



**THE MEDIATING EFFECT OF SCHOOL CULTURE ON THE
RELATIONSHIP BETWEEN INSTRUCTIONAL LEADERSHIP
OF SCHOOL HEADS AND TEACHER ENGAGEMENT
OF PUBLIC ELEMENTARY SCHOOL TEACHERS**

Eva B. Nogadas¹ⁱ,

Raymunda L. Apostol²

¹Master of Arts in Education major in
Educational Management,
University of Mindanao,
Davao City, Philippines

Teacher 2, Hulid Elementary School,
Hulid, Aragon, Cateel,
Davao Oriental, Philippines

²EdD, Professor,
Baganga Offsite,
Davao Oriental,

Philippines
Public Schools Supervisor,
Baganga North,
District, Sto Nino, Lambajon,
Baganga, Davao Oriental,
Philippines

Abstract:

The purpose of this study was to determine the mediating effect of school culture on the relationship between instructional leadership and teacher engagement of public elementary teachers. Utilizing quantitative, non-experimental design via correlational technique, data were obtained from 300 respondents of the study who are teachers in public elementary schools in Cateel 2, province of Davao Oriental. The researcher utilized a total population sampling technique and an online survey mode of data collection. The researcher also utilized the statistical tools mean, Pearson r , and Medgraph using the Sobel z -test. From the results of the study, it was found that there is a very high level of instructional leadership and teacher engagement. There is also a very high level of school culture. Also, results revealed that there is a significant relationship between instructional leadership and teacher engagement, a significant relationship between instructional leadership and school culture, and a significant relationship between school culture and teacher engagement. Further, school culture has a partial mediating effect on the

ⁱ Correspondence: email eva.nogadas@deped.gov.ph

relationship between instructional leadership and teacher engagement among public elementary schools.

Keywords: education, school culture, instructional leadership, teacher engagement, mediating effect, teachers, Philippines

1. Introduction

The level of work disengagement is a global concern. A large number of employees are not engaged at work. The lack of teacher engagement places students at risk of poor academic performance. Teacher engagement is crucial to improve student chances for success. Although motivation and engagement are intrinsic to the person, a critical portion of student success lies in teacher engagement (Grove, 2019; Musenze *et al.*, 2020).

Teachers' engagement is an important aspect of achieving the success of schools. It is positive psychology experienced by a person, which is reflected in emotional, cognitive, and physical involvement in carrying out work enthusiastically and with energy. Further, employees who have high engagement can manage positive energy and inspiration from different activities into useful resources. Thus, teachers' engagement is a critical factor in improving the performance of teachers and the efficiency level of schools, which are manifested by enthusiasm, dedication, and job absorption (Bakker *et al.*, 2020; Sudibjo & Riantini, 2023).

A positively engaged teacher is one who prioritizes quality instructional leadership and delivery, seeks out the latest ideas and best practices, frequently monitors student progress and provides feedback, as well as modifies their instruction to meet the needs of their students. To include the emotional dimension of teacher engagement, engaged teachers demonstrate happiness at work as well. Instructional leaders set high-performance expectations to improve teachers' dedication to the college. However, uncertainty in the teachers' output can have adverse effects, such as reducing their level of engagement. If college instructional leaders demonstrate positive leadership behavior, there is an increase in teacher engagement (Hellbusch, 2022; Saleem *et al.*, 2020).

Moreover, it was found out in another study that instructional leadership and school culture are similar and that having a collaborative school culture is necessary for effective performance. The stronger the school culture, the more effective the organization. Further, instructional leadership is associated with teacher job satisfaction through the mediation effects of school culture and teacher collaboration. School leaders must be aware of the importance of instructional leadership and a positive school culture is developed at schools to ensure the effectiveness of schools. School leaders should establish trusting relationships if they place priority on effective instruction, student success, and school improvement (Liu *et al.*, 2020; Zahed-Babelan *et al.*, 2019).

Additionally, school heads should build and encourage school culture in order to improve teacher engagement. It has been discovered that instructional leadership is not

a solo struggle; as a result, teacher engagement in school can only be done by a collective school community (Khan, 2022). School culture significantly influences the development of student behavior and teachers' attitudes. Positively perceived school culture, characterized by cooperative interpersonal relationships, sharing of responsibilities, innovations, inspiring vision, and challenging mission, promotes students' motivation to learn, which in turn improves their academic achievement and teacher engagement in schools.

Relatedly, in an empowered school culture, instructional leadership is shared among staff, and teachers feel trusted to make decisions as they engage in their work. Through various professional development methods that encourage teacher engagement, teachers will begin to see the strengths in their colleagues and trust in their expertise. By providing multiple opportunities for teachers to reflect on different mindsets, teachers will begin to examine their teacher identities and how they impact their students (Fu *et al.*, 2022; Miller, 2022).

There was an urgency to conduct this study because, the existing situation in schools shows that there were still several problems and issues involving the teachers despite the implementation of various national and local programs that aim to provide teachers with a variety of benefits, thereby improving their instructional leadership and teacher engagement. Furthermore, there were no similar studies that deal with the mediating effect of school culture on the relationship between instructional leadership and teacher engagement in Region XI or specifically in one of the municipalities in Davao Oriental.

2. Literature Review

Innovation configurations provide administrators with detailed directions necessary for teachers to achieve optimal curriculum implementation strategies. It features the steps necessary to reach the goal of high-quality implementation of the new curriculum. Curriculum implementation is not simply an extension of the planning and adoption process. It is a phenomenon in its own right wherein it is the actual use of an innovation or what an innovation consists of in practice (Mogashoa, 2021; Nevenglosky *et al.*, 2018). Instructional leadership can affect teachers' participation in coaching, peer observation, mentoring, and mentoring. The training of principals might put more emphasis on instructional leadership abilities that promote peer observation, coaching, and peer mentoring for teachers to fulfill their specific needs and collaborate on professional development. Principals' instructional leadership behaviors support teachers' motivation and task concentration, the growth of students' learning capacity, and the development of teachers' skills to evaluate themselves and their students. For teachers to feel more confident, principals can foster conditions where they can communicate with them, assist them in setting up learning environments that are appropriate for school, and encourage

their professional development by modeling instructional leadership behaviors (Kim & Lee, 2020; Özdemir *et al.*, 2020).

