



## Post-pandemic academic resilience of the in-person teacher-interns

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### ABSTRACT

Given the ongoing nature of the COVID-19 pandemic, students are compelled to adapt to diverse academic challenges and faced existing obstacles. This capacity to thrive through such challenges is termed academic resilience. This study aimed to identify the relationship between the academic profile and the post-pandemic level of academic resilience of the in-person teacher-interns of Nueva Ecija University of Science and Technology, San Isidro Campus, during the 2<sup>nd</sup> semester of A.Y. 2022-2023. The academic profile of the respondents in terms of their final grades in Teaching Internship and Course Audit was identified. The level of their academic resilience in terms of perseverance, reflection, and adaptive-seeking assistance was also identified. The results of the study revealed that the academic performance of the in-person teacher-interns was very satisfactory and their level of academic resilience was very high even after the onset of the pandemic. However, the results also revealed that there was no significant relationship between the academic performance and the post-pandemic level of academic resilience of the in-person teacher-interns of the College of Education of NEUST San Isidro Campus.

## Introduction

People with resilience have a strong capacity to handle stress and adversity. It is the mental capacity of strength that people can draw upon to get through difficult situations without falling apart (Denckla et al., 2020). According to psychologists, those who possess resilience are better able to deal with hardship and move on from difficult experiences. Resiliency is the capacity of a system to adapt successfully to significant challenges that threaten its function, viability, or development (Masten et al., 2018).

Academic resilience refers to students' capacity to perform highly despite adverse circumstances. It refers to academic achievement in spite of a challenging or difficult circumstance in the educational process (Ye et al., 2021). In addition, Martin (2013) stated that academic resilience is the ability to effectively deal with setback, stress or pressure in the academic setting. In the past three years, the COVID-19 pandemic has caused both unprecedented disruptions and massive changes to education. Many schools and education systems began to offer education remotely (Zhao et al., 2021). Through online and distance learning, or via radio and television, schools shifted to teach students in very different ways and teachers proactively responded and showed great support for the shifts in lesson delivery (UNESCO, 2021). Students, however, have not benefited from online learning and their academic resiliency has

dampened since they have not received proper guidance from their teachers (Al-Maskari et al., 2022) and lose interest in attending classes online. On the contrary, the study of (Gazingan et al., 2022) showed that a high level of academic resiliency was evident among students even during the COVID-19 pandemic.

In the 2<sup>nd</sup> semester of A.Y. 2022-2023, The College of Education of NEUST San Isidro Campus allowed its teacher-interns to render their in-person Teaching Internship course, along with their Course Audit subject. These teacher-interns were deployed to different cooperating public and private schools in the nearby towns of San Isidro. This in-person teaching internship marked the beginning of continuous face-to-face teaching internship as schools geared towards the new normal. In other words, as schools return for full face-to-face classes, several changes made during and even after the pandemic including distance learning and remote learning have nearly come to an end. Conversely, the academic resilience of the students who have become accustomed to online learning may change too.

The study on the post-pandemic academic resilience of in-person teacher-interns was carried out to understand the specific challenges and adaptive strategies employed by teacher-interns in the wake of the COVID-19 pandemic. The goal of the study was to identify the relationship between the

academic performance and the post pandemic level of academic resiliency of the in-person teacher-interns of the College of Education of NEUST San Isidro Campus, in the 2<sup>nd</sup> semester of A.Y. 2022-2023.

### **Statement of the problem**

This study aimed to identify the relationship between the academic profile and the post-pandemic level of academic resiliency of the in-person teacher-interns of the College of Education of NEUST San Isidro Campus, during the 2<sup>nd</sup> semester of A.Y. 2022-2023. Specifically, it sought to answer the following questions:

- i. Identify the academic profile of the in-person teacher interns in terms of final grade in teaching internship and final grade in course audit
- ii. Describe the post-pandemic level of academic resilience of the in-person teacher-interns in terms of perseverance, reflection, and adaptive-seeking assistance.
- iii. Identify the relationship between academic profile of the respondents and their post-pandemic level of academic resilience.

