The Predictive Role of Hope on the Online Student Engagement of Filipino Pre-Service Teachers

[1]Alvin M. Nieva, [1]Annabel D. Quilon, [1]Susan R. Butac, [2]Roselle M. Beltran

[1]San Beda University, Manila, Philippines

[2]Isabela State University, Isabela, Philippines

ABSTRACT

To promote positive education in the Philippines and contribute to the understanding of online learning, this study aimed to investigate the predictive influence of dispositional hope on the online student engagement of Filipino pre-service teachers at a university in northern Luzon. The participants of this study comprised 279 Filipino pre-service teachers. Two scales were used: The Online Student Engagement Scale and the Adult Hope Scale. Moreover, for the main analysis, simple regression was used. Based on the overall statistical results of all the regression analyses conducted, dispositional hope consistently emerged as a positive predictor of the four domains of online student engagement: skills engagement, emotional engagement, participation engagement, and performance engagement. Consequently, this may indicate that hopeful pre-service teachers are more likely to be actively engaged in their online learning. This research contributes further to the understanding of how dispositional hope influences student engagement, showing that its positive effects apply to both face-to-face and online learning contexts.

Keywords: Hope, Online Learning, Online Student Engagement, Positive Education

INTRODUCTION

The COVID-19 pandemic disrupted the traditional face-to-face education system in the Philippines, prompting a rapid shift to emergency remote education. This broad term encompasses a range of delivery modalities including distance education, remote learning, online learning, and blended learning (Nieva & Prudente, 2022). The sudden shift to online learning left both faculty and students unprepared for higher education in a digital format (Hollister, et al., 2022). As the Philippines adopted online learning modalities in response to the COVID-19 pandemic, it became increasingly evident that student engagement was essential in ensuring their learning progress and academic success. According to Bedi (2023), student engagement is crucial for effective learning and involves connecting students with the course content, their peers, and their teachers.

Student Engagement

Student engagement is defined as "the student's psychological investment in an effort directed toward learning, understanding, or mastering the knowledge, skills, or craft that academic work is intended to promote" (Newmann, 1992, p. 2). The concept of student engagement was initially developed in the 1980s as a proactive approach to reducing the number of students who drop out of school (Finn & Zimmer, 2012). Since its inception in the 1980s, the concept of student engagement has been the subject of extensive research, which has consistently demonstrated its crucial role in various developmental and educational outcomes (Appleton, Christenson, & Furlong, 2008; Fredricks, Blumenfeld, & Paris, 2004; Kahu, 2013). Although there has been a substantial increase in interest among educators and theorists in understanding student engagement over the past 30 years, a universally accepted definition of the construct remains elusive. Despite this, a growing body of research has contributed to our understanding of this complex phenomenon (Eccles & Wang, 2012; Lam et al., 2014; Reschly & Christenson, 2012). The lack of consensus regarding the conceptualization of student engagement can be attributed to its multifaceted nature, diverse indicators, and multiple dimensions.(Lam et al., 2014; Skinner, Furrer, Marchand, & Kindermann, 2008).

Online Learning

Online learning can be fully synchronous, fully asynchronous, or blended, each format with its advantages and drawbacks (Fadde & Vu, 2014; Hollister, et al., 2022). Fully asynchronous learning is flexible but lacks real-time interaction, which can lead to feelings of isolation and a lack of immediate feedback. Synchronous online learning offers more real-time engagement but is less flexible and requires reliable technology. Blended learning combines the best of both worlds, offering both in-person and online learning. However, it requires more coordination and time management from instructors (Fadde & Vu, 2014; Hollister, et al., 2022). Regardless of the format, building a sense of community is crucial in online learning (Fadde & Vu, 2014; Gillett-Swan, 2017; Hollister, et al., 2022). Instructors can use learning management systems and discussion boards to foster interaction and connection among students (Fadde & Vu, 2014; Hollister, et al., 2022).

