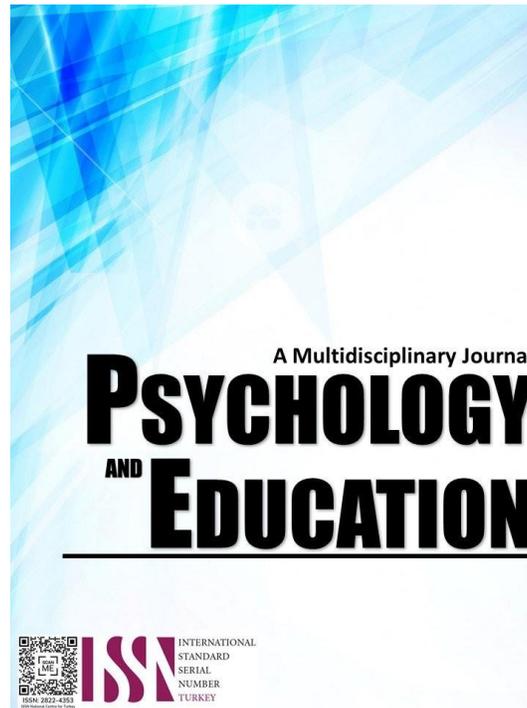


# THE MEDIATING ROLE OF GUIDANCE SERVICE EFFECTIVENESS ON THE COGNITIVE PRESENCE AND ADAPTIVE LEARNING ENGAGEMENT OF STUDENTS



**PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL**

Volume: 31

Issue 7

Pages: 749-776

Document ID: 2025PEMJ3002

DOI: 10.5281/zenodo.14823589

Manuscript Accepted: 01-15-2025

## The Mediating Role of Guidance Service Effectiveness on the Cognitive Presence and Adaptive Learning Engagement of Students

Jusueil D. Gelacio,\* Jerson John L. Trocio

For affiliations and correspondence, see the last page.

### Abstract

This study aimed to identify the interactions between students' cognitive presence, school guidance services and adaptive learning engagement in a junior high school context. This quantitative research adopted a stratified sampling technique to draw a sample of 300 junior high school students. Self-completed questionnaires were distributed from August 2023 to April 2024. The analysis included means, standard deviations Cronbach's alpha coefficient, also Pearson coefficients and regression to compare the variables. The study showed that students perceived a very high cognitive presence that enhanced adaptive learning engagement. School guidance services also mediate the relationship between cognitive presence and adaptive learning engagement interaction and a direct effect. A positive moderate relationship was observed between cognitive presence and Adaptive learning engagement represented. This research shows that students experience enhanced adaptive learning engagement when cognitive presence is effectively promoted. It is recommended that improvement of school guidance services may serve as crucial support and backing promoting the conditions for effective mastery of learning achievements. It is therefore important for educational policymakers and practitioners to pay the most attention to improving guidance programs as well as student-centered learning approaches to enhance students' intellectual participation and achievement.

**Keywords:** *student cognitive presence, school guidance services, adaptive learning engagement, junior high school, education policy*

### Introduction

The problem of students' adaptive learning engagement is complex by today's standards because engagement itself is a subjective measure, the tools to measure engagement in a cloud, and a widely accepted definition of engagement are still elusive and all these create difficulties in monitoring and, therefore, the improvement of this important indicator (Koul & Nayar, 2020; Mason, Crossley, & Bond, 2019). If these complexities are not well managed, there is a likelihood that academic performance could drop low, and students may become more withdrawn and less motivated, a situation that can be worsened online as well as in hybrid learning structures where dropout rates are generally high (Limniou et al., 2022). Further, lack of or restricted accessibility of guidance services can worsen these problems, therefore students are prevented from addressing academic and emotional demands, and personal and social growth and future success may be hampered by their lack of proper support (Wester, Walsh, Arango-Caro, & Callis-Duehl, 2021).

It was also established that the adaptive learning engagement that students keenly participate in is crucial for both academic accomplishment and overall individual advancement. Incorporation of the adaptive learning engagement encompasses the learning goal orientation, task value, efficacy beliefs, and Self-regulation mechanisms is central to assisting students in managing the educational process independently and effectively (Dixson, 2015). Engagement leads to the framework of personal learning objectives effectively valuing coursework and enhanced self-perceived academic capabilities that provoke students into readiness to tackle difficulty. This engagement is very useful especially where instruction delivery models are adaptive in line with the learning preference and requirements of the learner to increase memory retention and performance.

In addition, adaptive learning engagement cultivates emotional well-being by playing stress-buffering roles and decreasing feelings of loneliness, harbingers in conventional and online learning environments (Limniou et al., 2022). When students build the skills to manage and own it, engagement in adaptive learning becomes a key ingredient for the development of not only academic achievement but also crucial lifelong skills, such as thinking skills and problem-solving skills for future learning and socio-economic success. Hence, improving this engagement becomes relevant for educators and institutions who seek to improve the learning experience and development products of their settings.

Cognitive presence, as the independent variable (IV), and adaptive learning engagement, as the dependent variable (DV), are the cornerstones of the understanding of how students succeed in their learning processes. Another type of presence is cognitive in which the ability to understand content, build knowledge, and control learning resources that are essential to enhanced learning and critical thinking (Kang, Kim & Park 2008). When students exhibit a high level of cognitive presence, they are more likely to interact with their learning environment and as observed in this study adaptive learning behaviors that include setting learning goals, acknowledging the value of tasks, maintaining self-efficacy and self-regulation of learning activities (Kilpatrick, 2003). This connection makes it explicit that cognitive presence not only has a bearing on how students assimilate or make sense of information content but also determines their level of activation or engagement and success in learning activities.

However, the important role of School Guidance Services as the mediating variable between the cognitive presence and the adaptive learning engagement cannot be emphasized enough. These services, particularly appraisal, information, consultation and counselling

type empower students to undertake their educational challenges in an efficient manner (Namale & Awabi, 2018). School counseling services provide human emotional and academic support to strengthen cognitive presence to enhance learning so that students can grasp and recall knowledge.

In addition, guidance services have important roles in encouraging positive participation towards adaptive learning engagement because the guidance offers goal setting as well as enhances student's self-efficacy which is vital in appropriate learning and persistence in learning activities (Dixson, 2015). Hence, the nature of interaction between the school guidance services on learners adaptive learning engagement raises the need for a well-coordinated system support that enhance cognitive growth in learners, and the levels of enrollment learners accord to their learning process (Limniou, Sedghi, Kumari, & Drousiotis, 2022).

With this the researcher was forced to examine the relationship between the efficiency of school guidance services, students' cognitive presence, and students' adaptive learning engagement. Although students' adaptive learning engagement has been a focal research area with some studies incorporating different variables in their research, little consideration has been given to the use of school guidance services effectiveness and student cognitive presence.

In a study done by Wester, Walsh, Arango-Caro and Callis-Duehl (2021), it was noticed that limited students' adaptive learning engagement due to their knowledge deficit on how to handle their emotions, interact with peers, interact with School personnel, and grasp both the traditional and new normal contexts which were related with the cognitive presences of a student and resulted in the decline of the student's academic performance. This meant necessary constant examination of the correlation of these variables so as to have to review and enhance the friendliness of the school guiding services in the new normal as well as the traditional mode to foster the students' cognitive presence while pursuing adaptive learning engagement practices without compromising the schools' performances.

Cognitive presence as an independent variable is related to a student's learning mechanism, as well as learning process, based on participation in discourse, projects, as well as assignments (Damsa et al., 2019). This engagement allows learners to interpret concepts in their voices and simultaneously create relationships between different concepts, as well as relate those concepts to practical scenarios for deeper critical presence. In essence, skills in constructing knowledge are positively allied to cognitive presence, which has significant implications for deep learning and relative academic efficacies (Srivastava et al., 2019). The use of such engagements prepares the students for critical insights because they are exposed to different opinions and thus gain broader and better perspectives of such information-rich subjects and themes (Abel, Tondeur, & Sang, 2022; Berglund & Gericke, 2021).

A study also reveals that cognitive presence can hardly be discussed separately from students' problem-solving capacity, as the latter involves the application of existing knowledge to solve challenges and engage higher order thinking skills (Ali, 2022; Kabilan & Annamalai, 2022). Cognitive presence integrated with problem-solving develops students' competence in solving actual life challenges thereby boosting their overall cognitive growth (Maroungkas, Troussas, Krouska, & Sgouropoulou, 2023). In the same vain activeness pedagogy strategies like collaborative learning, concept mapping as well as practice and performance-based practices also support cognitive presence through collaborative construction of knowledge from learners' shared ideas as much as supported by Oman et al. (2020), Ng et al. (2022), and Junus et al. (2021). At the same time, students who practice these active learning techniques improve their knowledge acquisition and increase their ability to become lifelong learners (Thongmak, 2021; Huang & Lai, 2022).

School guidance services act as mediating variable in students' emotional, social and academic growth where the structured ones offer general information, as well as solutions that pertain to each learner like behavior modification or handling strategies (Bettters-Bubon, Brunner, & Kansteiner, 2016; Farrell & Brunton, 2020). Teachers, school psychologists, and social workers work together with help of counselors to address students' difficulties and create personal educational and behavioral plans which contribute to improvement of learning environment (Beames et al., 2020; Cheng et al., 2020). In the counseling services, the school counselors must listen to students' concerns in a safe space with the provision of the honoring of the student's privacy (Villares et al., 2022; Yi & Fiedler, 2022). In that case, the services deliver the most impact as far as school climate and student involvement are concerned, when student's well-being and mental health are of great importance (King & Fazel, 2021; Savitz-Romer & Nicola, 2021).

In addition, school guidance services include features of trauma sensitivity and cultural relevance to accept and manage current students, where they originate (Imad, 2022; Brooms, 2021). Social workers offer targeted services to the targeted groups such as the lesbian, gay, bisexual, and/or trans students as the school responds to the rights of everyone (Mayes et al., 2022; Goodman-Scott et al., 2022). Using positive behavior interventions and preventions as well as teaching students to make appropriate decisions and building understanding, counselors promote positive student behavior and accountability and decorum throughout the school (Russo, 2022; Molina et al., 2022). Lastly, school guidance services help in the improvement of the students' achievements and learner success by targeting on the effectiveness of the student's experience in the school (Alexander et al., 2022; Puhly et al., 2021).

Students' adaptive learning engagement is fundamentally influenced by key psychological constructs, including resilience, self-efficacy, and self-regulation. The results suggest resilience as an important factor that helps students to overcome obstacles and perceive them as development within changing learning contexts (Agasisti, Avvisati, Borgonovi, & Longobardi, 2018). This characteristic, together with self-efficacy, which is the level of faith a student has in their ability to complete certain tasks in an academic environment, fosters per-bola and determination in the face of academical challenges (Kaufmann et al., 2022, Chang and Hall, 2022). High self-efficacy students

not only approach challenges assertively but also look for relevant support and learn how to change study patterns, with resulting performance boosted to an extent (Darmawansah, Lin, & Hwang, 2022).

Self-regulation adds to adaptive learning engagement through the skills which enable learners to better manage their learning processes (Onah, Pang, & Sinclair, 2021). This encompasses developmental activities such as goal setting, evaluation of progress as well as evaluation of the effectiveness of certain strategies to enable the students to achieve value in adaptively structured systems (Yufereva, 2023; Muñoz, 2022). These are all elements that lead to Cognitive Presence which in turn is strongly associated with student achievement both within face-to-face as well as online environments (Riaz et al., 2022). Hence, meaningful improvement of these constructs is central to supporting students' adaptive learning engagement and their success in complex learning environments (Moore & Miller, 2022; Budhrani, 2021).

This study aimed to establish the influence of student cognitive presence, guidance services, and counseling services on students' adaptive learning engagement among junior high school students in Davao City. Specifically, it sought to address several objectives. First, the study aimed to describe the level of students' cognitive presence in terms of understanding content, constructing knowledge, and managing learning resources. Second, it aimed to ascertain the level of school guidance services, focusing on appraisal services, information services, consultation services, and counseling services. Third, the study aimed to measure the level of students' adaptive learning engagement in terms of learning goal orientation, task value, self-efficacy, and self-regulation. Fourth, it sought to determine the significant relationship between cognitive presence and students' adaptive learning engagement, as well as between school guidance services and students' adaptive learning engagement. Lastly, the study aimed to evaluate the mediating effect of school guidance services on the relationship between students' cognitive presence and adaptive learning engagement.

To guide this investigation, the null hypothesis was tested at a 0.05 level of significance. The hypotheses included: There is no significant relationship between cognitive presence and students' adaptive learning engagement, and between school guidance services and students' adaptive learning engagement; and There is no significant relationship between the mediating effect of school guidance services on the relationship between students' cognitive presence and students' adaptive learning engagement.

The study was anchored with the cognitive engagement theory proposed by Ryan and Patrick (2001), Bangert-Drowns and Pyke (2002) as well as Wang and Kang (2006). This theory highlighted three key factors for assessing student cognitive presence: understanding content, knowledge construction, and learning resource management. In the study of Bangert-Drowns and Pyke (2002) the importance of the first factor which dealt with students comprehending the subject matter thoroughly, indicated their engagement and intellectual involvement in the learning process which facilitated the second factor, knowledge construction. This signified that understanding content served as a foundation for students to engage meaningfully and succeed in their academic pursuits.

Highlighted the findings of Corno and Mandinach (1983) and Wang and Kang (2006) that in cognitive engagement theory, knowledge construction comprised three key factors: information acquisition, information transformation, and the active process of constructing knowledge. These components played a vital role in facilitating students' understanding and application of knowledge, promoting their cognitive engagement, and fostering deeper learning experiences that led to effective learning resource management (Armah, Bervell, & Bonsu, 2023). This is supported by Richardson and Newby (2006) that states engaged learners with a high level of cognitive presence exhibit effective resource management that leads to a well-developed self-regulated learning process, cognitive engagement empowers learners to proficiently handle resources, adapt to their environment, and optimize performance.

The Connecticut School Association theory also supports the cognitive engagement discussion, postulated by the Connecticut School Association in 2001. This theory argued that comprehensive guidance and counseling services in schools, foundation programs and services, skills, and competencies were crucial prerequisites. By establishing these essential elements, schools could enhance learners' support systems and promote their well-being and academic achievements.

Moreover, engagement theory, as proposed by Kearsley and Schneiderman (1998), served as a framework for technology-based teaching and learning, that still supports the main theory of the study. It emphasized the essential notion that students needed to be actively and meaningfully engaged in their learning experiences both in onsite and virtual set-ups that signified high cognitive presence.

This adaptive learning engagement occurred through meaningful interactions with peers and instructors, as well as through engaging in worthwhile tasks and activities. By prioritizing these elements, the theory promoted effective learning and the development of critical skills and knowledge in technology-enhanced educational settings. Within the framework of the research, enhancing guidance services and establishing students' cognitive presence could ensure high students' adaptive learning engagement.

The study's conceptual framework, depicted in Figure 1 illustrates the interconnections between cognitive presence, guidance services, and students' adaptive learning engagement. Cognitive presence serves as the independent variable, comprising understanding content, constructing knowledge, and managing learning resources. This variable reflects learners' active engagement in reflection and communication to build and validate their understanding of key concepts within a subject. Understanding content enables students to interpret information and articulate lessons, while constructing knowledge involves connecting prior knowledge with new insights. Managing learning resources allows students to effectively utilize educational materials to enhance their learning through efficient time management and goal-oriented strategies.

Guidance services function as a mediating variable that explains how cognitive presence influences student engagement in adaptive learning environments. These services include appraisal, information, consultation, and counseling services, which collectively support students' personal, social, academic, and career development. By providing structured support and resources, guidance services facilitate self-awareness and informed decision-making.

The dependent variable, students' adaptive learning engagement, encompasses learning goal orientation, task value, self-efficacy, and self-regulation. This engagement reflects how students interact with adaptive learning systems, ultimately enhancing their educational experiences and success. The framework highlights the path from cognitive presence to guidance services and their collective impact on fostering adaptive learning engagement among students.

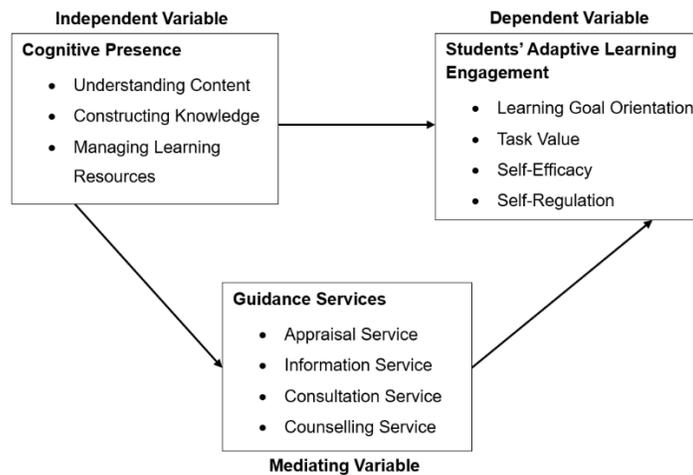


Figure 1. *The Conceptual Framework illustrates the variables of the study*

The significance of student engagement in the realm of education couldn't be overstated, as it exhibited a direct correlation with academic achievements, retention rates, and holistic learning outcomes (Bowden, Tickle, & Naumann, 2019). Active participation, motivation, and investment in the educational journey were all prominent characteristics exhibited by engaged students (Morfaki & Skotis, 2022). Discussed in the study of Veyaluthum, Aldridge, and Fraser (2011), school guidance services influence adaptive student engagement by addressing learning goal orientation, task value, self-efficacy, and self-regulation aspects, creating a supportive and inclusive environment for active participation in learning.