### **Materials and methods**

#### **Research design**

This research utilized the descriptive-correlation design to identify the relationship between the academic profile in terms of final grades in Teaching Internship and Course Audit and the post-pandemic level of academic resilience in terms of perseverance, reflection, and adaptive-seeking assistance of the in-person teacher-interns of the College of Education of NEUST San Isidro Campus, this 2<sup>nd</sup> semester of A.Y. 2022-2023

#### **Respondents of the study**

The respondents of the study were the 330 in-person teacher-interns of the College of Education of Nueva Ecija University of Science and Technology, San Isidro Campus, during the 2<sup>nd</sup> Semester of A.Y. 2022-2023. They were asked to about their academic profile in terms of their final grades in Teaching Internship and Course Audit. In addition, they were asked to assess themselves regarding the

level of their academic resiliency almost a year after the onset of the COVID-19 pandemic.

### **Instrumentation**

The researchers used a two-part questionnaire in gathering data. The first part deals with identifying the academic profile of the respondents through their final grades in Teaching Internship and Course Audit. In order to qualify the final grades of the respondents in both subjects, the researcher made use of the scale as follows: (1) 1.00; (2) 1.25; (3) 1.50; and (4) 1.75, verbally interpreted as 1.00 Excellent; 1.25 Very Satisfactory; 1.50 Satisfactory; 1.75 Good; 2.00 Fair; 2.25 Poor; 2.50 Very poor; 2.75 Needs Improvement; and 3.00 Failed. The second part deals with the graduates' assessment on the post-pandemic level of their academic resiliency which made use of the scale (5) became much better; (4) became somewhat better; (3) stayed the same; (2) became somewhat worse; and (1) became much worse, verbally interpreted as 4.20-5.00: Very High level; 3.4-4.19: High level; 2.60-3.39: Moderate level; 1.8-2.59: Low level; 1.00-1.79: Very low level

### **Data collection**

In order to gather data and information needed for the study, the researcher read previous studies, journals, and online sources until he located a standardized questionnaire in gathering the academic profile of the respondents and the post-pandemic level of academic resiliency. He gathered literature and studies pertinent to the study in order to find different parameters to be tested and to support the findings of the study after the data-gathering phase.

### **Statistical analysis**

The gathered data from the questionnaire were tallied, tabulated, and interpreted using the following statistical tools. Frequency count was used to analyze and interpret the academic profile of the respondents while weighted mean was used to describe their post-pandemic level of academic resiliency. To determine the relationship between the academic profile of the respondents and their post-pandemic level of academic resiliency, Pearson R correlation was used.

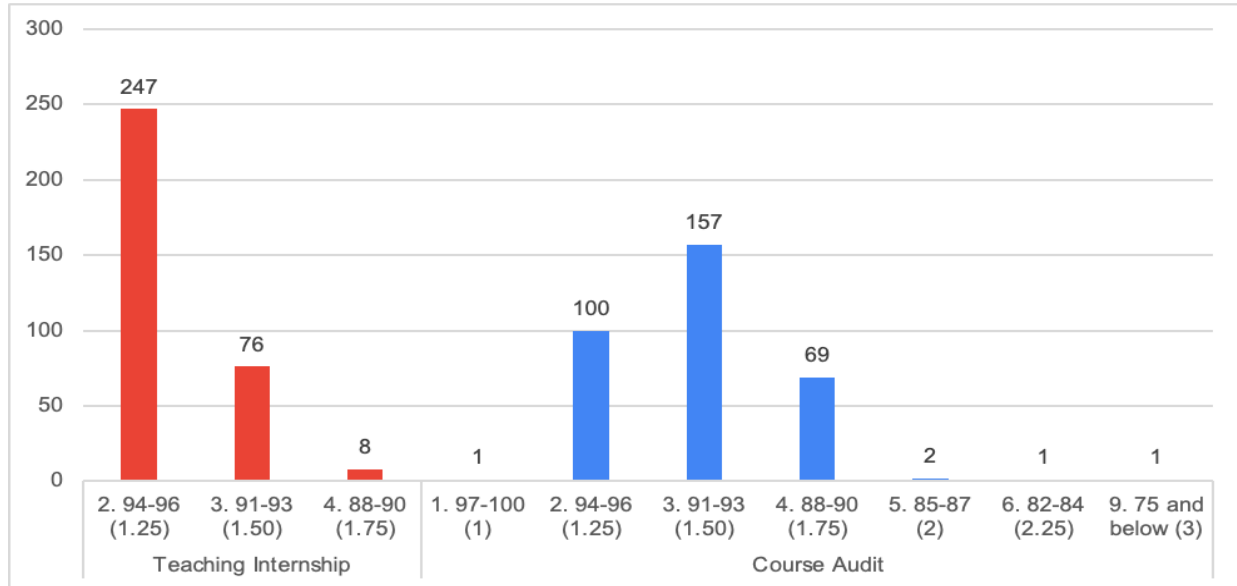
### Results Academic profile of the respondents