Online Student Engagement

Dixson (2015) defines student engagement as the active participation of students in their learning, which involves dedicating time, energy, cognitive effort, and emotional investment to their academic pursuits. Dixson (2010, 2015) developed the Online Student Engagement Scale, adapting Handelsman et al.'s (2005) framework for measuring student engagement in traditional classrooms. Handelsman et al. proposed four key dimensions of student engagement: skills engagement, emotional engagement, participation engagement, and performance engagement. Dixson applied these dimensions to the online learning context, creating a scale that assesses student engagement in these areas within digital environments.

Skills engagement involves consistently keeping up with assigned readings and putting forth diligent effort. This includes reading required materials before class, reviewing lecture notes and slides, and completing online quizzes or discussion board posts (Dixson, 2010, 2015; Handelsman et al., 2005). Additionally, students should work diligently, exert themselves, and apply themselves to their studies by spending extra time studying for exams and contributing to online forums.

Emotional engagement involves applying learned concepts to one's own life. This can be achieved by relating course material to personal experiences, utilizing knowledge in practical situations, and implementing learned skills in daily life (Dixson, 2010, 2015; Handelsman et al., 2005). By actively applying course material, students can maximize their learning experience and gain valuable skills that will benefit them in the long run.

Participation engagement is achieved by actively participating in small group discussions. By sharing ideas, asking questions, and providing feedback to group members during virtual meetings, students can foster a sense of community and collaboration (Dixson, 2010, 2015; Handelsman et al., 2005).

Performance engagement includes consistently answering questions correctly on multiple-choice tests and other online assessments (Dixson, 2010, 2015; Handelsman et al., 2005). By doing so, students can significantly improve their overall performance. Additionally, earning high grades in assignments and projects contributes to a higher GPA. By combining active engagement with strong academic performance, students can maximize their learning experience and achieve their educational goals.

Positive Education and Hope Theory

Positive education, as outlined by Seligman et al. (2009), goes beyond traditional skills to cultivate happiness. Norrish et al. (2013) argue that positive education fosters a nurturing school environment that supports students' well-being and flourishing. Filipino pre-service teachers need an educational approach that focuses on positivity, particularly during challenging times.

Hope is a strength-based construct rooted in positive psychology (Snyder, Lopez, Shorey, Rand, & Feldman, 2003). This theory posits that people's actions are guided by goals (Snyder, Rand, & Sigmon, 2018). This cognitive, motivational model involves three interrelated cognitive components that include goals, agency, and pathways (Edwards, Rand, Lopez, & Snyder, 2006). Hope is defined as "a cognitive set that is based on a

reciprocally-derived sense of successful agency (goal-directed determination) and pathways (planning to meet goals)" (Snyder, Harris, Anderson, Holleran, & et al, 1991, p. 571). People need to believe they can find multiple ways to achieve their goals. This ability to envision different paths is called "pathways thinking" or "waypower" (Snyder, 2000). People with high hope are especially good at thinking of alternative routes when they encounter obstacles (Edwards et al., 2006; Snyder, 2000). The motivation to actually follow these paths is called "agency thinking" or "willpower" (Yang, Zhang, & Kou, 2016). It is the belief that one can start and keep moving towards their own goals (Snyder, 2000).

Studies have shown that hope can boost academic success and students with higher levels of hope tend to achieve more academically and are more likely to complete their university degrees (Curry et al., 1997; Day et al., 2010; Rand, 2009; Snyder et al., 2002). Additionally, research suggests that hope can predict student grades, even when considering factors like previous academic performance and intelligence (Curry et al., 1997; Day et al., 2010; Snyder et al., 2002). A three-year longitudinal study by Day and colleagues (2010) further demonstrated that hope can predict future academic achievement, even when accounting for past performance, intelligence, and personality traits.

Bernardo (2010) expanded on the hope theory by introducing the locus-of-hope model. This model proposes that hopeful thoughts can originate from oneself, others, or external forces, especially in collectivist cultures. To account for this, Bernardo added three external locus-of-hope dimensions: family, peers, and supernatural/spiritual beings or forces (Bernardo, 2010; Bernardo, Salanga, Khan, & Yeung, 2016). These dimensions were inspired by studies conducted in the Philippines, which highlighted the significant influence of family, peers, and faith in achieving goals (Briones, 2009; Tolentino, 2009, as cited in Bernardo, 2010).