The study of Ozogul (n.d.) emphasized that student cognitive presence influences students' adaptive learning engagement, promoting deep learning, active participation, and academic success in the learning environment. These studies signify the importance of verifying the correlation of these variables on student engagement to establish an effective adaptive student learning engagement. Furthermore, aligning with the United Nations Sustainable Development Goal 4 (SDG 4), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, fostering student engagement is critical in creating educational systems that are not only effective but also sustainable and accessible to every learner.

The study was expected to benefit the school counselor, students, educators, and future researchers. The results of the research would equip school counselors with a comprehensive framework to assess their guidance and counseling programs, along with insights into the specific elements, methods, and timing for delivering these services considering adaptive learning engagement. Moreover, the data derived from this study would empower school counselors to enhance the efficiency of their duties, enabling them to continually enhance their provision of services wherein they would become more effective in their roles, positively impacting their ability to deliver improved assistance to students.

This study would also raise awareness among the students on the vital role of the school's guidance and counseling programs in boosting their adaptive learning engagement and enhancing their cognitive presence. This would also assist and encourage the students to seek counseling, identify their problems, and find solutions through consultation with their counselor for proficient and effective learning.

For educators, this served as a valuable opportunity to engage in introspection and evaluate their performance. It offered them a visual representation of areas that required improvement in their teaching methodologies. By doing so, they could develop effective strategies for effective and efficient learning, thereby guaranteeing the provision of high-quality education. Additionally, this reflective process enabled teachers to adapt and refine their instructional techniques to meet the unique challenges and demands of education.

To future researchers, exploring the interplay of these variables would yield valuable insights into potential factors that may impact students' adaptive learning engagement. Such an investigation would serve to validate the current findings and potentially introduce additional variables that could influence adaptive learning engagement among junior high school students. This broader understanding would contribute to the ongoing discourse on effective strategies for promoting student engagement and success in the learning environment.

## Methodology

### Respondents

The research was conducted in Region XI, Philippines, with a specific focus on a secondary school within the Division of Davao City with a school code of 304359. This school, located at Sto. Niño community, Matina Crossing, Talomo, Davao City, 8000 Davao del Sur. The researcher aimed to examine the school's guidance services, students' cognitive presence, and students' adaptive learning engagement. For anonymity and data privacy, the identified school utilized the school code instead of names, with the code 304359 assigned.

The aforementioned 'school was among the largest educational institutions in Davao Region, accommodating over 7000 students who were actively participating in online classes during the pandemic and were presently enrolled in in-person and blended learning for junior high school. This school's location is situated in the Philippines, specifically in Region XI where Davao City was located. Considering the study's scope, this area was deemed suitable for conducting the research due to the researcher's convenient access to the data to be collected.

The study comprised 300 participants from school 304359 who would serve as respondents. Data analysis was carried out using advantageous statistical methods, including mean, standard deviation, and Cronbach's Alpha, tailored to accommodate the sample size of 300. These participants had been selected using stratified sampling, where every member of the population under study belonged to a distinct and homogeneous subpopulation called a stratum (Howell, 2020). All respondents were junior high school students of school 304359 who engaged in in-person and blended learning classes. The study was conducted between August 2023 and April 2024.

During the selection of respondents, strict adherence to inclusion criteria had been ensured. Junior high school students who experienced onsite and online classes were eligible to participate as respondents in the study. The research concentrated on evaluating the extent of students' adaptive learning engagement among current junior high school students. Any descriptions that would not meet the specified criteria were excluded from the study. Additionally, participants were explicitly informed that they had the option to decline, refuse, or withdraw from the study without needing to provide a reason, and importantly, there were no penalties associated with their decisions.

### Instrument

In this study, a modified questionnaire was employed to assess the variables of interest. The first adapted questionnaire, student cognitive presence, was developed by Kang, Kim and Park (2008). It comprised 21 items and was categorized into three indicators: understanding content, constructing knowledge, and managing learning resources. The responses were scored on a five-tiered scale, utilizing the five-point Likert scaling method for the descriptive rating. The reliability of these factors, assessed through Cronbach's coefficient alpha, yielded values of 0.844, 0.809, and 0.640, respectively. These results indicated that all 21-item questions were considered acceptable.

The second questionnaire consisted of 16 questions that focused on school guidance services. Each guidance service category in the study, namely appraisal service, information service, consultation service, and counseling service, included four items. The questionnaire underwent content validation by two experts in the field of guidance and counseling at the Department of Psychology and Education, University of Education, Winneba in Ghana. Respondents would use a four-point Likert scaling method, ranging from 1 to 5, for the descriptive rating. The questionnaire's reliability, as measured by Cronbach's alpha, was 0.81, indicating its suitability for research purposes.

The questionnaire's third part centers on adaptive learning engagement and was derived from Opdenakker and Minnaert's work in 2011. This section comprises 32 questions, covering four key aspects: learning goal orientation, self-regulation, self-efficacy, and task value. To evaluate responses, a scoring guide ranging from 1 to 5 was employed, using a five-point Likert scale to provide descriptive ratings for these elements.

Before being administered to the respondents, the questionnaires underwent validation by a panel of experts. The instruments received an overall mean rating of 32.4 from five validators. Among the evaluated aspects, sustainability of items received the highest score from the panel of 5, while the lowest average score of 4.2 was attributed to clarity of direction and items, exhibition and association of items, attainment of purpose, objectivity, and scale and evaluation rating scale. A score of 4.8 was obtained for the latter, with five representing the highest and one indicating poor performance.

### Procedure

In this study, a descriptive-correlational approach was employed, utilizing a quantitative, non-experimental research methodology. The non-experimental design refrained from manipulating an independent variable or utilizing random assignment to control extraneous factors (Basir, Ismail, Hassan, & Othman, 2023). The evaluation encompassed the study's variables, namely cognitive presence, guidance services, and student online engagement.

The study employed a descriptive design to characterize and analyze a population circumstance or phenomenon. It aimed to address how, what, when, and where questions rather than why. Additionally, a correlation design was utilized to quantify the extent of connection or association between multiple variables or sets of scores. This study measured the degree of cognitive presence, guidance

services, and students' adaptive learning engagement, examining their relationships. Moreover, regression techniques was applied to determine the nature, intensity, and direction of the link between one dependent variable and several other factors (Verma et al., 2023). In the context of the study, this helped ascertain the influence of cognitive presence and guidance services on students' adaptive learning engagement.

To facilitate the study, data gathering procedures were as follows: First, authorization was obtained from the University of Mindanao's Professional Schools' Dean. Subsequently, the researcher personally sought permission from the Superintendent in Davao City Division to conduct the research. The authorized letter from the Division Superintendent was appended to the letter that had been addressed to the principal of school 304359, a secondary public school, to request the administration's cooperation in administering the survey questionnaires.

Next, the participants received a thorough orientation about their involvement in the study, and informed consent had been obtained. Subsequently, the survey questions were distributed, with the researcher personally distributing the research instruments to the respondents between August 2023 and September 2023. With assistance from Department Heads and teachers, all questionnaires were collected. The fourth step involved the retrieval and encoding of data, which was done in the appropriate workspace.

Lastly, the collected data underwent analysis through the utilization of the subsequent statistical tools that include mean, Pearson  $r$ , and regression wherein mean was employed to evaluate students' cognitive presence, guidance services, and students' adaptive learning engagement. Pearson  $r$  was employed to establish a significant correlation between students' cognitive presence and their adaptive learning engagement, as well as the relationship between school guidance services and students' adaptive learning engagement, and regression was utilized to assess the influence of cognitive presence and guidance services on students' adaptive learning engagement.

The Sobel test statistics done produced ( $z$ ) is 0.7701, with a corresponding two-tailed  $p$ -value of 0.4412. This suggests that the mediation effect school guidance services were not statistically significant at the conventional alpha level of 0.05. This suggests that the mediation effect was not statistically significant at the conventional alpha level of 0.05.

Based on the result of Sobel test statistic, the analysis leads to simple mediation model called Model 4 in Hayes's Process Macro. It was a mediation model employing one mediator, school guidance services in the relationship between an independent variable, student cognitive presence, and the dependent variable, students' adaptive learning engagement. In that model, the total effect of cognitive presence on adaptive learning engagement was partitioned into a direct effect and an indirect effect through the mediator. It gave analysis of direct channels from the independent variable to the dependent variable and indirect channels passing through some mediator. Such an approach allows assessing whether the effect of the independent variable on the dependent variable is partially or fully mediated by the proposed mediating variable. The results include direct, indirect via bootstrap effect, and paths at the individual level of IV to mediator and mediator to DV to provide a complete view of the mediation process.

## Results and Discussion

### Student's Cognitive Presence

The study initially aimed to assess the student's cognitive presence, which was assessed in terms of understanding content, constructing knowledge, and managing learning resources. Based on Table 1 which shows the level of student's cognitive presence, the degree of student's cognitive presence got an overall mean of 4.36, which is very high, with an overall standard deviation of 0.20 which implies that cognitive presence is always manifested. The three indicators got a very high descriptive level wherein managing learning resources of students had the highest means of 4.38, followed by understanding content with a mean of 4.36 and constructing knowledge with a mean of 4.35, with a standard deviation of 0.33, 0.30, and 0.27 respectively.

Table 1. *Student's Cognitive Presence*

<i>Indicator</i>	<i>SD</i>	<i>Mean</i>	<i>Descriptive Level</i>
Understanding Content	0.30	4.36	Very High
Constructing Knowledge	0.27	4.35	Very High
Managing Learning Resources	0.33	4.38	Very High
Overall	0.20	4.36	Very High

The very high level of students' cognitive presence (mean = 4.36, SD = 0.20) underscores the importance of student-centered approaches, such as problem-based learning and inquiry-based activities, to enhance knowledge construction and engagement (Doolittle et al., 2023; Lombardi et al., 2021). The ability to manage learning resources highlights readiness for independent study, making self-learning opportunities essential in curricula to prepare students for knowledge-driven workplaces (Tsui & Kianto, 2021; Wittmann & Wulf, 2023).

The findings support prior research linking cognitive presence to academic success. Consistent with Lombardi et al. (2021) and Doolittle et al. (2023), this study confirms the effectiveness of active learning strategies. It also aligns with Wittmann and Wulf (2023) and Tsui and Kianto (2021), validating the role of resource management and independent learning in fostering preparedness for modern challenges.

## School Guidance Services

Secondly, the study aimed to measure the level of school guidance services which are measured in terms of four indicators that include appraisal service, information service, consultation service, and counseling service. Data from Table 2 shows the summary of the level of school guidance services that obtained an overall mean of 4.28, which signifies very high, with a standard deviation of 0.33 which implies that guidance services are very effective. All indicators were at a high level wherein the indicator's consultation service obtained the highest mean of 4.32 with a standard deviation of 0.48, followed by counseling service with a standard deviation of 4.31 with a standard deviation of 0.48, and both appraisal service and information service obtained a mean of 4.24 with a standard deviation of 0.42.

Table 2. *School Guidance Services*

<i>Indicator</i>	<i>SD</i>	<i>Mean</i>	<i>Descriptive Level</i>
Appraisal Service	0.42	4.24	Very High
Information Service	0.42	4.24	Very High
Consultation Service	0.38	4.32	Very High
Counselling Service	0.48	4.31	Very High
Overall	0.33	4.28	Very High

The very high level of school guidance services (mean = 4.28, SD = 0.33) highlights their effectiveness in supporting students' academic, vocational, and personal/social development. Comprehensive programs, including appraisal, information, consultation, and counseling services, are crucial for fostering learning achievement and well-being (Kaya & Erdem, 2021). Enhancing these services through counselor training, technology integration, and community collaboration can sustain quality and adapt to student needs (Gomwas et al., 2023).

The findings support prior research emphasizing the importance of effective school guidance services in improving student outcomes. Consistent with Kaya and Erdem (2021), the study confirms the role of high-quality guidance in achieving better academic and career readiness. It also aligns with Aguinis et al. (2021), reinforcing the value of sustained and well-implemented support systems for enhancing student development.

## Student's Adaptive Learning Engagement

The third goal of the study was to assess the degree of student's adaptive learning engagement in terms of learning goal orientation, task value, self-efficacy, and self-regulation. The summary of this data is presented in Table 3 which garners an overall mean of 4.35, which is very high, with a standard deviation of 0.17 that implies that student's adaptive learning engagement is always manifested. All indicators are at very high levels wherein student self-efficacy obtained the highest mean of 4.38 with a standard deviation of 0.28 followed by learning goal orientation, self-regulation, and task value with the mean of 4.37, 4.35, and 4.31 consecutively and with a standard deviation of 0.28, 0.28, and 0.33 respectively.

Table 3. *Student's Adaptive Learning Engagement*

<i>Indicator</i>	<i>SD</i>	<i>Mean</i>	<i>Descriptive Level</i>
Learning Goal Orientation	0.28	4.37	Very High
Task Value	0.33	4.31	Very High
Self-Efficacy	0.28	4.38	Very High
Self-Regulation	0.28	4.35	Very High
Overall	0.17	4.35	Very High

The study's findings reveal a very high level of adaptive learning engagement (mean = 4.35, SD = 0.17), emphasizing students' readiness to adopt self-regulated strategies like goal-setting, self-monitoring, and valuing tasks (Wu et al., 2023). This highlights opportunities for educators to integrate adaptive learning approaches into teaching, such as goal-setting workshops and self-evaluation activities, to further enhance motivation and learning autonomy (Madhavan & Venugopalan, 2023). Policymakers should prioritize teacher training and resource allocation to sustain and develop these capabilities, preparing students to meet the challenges of a dynamic educational landscape.

The findings strongly support existing research on adaptive learning engagement. Consistent with Schunk (2022), the study affirms that high self-efficacy and self-regulation are vital for effective learning. Additionally, it aligns with Hennessy et al. (2022), who emphasize the role of differentiated learning tools in fostering adaptive skills. The results corroborate Russell et al. (2020), demonstrating the importance of adaptive learning dispositions in equipping students to navigate complex educational demands and achieve lifelong success.

## Significance of the Relationship between Student's Cognitive Presence and Student's Adaptive Learning Engagement

The significance of the relationship between student's cognitive presence and student's adaptive learning engagement is depicted in Table 4. Based on the information provided, it appears that there is a significant relationship between student's cognitive presence and student's adaptive learning engagement. This can be proven by the obtained p-value (0.0001) which is less than the 0.05 alpha level of significance that leads to rejecting the null hypothesis,  $H_0:1$ . In addition, the correlation coefficient ( $r$ ) 0.2495 indicates the positive moderate correlation between the student's cognitive presence and the student's adaptive learning engagement.



Table 4. Significance of the Relationship between Student’s Cognitive Presence and Student’s Adaptive Learning Engagement

Pearson Correlation	r	p-value	Decision
Student’s Cognitive Presence and Student’s Adaptive Learning Engagement	0.2495	0.0001	Reject HO1.1

The study highlights a significant positive moderate correlation ( $r = 0.2495$ ,  $p = 0.0001$ ) between students’ cognitive presence and adaptive learning engagement. This finding underscores the importance of fostering cognitive presence students' ability to construct meaning and engage reflectively to enhance adaptive learning (Wong & Liem, 2021). Educational strategies such as reflective activities, discussions, and active participation can strengthen cognitive presence, thereby increasing the effectiveness of adaptive learning programs. Policymakers and educators should integrate these strategies to optimize the benefits of adaptive learning technologies and create enriched, individualized learning experiences (Maxwell, 2023).

The study supports Intellectual Investment Theory (Ackerman, 1996; Von Stumm & Ackerman, 2013), which connects cognitive presence to adaptive learning engagement. The theory posits that individuals with a high need for cognition excel in processing complex information and demonstrate greater motivation for tasks requiring higher-order thinking skills. This aligns with the study’s findings that students with stronger cognitive presence are more likely to engage in self-regulated learning and task mastery. Additionally, it corroborates research by Mamun and Lawrie (2023), emphasizing the role of cognitive engagement in boosting adaptive learning, validating the positive relationship between the two variables.

**Significance of the Relationship between School Guidance Services and Student’s Adaptive Learning Engagement**

The significance of the relationship between school guidance services and student’s adaptive learning engagement is depicted in Table 5. Based on the information provided, it appears that there is a significant relationship between school guidance services and students’ adaptive learning engagement. This can be proven by the obtained p-value (0.02) which is less than the 0.05 alpha level of significance that leads to rejecting the null hypothesis, HO1.2. In addition, the correlation coefficient (r) 0.134 indicates the positive moderate correlation between school guidance services and students’ adaptive learning engagement.

Table 5. Significance on the Relationship between School Guidance Services and Student’s Adaptive Learning Engagement

Pearson Correlation	r	p-value	Decision
School Guidance Services and Student’s Adaptive Learning Engagement	0.134	0.02	Reject HO1.2

The study reveals a statistically significant relationship between school guidance services and students’ adaptive learning engagement, with a p-value of 0.02 and a positive correlation coefficient ( $r = 0.134$ ). This suggests that guidance services, including academic advising, career counseling, and personal development, contribute positively to adaptive learning engagement. Although the correlation is moderate, the findings emphasize the importance of enhancing guidance programs to better support students’ learning processes and foster their ability to adapt to individualized educational approaches (Emara & Khurma, 2023).