Figure 1 presents the academic profile of the respondents in terms of their final grades in Teaching Internship and Course Audit.

In teaching internship 247 respondents performed very satisfactory, whereas only 76 and 8

respondents performed satisfactory and good (Figure 1).

In course audit only one student performed excellent, whereas 100 students performed very satisfactorily. The highest number of students (157) performed satisfactory in course audit and lowest were from fair to needs improvement (Figure 1).



**Figure 1:** Academic profile of the respondents

Legend: 1.00(97-100) Excellent; 1.25 (94-96) Very Satisfactory; 1.50 (91-93) Satisfactory; 1.75 (88-90) Good; 2.00 (85-87) Fair; 2.25 (82-84) Poor; 2.50 (79-82) Very poor; 2.75 (75-78) Needs Improvement; 3.00 (74 and below) Failed

### Respondents' post-pandemic level of academic resilience

A total of 14 indicators were used to assess the post-pandemic level of academic resilience of the in-person teacher-interns in terms of perseverance. These respondents were found to have Become Much Better (BMB) based on the 9 indicators. Some of these were the respondents' acceptance on their professor's feedback (WM = 4.69), trying their best to study hard (WM = 4.64), believing their can improve their grades (WM = 4.62), and trying to think of new solutions (WM = 4.59). Some respondents were found to have become somewhat better in other 5 indicators.

Meanwhile, the post-pandemic level of academic resilience of the in-person teacher-interns in terms of reflection were assessed using 9 indicators. Among these 9 indicators, respondents were found to have Become Much Better (BMB). These were on the indicators like giving themselves encouragement (WM = 4.69), monitoring and

evaluating their achievements and effort (WM = 4.64), and using their past experiences to motivate themselves (WM = 4.56), among others. Only one indicator where the respondents were found to have Become Somewhat Better (BSB) and this was about the respondents' setting of their own goals for achievement with a weighted mean of 4.09. Other indicators can be found on Table 2.

Table 3 presents the 7 indicators on the in-person teacher interns' post pandemic level of academic resilience in terms of adaptive-seeking assistance. Generally, respondents were found to have Become Somewhat Better in the areas of success at a university (WM = 3.92) and landing a job after graduation (WM = 3.87). However, there was an indicator in which the respondents were found to have Stayed The Same (STS). With a weighted mean of 2.85, respondents stayed the same on being self-disappointed.

**Table 1:** The post-pandemic level of academic resilience of the in-person teacher-interns in terms of perseverance

INDICATORS	Weighted mean	Verbal interpretation
1. In accepting my instructor’s/professor’s feedback on my work, I:	4.69	BMB
2. In using the feedback of my instructors/professors to improve my work, I:	4.13	BSB
3. In giving up on my academic struggles, I:	3.61	BSB
4. In using the situation to motivate myself, I:	4.32	BMB
5. In changing my career plans, I:	4.12	BSB
6. In seeing the situation as a challenge, I:	4.23	BMB
7. In doing my best to stop thinking negative thoughts, I:	4.56	BMB
8. In seeing the situations as temporary, I:	4.39	BMB
9. In working harder, I:	3.57	BSB
10. In trying to think of new solutions, I:	4.59	BMB
11. In blaming the instructor/professor about my failure, I:	3.62	BSB
12. In trying my best to study hard, I:	4.64	BMB
13. In changing my long-term goals and ambitions, I:	4.47	BMB
14. In believing that I can improve my grades, I:	4.62	BMB
<b>Grand Mean</b>	<b>4.25</b>	<b>BMB</b>