The Present Research

Previous studies have established a connection between hope and student engagement. For instance, Yoon and colleagues (2015) found that hope is a predictor of student engagement in traditional classroom settings among North American students. Similarly, Azila-Gbettor and colleagues (2021) discovered that hope positively influences Ghanaian students' academic, peer, and intellectual engagement. In the Philippine context, De Guzman and Macapagal (2020) found that hope partially mediates the relationship between social support and school engagement among sixth-grade students in Quezon City.

To our knowledge, there is a lack of empirical research exploring the relationship between hope and student engagement among Filipino pre-service teachers, particularly in online learning settings. This study aims to address this research gap.

To promote positive education in the Philippines and contribute to the understanding of online learning, this study aimed to investigate the predictive influence of dispositional hope (Snyder, 2000) on the online student engagement (Dixson, 2010, 2015) of Filipino pre-service teachers at a university in northern Luzon. Specifically, this research sought to determine whether dispositional hope positively predicts online student engagement, as measured by skills engagement, emotional engagement, participation engagement, and performance engagement, as defined by Dixson's (2010, 2015) framework. It was hypothesized that Filipino pre-service teachers with higher levels of dispositional hope would exhibit greater engagement in their online learning experiences.

METHOD

Participants

The participants of this study comprised 279 Filipino pre-service teachers. They were first-year Bachelor of Secondary Education and Bachelor of Elementary Education students from a state university in northern Luzon. Both male and female pre-service teachers responded to the survey. The researchers utilized convenience sampling in selecting the participants. According to Urdan (as cited in Nieva, 2023), this sampling method involves selecting participants who are readily available and eager to take part in the study.

Measures

The Online Student Engagement Scale (Dixson, 2010, 2015). This scale measures the engagement of the student in his or her online learning environment. It is composed of 19 items with four dimensions namely: skills engagement, emotional engagement, participation engagement, and performance engagement. This measure follows a response format such as the following: 1 = not at all characteristic of me, 2 = not really characteristic of me, 3 = moderately characteristic of me, 4 = characteristic of me, and 5 = very characteristic of me. In this study, the computed reliability estimates of the scale's dimensions, based on Cronbach's alpha, are as follows: skills (α = .86), emotional (α = .90), participation (α = .88), and performance (α = .83). These values indicate that the scale is reliable.

Adult Hope Scale (Snyder et al., 1991). This scale measures the person's dispositional hope. This contains 12-item-questions with two dimensions namely: pathways thinking with 4 items, and agency thinking with 4 items also. The last 4 items are considered fillers. The response format includes 1 = definitely false to 8 = definitely true. The computed reliability estimate of this scale for this study, based on Cronbach's alpha, is α = .88. This suggests that the scale is considered reliable.

Research Design and Procedure

This study used a quantitative approach, specifically the cross-sectional predictive study (Johnson, 2001). "Cross-sectional as a research dimension means that data were collected from participants only once, at a single point in time, while prediction as a research objective aimed to forecast future events or behaviors by analyzing patterns within the collected data" (Nieva, 2024, p. 156).

Before the actual gathering of data, the researchers obtained permission from the university administration. After this, the link containing the questionnaires was sent to the first-year education students through their advisers. It took a week to retrieve the required data for this study. Preliminary data analyses were performed before the main analysis. These include descriptive statistics: means, standard deviation, and zero-order correlations. For the main analysis, simple regression was used. Furthermore, reliability estimates of the measures were obtained using Cronbach's alpha coefficient.

RESULTS AND DISCUSSION

The purpose of this study was to determine whether dispositional hope could predict the online student engagement of the Filipino pre-service teachers from a university in northern Luzon particularly their skills engagement, emotional engagement, participation engagement, and performance engagement based on Dixson's (2010, 2015) framework.

For the preliminary data analyses, means and standard deviations of dispositional hope and the four factors of online student engagement are presented in Table 1. Using a median split as the basis of interpretation for the scores on the Adult Hope Scale, the computed mean score is considered slightly above the midpoint. This suggests that the participants' level of predispositional hope is relatively high. Farnsworth, Cordle, and Groen (2022) explained that hopeful students set goals that guide them toward positive outcomes and shield them from negative ones. They employ both strategic planning and self-belief. Moreover, they visualize clear paths to their desired future and believe in their ability to overcome challenges. Regarding the value of the standard deviations, the participants' scores are slightly dispersed, suggesting that their individual scores vary. This indicates that not all participants possess a high level of hope.