The results support the Gestalt Theory of Perception, which highlights the interconnectedness of elements within a holistic system (Bellinger, 2022). The study confirms that comprehensive guidance services spanning assessment, education, and advisory functions foster adaptive learning by addressing students’ academic, vocational, and personal needs in an integrated manner. Despite the moderate correlation, this finding aligns with Imam and Utomo’s (2023) assertion that school counseling enhances learning engagement by building motivation, self-regulation, and adaptability. These outcomes underscore the need for balanced, enriched guidance programs to optimize adaptive learning outcomes.

**Significance of the Relationship between the Mediating Effect of School Guidance Services on the Relationship of Student’s Cognitive Presence and Student’s Adaptive Learning Engagement**

The significance of the relationship between the mediating effect of school guidance services on the relationship between the student’s cognitive presence and the student’s adaptive learning engagement is depicted in Table 6. The table shows that the mediating effect of guidance services is statistically significant in influencing the relationship between student’s cognitive presence and student’s adaptive learning engagement which is proven by both obtained p-values of direct and indirect effect which are both less than the alpha level of significance which is 0.05 that leads for the rejection of null hypothesis, HO2.

This positive value indicates the strong positive correlation of variables wherein there is a 4.24% indirect effect that indicates the mediation and a 95.76% direct effect that suggests the impact is not mediated by the school guidance service. The total effect shows the overall influence, combining both the direct and mediated effects.

Table 6. Significance of the Relationship between the Mediating Effect of School Guidance Services on the Relationship of Student’s Cognitive Presence and Student’s Adaptive Learning Engagement

Effect	Label	Estimate	SE	Z	p	%Mediation
--------	-------	----------	----	---	---	------------

Indirect	a x b	0.0079	0.0075	0.0035	0.0253	4.24
Direct	c	0.1783	0.0476	3.7437	0.0002	95.76
Total	c + a x b	0.1862	0.0551	3.7472	0.0255	100

A 4.24% indirect effect of school guidance services as buffer to students' cognitive presence and adaptive learning engagement is evident from the study. This means that cognitive presence is the primary determinant of the level of engagement in adaptive learning practice (95.76% direct effect), while the services of guidance leads to stronger relationship in this context. Such conclusions indicate that the rise of cognitive presence in conjunction with highly effective guidance services can commonly enhance the learning processes of the target students so that they could engage in adaptive learning environments much more actively (Zhang et al., 2022). Scholastic facilities must pay particular emphasis in ensuring that support services complement learning models that foster self-observation in students for optimal students' engagement and learning (Mamun & Lawrie, 2023).

The findings align with the Intellectual Investment Theory, which emphasizes that students with high cognitive presence are better equipped to engage in complex learning processes (Ackerman, 1996; Von Stumm & Ackerman, 2013). The Gestalt Theory of Perceptions further supports this by highlighting the holistic integration of guidance services in fostering cognitive engagement (Bellinger, 2022). While the direct effect of cognitive presence remains dominant, the mediated role of guidance services demonstrates their value in complementing cognitive efforts. This reinforces earlier studies, such as those by Kaya & Erdem (2021), which underscore the importance of combining cognitive and structural supports to optimize adaptive learning systems.

## Conclusions

This study sought to examine the interaction between student cognitive presence, guidance services, and students' adaptive learning engagement and the extent to which guidance services could mediate this interaction. The study found that a higher level of cognitive presence, which included understanding content, constructing knowledge, and managing learning resources, enhanced learning behaviors flexibly. Such behaviors included learning goal orientation, value of the task, self-efficacy, and self-regulation. Also, concerning the importance of school guidance services such as appraisal, information, consultation, and counseling on students' learning achievements and development. These services not only assist students in their studying but also impact their cognitive presence, which, in turn, increases their adaptive learning interest.

The strengthening of the mediating role of school guidance services meant that the impact of cognitive presence on engagement was even greater when it was supported by well-established and functional services. As such, this research underscored the importance of developing higher education institutions and allocating adequate resources to proper counseling services for students to enhance their learning. In recognizing the partnership between the cognitive presence and the recommended guidance services, educators, and policymakers could develop strategies that would help to foster the students' cognitive engagement and to provide a strong supportive environment. Such an approach sought to provide physical environments that were more appropriate and responsive to the needs of college students to promote a more active and responsive student society.

The participants were 300 junior high school students from school 304359 using stratified sampling to look into the junior high students' adaptive learning engagement between classroom and blended learning setups. Data collection was done from August 2023 to April 2024 after seeking necessary authorization from the proper authorities in the education sector. Participants were brought to an adequate understanding concerning the study; they were free to withdraw from the study whenever they wanted without any consequences and data was gathered through self-administered questionnaires. Quantitative data tools that were employed included mean, standard deviation, Cronbach's Alpha, Pearson r, and regression were used to analyze cognitive presence, guidance services, and adaptively engaged learning details.

This paper revealed that the students demonstrated very high cognitive presence levels regarding content understanding, construction of their knowledge, and learning resources management. This showed that the students were well-equipped to apply their knowledge, and these strategies proved the worth of students centered and active learning purposes like problem-based learning as well as collaborative projects. From the point of view of the management of the resources, the students were ready to do independent learning and all the demands of the new digital era. So, curriculum developers should aim at self-teaching and self-organization to improve students' educational performance and prepare them for advanced professional workplaces.

Then the study also underscored the highly effective school guidance and services encompassing appraisal information and consultation as well as counseling. These services were important in enhancing student's academic, vocational, and personal/social learning outcomes as evidenced in the research on the contributions to learning achievements and well-being. To sustain and improve this effectiveness, counselors should receive training on an ongoing basis, counselors should include technology in their practice and seek cooperation with parents and community resources. Applying assessments would maintain quality and modify services to address students' needs, focusing on evaluative and developmental roles that guidance and counseling programs played in students' education and endeavors.

The study showed that students had a high level of adaptive learning motivation, goal approach, perceived task value, self-efficacy, and self-regulation. This implied that students were able to use self-regulated learning strategies optimally. Teachers should capitalize on such versatility by incorporating these features into goals setting sessions and approaches to learning. School systems require that environments foster the acquisition of skills and that learning opportunities be made available for learners. Therefore, the government

should ensure teacher training and the integration of effective training in the processes of enhancing learning and the development of adaptive skills to prepare students for lifelong learning in the knowledge-driven economy in the face of the current challenges.

The analysis also showed that there was a strong correlation between the students' cognitive presence and their engagement in adaptive learning and the findings point to the fact that increased cognitive presence was associated with higher levels of adaptive learning. This called for the creation and development of cognitive presence involving activities such as participation and reflection to ensure that the benefits of Adaptive Learning were realized. Also, the analysis showed that school guidance services played a significant role in students' adaptive learning engagement, thereby stressing the benefits of stages characterized by supportive procedures including academic and career counseling. This was in addition to other factors such as guidance services that enhanced the motivation of students towards adaptive learning though the correlation recorded was not very strong. This indicated that there was the need for improvement of guidance programs, probably to supplement the usage of the adaptive learning technologies to provide support to students and also to ensure correct attitudes towards such environment were adopted. In summary, the above-presented results provided evidence of the significance of both deep engagement and proper guidance services for providing optimal adaptive learning experience, focusing on the necessity of regarding students' comprehensive support in an educational context.

Moreover, the study established that school guidance services had a substantial moderating influence on the link between students' cognitive presence and their adaptive learning engagement. With the continued focus on cognitive presence as the primary driver of the engagement of adaptive learning, the added aspect of the involvement of the guidance services helped foster the students' deeper thinking and learning in the context of personalized learning environments. The partial mediation reported here indicated a complementary relationship between the guidance services and cognitive presence with the latter providing extra material for the former to work with. The study confirmed the value of both approaches to learning and support services in facilitating the appropriate use of constructive learning participation and maximizing the gains from the learning process by students. Implementation of guidance services into learning structures may also help boost the functionalities of adaptive learning technologies for improved learning outcomes and individualized approaches to learning.

Based on the formulated conclusions, the researcher suggested that: First, educational institutions should consider the necessity and work on the creation of effective counseling services necessary for students' cognitive presence and engagement in adaptive learning. These include continuing education and professional development of counselors, the use of appropriate technology in counseling activities, and counseling with parents and other community members.

Secondly, educators should encourage the use of student-centered and active learning strategies like Project Based Learning (PBL) and project-based endeavors to take advantage of high cognitive presence among students for self-directed study. In addition, curriculum developers should also work towards improving the students' ability in self-tutoring and time management as these are important traits that will be useful, especially in the current technological era and complex corporate world.

Thirdly, Local Government Units (LGUs) together with the community partnership should implement professional orientations in the optimum guidance services and continuous staff developments and training for the schoolteachers and counselors in terms of technological advancements and incorporation of the student-centered approach in learning-teaching process. It is necessary to conduct workshops and seminars on how to use self-regulated learning strategies more effectively, provide students with necessary conditions for learning, and engage community in supporting the students' learning. The LGUs should create an assessment and feedback system on the overall impact and effectiveness of the guidance programs in the improvement of delivery and outcome of services given students, parents, and educators' feedback. Such initiatives should improve the quality of education and engage students in the adaptation of the principles of the knowledge economy.

Lastly, academic support services must be incorporated into educational structures as a way of enhancing cognitive presence and ensuring students' efficiency in the implementation of adaptive learning frameworks. By embracing these recommendations, educational institutions can foster favorable conditions that will lead to the optimization of students' cognitive processes, dynamic learning, and eventual success in the contemporary knowledge-based economy.

## References

- Abel, V. R., Tondeur, J., & Sang, G. (2022). Teacher Perceptions about ICT Integration into Classroom Instruction. *Education Sciences*, 12(9), 609. <https://doi.org/10.3390/educsci12090609>
- Abid, G., Arya, B., Arshad, A., Ahmed, S., & Farooqi, S. (2021). Positive personality traits and self-leadership in sustainable organizations: Mediating influence of thriving and moderating role of proactive personality. *Sustainable Production and Consumption*, 25, 299–311. <https://doi.org/10.1016/j.spc.2020.09.005>
- Abidin, Z., Mathrani, A., & Hunter, R. (2021). Teaching with technology: a lesson from social participation in an online learning community. *Technology, Pedagogy and Education*, 30(3), 381–392. <https://doi.org/10.1080/1475939x.2021.1884128>
- ACCA - <https://www.accaglobal.com>. (n.d.). Understanding the importance of appraisals | ACCA Qualification | Students | ACCA Global. <https://www.accaglobal.com/gb/en/student/exam-support-resources/fundamentals-exams-study-resources/fl/technical-articles/Importance-of-appraisals.html>

- Achat-Mendes, C. (2020, January 16). Learning, leaders, and STEM skills: Adaptation of the supplemental instruction model to improve STEM education and build transferable skills in undergraduate courses and beyond STEM Supplemental Instruction. <https://www.jstem.org/jstem/index.php/JSTEM/article/view/2418>
- Ackerman, P. L. (1996). A theory of adult intellectual development: Process, personality, interests, and knowledge. *Intelligence*, 22, 229-259.
- Adams, G. (n.d.). Meeting the school-age child care needs of working parents facing COVID-19 distance learning: Policy options to consider. <https://eric.ed.gov/?id=ED610005>
- Agasisti, T., Avvisati, F., Borgonovi, F., & Longobardi, S. (2018). Academic resilience. OECD Education Working Papers. <https://doi.org/10.1787/e22490ac-en>
- Aguilera-Hermida, A.P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, 1, 100011. <https://doi.org/10.1016/j.ijedro.2020.100011>.
- Aguinis, H., Yu, L., & Tosun, C. (2021). How to enhance scholarly impact: recommendations for university administrators, researchers, and educators. *International Journal of Contemporary Hospitality Management*, 33(8), 2485–2499. <https://doi.org/10.1108/ijchm-10-2020-1189>
- Ahmed, A. A. (2021, April 1). Buzz session and adaptive learning environment instructional strategies as determinants of integrated science pre-service teachers' pedagogical knowledge and skills in Southwestern Nigeria. <http://140.105.46.132:8080/xmlui/handle/123456789/1239>
- Ajani, N. O. A. (2023). Challenges mitigating against effective adoption and usage of e-learning in curriculum delivery in South African Universities. *International Journal of Innovative Technologies in Social Science*, 2(38). [https://doi.org/10.31435/rsglobal\\_ijtss/30062023/8005](https://doi.org/10.31435/rsglobal_ijtss/30062023/8005)
- Alabbasi, D. (2022). Factors Influencing Students' Engagement in Virtual Classrooms and Their Impact on Satisfaction. *An International Journal of Information Sciences Letters*. Retrieved from: <https://www.naturalspublishing.com/download.asp?ArtCID=25244>
- Aldhafeeri, F., & Alotaibi, A. F. (2022). Effectiveness of digital education shifting model on high school students' engagement. *Education and Information Technologies*, 27(5), 6869–6891. <https://doi.org/10.1007/s10639-021-10879-4>
- Alexander, E., Savitz-Romer, M., Nicola, T. P., Rowan-Kenyon, H. T., & Carroll, S. R. (2022). “We Are the Heartbeat of the School”: How School Counselors Supported Student Mental Health During the COVID-19 Pandemic. *American School Counselor Association*, 26(1b), 2156759X2211055. <https://doi.org/10.1177/2156759x221105557>
- Ali, K. M. I., Dawood, A. H., Hattab, R. a. S. B., Philip, N. I., Elwerfelli, M. M., Anwegi, L., Khabuli, J. O. A., & Du, X. (2022). Development of self-regulation amongst dental students in problem-based learning curricula: A qualitative study. *European Journal of Dental Education*, 27(2), 388–395. <https://doi.org/10.1111/eje.12820>
- Almasi, M., & Zhu, C. (2020). Investigating students' perceptions of cognitive presence concerning learner performance in blended learning courses: a Mixed-Methods approach. *Electronic Journal of e-Learning*. <https://doi.org/10.34190/ejel.20.18.4.005>.
- Almerino, P. M., Ocampo, L. A., Abellana, D. P. M., Almerino, J. G. F., Mamites, I. O., Pinili, L. C., Tenerife, J. J. L., Sitoy, R. E., Abelgas, L. J., & Peteros, E. D. (2020). Evaluating the academic performance of K-12 students in the Philippines: A Standardized Evaluation approach. *Education Research International*, 2020, 1–8. <https://doi.org/10.1155/2020/8877712>
- Alqasa, K. M. A. (2022, June 10). Active learning techniques and student satisfaction: Role of classroom environment. <https://ejer.com.tr/manuscript/index.php/journal/article/view/670>
- ALRikabi, H. T. S., Jasim, N. A., Majeed, B. A., Zkear, A. A., & ALRubei, I. R. N. (2022). Smart Learning based on Moodle E-learning Platform and Digital Skills for University Students. *International Journal of Recent Contributions From Engineering, Science & IT*, 10(01), 109–120. <https://doi.org/10.3991/ijes.v10i01.28995>
- Amerstorfer, C. M., & Von Münster-Kistner, C. F. (2021). Student Perceptions of Academic Engagement and Student-Teacher Relationships in Problem-Based Learning. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.713057>
- Ananga, P. (n.d.). Pedagogical Considerations of E-Learning in Education for Development in the face of COVID-19. <https://eric.ed.gov/?id=EJ1271209>
- Anindyaputri, N. A., Yuana, R. A., & Hatta, P. (2020). Enhancing Students' Ability in Learning Process of Programming Language using Adaptive Learning Systems: A Literature Review. *Open Engineering*, 10(1), 820–829. <https://doi.org/10.1515/eng-2020-0092>
- Annansingh, F. (2019). Mind the gap: Cognitive active learning in virtual learning environment perception of instructors and students. *Education and Information Technologies*, 24(6), 3669–3688. <https://doi.org/10.1007/s10639-019-09949-5>