Legend: 4.20-5.00: Became Much Better (BMB); 3.4-4.19: Became Somewhat Better (BSB); 2.60-3.39: Stayed the Same (STS); 1.8-2.59: Became Somewhat Worse (BSW); 1.00-1.79: Became Much Worse (BMW)

**Table 2:** The post-pandemic level of academic resilience of the in-person teacher-interns in terms of reflection

INDICATORS	Weighted mean	Verbal Interpretation
1. In using my past experiences to motivate myself, I:	4.56	BMB
2. In monitoring and evaluating my achievements and effort, I:	4.63	BMB
3. In seeking help from my instructors and professors, I:	4.45	BMB
4. In giving myself encouragement, I:	4.69	BMB
5. In trying different ways to study, I:	4.48	BMB
6. In setting my own goals for achievement, I:	4.09	BSB
7. In seeking encouragement from my family and friends, I:	4.34	BMB
8. In trying to think more about my strengths and weaknesses to help me work better, I:	4.56	BMB
9. In starting to self-impose rewards and punishments depending on my performance, I:	4.43	BMB
<b>Grand Mean</b>	<b>4.47</b>	<b>BMB</b>

Legend: 4.20-5.00: Became Much Better (BMB); 3.4-4.19: Became Somewhat Better (BSB); 2.60-3.39: Stayed the Same (STS); 1.8-2.59: Became Somewhat Worse (BSW); 1.00-1.79: Became Much Worse (BMW)

**Table 3:** The post-pandemic level of academic resilience of the in-person teacher-interns in terms of adaptive-seeking assistance

INDICATORS	Weighted mean	Verbal interpretation
1. In easily getting annoyed, I:	3.57	BSB
2. In believing that my chances of success at a university are poor, I:	3.92	BSB
3. In getting depressed, I:	3.85	BSB
4. In being self-disappointed, I:	2.85	STS
5. In thinking that my chances of getting a job I want is poor, I:	3.87	BSB
6. In stopping myself from panicking, I:	4.03	BSB
7. In feeling that everything was ruined and going wrong, I:	3.85	BSB
<b>Grand Mean</b>	<b>3.70</b>	<b>BSB</b>

Legend: 4.20-5.00: Became Much Better (BMB); 3.4-4.19: Became Somewhat Better (BSB); 2.60-3.39: Stayed the Same (STS); 1.8-2.59: Became Somewhat Worse (BSW); 1.00-1.79: Became Much Worse (BMW)

**Table 4:** Correlation of the Academic Profile and the post-pandemic level of academic Resilience of the Respondents

Final grade		perseverance	reflection	adaptive seeking assistance
Teaching Internship	Pearson Correlation	.010	-.079	.048
	Sig. (2-tailed)	.863	.154	.381
	N	331	331	331
Course Audit	Pearson Correlation	.106	.065	.025
	Sig. (2-tailed)	.054	.238	.653
	N	331	331	331

\*Correlation is significant at the 0.05 level (2-tailed).

**Relationship between the academic profile and their post-pandemic level of academic resilience**

In the Teaching Internship, final grades showed weak positive correlations with perseverance ( $r = 0.010$ ) and adaptive seeking assistance ( $r = 0.048$ ), but a weak negative correlation with reflection ( $r = -0.079$ ). However, none of these correlations were statistically significant ( $p > .05$ ).

For the Course Audit, final grades exhibited a weak positive correlation with perseverance ( $r = 0.106$ ) and a slightly stronger correlation with reflection ( $r = 0.065$ ), but no significant correlation with adaptive seeking assistance ( $r = 0.025$ ). The correlation between final grades and perseverance approached significance ( $p = .054$ ), while the correlations with reflection and adaptive seeking assistance were not significant ( $p > .05$ ).