Regarding the mean scores of the four factors of the Online Student Engagement Scale, adopting the median split as the basis for interpretation, all of the factors have mean scores higher than the midpoint as indicated in Table 1. This suggests that these participants have a high level of engagement in their online learning in all of its domains. Further, their individual scores are less dispersed as indicated by their standard deviations for all of the factors. Overall, these findings suggest that these pre-service teachers are highly engaged and dedicated online learners. They consistently demonstrate a strong work ethic by keeping up with assigned readings, submitting assignments on time, and actively participating in online discussions and group activities. They

actively seek opportunities to apply course concepts to real-world scenarios, enhancing their understanding and critical thinking skills. By fostering a collaborative and supportive learning environment, they contribute positively to the overall learning experience of their peers.

Table 1. Mean and Standard Deviation of the Adult Hope Scale and the Online Student Engagement Scale

Variables	Mean	Std. Deviation
Dispositional Hope	5.7603	1.01084
Skills Engagement	3.6446	.71889
Emotional Engagement	3.7355	.78886
Participation Engagement	3.5735	.76838
Performance Engagement	3.7903	.85344

The degree of relationships between hope and the four factors of online student engagement was determined by performing zero-order correlations. The results are presented in Table 2. Results suggest that dispositional hope is significantly and positively related to the four factors of online student engagement.

The following correlation coefficient values are within the acceptable limit for conducting regression analysis, as we can see that dispositional hope, as measured by the Adult Hope Scale, did not highly correlate with the four factors of the Online Student Engagement Scale, indicating no multicollinearity (Nieva, 2022).

Table 2. Zero-Order Correlations of the Online Student Engagement Scale and the Adult Hope Scale

	1	2	3	4	5
1. Skills Engagement	-	.807**	.753**	.729**	.680**
2. Emotional Engagement		-	.764**	.679**	.681**
3. Participation Engagement			-	.712**	.678**
4. Performance Engagement				-	.647**
5. Dispositional Hope					-
Note: *$p<.05$; **$p<.01$					

In the main analysis, with dispositional hope as the predictor variable, we performed four separate simple regression analyses, as there were four criterion or outcome variables: skills engagement, emotional engagement, participation engagement, and performance engagement. These outcome variables correspond to the four dimensions of the Online Student Engagement Scale. The results of the regression analyses are presented in Tables 3 to 6, respectively.

Table 3 presents the results of the regression analysis for skills engagement as the criterion variable and dispositional hope as the predictor variable. The results revealed that dispositional hope positively predicts the outcome variable, skills engagement. The predictor variable, dispositional hope, explained 46.3% of the variance in skills engagement.

Table 3. Regression Result on Skills Engagement

		b	SE b	β
1	(Constant)	.857	.183	
	Hope	.484	.031	.680***

Note: R^2= .463, *p < .05, **p < .01, ***p < .001.

Table 4 presents the results for emotional engagement as the criterion variable and dispositional hope as the predictor variable. Using regression analysis, emotional engagement in online student engagement was positively predicted by dispositional hope, explaining 46.4% of the variance.

Table 4. Regression Result on Emotional Engagement

		b	SE b	β
1	(Constant)	.675	.201	
	Hope	.531	.034	.681***

Note: R^2= .464, *p < .05, **p < .01, ***p < .001.

Table 5 presents the results of the regression analysis for participation engagement as the criterion variable and dispositional hope as the predictor variable. The results suggested that dispositional hope positively predicted the outcome variable, participation engagement, explaining 46% of the variance.

Table 5. Regression Result on Participation Engagement

		b	SE b	β
1	(Constant)	.604	.196	
	Hope	.516	.034	.678***

Note: R^2= .460, *p < .05, **p < .01, ***p < .001.

Table 6 presents the results of the regression analysis with performance engagement as the criterion variable and dispositional hope as the predictor variable. The predictor variable, dispositional hope, positively predicts performance engagement, explaining 41.9% of the variance.