Curriculum prioritization, teaching more concisely and purposefully, and adherence to a standard timetable are among the most popular strategies teachers utilize to maximize instructional time. Other, less common methods teachers use include having the materials ready in advance, getting rid of departmentalized classrooms to allow for greater subject-specific flexibility, and developing a positive outlook on not being able to complete every aspect of every session. Through more focused instruction and the elimination of pointless distractions, teachers are maximizing instructional time. Relatedly, increasing instructional time leads to gains in academic achievement, the magnitude of which depends on how time is increased and what the time is used for. Research suggests that extending the school year is a more effective method of improving academic outcomes compared to extending the school day (Bauml *et al.*, 2020; Kraft & Novicoff, 2022).

Moreover, proximal factors such as teacher support strongly influence emotional engagement. Factors from the family, peer, and community contexts make unique contributions to emotional engagement. There is a need to consider emotional engagement as a long-term process. Also, teachers are crucial agents in adolescents' school life, and teachers' roles involve both academic and socio-emotional functions. There are direct associations of teacher support with intentions to quit and indirect associations via emotional engagement and boredom. Perceived emotional support is the most central aspect of teacher support, as revealed by both indirect and direct associations with intentions to quit (Quin *et al.*, 2018; Tvedt *et al.*, 2021).

Teacher enthusiasm is contagious in class and positively affects student emotions. There are correlations between teacher enthusiasm, enjoyment, boredom, and social engagement. Student enjoyment is found to mediate the relationship between teacher enthusiasm and student social-behavioral engagement in class. Also, teacher social engagement and job satisfaction are found to be linked over time. Initial teacher self-efficacy predicts work satisfaction via engagement and initial work satisfaction predicts later teacher self-efficacy via social engagement with students (Dewaele & Li, 2021; Granziera & Perera, 2019).

Relatedly, in an empowered school culture, instructional leadership is shared among staff, and teachers feel trusted to make decisions as they engage in their work. Through various professional development methods that encourage teacher engagement, teachers will begin to see the strengths in their colleagues and trust in their expertise. By providing multiple opportunities for teachers to reflect on different mindsets, teachers will begin to examine their teacher identities and how they impact their students (Fu *et al.*, 2022; Miller, 2022).

A positively engaged teacher prioritizes quality instructional leadership and delivery, seeks out the latest ideas and best practices, frequently monitors student progress and provides feedback, as well modifies their instruction to meet the needs of

their students. To include the emotional dimension of teacher engagement, engaged teachers demonstrate happiness at work as well. Instructional leaders set high-performance expectations to improve teachers' dedication to the college. However, uncertainty in the teachers' output can have adverse effects, such as reducing their level of engagement. If college instructional leaders demonstrate positive leadership behavior, there is an increase in teacher engagement (Hellbusch, 2022; Saleem *et al.*, 2020).

Moreover, it was found out in another study that instructional leadership and school culture are similar and that having a collaborative school culture is necessary for effective performance. The stronger the school culture, the more effective the organization. Further, instructional leadership is associated with teacher job satisfaction through the mediation effects of school culture and teacher collaboration. School leaders must be aware of the importance of instructional leadership and a positive school culture is developed at schools to ensure the effectiveness of schools. School leaders should establish trusting relationships if they place priority on effective instruction, student success, and school improvement (Liu *et al.*, 2020; Zahed-Babelan *et al.*, 2019).

Additionally, school heads should build and encourage school culture to improve teacher engagement. It has been discovered that instructional leadership is not a solo struggle; as a result, teacher engagement in school can only be done by a collective school community (Khan, 2022). School culture significantly influences the development of student behavior and teachers' attitudes. Positively perceived school culture, characterized by cooperative interpersonal relationships, sharing of responsibilities, innovations, inspiring vision, and challenging mission, promotes students' motivation to learn, which in turn improves their academic achievement and teacher engagement in schools.

Relatedly, in an empowered school culture, instructional leadership is shared among staff, and teachers feel trusted to make decisions as they engage in their work. Through various professional development methods that encourage teacher engagement, teachers will begin to see the strengths in their colleagues and trust in their expertise. By providing multiple opportunities for teachers to reflect on different mindsets, teachers will begin to examine their teacher identities and how they impact their students (Fu *et al.*, 2022; Miller, 2022).

3. Material and Methods

In this study, there were 300 respondents from a total population of 330 public elementary school teachers coming from Cateel 2, Davao Oriental. From the total population of 330, 30 public elementary school teachers were considered in the pilot test and were excluded from the full-blown survey. With a desire to give everyone a chance to be included in the study, a total population sampling technique was used. Total population sampling is a design where you choose to examine the entire population that has a particular set of characteristics such as specific experiences, knowledge, skills, and

exposure to an event (Laerd, 2012). Moreover, the idea is that the groupings are made so that the population units within the groups are similar.

For the inclusion criteria, the public elementary school teachers in Cateel 2, Davao Oriental were the groups to become respondents. These public elementary school teachers were currently employed in SY 2023-2024 and whose plantilla numbers are in the Department of Education, as they are the ones who were in the position to provide useful information upon testing the hypothesis of the study. For the exclusion criteria, teachers in the junior and senior high schools in Cateel 2, Davao Oriental, even if teaching in the identified areas of the study were excluded in the study for, they were in different work environments and supervision. Also, those teachers in private schools and those teachers who hold managerial or supervisory positions were excluded from the study. The respondents were chosen accordingly to answer the questionnaire with confidentiality. The target respondents were free to decline from participating in the survey. They were not forced to answer the research questionnaire and were encouraged to return the same to the researcher for its automatic disposal. Moreover, they can withdraw anytime their participation in the research process if they feel uncomfortable about the study since they were given the free will to participate without any form of consequence or penalty.