**Discussion**

This study involved 330 in-person teacher-interns from the College of Education of Nueva Ecija University of Science and Technology, San Isidro Campus, during 2<sup>nd</sup> semester of A.Y. 2022-2023. On the academic profile of these in-person teacher-interns in terms of their final grades in Teaching Internship, the results showed that majority or 247 out of 330 of them got a grade of 1.25 with a remark of “very satisfactory” while 76 out of the remaining graduates got a final grade of 1.50 with a remark of “satisfactory”. Meanwhile, only 8 out of the total number of these in-person teacher-interns got a grade of 1.75 with a remark of “good”. On the other hand, the academic profile of these in-person teacher-interns in terms of their final grades in Course Audit were as follows: 157 out of 330 teacher-interns got a grade of 1.50 with a remark of “satisfactory”; 100 teacher-interns got a grade of 1.25 with a remark of “very satisfactory” and only 69 teacher-interns got a grade of 1.75 with a

remark of “good”. A total of 4 teacher-interns got a grade of 2.00 and below, with a remark of “fair”.

Conversely, these figures showed an average academic performance of these in-person teacher-interns and this average performance may be due to several factors including parents’ education levels and income, teachers’ knowledge of the subject, mode of teaching, academic engagement and many more (Francisco et. al., 2020). In fact, now that classes have gone full face-to-face again, getting used to the academic engagement that comes with in-person instruction is another difficulty that students encounter (Vasquez et al., 2023). The reason being, students have been secluded from their peers during the outbreak and have not interacted with them much. As a result, some students could find it difficult to interact with others and take part in group activities, both of which are crucial for face-to-face learning, thus, probably affecting their academic performance in general. In other words, these in-person teacher-interns’ ability to perform highly despite the adverse circumstances of the new normal has been affected, as manifested on their average academic performance in both of their subjects.

Teaching may be one of the hardest jobs one will ever have-one that requires perseverance, which influences one’s teaching and learning performance. As in-person teacher-interns with academic subjects to complete, their post-pandemic level of academic resilience in terms of their perseverance needs to be assessed. In this study, the level of academic resilience of the in-person teacher-interns in terms of perseverance was at “very high level” obtaining a grand mean of 4.25, verbally interpreted as “became much better, even after the onset of the pandemic. The self-assessment made in the long list of indicators in terms of perseverance of these in-person teacher-interns all showed a “very high level” of academic resilience. Perseverance

indicators like accepting the instructor's/professor's feedback on their work (WM= 4.69), trying their best to study hard (4.64), believing that they can improve their grades (4.62), trying to think of new solutions, (4.59), and doing their best to stop thinking negative thoughts (4.56) were some of the manifestations where the respondents have "become much better" even after the pandemic. On the other hand, these in-person teacher-interns, based on their self-assessment displayed a "high level" of perseverance in the following indicators: after the pandemic, the in-person teacher-interns have "become somewhat better" in using the feedback of their instructors/professors to improve their work (WM = 4.13), changing their career plans (4.12), not blaming the instructor/professor about their failure (3.62), not giving up on their academic struggles (3.61), and working harder (3.57). In the quest of these in-person teacher-interns to become achievers in the new normal, they need to know how to persevere when faced with a challenge or a problem they don't know the answer to. For instance, now that classes have gone completely face-to-face, in-person teacher-interns shall be able to adjust to the needs of their academic environment and that their academic performance shall not impair. According to Pradeepa 2023, by persevering, people can improve their skills and can foster their creativity and innovation as they explore new ways to solve problems and find solutions. Moreover, perseverance can strengthen one's resilience and mental health when coping with stress and adversity. Based on the results and the claims stated herein, there is a reason to believe that these in-person teacher-interns showed a very high level of academic resilience in terms of perseverance, which has become evident during COVID 19 pandemic and has lasted even after its onset.