- Anthonsamy, L., Koo, A. C., & Hew, S. H. (2020). Self-regulated learning strategies in higher education: Fostering digital literacy for sustainable lifelong learning. *Education and Information Technologies*, 25(4), 2393–2414. <https://doi.org/10.1007/s10639-020-10201-8>
- Archambault, L., Leary, H., & Rice, K. (2022). Pillars of online pedagogy: A framework for teaching in online learning environments. *Educational Psychologist*, 57(3), 178–191. <https://doi.org/10.1080/00461520.2022.2051513>
- Arghode, V., Brieger, E., & Wang, J. (2018). Engaging instructional design and instructor role in an online learning environment. *European Journal of Training and Development*, 42(7/8), 366–380. <https://doi.org/10.1108/ejtd-12-2017-0110>
- Armah, J. K., Bervell, B., & Bonsu, N. O. (2023). Modeling the role of learner presence within the community of inquiry framework to determine online course satisfaction in distance education. *Heliyon*, 9(5), e15803. <https://doi.org/10.1016/j.heliyon.2023.e15803>
- Arumugam, A., Shanmugavelu, D., Parasuraman, D., Sathya, D. J., Kannan, D., Kumar, P., & Singh, J. S. A. (2021). IMPORTANCE OF GUIDANCE AND COUNSELLING IN THE SCHOOL EDUCATIONAL SYSTEM: AN OVERVIEW. *EPRA International Journal of Multidisciplinary Research*, 239–250. <https://doi.org/10.36713/epra8153>
- Asad, M. M., Hussain, N., Wadho, M., Khand, Z. H., & Churi, P. (2020). Integration of e-learning technologies for interactive teaching and learning process: an empirical study on higher education institutes of Pakistan. *Journal of Applied Research in Higher Education*, 13(3), 649–663. <https://doi.org/10.1108/jarhe-04-2020-0103>
- Asif, M., Thomas, G., Awan, M. U., & Din, A. M. (2021). Enhancing student engagement through heterogeneous pedagogical approaches: action research in a university level course in Saudi Arabia. *International Journal of Educational Management*, 35(1), 1–28. <https://doi.org/10.1108/ijem-10-2019-0375>
- Ayoub, Z. B. R. L. (2023, June 1). Enhancing the didactic experience through edutainment in Algerian classrooms. <http://dSPACE.centre-univ-mila.dz/jspui/handle/123456789/2476>
- Azizan, S. (2022, February 18). Online Learning and COVID-19 in Higher Education: The Value of IT models in Assessing Students' satisfaction. *Learning & Technology Library (LearnTechLib)*. <https://www.learntechlib.org/p/220505/>
- Ba, S., Hu, X., Stein, D., & Liu, Q. (2022). Assessing cognitive presence in online inquiry-based discussion through text classification and epistemic network analysis. *British Journal of Educational Technology*, 54(1), 247–266. <https://doi.org/10.1111/bjet.13285>
- Bai, B., & Wang, J. (2020). The role of growth mindset, self-efficacy, and intrinsic value in self-regulated learning and English language learning achievements. *Language Teaching Research*, 136216882093319. <https://doi.org/10.1177/1362168820933190>
- Bakar, A. Y. A. (2019). Guidance and counseling in schools. <https://doi.org/10.2991/iccie-18.2019.3>
- Bakker, A. B., Petrou, P., Kamp, E. E. O. D., & Tims, M. (2018). Proactive vitality management, work engagement, and creativity: the role of goal orientation. *Applied Psychology*, 69(2), 351–378. <https://doi.org/10.1111/apps.12173>
- Bangert-Drowns, R. L., & Pyke, C. (2002). Teacher ratings of student engagement with educational software: An exploratory study. *Educational Technology Research and Development*, 50(2), 23–37. <https://doi.org/10.1007/bf02504992>
- Barrett, M. D. (2021). A conceptual model for hybrid adaptive instructional and assessment systems. In *Springer eBooks* (pp. 3–13). [https://doi.org/10.1007/978-3-030-77857-6\\_1](https://doi.org/10.1007/978-3-030-77857-6_1)
- Bartusevičienė, I., Pazaver, A., & Kitada, M. (2021). Building a resilient university: ensuring academic continuity—transition from face-to-face to online in the COVID-19 pandemic. *WMU Journal of Maritime Affairs*. <https://doi.org/10.1007/s13437-021-00239-x>
- Basir, S. A., Ismail, F., Hassan, J., & Othman, N. Z. (2023). The study of socio-demographic variables on youths' patriotism using non-experimental design. *Nucleation and Atmospheric Aerosols*. <https://doi.org/10.1063/5.0118131>
- Beames, J. R., Johnston, L., O'Dea, B., Torok, M., Boydell, K. M., Christensen, H., & Werner-Seidler, A. (2020). Addressing the mental health of school students: Perspectives of secondary school teachers and counselors. *International Journal of School and Educational Psychology*, 10(1), 128–143. <https://doi.org/10.1080/21683603.2020.1838367>
- Beamish, W., & Saggars, B. (2023). Diversity and differentiation. In *Routledge eBooks* (pp. 186–198). <https://doi.org/10.4324/9781003296768-16>
- Beard, K. H., Vakil, J. B., Chao, T., & Hilty, C. D. (2021). Time for Change: Understanding Teacher Social-Emotional Learning Supports for Anti-Racism and Student Well-Being During COVID-19, and Beyond. *Education and Urban Society*, 001312452110625. <https://doi.org/10.1177/00131245211062527>
- Beatson, N., De Lange, P., O'Connell, B., Tharapos, M., & Smith, J. K. (2021). Factors impacting on accounting academics' motivation and capacity to adapt in challenging times. *Accounting Research Journal*, 34(2), 184–195. <https://doi.org/10.1108/arj-08-2020-0240>
- Bebbington, J. L. M. A. A. (2023, June 13). Socially Engaged Pedagogy in the Zoom Age. <http://www.ijea.org/v24si1/v24si1.4/>

- Bećirović, S. (2022, March 24). An examination of students' online learning satisfaction, interaction, Self-Efficacy, and Self-Regulated learning. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4066025](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4066025)
- Bellinger, K. (2022). The implementation of a gestalt therapy play group in a rural school and the perceived effect on student emotional regulation - ProQuest. <https://search.proquest.com/openview/c5e0ab5bd583bfdc45443480c1222c>
- Beneroso, D., & Robinson, J. E. (2022). Online project-based learning in engineering design: Supporting the acquisition of design skills. *Education for Chemical Engineers*, 38, 38–47. <https://doi.org/10.1016/j.ece.2021.09.002>
- Benigno, V., Caruso, G., Dagnino, F. M., Mutta, E., & Fante, C. (2022). Enhancing home education in Italian context: Teachers' perception of a hybrid inclusive classroom. *Education Sciences*, 12(8), 563. <https://doi.org/10.3390/educsci12080563>
- Berestova, A., Ermakov, D. M., Aitbayeva, A., Gromov, E., & Vanina, E. (2021). Social networks to improve the creative thinking of students: How does it work? *Thinking Skills and Creativity*, 41, 100912. <https://doi.org/10.1016/j.tsc.2021.100912>
- Berglund, T., & Gericke, N. (2021). Diversity in views as a resource for learning? Student perspectives on the interconnectedness of sustainable development dimensions. *Environmental Education Research*, 28(3), 354–381. <https://doi.org/10.1080/13504622.2021.1980501>
- Bettters-Bubon, J., Brunner, T., & Kansteiner, A. (2016). Success For All? The Role of the School Counselor in Creating and Sustaining Culturally Responsive Positive Behavior Interventions and Support Programs. *The Professional Counselor*, 6(3), 263–277. <https://doi.org/10.15241/jbb.6.3.263>
- Bettters-Bubon, J., Pianta, R., Sweeney, D., & Goodman-Scott, E. (2022). Antiracism Starts With Us: School Counselor Critical Reflection Within a Multitiered Systems of Support Framework. *Professional School Counseling*, 26(1a), 2156759X2210867. <https://doi.org/10.1177/2156759x221086747>
- Blegur, J., Haq, A. H. B., & Barida, M. (2021). Exploring Goal-Setting Strategies of Prospective Physical Education Teachers to Maintain Academic Performance. *Education and Information Technologies*, 13(1), 473–484. <https://doi.org/10.35445/alishlah.v13i1.539>
- Böheim, R., Knogler, M., Kosel, C., & Seidel, T. (2020). Exploring student hand-raising across two school subjects using mixed methods: An investigation of an everyday classroom behavior from a motivational perspective. *Learning and Instruction*, 65, 101250. <https://doi.org/10.1016/j.learninstruc.2019.101250>
- Bojović, Ž. P., Bojović, P. D., Vujosevic, D., & Šuh, J. (2020). Education in times of crisis: Rapid transition to distance learning. *Computer Applications in Engineering Education*, 28(6), 1467–1489.
- Borkowski, J. G., & Thorpe, P. K. (2022). Self-Regulation and motivation. In *Routledge eBooks* (pp. 45–73). <https://doi.org/10.4324/9780203763353-3>
- Bostwick, K. C. P., Collie, R. J., Martin, A. J., & Durksen, T. L. (2020). Teacher, classroom, and student growth orientation in mathematics: A multilevel examination of growth goals, growth mindset, engagement, and achievement. *Teaching and Teacher Education*, 94, 103100. <https://doi.org/10.1016/j.tate.2020.103100>
- Bowden, J., Tickle, L., & Naumann, K. (2019). The four pillars of tertiary student engagement and success: a holistic measurement approach. *Studies in Higher Education*, 46(6), 1207–1224. <https://doi.org/10.1080/03075079.2019.1672647>
- Brooms, D. R. (2021). “He Wanted Everybody to Succeed”: Black Males, Relational Trust, and School Counseling. *Professional School Counseling*, 25(1\_part\_4). <https://doi.org/10.1177/2156759X211040035>
- Budhrani, K. (2021, September 1). How did parents balance it all? Work-From-Home parents' engagement in academic and support roles during remote learning. *Learning & Technology Library (LearnTechLib)*. <https://www.learntechlib.org/p/218909/>
- Burke, K., & Larmar, S. A. (2020). Acknowledging another face in the virtual crowd: Reimagining the online experience in higher education through an online pedagogy of care. *Journal of Further and Higher Education*, 45(5), 601–615. <https://doi.org/10.1080/0309877x.2020.1804536>
- Caena, F., & Redecker, C. (2019). Aligning teacher competence frameworks to 21st-century challenges: The case for the European Digital Competence Framework for Educators ( Digcompedu). *European Journal of Education*, 54(3), 356–369. <https://doi.org/10.1111/ejed.12345>
- Caena, F., & Redecker, C. (2019b). Aligning teacher competence frameworks to 21st-century challenges: The case for the European Digital Competence Framework for Educators ( Digcompedu). *European Journal of Education*, 54(3), 356–369. <https://doi.org/10.1111/ejed.12345>
- Çakıroğlu, Ü., & Kahyar, S. (2022). Modeling online community constructs through interaction data: A learning analytics based Approach. *Education and Information Technologies*, 27(6), 8311–8328. <https://doi.org/10.1007/s10639-022-10950-8>

- Calderón, A., Scanlon, D., MacPhail, A., & Moody, B. (2020). An integrated blended learning approach for physical education teacher education programs: teacher educators' and pre-service teachers' experiences. *Physical Education and Sport Pedagogy*, 26(6), 562–577. <https://doi.org/10.1080/17408989.2020.1823961>
- Cañete, A. M. G. (2023). A lesson study on teaching impulse and momentum in the new normal. <https://philpapers.org/rec/CAEALS>
- Capone, R., & Lepore, M. (2021). From Distance Learning to Integrated Digital Learning: a fuzzy cognitive analysis focused on engagement, motivation, and participation during the COVID-19 pandemic. *Technology, Knowledge, and Learning*, 27(4), 1259–1289. <https://doi.org/10.1007/s10758-021-09571-w>
- Carless, D., & Boud, D. (2018). The development of student feedback literacy: enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43(8), 1315–1325. <https://doi.org/10.1080/02602938.2018.1463354>
- Carpenter, D., & Munshower, P. (2019). Broadening borders to build better schools. *International Journal of Educational Management*, 34(2), 296–314. <https://doi.org/10.1108/ijem-09-2018-0296>
- Cavanagh, T. B., Chen, B., Lahcen, R. A. M., & Paradiso, J. (2020). Constructing a design framework and pedagogical Approach for adaptive Learning in Higher Education: A Practitioner's perspective. *The International Review of Research in Open and Distributed Learning*, 21(1), 172–196. <https://doi.org/10.19173/irrodl.v21i1.4557>
- Cayubit, R. F. O. (2021). Why learning environment matter? An analysis of how the learning environment influences the academic motivation, learning strategies, and engagement of college students. *Learning Environments Research*, 25(2), 581–599. <https://doi.org/10.1007/s10984-021-09382-x>
- Ceha, J., Law, E., Kulic, D., Oudeyer, P., & Roy, D. (2021). Identifying Functions and Behaviours of Social Robots for In-Class Learning Activities: Teachers' perspective. *International Journal of Social Robotics*, 14(3), 747–761. <https://doi.org/10.1007/s12369-021-00820-7>
- Cenka, B. a. N., Santoso, H. B., & Junus, K. (2022). Personal learning environment toward lifelong learning: an ontology-driven conceptual model. *Interactive Learning Environments*, 1–17. <https://doi.org/10.1080/10494820.2022.2039947>
- Chan, C. K. Y. (2023, May 2). The AI revolution in Education: Will AI replace or assist teachers in higher education? *arXiv.org*. <https://arxiv.org/abs/2305.01185>
- Chang, C., & Hall, N. C. (2022). Differentiating teachers' social goals: implications for Teacher–Student relationships and perceived classroom engagement. *AERA Open*, 8, 233285842110649. <https://doi.org/10.1177/23328584211064916>
- Chang, C., Panjaburee, P., Lin, H., Lai, C., & Hwang, G. (2022). Effects of online strategies on students' learning performance, self-efficacy, self-regulation and critical thinking in university online courses. *Educational Technology Research and Development*, 70(1), 185–204. <https://doi.org/10.1007/s11423-021-10071-y>
- Channaoui, N., Bui, K., & Mittman, I. S. (2020). Efforts of diversity and inclusion, cultural competency, and equity in the genetic counseling profession: A snapshot and reflection. *Journal of Genetic Counseling*, 29(2), 166–181. <https://doi.org/10.1002/jgc4.1241>
- Chen, Y., & Techawitthayachinda, R. (2021). Developing deep learning in science classrooms: Tactics to manage epistemic uncertainty during whole-class discussion. *Journal of Research in Science Teaching*, 58(8), 1083–1116. <https://doi.org/10.1002/tea.21693>
- Chen, Y., Lei, J., & Cheng, J. (2019). What if online students take on the responsibility: Students' cognitive presence and peer facilitation techniques. *Online Learning*, 23(1). <https://doi.org/10.24059/olj.v23i1.1348>
- Cheng, Y., Yu, J., Shen, Y., & Huang, B. (2020). Coproducing Responses to COVID-19 with Community-Based Organizations: Lessons from Zhejiang Province, China. *Public Administration Review*, 80(5), 866–873. <https://doi.org/10.1111/puar.13244>
- Cholewa, B., & Laundry, K. (2019). School counselors consulting and collaborating within MTSS. In *Routledge eBooks* (pp. 222–245). <https://doi.org/10.4324/9781315144467-8>
- Christensen, J., Larson, K. E., & Dykes, F. (2021). Using a school-wide coaching framework to create safe and inclusive spaces for students who identify as LGBTQ. *Preventing School Failure: Alternative Education for Children and Youth*, 65(4), 371–378. <https://doi.org/10.1080/1045988x.2021.1925868>
- Clausen, J., Bunte, B., & Robertson, E. T. (2020). Professional Development to Improve Communication and Reduce the Homework Gap in Grades 7-12 during COVID-19 Transition to Remote Learning. *The Journal of Technology and Teacher Education*, 28(2), 443–451. <https://eric.ed.gov/?id=EJ1257149>
- Coetzee, M. (2023). Students' career capital resource needs for employability in the technology-driven work world. *Journal of Teaching and Learning for Graduate Employability*, 14(1), 136–150. <https://doi.org/10.21153/jtlge2023vol14no1art1658>
- Community of Inquiry. (2023, April 4). Office of Curriculum, Assessment and Teaching Transformation - University at Buffalo.

<https://www.buffalo.edu/catt/develop/teach/learning-environments/community-of-inquiry.html>

Connecticut School Association. (2001). Best Practices for School Counseling in Connecticut. Counselor Competencies, Model Job Description, and Evaluation Guidelines. Retrieved from: <https://portal.ct.gov/-/media/SDE/Special-Education/bestpractices.pdf>

Conti, D., & Dawson, R. (2022). Real-World learning as a frame for sustainability in education. In Springer eBooks (pp. 55–72). [https://doi.org/10.1007/978-3-031-09112-4\\_5](https://doi.org/10.1007/978-3-031-09112-4_5)

Cuijpers, P., Auerbach, R. P., Benjet, C., Bruffaerts, R., Ebert, D. D., Karyotaki, E., & Kessler, R. C. (2019). The World Health Organization World Mental Health International College Student initiative: An overview. *International Journal of Methods in Psychiatric Research*, 28(2), e1761. <https://doi.org/10.1002/mpr.1761>

Culture, K. J. K. T.-. F. O. E. A. (2023). Enhancing the Effectiveness of Digital Game-Based Learning with Adaptive Instructional Support. *Trepo*. <https://trepo.tuni.fi/handle/10024/151393>

Dahir, C. A., Cinotti, D., & Feirsén, R. (2019). Beyond compliance: assessing administrators' commitment to comprehensive school counseling. *NASSP Bulletin*, 103(2), 118–138. <https://doi.org/10.1177/0192636519830769>

Dai, Y., Liu, A., Jian-Jun, Q., Guo, Y., Jong, M. S., Chai, C. S., & Lin, Z. (2022). Collaborative construction of artificial intelligence curriculum in primary schools. *Journal of Engineering Education*, 112(1), 23–42. <https://doi.org/10.1002/jee.20503>

Damsa, C., Nerland, M., & Andreadakis, Z. (2019). An ecological perspective on learner-constructed learning spaces. *British Journal of Educational Technology*, 50(5), 2075–2089. <https://doi.org/10.1111/bjet.12855>

Darling-Hammond, L., Flook, L., Cook-Harvey, C. M., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. <https://doi.org/10.1080/10888691.2018.1537791>

Darmawansah, N., Lin, C. R., & Hwang, G. (2022). Empowering the collective reflection-based argumentation mapping strategy to enhance students' argumentative speaking. *Computers & Education*, 184, 104516. <https://doi.org/10.1016/j.compedu.2022.104516>

Daulay, N., Harahap, A.C.P., & Sinaga, M.H.P. (2022). The role of guidance and counseling services in helping students with academic stress. *Journal of Professionals in Guidance and Counseling*, 3(2), 78-86. <https://journal.uny.ac.id/index.php/progcouns>

De Kleijn, R. A. (2021). Supporting student and teacher feedback literacy: an instructional model for student feedback processes. *Assessment & Evaluation in Higher Education*, 48(2), 186–200. <https://doi.org/10.1080/02602938.2021.1967283>