This study was conducted in 16 public elementary schools in Cateel 2, Davao Oriental, which is part of Region XI in the Philippines. Region XI is located in the southeastern portion of Mindanao, and Mindanao consists of five provinces, namely: Compostela Valley, Davao del Norte, Davao del Sur, Davao Oriental, and Davao Occidental. The region encloses the Davao Gulf and its regional center is Davao City. Cateel is a second-class municipality in the province of Davao Oriental. It is situated on the shore of a bay of the Pacific Ocean at the mouth of the river bearing its name. Cateel is bounded on the North by the Municipality of Boston, on the east by the Pacific Ocean, on the South by the Municipality of Baganga, and on the West by the Municipality of Compostela, Cateel is a land of rich and fertile valleys, rolling hills, beaches, swamps, and vast plains. Also, Cateel was divided into two school districts, namely: Cateel District I and Cateel District II.

The researcher believed that this was the appropriate locale of the study because it had a good number of respondents who ensured concrete results of the study and that the researcher had not come across a study using the variables of school culture, instructional leadership of school heads and teacher in the local setting. As a researcher, who is presently teaching in Cateel, Davao Oriental is interested in knowing the existing level of school culture, instructional leadership of school heads, and teacher engagement after the challenges brought about by the COVID-19 pandemic with the strict observance of the health and safety protocols and most especially the implementation of their teaching and learning strategies.

Moreover, the researcher would like to know the experiences on how these teachers can cope and adjust to the abrupt shift from the face-to-face mode to the online

method of teaching and learning. With the new normal, schools are going back to face-to-face classes and again this needs another adjustment from the teachers on the smooth and effective delivery of their class activities. As a result, the shift from an online setting to face-to-face classes or the new normal entails another challenge in terms of class preparation and conduct of class activities which in effect has affected the school culture and teacher engagement with the students.

The study utilized a quantitative, descriptive, non-experimental design using a correlation technique. This aided in determining the levels of school culture, instructional leadership of school heads, and teacher engagement. Quantitative research narrows itself to statistical analyses of collected data via survey questionnaires employing computational approaches (Trefry, 2017). The researcher obtained the numerical data from a population to establish accuracy. Descriptive research depicts the precise selection of respondents through a survey (Kowalczyk, 2018). The design described school culture, instructional leadership of school heads, and teacher engagement of public elementary school teachers.

The correlational technique is a non-experimental approach in which it analyzes the relationship between two or more variables without reserve. It also looks into the degree of association by relating it with other variables. Apparently, correlational studies have independent and dependent variables with the effects of the independent variable observed on the dependent value (Patidar, 2013). The researcher chose this design to align the variables based on the discussion of the aforementioned related literature. This technique was appropriate since the study aimed to determine whether school culture provided a relationship to school culture, instructional leadership of school heads, and teacher engagement among public elementary school teachers (Creswell, 2014). The mediation process was used to determine whether the relationship between instructional leadership of school heads as the independent variable and teacher engagement as the dependent variable is significantly reduced after the inclusion of the mediator variable-school culture. In other words, mediating relationships occur when a third variable plays an important role in governing the relationship between the other two variables (MacKinnon, 2008).

In the conduct of the study, a systematic procedure was followed. The researcher will send a letter to the Schools Division Superintendent of the Department of Education, Division of Davao Oriental asking for permission to conduct the study and once approved was furnished to the School Heads of the respondents. The researcher immediately visited the concerned school heads of the identified schools in Cateel 2, Davao Oriental, as part of the courtesy call and discussed the plan for the conduct online method of data gathering through the use of Google Forms. Also, before the actual data collection, the researcher will secure Certificate of Compliance from UMERC (UMERC Protocol Number 2023-505) to ensure compliance with some ethical considerations in research. The data in all retrieved questionnaires was analyzed and interpreted in line

with the objectives of the study with the assistance of the designated Statistician and based on the findings of the study, conclusions and recommendations were formulated.

In the conduct of this study and before the data were gathered some ethical issues and considerations were considered. The researcher underwent an evaluation to be conducted by the members of the ethics review committee. After several review processes, this study was marked as passed and approved by the UM Ethics Review Committee (UMERC).

The participation of the respondents was completely voluntary and anonymous to protect their privacy. All public elementary school teachers in Cateel 2, Davao Oriental who were involved in the study were given the free will to participate without any form of consequence or penalty. As a researcher, all data gathered were kept confidential, and such information was utilized only for the purpose of the research. No names were required from the respondents so that their identities became anonymous in adherence to the Data Privacy Act of 2012 which protects the respondents from unauthorized processing of their private or identifiable information or guarantees them that their response cannot be traced back to its real sources to protect their identity.

Informed consent was secured from all the respondents involved in the study. The respondent signed the ICF to prove his/her willingness to participate. It was in a form asking for their voluntary consent in giving their ideas for the said study. The participants were carefully selected based on the criteria provided in the research. The criteria in the selection of respondents included all those public elementary teachers currently employed at Cateel 2, Division of Davao Oriental. No individual answered the questionnaire if he/she did not qualify for the criteria. The study did not involve high risks of situations that the respondents experienced in the area of physical, psychological, or socio-economic concerns. It protected and secured the rights of the respondents who were public elementary school teachers and this was conducted following due process.

All public elementary teachers were the primary beneficiaries of the study and they were able to gain an understanding of the dynamic of instructional leadership of school heads, their teacher engagement, and school culture in the workplace. The results of this study can help the teachers in their profession since the findings of this study will give them new information about the instructional leadership of school heads, their teacher engagement, and school culture in addition, this study will be used as a practical reference for future research in the field of Education. Further, in the conduct of this research, the respondents will receive tangible benefits such as a simple token from the researcher.