When it comes to the in-person teacher-interns' post-pandemic level of academic resilience, particularly in the area of Reflection, their self-assessment was at "very high level" obtaining a grand mean of 4.47, verbally interpreted as "became much better". Reflection plays a central role in adapting to change in educational environments and learning from disruptions to teaching norms, the COVID-19 pandemic being a prime example (Machost et al., 2023). In other words, now that the pandemic has been put to stop, and classes have gone completely face-to-face, students' reflective abilities may have changed as well. Based on the self-assessment made by the in-person teacher-interns as regards their post-pandemic level of reflective abilities, the results showed a 'very high

level" of academic resilience to almost across all the indicators used. First, in-person teacher-interns "became much better" in giving themselves encouragement (WM = 4.69), in monitoring and evaluating their achievements and effort (4.63), in using their past experiences to motivate themselves (4.56), in trying to think more about their strengths and weaknesses to help them work better (4.56), in trying different ways to study (4.48), in seeking help from their instructors and professors (4.45), in starting to self-impose rewards and punishments depending on their performance (4.43), and in seeking encouragement from their family and friends (4.34), all attaining a 'very high level" of academic performance in terms of perseverance. Notably, only one indicator about setting their own goals for achievement was found to be at "high level" where these in-person teacher interns "became somewhat better" after the diverse effects of COVID-19 pandemic. In the quest of these in-person teacher-interns to become achievers in the new normal, they need to know how to reflect because without deep thinking about their work and academic endeavors, they can fall back on rigid policies, mechanical routines, and scripted curricula (Pattung et al., 2023) In other words, teacher-interns need to investigate their own values, beliefs, and biases as they work to create transformative and emancipatory learning experiences. That is where reflection comes in.

Another post-pandemic level of academic resilience measured in this study was the adaptive-seeking assistance of the in-person teacher-interns. According to Collie and Martin 2016, one's ability to effectively react and respond in constructive ways varied situations is known as adaptability. Moreover, a person's capacity to be adaptable is important because it enables successful adjustment to life's inherent changing circumstances. In relation to the new normal adjustment made by the in-person teacher-interns as measured in this study, the level of their academic resilience in terms of adaptive-seeking assistance were notably at its "high level" with a grand mean of 3.70, verbally interpreted as "became somewhat better", and different from the first two academic resiliency indicators. Their self-assessment revealed that they "became somewhat better" in stopping themselves from panicking (WM = 4.02), in believing that their chances of success at a university are poor (3.92), in getting away from depression (3.85), in feeling that everything was ruined and going wrong (3.85), and in easily getting annoyed (3.57). Meanwhile, in being self-disappointed, in-person teacher-interns "stayed the

same' with the weighted mean of 2.85. In the quest of these in-person teacher-interns to become achievers in the new normal, they need to know how to adapt in their current environment because adaptability is associated with important academic and non-academic outcomes among adolescents and employees (Ancho et al., 2021). Conversely, when students are more adaptable, they also tend to perceive that they have a greater control over their academic outcomes.

Table 4 shows that the academic performance of the teacher-interns at NEUST San Isidro Campus, as defined by their final grades in teaching internships and course audit, does not significantly impact their academic resilience, measured through perseverance, reflection, and adaptive-seeking assistance. This lack of correlation suggests that academic performance and resilience are distinct constructs. In other words, a high-achieving student in terms of grades may not necessarily exhibit high academic resilience. Conversely, a student with lower academic performance may still possess strong resilience characteristics. This uncoupling of academic performance and resilience further implies that other factors could influence these teacher-interns' resilience. These factors might include personal traits, levels of social support, mental health status, past experiences, and individual coping mechanisms. As such, there may be a rich opportunity for future research to delve into these other potential influences on resilience. Moreover, the findings may necessitate a reevaluation of how teacher-interns are assessed. Suppose the ultimate objective is to nurture resilience, especially in a post-pandemic world. In that case, our educational institutions might need to emphasize fostering resilience-related skills and competencies instead of focusing predominantly on traditional academic grading systems. These results could also have significant implications for the design of the curriculum and the structure of teacher training programs. In response to these findings, it might be necessary to integrate more elements into these programs that promote resilience, particularly given the additional stresses and uncertainties introduced by the pandemic. Lastly, the lack of correlation between previous academic performance and resilience might suggest that the impact of the pandemic has been profound, perhaps outweighing the influence of prior academic success. This could indicate that the pandemic has required students to develop unique coping mechanisms and to build resilience in ways that are independent of their historical academic achievements. In conclusion,

this study points to the need for a greater focus on resilience in our educational strategies and evaluations in the post-pandemic period.