DeMink-Carthew, J., & Netcoh, S. (2022). Mixed Feelings about Choice. In Routledge eBooks (pp. 73–105). <https://doi.org/10.4324/9781003225867-9>

Denton, C. A., Muis, K. R., Dubé, A. K., & Armstrong, S. (2022). En-Garde: Source Evaluations in the Digital Age. *Advances in Social Sciences Research Journal*, 9(9), 320–360. <https://doi.org/10.14738/assrj.99.13066>

Dereshiwsky, M. I. (2021). Fostering effective learning in the online classroom. In IGI Global eBooks (pp. 139–164). <https://doi.org/10.4018/978-1-7998-7571-0.ch007>

Dewi, P. D. P. K., & Primayana, K. H. (2019). Effect of Learning Module with Setting Contextual Teaching and Learning to Increase the Understanding of Concepts. *International Journal of Education and Learning*, 1(1), 19–26. <https://doi.org/10.31763/ijelev.11i1.26>

Dixson, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of Scholarship of Teaching and Learning*, 10(2), 1–13. <http://josotl.indiana.edu/article/view/1744>

Dixson, M. D. (2015). Measuring student engagement in the online course: the Online Student Engagement Scale (OSE). *Online Learning*, 19(4). <https://doi.org/10.24059/olj.v19i4.561>

Doolittle, P., Wojdak, K., & Walters, A. (2023). Defining Active Learning: A Restricted Systemic Review. *Teaching & Learning Inquiry*, 11. <https://doi.org/10.20343/teachlearninqu.11.25>

Dornauer, V., Netzer, M., Kaczko, É., Norz, L., & Ammenwerth, E. (2023). Automatic classification of online discussions and other learning traces to detect cognitive presence. *International Journal of Artificial Intelligence in Education*. <https://doi.org/10.1007/s40593-023-00335-4>

Edmonstone, J., Lawless, A., & Pedler, M. (2019). Leadership development, wicked problems, and action learning: provocations to a debate. *Action Learning: Research and Practice*, 16(1), 37–51. <https://doi.org/10.1080/14767333.2019.1568967>

Ellington, B. L., Dunbar, A., & Wachter-Morris, C. (2023). Elevating and Expanding School Counselors' Roles and Voices in the Prevention of School Violence. *Journal of the American School Counselor Association*, 27(1), 2156759X2211500. <https://doi.org/10.1177/2156759x221150003>

Elmi, C. (2020). Integrating social-emotional learning strategies in higher education. *European Journal of Investigation in Health*,



Psychology and Education, 10(3), 848–858. <https://doi.org/10.3390/ejihpe10030061>

El-Sabagh, H. A. (2021). Adaptive e-learning environment based on learning styles and its impact on the development of students' engagement. *International Journal of Educational Technology in Higher Education*, 18(1). <https://doi.org/10.1186/s41239-021-00289>

Emara, N., Ali, N., & Khurma, O. A. (2023). Adaptive Learning Framework (Alef) in UAE Public Schools from the Parents' Perspective. *Social Sciences*, 12(5), 297. <https://doi.org/10.3390/socsci12050297>

Fafunwa, S. B., & Akinpelu, D. (2008). Provision of guidance services in senior high schools in Lagos State:

Falcón-Linares, C., Rodríguez-Martínez, A. B., Pascual, A. C., & Quílez-Robres, A. (2021). Counselor-Perceived Teacher Actions Needed to Carry out Educational and Vocational Guidance in Secondary Schools in Spain. *Frontiers in Education*, 6. <https://doi.org/10.3389/educ.2021.737163>

Fang, Z. (2022). Fostering Students' Well-Being: The mediating role of teacher interpersonal behavior and Student-Teacher Relationships. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.796728>

Farrell, O., & Brunton, J. (2020). A balancing act: a window into online student engagement experiences. *International Journal of Educational Technology in Higher Education*, 17(1). <https://doi.org/10.1186/s41239-020-00199-x>

Ferrer, J., Ringer, A., Saville, K., Parris, M. A., & Kashi, K. (2020). Students' motivation and engagement in higher education: the importance of attitude to online learning. *Higher Education*, 83(2), 317–338. <https://doi.org/10.1007/s10734-020-00657-5>

Financially Smart Career Planning For Teens. (n.d.). Google Books. [https://books.google.com/books?hl=en&lr=&id=LPHIEAAQBAJ&oi=fnd&pg=PT3&dq=Information+services+within+school+guidance+are+essential+in+empowering+students+to+make+informed+choices+regarding+their+academic+and+career+paths.+&ots=cSo67Znoj&sig=I486Zdj5r17rriN-zH0l\\_sTTB2I](https://books.google.com/books?hl=en&lr=&id=LPHIEAAQBAJ&oi=fnd&pg=PT3&dq=Information+services+within+school+guidance+are+essential+in+empowering+students+to+make+informed+choices+regarding+their+academic+and+career+paths.+&ots=cSo67Znoj&sig=I486Zdj5r17rriN-zH0l_sTTB2I)

Fiock, H. (2020). Designing a community of inquiry in online courses. *The International Review of Research in Open and Distributed Learning*, 21(1), 134–152. <https://doi.org/10.19173/irrodl.v20i5.3985>

Foo, S. M., & Quek, C. L. (2019). Developing Students' Critical Thinking through Online Discussions: A Literature Review. *Malaysian Online Journal of Educational Technology*, 7(2), 37–58. <https://doi.org/10.17220/mojet.2019.02.003>

Forsythe, A., & Jellicoe, M. (2018). Predicting gainful learning in Higher Education; a goal-orientation approach. *Higher Education Pedagogies*. <https://doi.org/10.1080/23752696.2018.1435298>

Gacs, A., Goertler, S., & Spasova, S. (2020). Planned online language education versus crisis-prompted online language teaching: Lessons for the future. *Foreign Language Annals*, 53(2), 380–392. <https://doi.org/10.1111/flan.12460>

Galasso, G., Longobardi, S., & Strozza, S. (2021). The academic resilience of native and immigrant-origin students in selected European countries. *Journal of Ethnic and Migration Studies*, 48(10), 2347–2368. <https://doi.org/10.1080/1369183x.2021.1935657>

Galikyan, I., & Admiraal, W. (2019). Students' engagement in asynchronous online discussion: The relationship between cognitive presence, learner prominence, and academic performance. *Internet and Higher Education*, 43, 100692. <https://doi.org/10.1016/j.iheduc.2019.100692>

García, T., & Pintrich, P. R. (2022). Regulating motivation and cognition in the classroom. In *Routledge eBooks* (pp. 127–153). <https://doi.org/10.4324/9780203763353-6>

Gero, A., Shekh-Abed, A., & Hazzan, O. (2022). Dedicated assignments as a means of advancing junior students' systems thinking and abstract thinking. In *Lecture notes in networks and systems* (pp. 210–216). [https://doi.org/10.1007/978-3-030-93907-6\\_22](https://doi.org/10.1007/978-3-030-93907-6_22)

Giacumo, L. A., & Savenye, W. C. (2019). Asynchronous discussion forum design to support cognition: effects of rubrics and instructor prompts on learner's critical thinking, achievement, and satisfaction. *Educational Technology Research and Development*, 68(1), 37–66. <https://doi.org/10.1007/s11423-019-09664-5>

Gibbons, M. M., Hardin, E. E., Taylor, A. N., Brown, E. J., & Graham, D. (2019). Evaluation of an SCCT-Based intervention to increase postsecondary awareness in rural Appalachian youth. *Journal of Career Development*, 47(4), 424–439. <https://doi.org/10.1177/0894845319832972>

Githae, J. N. (2022, November 18). Digital Skills Development Factors as Predictors of Self-efficacy for Online Journalism among Undergraduate Mass Communication Students in Rwanda. <http://ir.jkuat.ac.ke/handle/123456789/5984>

Godfrey, N. (2022). Students perceptions of the impact of guidance and counseling programs on academic needs satisfaction in secondary schools within the Rift Valley Region, Kenya. *Educational Research and Reviews*, 17(4), 145–151. <https://doi.org/10.5897/err2022.4232>

Gomis, K., Saini, M., Arif, M., & Pathirage, C. (2023). Enhancing the assessment and the feedback in higher education. *Quality*



Assurance in Education, 32(2), 165–179. <https://doi.org/10.1108/qaе-01-2023-0004>

Goodman-Scott, E. C., Edirmanasinghe, N. A., Moe, J., & Boulden, R. (2022). Assessing the Influence of Multitiered Systems of Support Training on School Counselors' Perceptions of School Counseling Activities: Results of a National Study. *Professional School Counseling, 26*(1). <https://doi.org/10.1177/2156759X221138232>

Gopinathan, S., Kaur, A. H., Veeraya, S., & Raman, M. (2022). The Role of Digital Collaboration in Student Engagement towards Enhancing Student Participation during COVID-19. *Sustainability, 14*(11), 6844. <https://doi.org/10.3390/su14116844>

Guo, P., Saab, N., Wu, L., & Admiraal, W. (2021). The Community of Inquiry perspective on students' social presence, cognitive presence, and academic performance in online project-based learning. *Journal of Computer Assisted Learning, 37*(5), 1479–1493. <https://doi.org/10.1111/jcal.12586>

Gyamerah, A. K. (2021). Instructional Leadership Practices that Support Increased Student Achievement in Ghana's Rural Districts. Walden University ProQuest Dissertations Publishing. <https://www.proquest.com/openview/ad34e2dad487795c10447b66ce04b498/1?pq-origsite=gscholar&cbl=18750&diss=y>

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers, 3*, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>

Hall-Mills, S., Johnson, L., Gross, M., Latham, D., & Everhart, N. (2022). Providing Telepractice in Schools During a Pandemic: The Experiences and Perspectives of Speech-Language Pathologists. *Language Speech and Hearing Services in Schools, 53*(2), 290–306. [https://doi.org/10.1044/2021\\_lshss-21-00023](https://doi.org/10.1044/2021_lshss-21-00023)

Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research, 93*(3), 184–191.

Hao, Y., Lee, K. S., Chen, S. T., & Sim, S. C. (2019). An evaluative study of a mobile application for middle school students struggling with English vocabulary learning. *Computers in Human Behavior, 95*, 208–216. <https://doi.org/10.1016/j.chb.2018.10.013>

Harrison, M. G., Cheung, J. K. F., Tam, C. K. Y., Cheng, A. S., & Yeung, S. S. (2023). "If they talk to the counselor, at least I know they have some way out": parents' perceptions of school counseling in Hong Kong. *Pastoral Care in Education, 1–20*. <https://doi.org/10.1080/02643944.2023.2233534>

Hatzilygeroudis, I., Berki, E., & Valtanen, J. (2019). The PATRAS Blended Strategy model for Deep and Meaningful Learning in Quality Life-Long Distance Education. *Electronic Journal of e-Learning, 17*(2). <https://doi.org/10.34190/jel.17.2.01>

Haugen, J. S., Bledsoe, K. G., Burgess, M., & Rutledge, M. (2021). The framework of anti-racist school counseling competencies: A Delphi study. *Journal of Counseling and Development, 100*(3), 252–265. <https://doi.org/10.1002/jcad.12422>

Hennessy, S., D'Angelo, S., McIntyre, N., Koomar, S., Kreimeia, A., Cao, L., Brugha, M., & Zubairi, A. (2022). Technology Use for Teacher Professional Development in Low- and Middle-Income Countries: A systematic review. *Computers and Education Open, 3*, 100080. <https://doi.org/10.1016/j.caeo.2022.100080>

Heydarnejad, T., Tagavipour, F., Patra, I., & Khafaga, A. F. (2022). The impacts of performance-based assessment on reading comprehension achievement, academic motivation, foreign language anxiety, and students' self-efficacy. *Language Testing in Asia, 12*(1). <https://doi.org/10.1186/s40468-022-00202-4>

Hoidn, S., & Reusser, K. (2020b). Foundations of Student-Centered Learning and Teaching. In *Routledge eBooks* (pp. 17–46). <https://doi.org/10.4324/9780429259371-3>

Hollister, B., Nair, P., Hill-Lindsay S., & Chukoskie L. (2022). Engagement in Online Learning: Student Attitudes and Behavior During COVID-19. *Sec. Digital Learning Innovations. Volume 7 – 2022*. <https://doi.org/10.3389/feduc.2022.851019>.

Hoti, I., Dragusha, B., & Ndou, V. (2022). Online Teaching during the COVID-19 Pandemic: A Case Study of Albania. *Administrative Sciences, 12*(3), 116. <https://doi.org/10.3390/admsci12030116>

Howard, J. L., Bureau, J. S., Guay, F., Chong, J., & Ryan, R. M. (2021). Student Motivation and Associated Outcomes: A Meta-Analysis from Self-Determination Theory. *Perspectives on Psychological Science, 16*(6), 1300–1323. <https://doi.org/10.1177/1745691620966789>

Howell, C. R., Wei, S., Nassel, A., Agne, A. A., & Cherrington, A. (2020). Area-based stratified random sampling using geospatial technology in a community-based survey. *BMC Public Health, 20*(1). <https://doi.org/10.1186/s12889-020-09793-0>

Hu, Y., Donald, C. L., & Giacaman, N. (2022). A revised application of cognitive presence automatic classifiers for MOOCs: a new set of indicators revealed? *International Journal of Educational Technology in Higher Education, 19*(1). <https://doi.org/10.1186/s41239-022-00353-7>

Huang, M. (2021). A case study of ESL students' remote speaking class learning experiences in a Canada university during the COVID-



- 19 pandemic. *Journal of English Language Teaching and Applied Linguistics*, 3(5), 32–44. <https://doi.org/10.32996/jeltal.2021.3.5.4>
- Huang, X., & Lai, L. L. (2020). Connecting formal and informal workplace learning with teacher proactivity: a proactive motivation perspective. *Journal of Workplace Learning*, 32(6), 437–456. <https://doi.org/10.1108/jwl-01-2020-0005>
- Idris, R., Govindasamy, P., Nachiappan, S., & Bacotang, J. (2023). Exploring the impact of cognitive factors on learning, motivation, and career in Malaysia's STEM education. *International Journal of Academic Research in Business & Social Sciences*, 13(6). <https://doi.org/10.6007/ijarbs/v13-i6/17227>
- Ifeagachukwu, A. (2021, November 24). Problems facing professional counselors in public secondary schools in Nigeria and way forward. <https://researchparks.innovativeacademicjournals.com/index.php/IJIE/article/view/2210>
- Imad, M. (2022). Trauma-informed education for wholeness: Strategies for faculty & advisors. *New Directions for Student Services*, 2022(177), 39–47. <https://doi.org/10.1002/ss.20413>
- Imam, Y., & Utomo. (2023). Enhancing Learning Processes: The impact of guidance and counseling programs on visually impaired high school students. <https://repo-dosen.ulm.ac.id/handle/123456789/33196>
- Imbarack, P. (n.d.). My family matters altruistic, mixed, and self-oriented purposes for learning among Chilean students. [https://www.scielo.cl/scielo.php?pid=S0718-45652022000200165&script=sci\\_arttext&tlng=en](https://www.scielo.cl/scielo.php?pid=S0718-45652022000200165&script=sci_arttext&tlng=en)
- Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. (2019). Nurturing nature: How brain development is inherently social and emotional, and what this means for education. *Educational Psychologist*, 54(3), 185–204. <https://doi.org/10.1080/00461520.2019.1633924>
- Ismail, I. (2019, April 30). Students' perceptions of the benefits of mobile polling technology in teaching and learning in college: Implications of students' participation and academic performance. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4027173](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4027173)
- Joshi, K. (2023, April 1). INTERACTIVE PEDAGOGY IN PRIVATE SCHOOL CLASSROOMS: AN INTERPRETIVE INQUIRY. <http://101.251.6.110:8080/handle/20.500.14301/300>
- Junus, K., Santoso, H. B., & Ahmad, M. (2021). Experiencing the community of inquiry framework using asynchronous online role-playing in computer-aided instruction class. *Education and Information Technologies*, 27(2), 2283–2309. <https://doi.org/10.1007/s10639-021-10670-5>
- Kabilan, M. K., & Annamalai, N. (2022). Online teaching during COVID-19 pandemic: A phenomenological study of university educators' experiences and challenges. *Studies in Educational Evaluation*, 74, 101182. <https://doi.org/10.1016/j.stueduc.2022.101182>
- Kang, M., Kim, S., & Park, S. (2008). Developing a Cognitive Presence Scale for Measuring Students' Involvement during e-Learning Process. *ResearchGate*. <https://www.researchgate.net/publication/274008848>
- Karaca, M. (2022). Self-Regulation Scale for Science: A Validity and Reliability Study. <https://eric.ed.gov/?id=EJ1345454>
- Karaman, M. A., Eşici, H., Tomar, İ. H., & Aliyev, R. (2021). COVID-19: Are school counseling services ready? Students' psychological symptoms, school counselors' views, and solutions. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.647740>
- Kaufmann, L., Ninaus, M., Weiss, E. M., Gruber, W., & Wood, G. (2022). Self-efficacy matters: Influence of students' perceived self-efficacy on statistics anxiety. *Annals of the New York Academy of Sciences*, 1514(1), 187–197. <https://doi.org/10.1111/nyas.14797>
- Kaya, M., & Erdem, C. (2021). Students' Well-Being and Academic Achievement: A Meta-Analysis Study. *Child Indicators Research*, 14(5), 1743–1767. <https://doi.org/10.1007/s12187-021-09821-4>
- Kearsley, G., & Shneiderman, B. (1998). Engagement Theory: A Framework for Technology-Based Teaching and Learning. *Educational Technology Archive*, 38(5), 20–23. <https://eric.ed.gov/?id=EJ573955>
- Kenwright, B. (2023, August 18). Exploring the power of creative AI tools and Game-Based methodologies for interactive Web-Based programming. *arXiv.org*. <https://arxiv.org/abs/2308.11649>
- Khanal, J. (2023). Shifting identities: an examination of student perceptions and experiences in face-to-face and online learning in Nepal. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-023-12020-z>
- Khoza, S. B. (2022). Voices of Eswatini general certificate of education geography teachers on teaching climate change. <https://ukzn-dspace.ukzn.ac.za/handle/10413/22256>
- Kier, M. W., & Johnson, L. L. (2022). Exploring How Secondary STEM Teachers and Undergraduate Mentors Adapt Digital Technologies to Promote Culturally Relevant Education during COVID-19. *Education Sciences*, 12(1), 48. <https://doi.org/10.3390/educsci12010048>
- Kift, S., Thomas, L., & Shah, M. (2021). Retention and success during a pandemic. In *Springer eBooks* (pp. 295–333).



