stated it is slightly difficult; 30 respondents (15.2%) find it somewhat easy; 27 respondents (13.7%) reported it is slightly easy; 23 respondents (11.7%) indicated it is somewhat difficult, 6 respondents (3.0%) find it very easy and 5 respondents (2.5%) reported that it is very difficult. The overall mean score of 4.01 suggests that, on average, respondents perceive it as neither difficult nor easy to try hard on their college work at the present moment. This data indicates that many respondents perceive trying hard on their college work as a relatively easy task. However, there is variability among individuals, with some finding it more difficult or more accessible than others.

Item 3 presents the perceived difficulty or ease individuals experience when trying to stay focused on their college work at the present moment. 54 respondents (27.4%) reported that it is neither difficult nor easy for them to stay focused on their college work; 39 respondents (19.8%) stated that it is slightly difficult; 37 respondents (18.8%) find it slightly easy; 28 respondents (14.2%) reported it is easy; 24 respondents (12.2%) indicated it is somewhat difficult; 11 respondents (5.6%) find it very difficult; and 4 respondents (2.0%) reported it is easy. The overall mean score of 3.92 suggests that, on average, respondents perceive it as easy to stay focused on their college work at the present moment. This data indicates that a significant portion of respondents perceive staying focused on their college work as a relatively easy task. However, there is variability among individuals, with some finding it more difficult or easier than others.

Item 4 presents why individuals missed online classes recently, with respondents able to select more than one option. 108 respondents (54.8%) reported missing online classes because their internet was not working; 32 respondents (16.2%) missed online classes because they were sick; 22 respondents (11.2%) indicated other reasons for missing online classes; 20 respondents (10.2%) missed online classes because they were helping their family with something; 7 respondents (3.6%) reported missing online classes because they did not have a computer; 5 respondents (2.5%) missed online classes because they did not feel like attending; 2 respondents (1.0%) reported missing online classes because a family member was sick; and One respondent (0.5%) indicated that they are not attending school in person. The overall mean score of 4.07 suggests that, on average, respondents cited "My internet wasn't working" as one of the primary reasons for missing online classes recently. This data highlights various reasons individuals might miss online classes, with technical issues such as internet problems being the most common factor. It also indicates that other factors, such as sickness, family obligations, and personal feelings, contribute to missed attendance in online classes.

Item 5 presents the reasons why individuals recently missed in-person college, with respondents able to select more than one option. 89 respondents (45.2%) reported missing college because they were sick; 53 respondents (26.9%) indicated other reasons for missing college; 36 respondents (18.3%) missed college because they were helping their family with something; 8 respondents (4.1%) reported missing college because a family member was sick, 8 respondents (4.1%) missed college because they did not feel like attending; 4 respondents (2.0%) reported missing college because they had no way to get to school and One respondent (0.5%) indicated that they are not attending school in person. The overall mean score of 4.48 suggests that, on average, respondents cited "I had no way

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to get to school" as one of the primary reasons for missing in-person college recently. This data highlights various reasons individuals might miss in-person college, with sickness and transportation issues being the most common factors. It also indicates that other factors, such as family obligations and personal feelings, contribute to missed attendance.

The findings underscore the importance of student engagement and the challenges they face in maintaining academic participation. The high levels of effort reported suggest a strong commitment to academic success, which is encouraging for educational institutions aiming to foster a supportive learning environment.

However, the significant impact of internet connectivity issues on online class attendance highlights the need for improved technological infrastructure and support. Addressing these technical barriers is crucial for ensuring equitable access to education, particularly in remote learning contexts.

Additionally, the prevalence of health-related absences in both online and in-person settings points to the necessity for institutions to implement robust health and wellness programs. By addressing these challenges, colleges can enhance student retention and academic performance, ultimately contributing to a more effective and inclusive educational experience.

e) Student Relationships

Item 1 presents whether there are adults at the college whom individuals can go to for help if needed. 120 respondents (60.9%) reported that there are adults at their college whom they can go to for help if needed. 77 respondents (39.1%) indicated no adults at their college whom they can go to for help if needed.

This data suggests that most respondents perceive the presence of adults at their college whom they can turn to for assistance when needed. Having such support networks in place can be beneficial for students in navigating various challenges they may encounter during their college experience.