Table 6. Regression Result on Performance Engagement

		b	SE b	β
1	(Constant)	.642	.226	
	Hope	.547	.039	.647***

Note: R^2= .419, *p < .05, **p < .01, ***p < .001.

Based on the overall statistical results of all the regression analyses conducted, dispositional hope consistently emerged as a positive predictor of the four domains of online student engagement. Consequently, this may indicate that hopeful pre-service teachers are more likely to be actively engaged in their online learning.

Specifically, they consistently complete readings, actively participate in discussions, and strive to make the course personally meaningful. As a result, this engagement often translates into positive academic outcomes, such as strong performance on tests and assignments. Moreover, a hopeful mindset can help pre-service teachers develop resilience and perseverance, which are essential qualities for effective teaching.

In line with this, studies have indicated that online learners tend to be more engaged when interacting with course content, classmates, and teachers (Bedi, 2023; Lear et al., 2010). Furthermore, Engaged students are less likely to feel isolated and more likely to stay motivated and satisfied with their academic performance (Banna et al., 2015; Bedi, 2023; Fredricks et al., 2004). Active participation in online platforms can foster positive social skills, even with limited face-to-face interaction. Students who build strong social connections often experience improved mental health and overall well-being (Quilon & Kurniawan, 2023). Collaborative activities and social skill exercises can enhance student satisfaction and create positive learning experiences.

Farnsworth, Cordle, and Groen (2022) argue that hope theory posits that agency thinking, the belief in one's capacity to achieve goals, is the primary motivator for goal-oriented actions. This is a pivotal aspect of the theory, as students lacking confidence in their ability to succeed are less likely to pursue their aspirations. Agency thinking aligns with student engagement, reflecting an individual's drive to accomplish goals. As previously noted, engaged students are more likely to exhibit agency thinking. Understanding this connection is essential for educators seeking to foster motivation and achievement.

This study contributes to expanding the ecological validity of hope's influence on student engagement. In other words, this research strengthens the evidence that hope plays a significant role in student engagement, regardless of the learning environment. Furthermore, hope influence equally applies to face-to-face and online learning environments. Therefore, by fostering a sense of agency and belief in one's ability to succeed, educators can empower students to overcome challenges and achieve their goals.

CONCLUSION

This study sought to advance the understanding of online learning in the Philippines by investigating the predictive role of dispositional hope on the online student engagement of Filipino pre-service teachers at a university in northern Luzon.

The gathered data supported the hypothesized relationship between dispositional hope and online student engagement among Filipino pre-service teachers. Because dispositional hope positively predicted all four domains of online student engagement: skills engagement, emotional engagement, participation engagement, and performance engagement, pre-service teachers with high levels of hope are more likely to actively engage in their online learning activities. This research contributes further to the understanding of how dispositional hope influences student engagement, showing that its positive effects apply to both face-to-face and online learning contexts. This suggests that by cultivating a sense of agency and belief in one's ability to succeed, educators can empower students to become more engaged and motivated learners.

While this study examined only internal hope, future research could delve deeper into external sources of hope, such as parental support, peer influence, and spirituality, as suggested by Bernardo (2010).

REFERENCES

1. Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. Psychology in the Schools, 45(5), 369–386. https://doi.org/10.1002/pits.20303
2. Azila-Gbettor, E. M., Mensah, C., Atatsi, E. A., & Abiemo, M. K. (2021). Predicting students' engagement from hope and mindfulness. Journal of Applied Research in Higher Education, 14(4), 1355-1370. https://doi.org/10.1108/JARHE-02-2021-0068
3. Banna, J., Lin, M. F. G., Stewart, M., & Fialkowski, M. K. (2015). Interaction matters: Strategies to promote engaged learning in an online introductory nutrition course. Journal of Online Learning and Teaching/MERLOT, 11(2), 249.
4. Bedi, A. (2023). Keep Learning: Student Engagement in an Online Environment. Online Learning,

27(2), 119-136.