[https://doi.org/10.1007/978-3-030-80045-1\\_14](https://doi.org/10.1007/978-3-030-80045-1_14)

Kilis, S., & Yildirim, Z. (2019). Posting patterns of students' social presence, cognitive presence, and teaching presence in online learning. *Online Learning*, 23(2). <https://doi.org/10.24059/olj.v23i2.1460>

King, T., & Fazel, M. (2021). Examining the mental health outcomes of school-based peer-led interventions on young people: A scoping review of range and a systematic review of effectiveness. *PLOS ONE*, 16(4), e0249553. <https://doi.org/10.1371/journal.pone.0249553>

Kisida, B., Goodwin, L. D., & Bowen, D. H. (2020). Teaching History through theater: The Effects of arts Integration on Students' knowledge and Attitudes. *AERA Open*, 6(1), 233285842090271. <https://doi.org/10.1177/2332858420902712>

Kopparla, M., Nguyen, T., & Woltering, S. (2022). Maps of meaning: journeys of first-year engineering students. *European Journal of Engineering Education*, 47(6), 930–949. <https://doi.org/10.1080/03043797.2022.2037522>

Koszalka, T. A., Pavlov, Y., & Wu, Y. (2021). The informed use of pre-work activities in collaborative asynchronous online discussions: The exploration of idea exchange, content focus, and deep learning. *Computers & Education*, 161, 104067. <https://doi.org/10.1016/j.compedu.2020.104067>

Koul, S., & Nayar, B. (2020). The holistic learning educational ecosystem: A classroom 4.0 perspective. *Higher Education Quarterly*, 75(1), 98–112. <https://doi.org/10.1111/hequ.12271>

Kozleski, E. B., & Proffitt, W. R. (2019). A journey towards equity and diversity in the educator workforce. *Teacher Education and Special Education*, 43(1), 63–84. <https://doi.org/10.1177/0888406419882671>

Kuznekoff, J. H. (2022). Digital distractions, Note-Taking, and student learning. In IGI Global eBooks (pp. 143–160). <https://doi.org/10.4018/978-1-7998-9243-4.ch007>

Kyei-Blankson, L. (2019). Establishing the importance of interaction and presence to student learning in online environments. *Learning & Technology Library (LearnTechLib)*. <https://www.learntechlib.org/p/161956/>

Kyte, S. B., Collins, E., & Deil-Amen, R. (2020). Mindset Messaging: Fostering Student Support and Confidence through Micro-Messaging in Advisor Communication. *NACADA Journal*, 40(1), 36–48. <https://doi.org/10.12930/nacada-19-08>

Lambrev, V. S., & Cruz, B. C. (2023). Facilitating cognitive presence in online professional doctoral education: implications for practice-based programs. *Journal of Further and Higher Education*, 1–12. <https://doi.org/10.1080/0309877x.2023.2200134>

Lane, S., Hoang, J., Leighton, J. P., & Rissanen, A. (2021). Engagement and Satisfaction: Mixed-Method Analysis of Blended Learning in the Sciences. *Canadian Journal of Science, Mathematics and Technology Education*, 21(1), 100–122. <https://doi.org/10.1007/s42330-021-00139-5>

Larsen, K. C. (2019). The effects of direct instruction of metacognitive skills through self-regulated learning and self-efficacy development in the mathematical sciences. <https://scholarworks.montana.edu/xmlui/handle/1/15676>

Lauermann, F., & Berger, J. (2021). Linking teacher self-efficacy and responsibility with teachers' self-reported and student-reported motivating styles and student engagement. *Learning and Instruction*, 76, 101441. <https://doi.org/10.1016/j.learninstruc.2020.101441>

Lavender, P. (2022, July 1). Teacher talk and pupil talk: a case study of a thinking skills approach to learning in an English primary academy. <https://wlv.openrepository.com/handle/2436/625068>

Leupold, C. R., Lopina, E. C., & Erickson, J. (2019). Examining the effects of core Self-Evaluations and perceived organizational support on academic burnout among undergraduate students. *Psychological Reports*, 123(4), 1260–1281. <https://doi.org/10.1177/0033294119852767>

Leverett, P., D'Costa, S., & Baxa, M. (2022). The impact of Student-Teacher Relationships on Black middle School boys. *School Mental Health*, 14(2), 254–265. <https://doi.org/10.1007/s12310-022-09504-7>

Li, L. (2022). Teaching presence predicts cognitive presence in blended learning during COVID-19: The chain mediating role of social presence and sense of community. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.950687>

Liang, P. (2023). Sustainability in Action: Exploring Competences For Careers In Sustainability. *DIVA*. <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1774071>

Limniou, M., Sedghi, N., Kumari, D., & Drousiotis, E. (2022). Student Engagement, Learning Environments, and the COVID-19 Pandemic: A Comparison between Psychology and Engineering Undergraduate Students in the UK. *Education Sciences*, 12(10), 671. <https://doi.org/10.3390/educsci12100671>

Liu, Z., Kong, X., Liu, S., Yang, Z., & Zhang, C. (2022). Looking at MOOC discussion data to uncover the relationship between discussion pascings, learners' cognitive presence, and learning achievements. *Education and Information Technologies*, 27(6), 8265–

8288. <https://doi.org/10.1007/s10639-022-10943-7>

Lo Presti, A., Capone, V., Aversano, A., & Akkermans, J. (2021). Career Competencies and Career Success: on the roles of employability activities and academic satisfaction during the School-to-Work transition. *Journal of Career Development*, 49(1), 107–125. <https://doi.org/10.1177/0894845321992536>

Lo, P., He, M., & Liu, Y. (2019). Social inclusion and social capital of the Shanghai Library as a community place for self-improvement. *Library Hi Tech*, 37(2), 197–218. <https://doi.org/10.1108/lht-04-2018-0056>

Lombardi, D., Shipley, T. F., & Team, P. (2021). The curious construct of active learning. *Psychological Science in the Public Interest*, 22(1), 8–43. <https://doi.org/10.1177/1529100620973974>

Lombardi, D., Shipley, T. F., Bailey, J. M., Bretones, P. S., Prather, E. E., Ballen, C. J., Knight, J. K., Smith, M. K., Stowe, R. L., Cooper, M. M., Prince, M., Atit, K., Uttal, D. H., LaDue, N. D., McNeal, P. M., Ryker, K., St John, K., Van Der Hoeven Kraft, K. J., & Docktor, J. L. (2021). The curious construct of active learning. *Psychological Science in the Public Interest*, 22(1), 8–43. <https://doi.org/10.1177/1529100620973974>

Louhab, F. E., Bahnasse, A., Bensalah, F., Khiat, A., Khiat, Y., & Talea, M. (2019). A novel approach for adaptive flipped classroom based on learning management system. *Education and Information Technologies*, 25(2), 755–773. <https://doi.org/10.1007/s10639-019-09994-0>

Lu, K., Pang, F., & Shadiev, R. (2021). Understanding the mediating effect of learning approach between learning factors and higher order thinking skills in collaborative inquiry-based learning. *Educational Technology Research and Development*, 69(5), 2475–2492. <https://doi.org/10.1007/s11423-021-10025-4>

Madhavan, V., & Venugopalan, M. (2023). Formal learning and organizational performance: the interplay of goal setting and flexible learning practices in attaining goal congruence. *Benchmarking*, 31(3), 955–989. <https://doi.org/10.1108/bij-10-2021-0623>

Mailizar, M., Umam, K., & Elisa, E. (2022). The impact of digital literacy and social presence on teachers' acceptance of online professional development. *Contemporary Educational Technology*, 14(4), ep384. <https://doi.org/10.30935/cedtech/12329>

Main, P. (2022). Strategies For Assessment For Learning. *Structural Learning*. <https://www.structural-learning.com/post/strategies-for-assessment-for-learning>

Mallillin, L. L. D., Cabaluna, J. C., Laurel, R. D., Arroyo, P. a. C., Señoron, T. M., & Mallillin, J. B. (2021). STRUCTURAL DOMAIN OF LEARNING AND TEACHING STRATEGIES IN THE ACADEMIC PERFORMANCE OF STUDENTS. *European Journal of Education Studies*, 8(9). <https://doi.org/10.46827/ejes.v8i9.3902>

Malone, C. M., Wycoff, K., & Turner, E. A. (2021). Applying an MTSS framework to address racism and promote mental health for racial/ethnic minoritized youth. *Psychology in the Schools*, 59(12), 2438–2452. <https://doi.org/10.1002/pits.22606>

Mamun, M. a. A., & Lawrie, G. (2023). Cognitive presence in the learner–content interaction process: The role of scaffolding in online self-regulated learning environments. *Journal of Computers in Education*. <https://doi.org/10.1007/s40692-023-00279-7>

Manyonga, B., & Ngubane, P. (2023). Preparing Rural Learners for Life after High School in South Africa. In BRILL eBooks (pp. 179–201). [https://doi.org/10.1163/9789004547025\\_012](https://doi.org/10.1163/9789004547025_012)

Marienko, M., Nosenko, Y., Cyxix, A., Tarayrov, B. II., & Shyshkina, M. P. (2020). Personalization of learning through adaptive technologies in the context of sustainable development of teachers' education. *E3S Web of Conferences*, 166, 10015. <https://doi.org/10.1051/e3sconf/202016610015>

Marougkas, A., Troussas, C., Krouska, A., & Sgouropoulou, C. (2023). Virtual Reality in Education: A review of learning theories, approaches, and methodologies for the last decade. *Electronics*, 12(13), 2832. <https://doi.org/10.3390/electronics12132832>

Mason, M., Crossley, M. W., & Bond, T. (2019). Changing modalities in international development and research in education: Conceptual and ethical issues. *International Journal of Educational Development*, 70, 102080. <https://doi.org/10.1016/j.ijedudev.2019.102080>

Massouti, A., Shaya, N., & Abukhait, R. (2023). Revisiting Leadership in Schools: Investigating the adoption of the Dubai Inclusive Education Policy Framework. *Sustainability*, 15(5), 4274. <https://doi.org/10.3390/su15054274>

Maxwell, M. (2023, May 1). School improvement through deeper learning: Using targeted professional development on blended learning to increase student engagement. <https://ttu-ir.tdl.org/items/7521df76-37b7-4933-8d31-b423d858f9ad>

Mayes, R. D., Edirmanasinghe, N., Ieva, K. P., & Washington, A. R. (2022). Liberatory school counseling practices to promote freedom dreaming for Black youth. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.964490>

Meece, J. L. (2022). The role of Motivation in Self-Regulated Learning. In Routledge eBooks (pp. 25–44).

<https://doi.org/10.4324/9780203763353-2>

Mejeh, M., & Rehm, M. (2024). Taking adaptive learning in educational settings to the next level: leveraging natural language processing for improved personalization. *Educational Technology Research and Development*. <https://doi.org/10.1007/s11423-024-10345-1>

Middleton, K. W., Meléndez, A. P., Lockett, N., Quesada-Pallarès, C., & Jack, S. (2019). The university as an entrepreneurial learning space. *International Journal of Entrepreneurial Behaviour & Research*, 26(5), 887–909. <https://doi.org/10.1108/ijeb-04-2018-0263>

Mielgo-Conde, I., Seijas-Santos, S., & De Prado, M. G. (2021). Review about Online Educational Guidance during the COVID-19 Pandemic. *Education Sciences*, 11(8), 411. <https://doi.org/10.3390/educsci11080411>

Miles, D. A. (2023). Experiences of Early-Career Educators' Preparedness to identify and address substance abuse behaviors and academic success in the Classroom: a Phenomenological study. *Scholars Crossing*. <https://digitalcommons.liberty.edu/doctoral/4272/>

Miller, K. E. (n.d.). A Light in Students' Lives: K-12 Teachers' Experiences (Re)Building Caring Relationships during Remote Learning. <https://eric.ed.gov/?id=EJ1287112>

Mirriahi, N., Jovanovic, J., Lim, L., & Lodge, J. M. (2021). Two sides of the same coin: video annotations and in-video questions for active learning. *Educational Technology Research and Development*, 69(5), 2571–2588. <https://doi.org/10.1007/s11423-021-10041-4>

Mitra, A., Swendeman, D., Sumstine, S., Sorin, C. R., Bloom, B. E., & Wagman, J. A. (2021). Structural barriers to accessing the Campus Assault Resources and Education (CARE) offices at the University of California (UC) campuses. *Journal of Interpersonal Violence*, 37(21–22), NP19468–NP19490. <https://doi.org/10.1177/08862605211042813>

Mohammed, S., & Kinyó, L. (2020). Constructivist theory as a foundation for the utilization of digital technology in the lifelong learning process. *The Turkish Online Journal of Distance Education*, 90–109. <https://doi.org/10.17718/tojde.803364>

Mokgalo, L., Njoroge, A., & Musikavanhu, M. (2022). Student interaction and engagement supported by blended learning tools in emergency teaching. In Emerald Publishing Limited eBooks (pp. 213–230). <https://doi.org/10.1108/978-1-80382-193-120221010>

Molenaar, I., De Mooij, S., Azevedo, R., Bannert, M., Järvelä, S., & Gašević, D. (2023). Measuring self-regulated learning and the role of AI: Five years of research using multimodal multichannel data. *Computers in Human Behavior*, 139, 107540. <https://doi.org/10.1016/j.chb.2022.107540>

Molina, C. E., Lemberger-Truelove, M. E., & Zieher, A. K. (2022). School Counselor Consultation Effects on Teachers' Mindfulness, Stress, and Relationships. *Professional School Counseling*, 26(1a). <https://doi.org/10.1177/2156759X221086749>

Monteiro, S. C., Almeida, L. S., & Garcia-Aracil, A. (2020). “It’s a very different world”: work transition and employability of higher education graduates. *Higher Education, Skills and Work-based Learning*, 11(1), 164–181. <https://doi.org/10.1108/heswbl-10-2019-0141>

Moore, R. L., & Miller, C.N. (2022). Fostering presence in online courses: A systematic review (2008-2020). *Online Learning*, 26(1), pp. 130-149. DOI: 10.24059/olj.v26i1.3071

Morfaki, C., & Skotis, A. (2022). Academic online learning experience during COVID-19 - a systematic literature review based on personality traits. *Higher Education, Skills and Work-based Learning*. <https://doi.org/10.1108/heswbl-03-2022-0062>

Morton, B. M. (2022). Trauma-Informed school practices: Creating positive classroom culture. *Middle School Journal*, 53(4), 20–27. <https://doi.org/10.1080/00940771.2022.2096817>

Moshtari, M., & Safarpour, A. (2023). Challenges and strategies for the internationalization of higher education in low-income East African countries. *Higher Education*. <https://doi.org/10.1007/s10734-023-00994-1>

Muir, T., Milthorpe, N., Stone, C., Dymont, J. E., Freeman, E., & Hopwood, B. (2019). Chronicling engagement: students' experience of online learning over time. *Distance Education*, 40(2), 262–277. <https://doi.org/10.1080/01587919.2019.1600367>

Muksin, S. N. B., & Makhsin, M. (2021). A Level of Student Self-Discipline in E-Learning During Pandemic Covid-19. *Procedia of Social Sciences and Humanities*, 1, 278–283. <https://doi.org/10.21070/pssh.v1i1.59>

Mulawarman, M., Susilawati, S., Syifa, L., & Rifani, E. (2020). Classroom Guidance Strategy with Flipped Method in Guidance and Counseling Services at Indonesia Schools in the Digital Era. *Islamic Guidance and Counseling Journal*, 3(2), 61–74. <https://doi.org/10.25217/igcj.v3i2.646>

Muñoz, J. L. R. (2022 June 15). Systematic Review of Adaptive Learning Technology for Learning in Higher Education. <https://ejer.com.tr/manuscript/index.php/journal/article/view/707>

Muntaza, F. (2022, December 31). The Effectiveness of Wordwall Application Learning Media on students' cognitive Development at SMK Al Firdaus Banyuwangi. <https://permadani.amiin.or.id/index.php/permadani/article/view/13>

Musa, S., & Dergaa, I. (2022). A Narrative Review on Prevention and Early Intervention of Challenging Behaviors in Children with a