Item 2 presents the level of connectedness that individuals feel to the adults at their university at the present moment. 34 respondents (17.3%) reported feeling disconnected from their university's adults, 64 respondents (32.5%) indicated feeling slightly connected, 64 respondents (32.5%) reported feeling somewhat connected, 29 respondents (14.7%) stated feeling quite connected, and 6 respondents (3.0%) reported feeling extremely connected. The overall mean score of 2.54 suggests that, on average, respondents feel slightly connected to the adults at their university at the present moment. This data indicates that while some individuals feel connected to the adults at their university to varying degrees, a significant portion feel less connected. Building stronger connections between students and adults at the university can foster a supportive and inclusive environment, benefiting students' overall well-being and academic success.

Item 3 presents how often individuals participating in distance learning hear individually from their instructors/professors. 16 respondents (8.1%) reported hearing from their instructors/professors once every few weeks, 36 respondents (18.3%) indicated hearing from their instructors/professors about once a week, 92 respondents (46.7%) reported hearing from their instructors/professors several times a week, 23 respondents (11.7%) started hearing from their instructors/professors almost every day, and 30 respondents (15.2%) reported not participating in distance learning. The overall mean score of 3.08 suggests that, on average, respondents participating in distance learning hear from their instructors/professors several times a week individually. This data indicates that most respondents participating in distance learning communicate regularly with their instructors/professors, with a significant portion hearing from them several times a week. This frequent communication can support students' engagement and success in their online courses.

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Item 4 presents how often individuals learning online from home are contacted by their instructors/professors. 26 respondents (13.2%) reported being contacted once every few weeks, 38 respondents (19.3%) indicated being contacted about once a week, 80 respondents (40.6%) reported being contacted several times weekly, 19 respondents (9.6%) stated being contacted almost every day, 34 respondents (17.3%) reported not participating in distance learning. The overall mean score of 2.98 suggests that, on average, respondents learning online from home are contacted several times a week by their instructors/professors. This data indicates that most respondents learning online from home receive regular communication from their instructors/professors, with a significant portion being reached out to several times a week. This frequent communication can support students' engagement and success in their online learning environment.

Item 5 presents the level of connectedness that individuals feel to other students at their college at the present moment. 3 respondents (1.5%) reported feeling disconnected from other college students, 39 respondents (19.8%) indicated feeling slightly connected, 71 respondents (36%) reported feeling somewhat connected, 63 respondents (32%) stated feeling quite connected, 21 respondents (10.7%) reported feeling incredibly connected. The overall mean score of 3.30 suggests that, on average, respondents feel connected to other students at their college at the present moment. This data indicates that most respondents feel connected to other students at their college to varying degrees, with a significant portion feeling quite connected. This sense of connection can contribute to a supportive and inclusive college community, fostering collaboration and mutual support among students.

Item 6 presents how often individuals participating in distance learning talk with their college friends. Once every few weeks: 8 respondents (4.1%) reported talking with their friends from college once every few weeks. About once a week: 20 respondents (10.2%) indicated talking with their friends about once a week. Several times a week: 81 respondents (41.1%) reported talking with their friends from college several times a week. Almost every day: 59 respondents (29.9%) started talking with their friends nearly every day. I am not participating in distance learning: 29 respondents (14.7%) reported not participating in distance learning. The overall mean score of 3.41 suggests that, on average, respondents participating in distance learning talk with their friends from college almost every day. This data indicates that most respondents participating in distance learning maintain regular communication with their friends from college, with a significant portion talking almost every day. Maintaining social connections can be essential for students' well-being and sense of belonging, especially during remote learning.

Item 7 presents how often individuals learning online from home spend time talking with their friends from college. Once every few weeks: 12 respondents (6.1%) reported talking with their friends from college once every few weeks. About once a week: 22 respondents (11.2%) indicated talking with their friends about once a week. Several times a week: 77 respondents (39.1%) reported talking with their friends from college several times a week.Almost every day: 57 respondents (28.9%) stated spending time talking with their friends nearly every day. I am not participating in distance learning: 29 respondents (14.7%) reported not participating in distance learning.

The overall mean score of 3.35 suggests that, on average, respondents learning online from home spend time talking with their friends from college almost every day. This data indicates that most respondents learning online from home maintain regular communication with their friends from college, with a significant portion spending time talking almost every day. This social interaction can play a crucial role in maintaining connections and support networks, particularly during periods of remote learning.