5. Bernardo, A. B. I. (2010). Extending hope theory: Internal and external locus of trait hope. Personality andIndividual Differences, 49(8), 944–949. https://doi.org/10.1016/j.paid.2010.07.036

6. Bernardo, A. B. I., Salanga, M. G. C., Khan, A., & Yeung, S. S. (2016). Internal and External Loci-of-Hope Predict Use of Individual and Collaborative Learning Strategies: Evidence from University Students in Four Asian Cities. Asia-Pacific Education Researcher, 25(3), 367–376. https://doi.org/10.1007/s40299- 015-0249-y

7. Curry, L. A., Snyder, C. R., Cook, D. L., Ruby, B. C., & Rehm, M. (1997). Role of hope in academic and sport achievement. Journal of Personality and Social Psychology, 73(6), 1257–1267. https://doi.org/10.1037/0022-3514.73.6.1257

8. Day, L., Hanson, K., Maltby, J., Proctor, C., & Wood, A. (2010). Hope uniquely predicts objective academic achievement above intelligence, personality, and previous academic achievement. Journal of Research in Personality, 44(4), 550–553. https://doi.org/10.1016/j.jrp.2010.05.009

9. De Guzman, M. M. A., & Macapagal, M. E. (2020). Pangarap ko, pangarap natin: The role of hope as amediator between social support and school engagement among Filipino public school students. International Journal of Research Studies in Education, 9(6), 25-36. https://doi.org/10.5861/ijrse.2020.5030

10. Dixson, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? Journal of the Scholarship of Teaching & Learning, 10(2), 1–13. Retrieved from http://ezproxy.deakin.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN= 52225431&site=eds-live&scope=site

11. Dixson, M. D. (2015). Measuring student engagement in the online course: the Online Student Engagement scale (OSE).(Section II: Faculty Attitudes and Student Engagement)(Report). Online Learning Journal (OLJ), 19(4), 143.

12. Eccles, J., & Wang, M.-T. (2012). Part 1 commentary: So what is student engagement anyway? In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), Handbook of research on student.

13. Edwards, L. M., Rand, K., Lopez, S. J., & Snyder, C. R. (2006). Understanding hope: A review of measurement and construct validity research. In A. Ong & M. van Dulmen (Eds.), Handbook of methods inpositive psychology (pp. 83–95). New York: Oxford Press.

14. Fadde, P. J., and Vu, P. (2014). Blended online learning: benefits, challenges, and misconceptions. Online learn. Common Misconceptions Benefits Challenges 2014, 33–48. doi: 10.4018/978-1-5225-8009-6.ch002

15. Farnsworth, E.M., Cordle, M., Groen, A. (2022). Hope and Student Engagement: Keys to School Success. In: Reschly, A.L., Christenson, S.L. (eds) Handbook of Research on Student Engagement. Springer, Cham.https://doi.org/10.1007/978-3-031-07853-8_10

16. Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter? In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), Handbook of research on student engagement (pp. 97-131).New York, NY, US: Springer Science + Business Media.

17. Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 74(1), 59–109. https://doi.org/10.3102/00346543074001059

18. Gillett-Swan, J. (2017). The challenges of online learning: supporting and engaging the isolated learner. J. Learn. Design 10, 20–30. doi: 10.5204/jld.v9i3.293

19. Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A Measure of College Student Course Engagement. The Journal of Educational Research, 98(3), 184–192.

20. Hollister, B., Nair, P., Hill-Lindsay, S., and Chukoskie, L. (2022). Engagement in online learning: student attitudes and behavior during COVID-19. Front. Educ. 7, 851019. doi: 10.3389/feduc.2022.851019

21. Johnson, B. (2001). Toward a New Classification of Nonexperimental Quantitative Research. EducationalResearcher, 30(2), 3–13. https://doi.org/10.3102/0013189X030002003

22. Kahu, E. R. (2013). Framing student engagement in higher education. Studies in Higher Education, 38(5),758–773. https://doi.org/10.1080/03075079.2011.598505

23. Lam, S. F., Jimerson, S., Wong, B. P. H., Kikas, E., Shin, H., Veiga, F. H., … Zollneritsch, J. (2014). Understanding and measuring student engagement in School: The results of an international study from

12 countries. School Psychology Quarterly, 29(2), 213–232. https://doi.org/10.1037/spq0000057

24. Lear, J. L., Ansorge, C., & Steckelberg, A. (2010). Interactivity/community process model for the online education environment. Journal of Online Learning and Teaching, 6(1), 71–77.Newmann, F. (1992). Student engagement and achievement in American secondary schools. In F. Newmann (Ed.), Student engagement and achievement in American secondary schools. New York: Teachers College Press.