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## References

- Al-Maskari, A., Al-Riyami, T., & Kunjumammed, S. K. (2022). Students academic and social concerns during COVID-19 pandemic. *Education and Information Technologies*, 27(1), 1–21. <https://doi.org/10.1007/s10639-021-10592-2>
- Ancho, Inero & Arrieta, Gilbert (2021). Filipino Teacher Professional Development in the New Normal. *Education & Self Development*. 16. 25-43. [10.26907/esd.16.3.04](https://doi.org/10.26907/esd.16.3.04).
- Collie, Rebecca & Martin, Andrew. (2016). Adaptability: An Important Capacity for Effective Teachers. *Educational Practice and Theory*. 38. 27-39. [10.7459/ept/38.1.03](https://doi.org/10.7459/ept/38.1.03).
- Denckla, C. A., Cicchetti, D., Kubzansky, L. D., Seedat, S., Teicher, M. H., Williams, D. R., & Koenen, K. C. (2020). Psychological resilience: an update on definitions, a critical appraisal, and research recommendations. *European journal of psychotraumatology*, 11(1), 1822064. <https://doi.org/10.1080/20008198.2020.1822064>
- Francisco, Christopher & Celon, L. (2020). Teachers' Instructional Practices and Its Effects on Students' Academic Performance. 64-71.
- Gazingan, G.D., Gonzales, J.T., Reyes, E.R. & Salas, R.F. (2022). Academic Resiliency of BSIT Students of Nueva Ecija University of Science and Technology, San Isidro Campus, *The Dream: The Official Research Journal of NEUST San Isidro Campus*, Vol. 5, pp 75-82, 2022
- Machost, H. & Stains, M. (2023). Reflective Practices in Education: A Primer for Practitioners. *CBE life sciences education*, 22(2), es2. <https://doi.org/10.1187/cbe.22-07-0148>
- Martin, Andrew. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. *School Psychology International*. 34. 488-500. [10.1177/0143034312472759](https://doi.org/10.1177/0143034312472759).
- Masten, A. S., & Barnes, A. J. (2018). Resilience in Children: Developmental Perspectives. *Children (Basel, Switzerland)*, 5(7), 98. <https://doi.org/10.3390/children5070098>

- Pattung, Agustina & Caban, Reymarie. (2023). Challenges and Experiences of Pre-service Teachers in Teaching Internship during the New Normal. *Asian Journal of Education and Social Studies*. 40. 38-45. 10.9734/ajess/2023/v40i2869.
- Pradeepa, S. (2023). Benefits of Perseverance: 8 Reasons Why Perseverance Matters <https://www.believeinmind.com/self-growth/benefits-of-perseverance>
- UNESCO, Learning through radio and television in the time of COVID-19, 2 June 2020, <https://www.unesco.org/en/articles/learning-through-radio-and-television-time-covid-19>
- Vasquez, Ariston & Vasquez, Alfred Rey (2023). Challenges Encountered by the Students in the Face-to-Face Class Implementation in the Post-COVID Learning Context. 11. 485-489.
- Ye, W., Strietholt, R., Blömeke, S. (2021). Academic Resilience: Underlying Norms and Validity of Definitions, Educational Assessment, Evaluation and Accountability, v33 n1 p169-202
- Zhao, Y. & Watterston, J. (2021). The changes we need: Education post COVID-19. *Journal of Educational Change*, 22(1), 3–12. <https://doi.org/10.1007/s10833-021-09417-3>