- Special Emphasis on COVID-19 Times. *Psychology Research and Behavior Management*, Volume 15, 1559–1571. <https://doi.org/10.2147/prbm.s354428>
- Nadeem, N. H. (2021). Students' perceptions about the impact of using Padlet on class engagement. In IGI Global eBooks (pp. 1919–1939). <https://doi.org/10.4018/978-1-7998-8047-9.ch095>
- Naidoo, P., & Cartwright, D. (2020). Where to from Here? Contemplating the Impact of COVID-19 on South African Students and Student Counseling Services in Higher Education. *Journal of College Student Psychotherapy*, 36(4), 355–369. <https://doi.org/10.1080/87568225.2020.1842279>
- Namale, M. K., & Awabil, G. (2018). Evaluation of guidance services in senior high schools in Gomoa West district in the central region of Ghana. *Journal of Education and Practice*, 9(17), 23–30. <https://www.iiste.org/Journals/index.php/JEP/article/download/43091/44385>
- Namboodiri, S. (2022). Zoom-ing Past “the New Normal”? Understanding Students' Engagement with Online Learning in Higher Education during the COVID-19 Pandemic. In Springer eBooks (pp. 139–158). [https://doi.org/10.1007/978-3-030-88234-1\\_8](https://doi.org/10.1007/978-3-030-88234-1_8)
- Ndwiga, P. W. (2022). Practice of Guidance and Counselling Appraisal Services on Learners' Discipline in Primary Schools in Mbeere South Sub County, Kenya. *European Journal of Education and Pedagogy*, 3(6), 199–202. <https://doi.org/10.24018/ejedu.2022.3.6.502>
- Ng, P. M. L., Chan, J. Y., & Lit, K. K. (2022). Student learning performance in online collaborative learning. *Education and Information Technologies*, 27(6), 8129–8145. <https://doi.org/10.1007/s10639-022-10923-x>
- Nilimaa, J. (2023). New examination approach for Real-World Creativity and Problem-Solving Skills in Mathematics. MDPI. <https://doi.org/10.3390/higheredu2030028>
- Nykyporets, S. S. (2023). The use of open educational resources (OER) in Ukraine: unleashing the potential for knowledge democratization and lifelong learning. Репозитарій Вінницького Національного Технічного Університету. <http://ir.lib.vntu.edu.ua/handle/123456789/37405>
- Okwelle, P., & Bethel-Eke, O. A. (2018). Appraisal of vocational guidance services in secondary schools in Rivers State: Implications for counseling. ResearchGate. [https://www.researchgate.net/publication/343181332\\_Appraisal\\_of\\_Vocational\\_Guidance\\_Services\\_in\\_Secondary\\_Schools\\_in\\_Rivers\\_State\\_Implications\\_for\\_Counseling](https://www.researchgate.net/publication/343181332_Appraisal_of_Vocational_Guidance_Services_in_Secondary_Schools_in_Rivers_State_Implications_for_Counseling)
- Oman, K., Al Lawati, E., & Al Mukhaini, F. (2020). The Relationship between Cultural Socialization and Mental Health among Higher Education Students in A'Sharqiyah University in the Sultanate of Oman. Retrieved from <https://ideas.repec.org/a/bcp/journal/v6y2022i9p152-158.html>
- Onah, D. F. O., Pang, E. L. L., & Sinclair, J. (2021). Investigating self-regulation in the context of a blended learning computing course. *Campus-wide Information Systems*, 39(1), 50–69. <https://doi.org/10.1108/ijilt-04-2021-0059>
- Oppong, E., Shore, B. M., & Muis, K. R. (2018). Clarifying the connections among giftedness, metacognition, Self-Regulation, and Self-Regulated learning: Implications for theory and practice. *Gifted Child Quarterly*, 63(2), 102–119. <https://doi.org/10.1177/0016986218814008>
- Ouimet, J. A., & Smallwood, B. (2005). CLASSE – The class-level survey of student engagement. *Assessment Update*, 17(6), 13–15.
- Ozogul, G. (n.d.). Perceived and Actual Cognitive Presence: A Case Study of an Intentionally-Designed Asynchronous Online Course. <https://eric.ed.gov/?id=EJ1340540>
- Ozogul, G., Zhu, M., & Phillips, T. (2022). Perceived and actual cognitive presence: A case study of an Intentionally-Designed Asynchronous online course. *Online Learning*, 26(1). <https://doi.org/10.24059/olj.v26i1.3051>
- Palma, C., Abdou, A. S., Danforth, S., & Griffiths, A. J. (2023). Are Deficit Perspectives Thriving in Trauma-Informed Schools? A Historical and Anti-Racist Reflection. *Equity & Excellence in Education*, 1–17. <https://doi.org/10.1080/10665684.2023.2192983>
- Paloş, R., Maricuţoiu, L. P., & Costea, I. (2019). Relations between academic performance, student engagement, and student burnout: A cross-lagged analysis of a two-wave study. *Studies in Educational Evaluation*, 60, 199–204. <https://doi.org/10.1016/j.stueduc.2019.01.005>
- Pande, M. B., & Bharathi, S. V. (2020). Theoretical foundations of design thinking – A constructivism learning approach to design thinking. *Thinking Skills and Creativity*, 36, 100637. <https://doi.org/10.1016/j.tsc.2020.100637>
- Pather, N., Blyth, P., Chapman, J., Dayal, M., Flack, N. A., Fogg, Q. A., Green, R. A., Hulme, A., Johnson, I., Meyer, A., Morley, J. W., Shortland, P., Štrkalj, G., Štrkalj, M., Valter, K., Webb, A. L., Woodley, S. J., & Lazarus, M. D. (2020). Forced disruption of anatomy education in Australia and New Zealand: An acute response to the COVID-19 pandemic. *Anatomical Sciences Education*, 13(3), 284–300. <https://doi.org/10.1002/ase.1968>



- Peacock, S., Cowan, J. J., Irvine, L., & Williams, J. (2020). An exploration into the importance of a sense of belonging for online learners. *The International Review of Research in Open and Distributed Learning*, 21(2), 18–35. <https://doi.org/10.19173/irrodl.v20i5.4539>
- Pellerone, M. (2021). Self-Perceived Instructional Competence, Self-Efficacy and Burnout during the Covid-19 Pandemic: A Study of a Group of Italian School Teachers. *European Journal of Investigation in Health, Psychology and Education*, 11(2), 496–512. <https://doi.org/10.3390/ejihpe11020035>
- Pelley, J. W. (2021). A Metacognitive perspective: keys to effective active learning and potential barriers. In Springer eBooks (pp. 131–150). [https://doi.org/10.1007/978-3-030-62916-8\\_11](https://doi.org/10.1007/978-3-030-62916-8_11)
- Peng, P., & Kievit, R. A. (2020). The Development of Academic Achievement and Cognitive Abilities: a Bidirectional perspective. *Child Development Perspectives*, 14(1), 15–20. <https://doi.org/10.1111/cdep.12352>
- Peter, F., Spiess, C. K., & Zambre, V. (2021). Informing students about college: Increasing enrollment using a behavioral intervention? *Journal of Economic Behavior and Organization*, 190, 524–549. <https://doi.org/10.1016/j.jebo.2021.07.032>
- Peterson, A., Dumont, H., Lafuente, M., & Law, N. (2018). Understanding innovative pedagogies. OECD Education Working Papers. <https://doi.org/10.1787/9f843a6e-en>
- Phakamach, P. (2023, May 29). Innovative practices in Vocational Education Administration. <https://ph01.tci-thaijo.org/index.php/IJECT/article/view/250991>
- Pincus, R., Hannor-Walker, T., Wright, L. S., & Justice, J. (2020). COVID-19's effect on students: How school counselors rise to the rescue. *NASSP Bulletin*, 104(4), 241–256. <https://doi.org/10.1177/0192636520975866>
- Pocan, J. (2022, June 18). Exploring Teaching Strategies and Challenges towards a Holistic Context-Based Special Education Teaching Strategies Program. <https://po.pnuresearchportal.org/ejournal/index.php/normallights/article/view/1715>
- Polo, F. Z., & Sánchez-Martín, J. (2019). Teaching for a Better World. Sustainability and sustainable development goals in the construction of a Change-Maker University. *Sustainability*, 11(15), 4224. <https://doi.org/10.3390/su11154224>
- Pu, C., & Weng, S. (2023). Developing teacher candidates' global teaching competence through virtual exchange. *Asia-pacific Journal of Teacher Education*, 1–22. <https://doi.org/10.1080/1359866x.2023.2235304>
- Puhly, C. E., Litke, S., Silverstein, M. J., Kiely, J. R., Pardes, A., McGeoch, E., & Daly, B. P. (2021). Counselor and student perceptions of a mHealth technology platform used in a school counseling setting. *Psychology in the Schools*, 58(7), 1284–1298. <https://doi.org/10.1002/pits.22541>
- Purgason, L. L. (n.d.). Teaching technology and tolerance in tandem: culturally responsive classroom guidance interventions. <https://eric.ed.gov/?id=EJ1224480>
- Qhosola, M. R. (2020). Developing a strategy to facilitate multigenerational collaboration of teachers to improve their communication skills for teaching. <https://scholar.ufs.ac.za/handle/11660/11347>
- Qu, J. (2021). Research on mobile learning in a teaching information service system based on a big data-driven environment. *Education and Information Technologies*, 26(5), 6183–6201. <https://doi.org/10.1007/s10639-021-10614-z>
- Quezada, R. L., Talbot, C., & Quezada-Parker, K. B. (2020). From Bricks and Mortar to Remote Teaching: A Teacher Education Program's Response to COVID-19. *Journal of Education for Teaching*, 46(4), 472–483. <https://doi.org/10.1080/02607476.2020.1801330>
- Quirk, M. E., & Chumley, H. (2018). The adaptive medical curriculum: A model for continuous improvement. *Medical Teacher*, 40(8), 786–790. <https://doi.org/10.1080/0142159x.2018.1484896>
- Ragan, L. C., Cavanagh, T. B., Schroeder, R., & Thompson, K. (2023). Supporting faculty success in online learning. In Routledge eBooks (pp. 116–137). <https://doi.org/10.4324/9781003445623-10>
- Rahimi, M., & Zhang, L. J. (2021). Effects of an engaging Process-Genre approach on student engagement and writing achievements. *Reading & Writing Quarterly*, 38(5), 487–503. <https://doi.org/10.1080/10573569.2021.1982431>
- Rahmadany, R. N. (2023, July 24). UNDERGRADUATE EFL STUDENTS' PERCEPTIONS AND EXPERIENCES ON BLENDED LEARNING METHOD FOR READING COMPREHENSION. Rahmadany | Jurnal Penelitian, Pendidikan, Dan Pembelajaran. <https://jim.unisma.ac.id/index.php/jp3/article/view/21496>
- Rajabalee, Y. B., & Santally, M. I. (2020). Learner satisfaction, engagement and performances in an online module: Implications for institutional e-learning policy. *Education and Information Technologies*, 26(3), 2623–2656. <https://doi.org/10.1007/s10639-020-10375-1>

- Rakhimov, M. (2021). THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE MANAGEMENT OF E-LEARNING PLATFORMS AND MONITORING KNOWLEDGE OF STUDENTS. *КиберЛенинка*. <https://cyberleninka.ru/article/n/the-role-of-artificial-intelligence-in-the-management-of-e-learning-platforms-and-monitoring-knowledge-of-students>
- Rashid, Y., Rashid, A., Warraich, M. S., Sabir, S., & Waseem, A. (2019). Case study method: A Step-by-Step guide for business researchers. *International Journal of Qualitative Methods*, 18, 160940691986242. <https://doi.org/10.1177/1609406919862424>
- Rayburn, S. W., Anderson, S., & Sierra, J. J. (2020). FUTURE THINKING CONTINUITY OF LEARNING IN MARKETING: A STUDENT PERSPECTIVE ON CRISIS MANAGEMENT IN HIGHER EDUCATION. *Marketing Education Review*, 31(3), 241–255. <https://doi.org/10.1080/10528008.2020.1837633>
- Reilly, C., & Reeves, T. C. (2022). Refining active learning design principles through design-based research. *Active Learning in Higher Education*, 146978742210961. <https://doi.org/10.1177/14697874221096140>
- Riaz, A., Zaman, K., Safdar, T., Shahbal, S., Raja, A., Alfi, E. A. M., & Amal Hamoud, A. (2022). Effects Of Online Learning Experience, Cognitive Presence, And Psychological Well-Being Among University And College Students During Pandemic In Pakistan And KSA. *Journal of Positive School Psychology*, 6(10), 1370–1386. <https://journalppw.com/index.php/jpsp/article/download/13355/8673/16154>
- Richardson, J. C., & Newby, T. (2006). The role of students' cognitive engagement in online learning. *American Journal of Distance Education*, 20(1), 23–37. [https://doi.org/10.1207/s15389286ajde2001\\_3](https://doi.org/10.1207/s15389286ajde2001_3)
- Ritonga, M., Lahmi, A., Saputra, R., Mursal, & Nofrizaldi. (2022). Online learning during the COVID-19 pandemic period: Studies on the social presence and affective and cognitive engagement of students. *Pegem Journal of Education and Instruction*, 12(1). <https://doi.org/10.47750/pegegog.12.01.21>
- Roblyer, M. D., & Wiencke, W. R. (2004). Exploring the interaction equation: Validating a rubric to assess and encourage interaction in distance courses. *Journal of Asynchronous Learning Networks*, 8(4), 25–37.
- Roitsch, J. (2021). Lessons Learned: What the COVID-19 Global Pandemic Has Taught Us about Teaching, Technology, and Students with Autism Spectrum Disorder. ODU Digital Commons. [https://digitalcommons.odu.edu/cdse\\_pubs/62/](https://digitalcommons.odu.edu/cdse_pubs/62/)
- Russell, J. M., Baik, C., Ryan, A. T., & Molloy, E. (2020). Fostering self-regulated learning in higher education: Making self-regulation visible. *Active Learning in Higher Education*, 23(2), 97–113. <https://doi.org/10.1177/1469787420982378>
- Russo, C. C., Dell'Era, A., Zagrean, I., Danioni, F., & Barni, D. (2022). Activating Self-Transcendence Values to Promote Prosocial Behaviors among Adolescents during the COVID-19 Pandemic: The Moderating Role of Positive Orientation. *Journal of Genetic Psychology*, 183(3), 263–277. <https://doi.org/10.1080/00221325.2022.2058352>
- Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437–460. <https://doi.org/10.3102/00028312038002437>
- Sabnis, S., Castillo, J. M., & Wolgemuth, J. R. (2019). RTI, equity, and the return to the status quo: Implications for consultants. *Journal of Educational and Psychological Consultation*, 30(3), 285–313. <https://doi.org/10.1080/10474412.2019.1674152>
- Sadaf, A., Kim, S. K., & Wang, Y. (2021). A comparison of cognitive presence, learning, satisfaction, and academic performance in Case-Based and Non-Case-Based online discussions. *American Journal of Distance Education*, 35(3), 214–227. <https://doi.org/10.1080/08923647.2021.1888667>
- Sadaf, A., Wu, T., & Martin, F. (2021). Cognitive Presence in Online Learning: A Systematic Review of Empirical Research from 2000 to 2019. *Computers and Education Open*, 2, 100050. <https://doi.org/10.1016/j.caeo.2021.100050>
- Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022). Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review. *British Journal of Educational Technology*, 53(3), 593–619. <https://doi.org/10.1111/bjet.13190>
- Savitz-Romer, M., & Nicola, T. P. (2021). An ecological examination of school counseling equity. *The Urban Review*, 54(2), 207–232. <https://doi.org/10.1007/s11256-021-00618-x>
- Savitz-Romer, M., Rowan-Kenyon, H. T., Nicola, T. P., Alexander, E., & Carroll, S. R. (2021). When the kids are not alright: School counseling in the time of COVID-19. *AERA Open*, 7, 233285842110336. <https://doi.org/10.1177/23328584211033600>
- Schell, J. A. (2023). Designing For Academic Resilience in Hands-On Courses in Times of Crisis: Two Models for Supporting Hands-On Online Learning Drawn From the COVID-19 Pandemic. *American Behavioral Scientist*, 000276422211182. <https://doi.org/10.1177/00027642221118292>