The study used the Grammarly or Turnitin software and/ or Plagiarism Detector to ensure that there was no plagiarism to happen in the whole duration of the study. The study underwent the standard procedure of research established by the Professional Schools of the University of Mindanao and all the information presented was carefully written and cited. All sources used in this study came from reliable journals and other scholarly works There was no trace or indication of deliberate distortion of what was

done. The study had no conflict of interest since the researcher had no relationship with the respondents of the study, but it was a requirement for the completion of the master's degree in education at the University of Mindanao Professional Schools.

In this study, there was no deceit as everything that was written and reflected is true and underwent validation and thorough checking from different experts in the field of research. The researcher secured proper permission from the targeted agencies where the respondents are teaching/working. There was an online mode of data gathering through the use of Google Forms. The researcher sent a letter to the Schools Division Superintendent of the Department of Education, Division of Davao Oriental asking for permission to conduct the study and once approved was furnished to the School Heads of the respondents. No person was authorized to publish nor present this paper except the researcher or the adviser without the consent of the researcher. For purposes of publication of this study, the adviser becomes the co-author of the study.

4. Results and Discussion

Table 1: Level of Instructional Leadership

Indicators	Mean	SD	Descriptive Level
Instructional resource provider	4.42	0.60	Very High
Maintaining visible presence	4.19	0.53	High
Professional development	4.49	0.62	Very High
Maximizing instructional time	4.50	0.53	Very High
Monitoring students' progress	4.38	0.65	Very High
Feedback on teaching learning	4.47	0.62	Very High
Curriculum implementation	4.59	0.53	Very High
Overall	4.44	0.51	Very High

The level of instructional leadership is very high, resulting from the very high levels of responses. The indicators of curriculum implementation, maximizing instructional time, professional development, feedback on teaching-learning, instructional resource provider, and monitoring students' progress have very high ratings while maintaining a visible presence has a high rating. These indicators are arranged from highest to lowest level. The very high-level rating of curriculum implementation is suggestive of the school heads' very high extent of maintaining an environment that promotes the effective functioning of instructional content, arrangement, interventions, management, and monitoring in the classroom. Curriculum implementation is not simply an extension of the planning and adoption process. It is a phenomenon in its own right wherein it is the actual use of an innovation or what an innovation consists of in practice (Mogashoa, 2021; Nevenglosky *et al.*, 2018).

The very high level of maximizing instructional time suggests the very high use of time scheduled for purposes of instruction, examinations/testing guidelines, and other student activities. This is also in line with various authors (Bauml *et al.*, 2020; Kraft & Novicoff, 2022) stating that with more focused instruction and the elimination of

pointless distractions, teachers are maximizing instructional time. Relatedly, increasing instructional time leads to gains in academic achievement, the magnitude of which depends on how time is increased and what the time is used for. Research suggests that extending the school year is a more effective method of improving academic outcomes compared to extending the school day.

Table 2: Level of Teacher Engagement

Indicators	Mean	SD	Descriptive Level
Emotional engagement	4.77	0.39	Very High
Social engagement with colleagues	4.67	0.45	Very High
Cognitive engagement	4.68	0.43	Very High
Social engagement with students	4.75	0.40	Very High
Overall	4.72	0.34	Very High

The level of teacher engagement is very high, resulting from the very high levels of responses. The indicators of emotional engagement, social engagement with students, cognitive engagement, and social engagement with colleagues have very high ratings. These indicators are arranged from highest to lowest level. The very high level rating of emotional engagement is suggestive of the very high use of emotional engagement by the school heads used to motivate the excitement of teachers in teaching. This claim is consistent with various authors (Quin *et al.*, 2018; Tvedt *et al.*, 2021) stating that factors from the family, peer, and community contexts make unique contributions to emotional engagement. There is a need to consider emotional engagement as a long-term process. Also, teachers are crucial agents in adolescents' school life, and teachers' roles involve both academic and socio-emotional functions. There are direct associations of teacher support with intentions to quit and indirect associations via emotional engagement and boredom. Perceived emotional support is the most central aspect of teacher support, as revealed by both indirect and direct associations with intentions to quit.

Additionally, the very high level of social engagement with students is indicative of the very high ability of the teachers to empathize with students. This is in line with various authors (Dewaele & Li, 2021; Granziera & Perera, 2019) affirming that student enjoyment is found to mediate the relationship between teacher enthusiasm and student social-behavioral engagement in class. Also, teacher social engagement and job satisfaction are found to be linked over time. Initial teacher self-efficacy predicts work satisfaction via engagement and initial work satisfaction predicts later teacher self-efficacy via social engagement with students.

Table 3: Level of School Culture

Indicators	Mean	SD	Descriptive Level
Professional collaboration	4.51	0.56	Very High
Affiliative collegiality	4.41	0.60	Very High
Self-determination/efficacy	4.42	0.60	Very High
Overall	4.45	0.54	Very High

The very high level of school culture resulted from the very high levels of responses. The indicators of professional collaboration, affiliative collegiality, and self-determination/efficacy were arranged from highest to lowest. The very high level of professional collaboration is suggestive that cooperative interpersonal relationships help promote students' motivation to learn. This claim is in line with various authors (Liu *et al.*, 2020; Zahed-Babelan *et al.*, 2019) that it is associated with teacher job satisfaction through the mediation effects of school culture and professional collaboration. School leaders must be aware of the importance of a positive school culture developed at schools to ensure the effectiveness of schools.

Additionally, the very high level of self-determination/efficacy is indicative of the very high ability of the teachers to examine their teacher identities and how it impacts their students. This is in line with various authors (Fu *et al.*, 2022; Miller, 2022) in an empowered school culture, it is shared among staff and teachers feel trusted to make decisions as they engage in their work. Through various professional development methods that encourage teacher engagement, teachers will begin to see the strengths in their colleagues and trust in their expertise. By providing multiple opportunities for teachers to reflect on different mindsets, teachers will begin to examine their teacher identities and how they impact their students.