25. Nieva, A. (2022). The Relationship between Career Interests and Academic Achievements in English, Mathematics, and Science of Grade 10 Students. International Journal of Arts, Sciences and Education, 3(2June Issue). Retrieved from https://www.mail.ijase.org/index.php/ijase/article/view/122

26. Nieva, A., & Prudente, J. (2022). Online self-regulated learning, academic performance, and well-being of Senior High School Students in the NCR: A mediation analysis. Bedan Research Journal, 7(1), 48–62. https://doi.org/10.58870/berj.v7i1.32

27. Nieva, A. (2023). Construct validation of the teacher attitude to inclusion scale for Filipino pre-service teachers. Bedan Research Journal, 8(1), 305–329. https://doi.org/10.58870/berj.v8i1.56

28. Nieva, A. (2024). Personality Traits as Predictors of Pro-Environmental Behavior: Evidence from the Philippines. Bedan Research Journal, 9(1), 145–173. https://doi.org/10.58870/berj.v9i1.68

29. Norrish, J. M., Williams, P., & Connor, M. O. (2013). An applied framework for Positive Education. International Journal of Wellbeing, 3(2). https://doi.org/10.5502/ijw.v3i2.2

30. Quilon, A., & Kurniawan, Y. (2023). Online learning environment and mental health among university students. Bedan Research Journal, 8(1), 259–284. https://doi.org/10.58870/berj.v8i1.54

31. Rand, K. L. (2009). Hope and optimism: Latent structures and influences on grade expectancy and academic performance. Journal of Personality, 77(1), 231–260. https://doi.org/10.1111/j.1467-6494.2008.00544.x

32. Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), Handbook of research on student engagement (pp. 3-19). New York, NY, US: Springer Science + Business Media.

33. Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. Oxford Review of Education, 35(3), 293–311. https://doi.org/10.1080/03054980902934563

34. Skinner, E. A., Furrer, C., Marchand, G., & Kindermann, T. A. (2008). Engagement and Disaffection in theClassroom: Part of a Larger Motivational Dynamic? Journal of Educational Psychology, 100(4), 765–781. https://doi.org/10.1037/a0012840

35. Snyder, C. R. (2000). The past and possible futures of hope. Journal of Social and Clinical Psychology, 19(1), 11–28. https://doi.org/10.1521/jscp.2000.19.1.11

36. Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., … Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. Journal of Personality and Social Psychology, 60(4), 570–585. https://doi.org/10.1037//0022-3514.60.4.570

37. Snyder, C. R., Lopez, S. J., Shorey, H. S., Rand, K. L., & Feldman, D. B. (2003). Hope theory, measurements, and applications to school psychology. School Psychology Quarterly, 18(2), 122–139. https://doi.org/10.1521/scpq.18.2.122.21854

38. Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2018). Hope theory: A member of the positive psychology family. In M. W. Gallagher, & S. J. Lopez (Eds.), The Oxford handbook of hope (pp. 27–43). New York, NY: Oxford University Press.

39. Snyder, C. R., Shorey, H. S., Cheavens, J., Pulvers, K. M., Adams, V. H., & Wiklund, C. (2002). Hope and academic success in college. In Journal of Educational Psychology (Vol. 94, pp. 820–826). https://doi.org/10.1037/0022-0663.94.4.820

40. Yang, Y., Zhang, M., & Kou, Y. (2016). Self-compassion and life satisfaction: The mediating role of hope.Personality and Individual Differences, 98(January), 91–95. https://doi.org/10.1016/j.paid.2016.03.086

41. Yoon, H. J., In, H., Niles, S. G., Amudson, N. E., Smith, B. A., & Mills, L. (2015). The effects of hope onstudent engagement, academic performance, and vocational identity. The Canadian Journal of CareerDevelopment, 14(1), 34–45.