The findings highlight the importance of support networks and social connections in enhancing the college experience. The majority of students feel they have access to adults for assistance, which is crucial for navigating academic challenges. However, the

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relatively low sense of connectedness to university adults suggests a need for initiatives that foster stronger relationships between students and faculty.

Regular communication with instructors is a positive indicator of student engagement, as it helps maintain academic motivation and support. Additionally, the strong connections students feel with their peers underscore the importance of social interactions in promoting well-being, especially in remote learning environments.

Overall, these results suggest that colleges should focus on enhancing support systems and fostering connections among students and faculty to create a more inclusive and supportive educational environment. By addressing these areas, institutions can improve student satisfaction, engagement, and academic success.

3.3 Thematic Analysis of the Open-Ended Questions

Thematic analysis of the open-ended questions included positive aspects of the remote teaching and learning (RTL), challenges of RTL, feedback on health protocols, additional needs, student engagement, communication experience, support for diversity, and addressing race and culture.

3.3.1 What is working well with the remote teaching and learning (RTL) model that you would like to see continued?

Students identified several strengths of the Remote Teaching and Learning (RTL) model that they would like to see maintained in the future. A key area of success was student engagement and the use of scaffolding strategies that helped learners complete weekly tasks more effectively. Many students appreciated the asynchronous nature of RTL, which allowed for greater flexibility and accessibility, enabling them to learn at their own pace and manage their time more independently. The availability of Open Educational Resources (OER) further supported their learning by providing free and easily accessible materials. Blended learning—combining online and face-to-face instruction—emerged as a favorable approach, with students expressing a desire for this model to be continued. This hybrid format was seen as a scaffold that enhanced understanding and provided varied methods of content delivery. Students also emphasized the benefits of continuing to offer graduate programs online, citing convenience and broader accessibility. Additionally, the use of platforms like MOLE Classroom facilitated smoother communication and content sharing, contributing to an overall positive learning experience. Finally, some students reported that being at home minimized distractions, helping them to focus more compared to working in a noisy office environment. Overall, these reflections highlight that a well-structured RTL model, grounded in flexibility, accessibility, and thoughtful integration of digital tools, can significantly support and enhance student learning.

3.3.2 What is challenging about the remote teaching and learning (RTL) model that you would like to see improved?

Despite its strengths, the Remote Teaching and Learning (RTL) model presents several challenges that students and faculty would like to see addressed. Internet connectivity emerged as a major concern, affecting both students and faculty. Unstable or limited access to the internet hindered participation in online classes and negatively impacted learners' motivation to engage with the material. Many students emphasized the importance of reliable connectivity, as difficulties accessing digital content and participating in live sessions disrupted their learning experience. Related to this, technology provision remains a pressing issue, particularly for part-time and full-time faculty who may lack adequate tools or internet access to deliver high-quality instruction. Another area of concern is student cooperation and assessment. Some faculty found it challenging to ensure active student participation and to implement effective assessments, especially when learners had only brief exposure to online platforms. Additionally, faculty support and technological

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limitations presented practical difficulties. For example, preparing instructional videos was time-consuming, and limited storage capacity in institutional Google accounts made it difficult for instructors to upload teaching materials, record meetings, or manage their files efficiently. These issues highlight the need for improved infrastructure, increased technical support, and more robust planning to enhance the RTL experience for both students and educators.

3.3.3 Is there anything else you would like to share about the measures and protocols your district is taking to keep students and staff healthy?

The district has implemented a range of health and safety protocols aimed at protecting both students and staff in the transition back to in-person learning. One of the key measures is the limited face-to-face classroom setup, which helps reduce crowding and supports physical distancing. Upon entering school facilities, students are provided with alcohol or hand sanitizer to ensure proper hygiene practices are maintained. In addition, the district has adopted flexible learning and working arrangements, allowing faculty members to alternate between working on-site and from home, promoting safety while maintaining productivity. The institution continues to enforce minimum health standards such as mask-wearing and health monitoring. Notably, there is a strong collaboration with health authorities, particularly with the Department of Health (DOH). This partnership has led to the presence of DOH personnel on campus, offering free vaccination and booster services in dedicated spaces—an initiative that has been well-received and appreciated by the school community. These coordinated efforts reflect a comprehensive approach to maintaining a healthy and responsive educational environment.