Table 4.1: Significant Relationship between Instructional Leadership and Teacher Engagement

	EME	SEC	COG	SES	Overall
IRP	0.352	0.464	0.352	0.385	0.475
	<.001	<.001	<.001	<.001	<.001
MVP	0.282	0.372	0.272	0.284	0.371
	<.001	<.001	<.001	<.001	<.001
PD	0.278	0.403	0.296	0.314	0.396
	<.001	<.001	<.001	<.001	<.001
MIT	0.344	0.407	0.329	0.363	0.440
	<.001	<.001	<.001	<.001	<.001
MSP	0.292	0.428	0.300	0.286	0.401
	<.001	<.001	<.001	<.001	<.001
FTL	0.266	0.355	0.227	0.328	0.359
	<.001	<.001	<.001	<.001	<.001
CI	0.321	0.422	0.319	0.414	0.451
	<.001	<.001	<.001	<.001	<.001
Overall	0.350	0.469	0.343	0.388	0.475
	<.001	<.001	<.001	<.001	<.001

The correlation between the measures of instructional leadership and teacher engagement revealed a significant relationship. This implies that instructional leadership is significantly correlated with teacher engagement. The findings of this study are in line with the studies of various authors (Hellbusch, 2022; Saleem *et al.*, 2020) stating that instructional leaders set high-performance expectations to improve teachers' dedication to the college. However, uncertainty in the teachers' output can have adverse effects, such as reducing their level of engagement. If college instructional leaders demonstrate positive leadership behavior, there is an increase in teacher engagement.

Table 4.2: Significant Relationship between Instructional Leadership and School Culture

	PC	AC	SDE	Overall
IRP	0.648	0.655	0.620	0.696
	<.001	<.001	<.001	<.001
MVP	0.543	0.560	0.500	0.580
	<.001	<.001	<.001	<.001
PD	0.618	0.615	0.549	0.645
	<.001	<.001	<.001	<.001
MIT	0.549	0.571	0.515	0.592
	<.001	<.001	<.001	<.001
MSP	0.623	0.623	0.555	0.652
	<.001	<.001	<.001	<.001
FTL	0.575	0.601	0.495	0.605
	<.001	<.001	<.001	<.001
CI	0.562	0.590	0.546	0.615
	<.001	<.001	<.001	<.001
Overall	0.680	0.695	0.622	0.723
	<.001	<.001	<.001	<.001

The correlation between measures revealed that there is a significant relationship between instructional leadership and school culture. This implies that instructional leadership is positively correlated with school culture. The result of the study confirms various authors (Liu *et al.*, 2020; Zahed-Babelan *et al.*, 2019) who mentioned that having a collaborative school culture is necessary for effective performance. The stronger the school culture, the more effective the organization. School leaders must be aware of the importance of instructional leadership and a positive school culture is developed at schools to ensure the effectiveness of schools.

Table 4.3: Significant Relationship between School Culture and Teacher Engagement

	EmE	SEC	CogE	SES	Overall
PC	0.271	0.490	0.310	0.456	0.469
	< .001	< .001	< .001	< .001	< .001
AC	0.335	0.525	0.336	0.480	0.513
	< .001	< .001	< .001	< .001	< .001
SDE	0.327	0.552	0.362	0.457	0.521
	< .001	< .001	< .001	< .001	< .001
Overall	0.339	0.568	0.366	0.505	0.545
	< .001				

The correlation between measures revealed that there is a significant relationship between school culture and teacher engagement. This implies that school culture is positively correlated with teacher engagement. The result of the study confirms various authors (Khan, 2022; Fu *et al.*, 2022; Miller, 2022) who mentioned that school heads should build and encourage school culture to improve teacher engagement. Through various professional development methods that encourage teacher engagement, teachers will begin to see the strengths in their colleagues and trust in their expertise. By providing multiple opportunities for teachers to reflect on different mindsets, teachers will begin to examine their teacher identities and how they impact their students.

Table 5: Regression results of the variables in the criteria of the presence of mediating effect

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	InsL \Rightarrow ScC \Rightarrow TEng	0.206	0.0356	0.1360	0.275	0.306	5.78	< .001
Component	InsL \Rightarrow ScC	0.766	0.0423	0.6832	0.849	0.723	18.12	< .001
	ScC \Rightarrow TEng	0.269	0.0440	0.1823	0.355	0.423	6.10	< .001
Direct	InsL \Rightarrow TEng	0.113	0.0466	0.0220	0.205	0.169	2.43	0.015
Total	InsL \Rightarrow TEng	0.319	0.0342	0.2521	0.386	0.475	9.32	< .001

This study aims to contribute to the literature regarding the possible mediating variable for the relationship between instructional leadership and teacher engagement. Specifically, school culture was investigated as a possible mediating variable that could explain the effect of instructional leadership on teacher engagement. Partial mediation is found in the study, and important and significant direct effects were presented that may help in the enhancement of the existing research on instructional leadership and teacher engagement. Significantly, the present study on the relationship of instructional leadership and teacher engagement has found relevance to the study of Hellbusc (2022) and Saleem *et al.* (2020) that engaged teachers demonstrate happiness at work as well. Instructional leaders set high-performance expectations to improve teachers' dedication to the college. If college instructional leaders demonstrate positive leadership behavior, there is an increase in teacher engagement. Specifically, the current study has found that school culture is a positive and significant partial mediator of instructional leadership and teacher engagement and met Baron and Kenny's (1986) mediation guidelines.

In this connection, the mediation analysis involved the path between instructional leadership and teacher engagement, and the path between school culture and teacher engagement. The findings confirmed the significant relationship between instructional leadership and teacher engagement leading to support for various authors of this study (Kim & Lee, 2020; Özdemir *et al.*, 2020) who declared that instructional leadership can affect teachers' participation in coaching, peer observation, mentoring, and mentoring. The training of principals might put more emphasis on instructional leadership abilities that promote peer observation, coaching, and peer mentoring for teachers to fulfill their specific needs and collaborate on professional development.

5. Recommendations

The researcher came up with recommendations based on the results of the study. On the results of the very high levels of instructional leadership, teacher engagement, and school culture, the researcher recommends that the school maintain its existing best practices for the continuous observance of instructional leadership, teacher engagement, and school culture.