- Schunk, D. H. (2022). Self-Regulation of Self-Efficacy and attributions in academic settings. In Routledge eBooks (pp. 75–99). <https://doi.org/10.4324/9780203763353-4>
- Sefotho, M. M. (2018). Student experiences of academic counseling services in public universities in Ghana. <https://repository.up.ac.za/handle/2263/67850>
- Seifert, T., & Bar-Tal, S. (2022). Student-teachers' sense of belonging in collaborative online learning. *Education and Information Technologies*, 28(7), 7797–7826. <https://doi.org/10.1007/s10639-022-11498-3>
- Senovska, N. (2020). Developing Professional Self-Regulation of Students during Pedagogical Practice. <https://eric.ed.gov/?id=EJ1271349>
- Sesmiyanti, S. (2018). Student's cognitive engagement in the learning process. *Journal Polingua: Scientific Journal of Linguistic Literatura and Education*, 5(2), 48–51. <https://doi.org/10.30630/polingua.v5i2.34>
- Setiamunadi, A. A. (2023, July 12). Students' Motivational Strategies In Online Learning. <https://repository.uksw.edu/handle/123456789/30162>
- Setiawan, M. A. (2023). A practical guide in designing curriculum for diverse learners. [jurnal-stiepari.ac.id. https://doi.org/10.56910/pustaka.v3i3.741](https://doi.org/10.56910/pustaka.v3i3.741)
- Sezgin, S. (2021). Cognitive relations in online learning: Change of cognitive presence and participation in online discussions based on cognitive style. *Participatory Educational Research*, 8(1), 344–361. <https://doi.org/10.17275/per.21.20.8.1>
- Shea, P., Richardson, J. C., & Swan, K. (2022). Building bridges to advance the Community of Inquiry framework for online learning. *Educational Psychologist*, 57(3), 148–161. <https://doi.org/10.1080/00461520.2022.2089989>
- Shin, M., & Bolkan, S. (2020). Intellectually stimulating students' intrinsic motivation: the mediating influence of student engagement, self-efficacy, and student academic support. *Communication Education*, 70(2), 146–164. <https://doi.org/10.1080/03634523.2020.1828959>
- Shorey, S., Chan, V., Rajendran, P., & Ang, E. (2021). Learning styles, preferences and needs of generation Z healthcare students: A scoping review. *Nurse Education in Practice*, 57, 103247. <https://doi.org/10.1016/j.nepr.2021.103247>
- Singh, J. P., Singh, L., & Matthees, B. J. (2022). Establishing Social, Cognitive, and Teaching Presence in Online Learning—A Panacea in COVID-19 Pandemic, Post Vaccine and Post Pandemic Times. *Journal of Educational Technology Systems*, 51(1), 28–45. <https://doi.org/10.1177/00472395221095169>
- Singh, M. B. P. T. N. (2022). Resilience and transformation for global restructuring. Singh, Manju - Bhatt, Preeti - Tandon, Nupur - Ethics Press - Torrossa. <https://www.torrossa.com/gs/resourceProxy?an=5323522&publisher=FZP741#page=301>
- Sireci, S. G. (2020). Standardization and UNDERSTAND addition in Educational Assessment. *Educational Measurement: Issues and Practice*, 39(3), 100–105. <https://doi.org/10.1111/emip.12377>
- Smith, C. E., & Wood, S. M. (2020). Supporting the career development of gifted students: New role and function for school psychologists. *Psychology in the Schools*, 57(10), 1558–1568. <https://doi.org/10.1002/pits.22344>
- Somanandana, V., Jitanan, M., & Lalitpasan, U. (2022). Online Counseling Teaching Management during the COVID-19 Pandemic for Teacher Professional Students: Classroom Action Research. *Higher Education Studies*, 12(3), 146. <https://doi.org/10.5539/hes.v12n3p146>
- Srivastava, A. P., Babu, V., & Shetye, S. K. (2019). Exploring students' learning efficacy. *European Journal of Training and Development*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/ejtd-04-2019-0050>
- Stamatis, P. J., & Gkoutziamanis, G. A. (2020). Communication competence as fundamental aspect for effective school leadership and administration achieving: a synoptic theoretical approach. *European Journal of Education Studies*, 7(11). <https://doi.org/10.46827/ejes.v7i11.3332>
- Suanse, K., & Yuenyong, C. (2021). Development of the analytic geometry flipped classroom teaching model through Google Classroom. *Journal of Physics*, 1835(1), 012077. <https://doi.org/10.1088/1742-6596/1835/1/012077>
- Sugai, G., & Horner, R. H. (2019). Sustaining and scaling positive behavioral interventions and supports: implementation drivers, outcomes, and considerations. *Exceptional Children*, 86(2), 120–136. <https://doi.org/10.1177/0014402919855331>
- Sukmawati, S., Sujarwo, S., Soepriadi, D. N., & Amaliah, N. (2022). Online English language teaching in the midst of COVID-19 pandemic: Non-EFL students' feedback and response. *Al-Ta'lim*, 29(1), 62–69. <https://doi.org/10.15548/jt.v29i1.732>
- Suleiman, Y., Olanrewaju, M. K., & Suleiman, J. M. (2019). Improving guidance and counseling services for effective service delivery

- in Nigerian secondary schools. JOMSIGN: Journal of Multicultural Studies in Guidance and Counseling. <https://doi.org/10.17509/jomsign.v3i1.19606>
- Sun, Y., Ni, L., Zhao, Y., Shen, X., & Wang, N. (2018). Understanding students' engagement in MOOCs: An integration of self-determination theory and theory of relationship quality. *British Journal of Educational Technology*, 50(6), 3156–3174. <https://doi.org/10.1111/bjet.12724>
- Talib, M. A., Bettayeb, A. M., & Omer, R. (2021). Analytical study on the impact of technology in higher education during the age of COVID-19: Systematic literature review. *Education and Information Technologies*, 26(6), 6719–6746. <https://doi.org/10.1007/s10639-021-10507-1>
- Tam, A. C. F. (2020). Undergraduate students' perceptions of and responses to exemplar-based dialogic feedback. *Assessment & Evaluation in Higher Education*, 46(2), 269–285. <https://doi.org/10.1080/02602938.2020.1772957>
- Tan, C. (2021). The impact of the COVID-19 pandemic on student learning performance from the perspectives of community of inquiry. *Corporate Governance*, 21(6), 1215–1228. <https://doi.org/10.1108/cg-09-2020-0419>
- Tan, L. M., Laswad, F., & Chua, F. (2021). Bridging the employability skills gap: going beyond classroom walls. *Pacific Accounting Review*, 34(2), 225–248. <https://doi.org/10.1108/par-04-2021-0050>
- Tang, K., Won, M., & Treagust, D. F. (2019). Analytical framework for student-generated drawings. *International Journal of Science Education*, 41(16), 2296–2322. <https://doi.org/10.1080/09500693.2019.1672906>
- Tay, L. Y., Lee, S., & Ramachandran, K. (2021). Implementation of Online Home-Based Learning and Students' engagement during the COVID-19 Pandemic: A case study of Singapore Mathematics teachers. *Asia-pacific Education Researcher*, 30(3), 299–310. <https://doi.org/10.1007/s40299-021-00572-y>
- Tetteh, L. A., Krah, R. Y., Ayamga, T. A., Ayarna-Gagakuma, L. A., Offei-Kwafo, K., & Gbade, V. A. (2023). Covid-19 pandemic and online accounting education: the experience of undergraduate accounting students in an emerging economy. *Journal of Accounting in Emerging Economies*, 13(4), 825–846. <https://doi.org/10.1108/jaee-07-2021-0242>
- Thanawala, A., Murphy, C., & Hakim, T. (2021). Sustaining STEM Student Learning Support and Engagement during COVID-19. *Community College Journal of Research and Practice*, 46(1–2), 74–84. <https://doi.org/10.1080/10668926.2021.1973612>
- Tharapos, M., Peszynski, K., Lau, K. H., Heffernan, M., Vesty, G., & Ghalebeigi, A. (2022). Effective teaching, student engagement and student satisfaction during the Covid-19 pandemic: Evidence from business students' qualitative survey evaluations. *Journal of Accounting and Finance*. <https://doi.org/10.1111/acfi.13025>
- Tharayil, S., Borrego, M., Prince, M. J., Nguyen, K., Shekhar, P., Finelli, C. J., & Waters, C. (2018). Strategies to mitigate student resistance to active learning. *International Journal of STEM Education*, 5(1). <https://doi.org/10.1186/s40594-018-0102-y>
- Thompson, M. N., Her, P., Fetter, A. K., & Perez-Chavez, J. G. (2019). College student Psychological distress: relationship to Self-Esteem and career decision Self-Efficacy beliefs. *Career Development Quarterly*, 67(4), 282–297. <https://doi.org/10.1002/cdq.12199>
- Thongmak, M. (2021). A model for enhancing employees' lifelong learning intention online. *Learning and Motivation*, 75, 101733. <https://doi.org/10.1016/j.lmot.2021.101733>
- Thornbury, E. E. (2020). The relationship between instructor course participation, student participation, and student performance in online courses. *UTC Scholar*. <https://scholar.utc.edu/theses/665/>
- Tomlinson, C. A. (2023). The Parallel Curriculum Model: A Design to Develop Potential & Challenge High-Ability Learners. In *Routledge eBooks* (pp. 571–598). <https://doi.org/10.4324/9781003419426-21>
- Tsui, E., Kianto, A., & R. (2021). Towards a deeper understanding of the complex relationships between knowledge management practices and organisational performance : a meta-analytic study. <https://theses.lib.polyu.edu.hk/handle/200/11457>
- Turner, J. E., Li, B., & Wei, M. (2021). Exploring effects of culture on students' achievement motives and goals, self-efficacy, and willingness for public performances: The case of Chinese students' speaking English in class. *Learning and Individual Differences*, 85, 101943. <https://doi.org/10.1016/j.lindif.2020.101943>
- Tzenios, N. (2020, November 28). Clustering students for personalized health education based on learning styles. <https://journals.sagescience.org/index.php/ssret/article/view/22>
- Van Der Tuin, I. (2022). The Somatechnics of Emergency Online Education|. <https://studenttheses.uu.nl/handle/20.500.12932/42596>
- Van Laer, S., & Elen, J. (2018). Adults' Self-Regulatory Behaviour Profiles in Blended Learning Environments and their implications for design. *Technology, Knowledge, and Learning*, 25(3), 509–539. <https://doi.org/10.1007/s10758-017-9351-y>



- Verma, D., Berwal, P., Khan, M. A., Alharbi, R. S., Alfaisal, F. M., & Rathnayake, U. (2023). Design for the prediction of peak outflow of embankment breaching due to overtopping by regression technique and modelling. *Water*, 15(6), 1224. <https://doi.org/10.3390/w15061224>
- Villares, E., Starrett, A., & Limberg, D. (2022). Exploring school counseling during the first wave of COVID-19. *Journal of Counseling & Development*, 100(4), 386–398. <https://doi.org/10.1002/jcad.12433>
- Vlachopoulos, D., & Makri, A. (2019). Online communication and interaction in distance higher education: A framework study of good practice. *International Review of Education*, 65(4), 605–632. <https://doi.org/10.1007/s11159-019-09792-3>
- Voica, C., Singer, F. M., & Stan, E. (2020). How are motivation and self-efficacy interacting in problem-solving and problem-posing? *Educational Studies in Mathematics*, 105(3), 487–517. <https://doi.org/10.1007/s10649-020-10005-0>
- Von Stumm, S., & Ackerman, P. L. (2013). Investment and intellect: A review and meta-analysis. *Psychological Bulletin*, 139(4), 841–869. <https://doi.org/10.1037/a0030746>
- Wall, N., Walter, J. A., & Stephens, L. E. (2023). Shared Perspective: Considerations for designing a quality online learning experience. *Schole: A Journal of Leisure Studies and Recreation Education*, 1–10. <https://doi.org/10.1080/1937156x.2023.2175742>
- Walters, T. P., Simkiss, N. J., Snowden, R. J., & Gray, N. S. (2021). Secondary school students' perception of the online teaching experience during COVID-19: The impact on mental wellbeing and specific learning difficulties. *British Journal of Educational Psychology*, 92(3), 843–860. <https://doi.org/10.1111/bjep.12475>
- Wang, M., & Kang, M. (2006). Cybergogy for Engaged Learning: A Framework for Creating Learner Engagement through Information and Communication Technology. In Springer eBooks (pp. 225–253). [https://doi.org/10.1007/1-4020-3669-8\\_11](https://doi.org/10.1007/1-4020-3669-8_11)
- Wells, T. (2022). School Counselor Perceptions and knowledge of Trauma-Informed Practices. *Professional School Counseling*, 26(1), 2156759X2210963. <https://doi.org/10.1177/2156759x221096352>
- Wester, E. R., Walsh, L. C., Arango-Caro, S., & Callis-Duehl, K. (2021). Student Engagement Declines in STEM Undergraduates during COVID-19–Driven Remote Learning. *Journal of Microbiology & Biology Education*, 22(1). <https://doi.org/10.1128/jmbe.v22i1.2385>
- Wigfield, A. (2022). The role of children's achievement values in the Self-Regulation of their learning outcomes. In Routledge eBooks (pp. 101–124). <https://doi.org/10.4324/9780203763353-5>
- Wilcox, G., Conde, C. F., & Kowbel, A. (2021). Using Evidence-Based practice and Data-Based decision making in inclusive education. *Education Sciences*, 11(3), 129. <https://doi.org/10.3390/educsci11030129>
- Wilczewski, M., Gorbaniuk, O., & Giuri, P. (2021). The Psychological and Academic Effects of Studying From the Home and Host Country During the COVID-19 Pandemic. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.644096>
- Wilis, R., Prayitno, B. A., Sunarno, W., & Anjirawaroj, S. (2023). Improving students' metacognitive abilities and creative thinking skills through STEM-based online learning. *Jurnal Pendidikan Biologi Indonesia*, 9(1), 90–102. <https://doi.org/10.22219/jpbi.v9i1.22994>
- Witte, A. L., Schumacher, R., & Sheridan, S. M. (2022). The Effectiveness of Technology-Delivered Conjoint Behavioral Consultation: Addressing rural student and family needs. *Journal of Educational and Psychological Consultation*, 33(3), 254–279. <https://doi.org/10.1080/10474412.2022.2083624>
- Wittmann, S., & Wulf, T. (2023). Effects of flipped classes on student learning: The role of positively perceived instructor attitude towards students. *International Journal of Management Education*, 21(1), 100735. <https://doi.org/10.1016/j.ijme.2022.100735>
- Wong, L. K., Yuen, M., & Chen, G. (2020). Career-related teacher support: A review of roles that teachers play in supporting students' career planning. *Journal of Psychologists and Counsellors in Schools*, 31(1), 130–141. <https://doi.org/10.1017/jgc.2020.30>
- Wong, Z. Y., & Liem, G. a. D. (2021). Student engagement: current state of the construct, conceptual refinement, and future research directions. *Educational Psychology Review*, 34(1), 107–138. <https://doi.org/10.1007/s10648-021-09628-3>
- Wongwatkit, C. (2023, June 28). The Future of Connectivist Learning with the Potential of Emerging Technologies and AI in Thailand: Trends, Applications, and Challenges in Shaping Education. <https://so07.tci-thaijo.org/index.php/JLSEd/article/view/2739>
- Wu, T., Lee, H., Wang, W., Lin, C., & Huang, Y. (2023). Leveraging computer vision for adaptive learning in STEM education: effect of engagement and self-efficacy. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00422-5>
- Xiao, Y., & Yang, M. (2019). Formative assessment and self-regulated learning: How formative assessment supports students' self-regulation in English language learning. *System*, 81, 39–49. <https://doi.org/10.1016/j.system.2019.01.004>



Xu, Z., Zhou, X., Watts, J., & Kogut, A. (2023). The effect of student engagement strategies in online instruction for data management skills. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-022-11572-w>

Yaiche, W. (2021). Boosting EFL Learners Critical Thinking through Guided Discovery: A Classroom-Oriented Research on First-Year Master Students. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3826506>

Yates, A., Starkey, L., Egerton, B., & Flueggen, F. (2020). High school students' experience of online learning during Covid-19: the influence of technology and pedagogy. *Technology, Pedagogy and Education*, 30(1), 59–73. <https://doi.org/10.1080/1475939x.2020.1854337>

Yi, H. J., Shin, Y., Min, Y., Lee, J., Jung, J., & Kang, Y. (2022). Perception and Experience of Sexual and Gender Minority Korean Youth in School Counseling. *International Journal for the Advancement of Counselling* Volume, 45(2), 189–209. <https://doi.org/10.1007/s10447-022-09490-0>

Yildiz, N. G. (n.d.). School counselors' leadership role in creating a collaborative school climate for linguistically diverse students. <https://eric.ed.gov/?id=EJ1323272>

Yufereva, O., V. (2023). Pedagogical skills in higher education institutions. <https://er.knutd.edu.ua/handle/123456789/23817>

Yurayat, P., & Seechaliao, T. (2021). Needs Assessment to Develop Online Counseling Program. *International Education Studies*, 14(7), 59. <https://doi.org/10.5539/ies.v14n7p59>

Zahner, D. G. H. (2022). Opening the black box of vertical transfer admission: The experiences of community college students in STEM majors. *Community College Journal of Research and Practice*, 1–25. <https://doi.org/10.1080/10668926.2022.2135041>

Zhang, R., Zou, D., & Cheng, G. (2023). A review of chatbot-assisted learning: pedagogical approaches, implementations, factors leading to effectiveness, theories, and future directions. *Interactive Learning Environments*, 1–29. <https://doi.org/10.1080/10494820.2023.2202704>

Zhang, Y., Tian, Y., Yao, L., Duan, C., Sun, X., & Niu, G. (2022). Individual differences matter in the effect of teaching presence on perceived learning: From the social cognitive perspective of self-regulated learning. *Computers and Education/Computers & Education*, 179, 104427. <https://doi.org/10.1016/j.compedu.2021.104427>

Ziomek-Daigle, J., & Heckman, B. D. (2019). Integrating Behavioral and Social/Emotional supports within the Response to Intervention (RTI) model. *Journal of Professional Counseling, Practice, Theory, & Research*, 46(1–2), 27–38. <https://doi.org/10.1080/15566382.2019.1671741>

Zuo, M., Hu, Y., Luo, H., Ouyang, H., & Zhang, Y. (2021). K-12 students' online learning motivation in China: An integrated model based on community of inquiry and technology acceptance theory. *Education and Information Technologies*, 27(4), 4599–4620. <https://doi.org/10.1007/s10639-021-10791-x>

Zuo, M., Hu, Y., Luo, H., Ouyang, H., & Zhang, Y. (2021). K-12 students' online learning motivation in China: An integrated model based on community of inquiry and technology acceptance theory. *Education and Information Technologies*, 27(4), 4599–4620. <https://doi.org/10.1007/s10639-021-10791-x>

### Affiliations and Corresponding Information

#### **Jusueil D. Gelacio, LPT**

Daniel R. Aguinaldo National High School  
Department of Education – Philippines

#### **Jerson John L. Trocio PhD., RPsy**

University of Mindanao – Philippines