3.3.4 Is there anything else you would like to share about students' needs at this time?

Currently, students face a variety of pressing needs that significantly impact their learning experience. Financial and technological barriers remain a major concern, as many students struggle to afford stable internet access or lack the necessary devices to fully participate in online classes. Access to learning resources and digital tools is essential, and without them, students may fall behind. Educators are encouraged to demonstrate understanding and flexibility, especially in extending deadlines or offering alternative arrangements when students encounter valid difficulties. Motivation and engagement also continue to be challenges, particularly when students are overwhelmed by external pressures or lack the interactive dynamics of a traditional classroom. Persistent internet connectivity issues, both at home and within the campus, further disrupt learning, often causing students to miss important parts of discussions or fail to submit tasks on time. In addition to academic concerns, students are also navigating personal challenges, including financial hardship, family responsibilities, and mental health struggles, which have led some to withdraw from courses altogether. Addressing these multifaceted needs requires a holistic and compassionate approach from institutions, including providing more technological support, improving campus internet infrastructure, and promoting student well-being through consistent academic and emotional support.

3.3.5 Is there anything else you would like to share about student engagement at this time?

Student engagement at this time reflects a mix of ongoing challenges and promising improvements, particularly as students transition between learning modalities. Many students continue to struggle with time management, often submitting activities late and finding it difficult to balance their academic responsibilities. Some are still in the process of adjusting to the current modality, especially those who experienced extended periods of remote learning. Classroom engagement, however, shows encouraging signs of

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progress—students are reported to be more active and excited during face-to-face classes, where direct interaction and immediate feedback foster a more dynamic learning environment. In contrast, online engagement remains limited; during virtual sessions, students often keep their cameras off, making it difficult for instructors to gauge attentiveness. As a result, educators have adopted strategies such as incorporating interactive activities during discussions to maintain focus. While online platforms serve a purpose—particularly for tasks like reading assignments, reflective writing, or essay-based activities—they are seen as less effective for facilitating real-time discussion and active participation. These observations highlight the importance of blending modalities strategically, leveraging the strengths of both online and in-person instruction to sustain and enhance student engagement.

3.3.6 Is there anything else you would like to share about your experience with communication from school or district leadership this year?

Experiences with communication from school or district leadership this year have been mixed. Some faculty and staff reported a lack of formal communication, noting that information is not always disseminated in a timely or structured manner, which can lead to confusion or uncertainty. While others acknowledge that communications are generally clear and follow protocol, there remain gaps—particularly when it comes to sensitive matters like student health and well-being. Some instructors expressed uncertainty about the correct procedures for reporting or addressing these concerns and often resort to informally asking classmates for updates. Additionally, a lack of clarity around roles and responsibilities in such cases contributes to the confusion. While data privacy regulations understandably limit access to student health records, clearer guidance from leadership on how to respond appropriately and who to contact in such situations would help instructors feel more supported and informed. Overall, improving formal communication channels and ensuring all stakeholders are aware of the proper protocols would enhance coordination and responsiveness across the institution.

3.3.7 What is the most important thing your school can keep doing to support students of different races, ethnicities, and cultures?

To effectively support students of different races, ethnicities, and cultures, it is essential for schools to continue fostering cultural awareness and integration across all areas of academic and campus life. This includes organizing activities and programs that celebrate cultural diversity, showcasing the unique identities and traditions of various groups. Integrating cultural education into the curriculum, alongside other important topics such as gender, can promote inclusivity and mutual respect within the classroom. Information dissemination about cultural events and issues also plays a key role in raising awareness and fostering understanding. Moreover, providing emotional and mental health support—such as online lectures addressing emotional stress, and promoting values like respect and empathy—ensures that students feel seen, heard, and valued regardless of their background. Institutions should also maintain flexibility in policies, recognizing that students from diverse backgrounds may have different needs and circumstances. Collaborating with organizations such as the MSU-IIT Center for Culture and Arts can further enrich these efforts by offering culturally grounded perspectives and resources. These strategies, when sustained and consistently implemented, create a more inclusive and supportive learning environment for all students.

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3.3.8 How can school leaders help you better learn about, discuss, and confront issues of race, ethnicity, and culture?