For the very high level of instructional leadership, the researcher recommends that the school management continue to implement the school plans and programs as mandated in the vision, mission, and goals of the school. Considering the performance of the school as shown by the teachers' support and cooperation, first, the school may evaluate the school's plans and programs versus its level of implementation. Also, a peer performance evaluation for teachers and teacher performance evaluation to be done by the students may be a regular annual activity. The conduct of orientation (for new teachers/staff) and re-orientation for existing teachers may be conducted with emphasis on the school's direction and mandate. This is a good action as this will enable everybody to be always aware of its commitment to the school, to the students and even to the parents, and to the community as a whole. The best practices of the school may be continued and if there are some deficiencies and inadequacies, then those areas may be improved or there may be room for continuing quality improvement.

For a very high level of teacher engagement, the teachers may be provided with chances to continue their schooling for professional development and may be allowed the teachers to enroll and proceed for their professional development (master or doctoral degrees) by way of scholarship or grant of soft loans to pay for the school fees and other school requirements. Updating teaching strategies through the regular conduct of re-tooling for updates of latest teaching strategies and attendance to seminars and training which may allow the teachers to improve their communication skills, ICT skills, critical thinking and maybe seminar on teachers' mental well-being like Mental Awareness, Stress Management or Anger Management. The regular conduct of meetings between teachers and management (may it be done by the program) is also recommended in order

to know some updates in school or to thresh out some issues or concerns within the program/department.

For the very high level of school culture, there may be an annual get-together activity in school or an annual conduct of spiritual activity (ecumenical) like retreats or recollection may be added to ensure that everybody in the school continues to exercise his/her strong faith in God Almighty. To maintain good rapport with the students, there may be a conduct of regular dialogue or focus group discussion between teachers and students to address some concerns in class, subject, or even the teachers and there may always be open communication among themselves. The school management may always respect the teachers' academic freedom and that school management may always listen to the sides of the teachers before any drastic action may be taken in case of some problems and issues among teachers or teachers' relationships. The school may always instill in the minds of the school staff and teachers that sincerity, commitment, and dedication of everybody counts most that everybody is always willing to extend a helping hand to those who are in need, and that what matters most is the education of the students.

On the partial mediating effect of school culture on the relationship between instructional leadership and teacher engagement, the researcher may recommend always be constant communication between school management and teachers and students and that everyone should always be reminded of the school's vision, mission and goals so that the best working relationship will be manifested at everyone gets out to the community and to the society bringing the good image of the school. The best practice of having an "open door policy" between teachers and management may allow the spirit of oneness and harmony at the workplace.

For future researchers, the study may be replicated and conducted in other regions on a larger population using structural equation modeling or with the use of other mediating variables to determine if the results of the study are affected by other variables. A qualitative study using the phenomenology method may be conducted to determine the impact of the best practices of the schools involved.

6. Conclusion

With consideration of the findings of the study, conclusions are drawn in this section. There is a very high level of instructional leadership and teacher engagement. There also is a very high level of school culture. There is a significant relationship between instructional leadership and teacher engagement. There is also a significant relationship between instructional leadership and school culture and a significant relationship between school culture and teacher engagement. Also, there is a partial mediation on the effect of school culture on the relationship between instructional leadership and teacher engagement.

The findings of the study clearly confirm the notion about the mediating effect of school culture on the relationship between instructional leadership and teacher engagement. The findings are supported by the anchor theory, the Work Engagement Theory by Kahn (1990) wherein employee engagement is the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances. Further, the findings of the study were substantiated by the Theory of Instructional Leadership by Hallinger and Wimpelberg (1992), and the Social Cognitive Theory by Vygotsky (1962).

Acknowledgements

This thesis would not have been possible without the guidance and help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study.

The panel of examiners was chaired by Dr. Jocelyn N. Bacasmot, and the members: Dr. Mary Ann E. Tarusan, Dr. Rinante L. Genuba, and Dr. Lyndon A. Quines, for the encouragement and guidance they offered to the researcher. To Dr. Raymunda L. Apostol, the thesis adviser, for her industrious and earnest efforts in checking the manuscript and for her continuous encouragement that inspired the researcher to finish this study;

To the officers of the Department of Education particularly the Division Superintendent for permitting to conduct the study and all elementary teachers who were the respondents of this study, colleagues and friends for their untiring support and effort in encouraging her to pursue her professional growth;

Last but not least, her husband Andro P. Nogadas, children Vince Adrian B. Nogadas, Princess Andrea B. Nogadas, her parents Romulo A. Biojon and Gloria H. Biojon, brother Retchie H. Biojon, Richardson H. Biojon, sisters Ritchen B. Ladura, Gretchen H. Biojon for their inspiration and unlimited support extended to the researcher and the one above all, the Omnipresent God, thank you so much.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Eva B. Nogadas is a Teacher 2 assigned at Hulid Elementary School, Hulid, Aragon, Cateel, Davao Oriental, Philippines. He is a candidate for a Master of Arts in Education major in Educational Management, University of Mindanao, Davao City, Philippines. She is the District Kindergarten Coordinator.

Raymunda L. Apostol (EdD) She is currently a Professor, Baganga Offsite, Davao Oriental, Philippines. She is a Public Schools Supervisor, Baganga North District, Sto Nino, Lambajon Baganga, Davao Oriental, Philippines.

References

- Akram, M., Kiran, S., & İlgan, A. (2017). Development and validation of instructional leadership questionnaire. *International Journal of Organizational Leadership*, 6, 73-88. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3333056
- Bakker, A. B., Petrou, P., Op den Kamp, E. M., & Tims, M. (2020). Proactive vitality management, work engagement, and creativity: The role of goal orientation. *Applied Psychology*, 69(2), 351-378. Retrieved from <https://doi.org/10.1111/apps.12173>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Bauml, M., Patton, M. M., & Rhea, D. (2020). A qualitative study of teachers' perceptions of increased recess time on teaching, learning, and behavior. *Journal of Research in Childhood Education*, 34(4), 506-520. Retrieved from <https://doi.org/10.1080/02568543.2020.1718808>.
- Bhebhe, S., & Nyathi, W. (2019). Instructional leaders' strategies for maintaining high performance in high schools: A case of high performing high schools in the Kingdom of Eswatini. *International Journal of Home Science*, 5(1), 250-256. Retrieved from <https://www.homesciencejournal.com/archives/2019/vol5issue1/PartE/5-1-25-680.pdf>
- Burns, E. C., Martin, A. J., & Collie, R. J. (2018). Adaptability, personal best (PB) goals setting, and gains in students' academic outcomes: A longitudinal examination from a social cognitive perspective. *Contemporary Educational Psychology*, 53, 57-72. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0361476X17302357>
- Chase, C. C., Marks, J., Malkiewich, L. J., & Connolly, H. (2019). How teachers talk guidance during Invention activities shapes students' cognitive engagement and transfer. *International Journal of STEM Education*, 6(1), 1-22. Retrieved from <https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-019-0170-7>
- Chong, W. H., Liem, G. A. D., Huan, V. S., Kit, P. L., & Ang, R. P. (2018). Student perceptions of self-efficacy and teacher support for learning in fostering youth competencies: Roles of affective and cognitive engagement. *Journal of Adolescence*, 68, 1-11. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S014019711830109X>
- Creswell, J. W. (2014). *Research design. qualitative, quantitative and mixed: Methods approaches* (2nd ed). London: Sage Publication.
- Daing, C. A., & Mustapha, L. C. (2023). School administrators' instructional leadership skills and teachers' performance and efficacy in senior high schools in the national capital region, Philippines. *International Journal of Educational Policy Research and*

- Review*, 11(1), 1. Retrieved from <https://journalissues.org/ijepr/wp-content/uploads/sites/7/2023/02/Daing-and-Mustapha-.pdf>
- Dewaele, J. M., & Li, C. (2021). Teacher enthusiasm and students' social-behavioral learning engagement: The mediating role of student enjoyment and boredom in Chinese EFL classes. *Language Teaching Research*, 25(6), 922-945. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/13621688211014538>
- Franklin, H., & Harrington, I. (2019). A review into effective classroom management and strategies for student engagement: Teacher and student roles in today's classrooms. *Journal of Education and Training Studies*. Retrieved from <https://rune.une.edu.au/web/handle/1959.11/27556>
- Fu, C., Zhao, Z., Wang, H., Ouyang, M., Mao, X., Cai, X., & Tan, X. (2022). How perceived school culture relate to work engagement among primary and secondary school teachers? Roles of affective empathy and job tenure. *Frontiers in Psychology*, 13, 878894. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.878894/full>
- Gkonou, C., & Miller, E. R. (2019). Caring and emotional labour: Language teachers' engagement with anxious learners in private language school classrooms. *Language Teaching Research*, 23(3), 372-387. Retrieved from <https://rune.une.edu.au/web/handle/1959.11/27556>
- Granziera, H., & Perera, H. N. (2019). Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view. *Contemporary Educational Psychology*, 58, 75-84. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0361476X17301911>
- Gray, J. C. (2018). Instructional leadership of principals and its relationship with the academic achievement of high-poverty students (Doctoral dissertation, Murray State University). Retrieved from <https://core.ac.uk/download/pdf/232888106.pdf>
- Grove, A. (2019). The teacher's role in student engagement. *Gardner-Webb University*. Retrieved from https://digitalcommons.gardner-webb.edu/cgi/viewcontent.cgi?article=1352&context=education_etd
- Hakanen, J., Bakker, A., & Schaufeli, W. (2018). Burnout and work engagement among Teachers. *Journal of School Psychology*, 43(1), 495-513. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0022440505000890>
- Hallinger, P., & Wimpelberg, R. (1992). New settings and changing norms for principal development. *The Urban Review*, 67(4), 1-22.
- Hellbusch, J. K. (2022). Engagement is everything: Principals' perceptions of their role in teacher engagement a qualitative study (Doctoral dissertation, The University of Nebraska-Lincoln). https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1360&context=cehse_daddiss

- Huong, V. T. M. (2020). Factors affecting instructional leadership in secondary schools to meet Vietnam's general education innovation. *International Education Studies*, 13(2), 48-60. Retrieved from <https://doi.org/10.5539/ies.v13n2p48>.
- Islami, R. A. Z. E., Anantanukulwong, R., & Faikhamta, C. (2022). Trends of teacher professional development strategies: A systematic review. *Shanlax International Journal of Education*, 10(2), 1-8. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1328203.pdf>
- Jelinska, M., & Paradowski, M. B. (2021). Teachers' engagement in and coping with emergency remote instruction during covid-19-induced school closures: A multinational contextual perspective. *Online Learning*, 25(1), 303-328. Retrieved from <https://eric.ed.gov/?id=EJ1287150>
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(1), 692-724.
- Kalkan, Ü., Altınay Aksal, F., Altınay Gazi, Z., Atasoy, R., & Dağlı, G. (2020). The relationship between school administrators' leadership styles, school culture, and organizational image. *Sage Open*, 10(1), 2158244020902081. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/2158244020902081>
- Khan, Z. (2022). Examining the mediating role of school culture in the relationship between heads' instructional leadership and students' engagement at secondary level in Punjab, Pakistan. *Bulletin of Education and Research*, 44(2), 71-83. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1368925.pdf>
- Khomariyah, S. N., Imron, A., & Sumarsono, R. B. (2023). Improving teacher performance through professional development in the new normal era. In *Proceedings of the International Conference on Educational Management and Technology (ICEMT 2022)* (Vol. 727, p. 3). Springer Nature.
- Kim, T., Lee, Y. (2020). Principal instructional leadership for teacher participation in professional development: Evidence from Japan, Singapore, and South Korea. *Asia Pacific Education Review*, 21, 261-278. <https://doi.org/10.1007/s12564-019-09616-x>.
- Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring teacher engagement: development of the engaged teacher's scale (ETS). *Frontline Learning Research*, 1(2), 33-52. Retrieved from <https://eric.ed.gov/?id=EJ1090832>
- Kowalczyk, D. (2018). Descriptive research design: Definition, examples & types. Retrieved from <https://study.com/academy/lesson/descriptive-research-design-definition-examples-types.html>
- Kraft, M. A., & Novicoff, S. (2022). Instructional time in US public schools: Wide variation, causal effects, and lost hours. *Annenberg Institute at Brown University*. Retrieved from <https://www.edworkingpapers.com/sites/default/files/Time%20Draft%20v47.pdf>
- Laerd Dissertation. (2012). Total population sampling: An overview. Retrieved from <http://dissertation.laerd.com/articles/total-population-sampling-an-overview.php>