School leaders play a critical role in fostering an inclusive environment by helping students and staff learn about, discuss, and confront issues related to race, ethnicity, and culture. One key approach is through sustainable training and education, including workshops and seminars that deepen understanding and promote cultural competence. These should be continuous and inclusive of both students and faculty to build a shared foundation of awareness and sensitivity. Leaders can also promote advocacy and policy implementation, such as strictly upholding the Indigenous Peoples (IP) Rights Act and other relevant laws to ensure equity and representation. Cultural awareness events, including forums, dialogues, orientations, and seasonal activities that highlight different traditions and histories, can serve as platforms for meaningful engagement. Collaborations with institutional bodies like the Center for Culture and Arts can help initiate awareness campaigns and provide expert guidance on cultural representation. Moreover, curriculum inclusion is essential—embedding discussions of race, ethnicity, and culture into various subjects reinforces the importance of these issues across disciplines. Lastly, school leaders might consider launching inclusive fellowship initiatives, such as inter-college events where students and staff are grouped based on their cultural backgrounds to promote exchange and solidarity, potentially showcased in large gatherings or school-wide assemblies. These strategies combined can build a more culturally aware and equitable school environment.

4.Conclusion

The findings from this study highlight the perceptions and experiences of 197 students regarding remote learning during the pandemic. A significant majority (60.0%) expressed a preference for flexible learning environments, indicating a positive attitude towards remote modalities. While most students reported satisfaction with social interactions and support from peers, challenges such as technological proficiency and varying levels of connectedness to faculty were noted. Additionally, students generally perceived COVID-related safety measures as appropriate and manageable, contributing to a sense of security on campus. However, the need for improved academic support and stronger relationships with faculty remains evident. Overall, these insights underscore the importance of enhancing support systems, fostering communication, and addressing technological barriers to create a more inclusive and effective educational environment that promotes student success and well-being.

To enhance the effectiveness of remote teaching and learning by addressing the diverse needs of students, improving engagement, and fostering an inclusive educational environment.

1. Training and Professional Development

Action: Implement ongoing professional development workshops for faculty focused on remote teaching strategies, technology integration, and cultural competency.

2. Enhancing Technological Support

Action: Provide students with access to necessary technology, including devices and reliable internet connections, through a loan program or partnerships with local organizations.

3. Curriculum Integration

Action: Integrate discussions of race, ethnicity, and culture into the remote curriculum, ensuring that diverse perspectives are represented in course materials and discussions.

4. Engagement Strategies

Action: Develop interactive online activities, such as virtual cultural showcases, discussion forums, and collaborative projects, to maintain student engagement during remote learning.

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5. Support Systems for Students

Action: Establish a mentorship program that pairs students with faculty or peers to provide academic and emotional support, particularly for those facing challenges related to remote learning.

Timeline: Launch program at the beginning of the next academic year.

Responsibility: Student Affairs Office.

6. Feedback and Assessment

Action: Create a system for regular feedback from students regarding their remote learning experiences, including challenges and suggestions for improvement.

7. Community and Family Engagement

Action: Organize virtual workshops and forums for families to discuss the challenges of remote learning and share resources, fostering a supportive community.

5. References

Ellen Nesset Mælan, Gustavsen, A. M., Stranger-Johannessen, E., & Nordahl, T. (2021). Norwegian students' experiences of homeschooling during the COVID-19 pandemic. *European Journal of Special Needs Education*. https://doi.org/10.1080/08856257.2021.1872843

Gudmundsdottir, G. B., & Hathaway, D. M. (2020). "We always make it work": Teachers' agency in the time of crisis. *Journal of Technology and Teacher Education*, 28(2), 239–250.

Krumsvik, R. J. (2020). Homeschooling, remote teaching and digital building in a societal crisis. *Nordic Journal of Digital Literacy*, 15, 71–85.

Panorama Education. (2020). Back-to-school surveys for distance, hybrid, or in-person learning in 2020–21. https://www.escneo.org/Downloads/BackToSchoolSurvey2020.pdf

Panorama Education. (2021). Panorama offsite learning survey results 2021 – Ames Community School District. https://amescsd.org/2021/01/panorama-offsite-learning-survey-results-2021/

Simpson, O. (2000). Supporting Students in Open and Distance Learning. London: Kogan Page.

Simpson, O. (2015). CEMCA EdTech Notes: Student support service for success in open and distance learning. http://creativecommons.org/licenses/by-sa/4.0/

Tiwari, S., & Khan, N. A. (2021). Forced homeschooling during Covid-19 pandemic. *Research Review International Journal of Multidisciplinary*. 6(2):85-92. *https://doi.org/10.31305/rrijm.2021.v06.i02.015*

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