- Lai, C., Wang, Q., & Huang, X. (2022). The differential interplay of TPACK, teacher beliefs, school culture and professional development with the nature of in-service EFL teachers' technology adoption. *British Journal of Educational Technology*, 53(5), 1389-1411. Retrieved from <https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1111/bjet.13200>
- Liu, Y., Bellibaş, M. Ş., & Gümüş, S. (2021). The effect of instructional leadership and distributed leadership on teacher self-efficacy and job satisfaction: Mediating roles of supportive school culture and teacher collaboration. *Educational Management Administration & Leadership*, 49(3), 430-453. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/1741143220910438>
- MacKinnon, D. P. (2008). Introduction to statistical mediation analysis. New York: Erlbaum.
- Miller, S. (2022). Teacher mindset affects school culture. *Master's Theses & Capstone Projects*. Retrieved from https://nwcommons.nwciowa.edu/cgi/viewcontent.cgi?article=1427&context=education_masters
- Mogashoa, T. (2021). Teachers' understandings of the implementation of the curriculum and assessment policy statement in secondary schools. *Ilkogretim Online*, 20(6), 1507-1521. Retrieved from <https://www.ilkogretim-online.org/fulltext/218-1635671016.pdf>
- Musenze, I. A., Mayende, T. S., Wampande, A. J., Kasango, J., & Emojong, O. R. (2020). Mechanism between perceived organizational support and work engagement: Explanatory role of self-efficacy. *Journal of Economic and Administrative Sciences*, 37(4), 471-495. Retrieved from <https://doi.org/10.1108/JEAS-02-2020-0016>
- Nevenglosky, E. A. (2018). Barriers to effective curriculum implementation (Doctoral dissertation, Walden University). Retrieved from <https://files.eric.ed.gov/fulltext/EJ1203958.pdf>
- Nguyen, T. D., Cannata, M., & Miller, J. (2018). Understanding student behavioral engagement: Importance of student interaction with peers and teachers. *The Journal of Educational Research*, 111(2), 163-174. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/00220671.2016.1220359>
- Özdemir, G., Sahin, S., & Öztürk, N. (2020). Teachers' self-efficacy perceptions in terms of school principal's instructional leadership behaviors. *International Journal of Progressive Education*, 16(1), 25-40. Retrieved from <https://doi.org/10.29329/ijpe.2020.228.3>
- Patidar, J. (2013). *Non experimental research design*. Retrieved from <http://www.slideshare.net/drjayeshpatidar/nonexperimental-research-design>
- Perera H. N., John J. E. (2020). Teachers' self-efficacy beliefs for teaching math: Relations with teacher and student outcomes. *Contemp. Educ. Psychol.* 61, 1–13. doi: 10.1016/j.cedpsych.2020.101842

- Quin, D., Heerde, J. A., & Toumbourou, J. W. (2018). Teacher support within an ecological model of adolescent development: Predictors of school engagement. *Journal of School Psychology, 69*, 1-15. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0022440518300517>
- Roefs, E., Leeman, Y., Oosterheert, I., & Meijer, P. (2021). Teachers' experiences of presence in their daily educational practice. *Education Sciences, 11*(2), 48. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1288324.pdf>
- Saleem, A., Deeba, F., & Naz, F. L. (2020). Role of instructional leadership on teachers' performance at college level. <https://pssr.org.pk/issues/v4/1/role-of-instructional-leadership-on-teachers-performance-at-college-level.pdf>
- Selvaraj, A. M., & Azman, H. (2020). Reframing the effectiveness of feedback in improving teaching and learning achievement. *International Journal of Evaluation and Research in Education, 9*(4), 1055-1062. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1274768.pdf>
- Selvaraj, A. M., Azman, H., & Wahi, W. (2021). Teachers' feedback practice and students' academic achievement: A systematic literature review. *International Journal of Learning, Teaching and Educational Research, 20*(1), 308-322. Retrieved from <https://www.ijlter.org/index.php/ijlter/article/viewFile/3211/pdf>
- Şenol, H., & Lesinger, F. Y. (2018). The relationship between instructional leadership style, trust and school culture. In *leadership. IntechOpen*. <https://www.intechopen.com/chapters/61096>
- Snyder, T. T. (2021). Educational assessments in the COVID-19 era and beyond. *National Academy of Education*. Retrieved from <https://naeducation.org/wp-content/uploads/2021/02/Educational-Assessments-in-the-COVID-19-Era-and-Beyond.pdf>
- Stone, D., & David-Lang, J. (2017). Stop sabotaging feedback. *Educational Leadership, 74*(8), 47-50. Retrieved from <https://www.keaeducation.co.nz/files/Stop-sabotaging-feedback.pdf>
- Sudibjo, N., & Riantini, M. G. D. (2023). Factors affecting teachers' work engagement: The case of private school teachers in Jakarta Metropolitan, Indonesia. *REICE: Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 21*(1), 119-138. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=8833457>
- Trefry, R. G. (2017). *Research methods information: Quantitative research*. Retrieved from https://apus.libguides.com/research_methods_guide/research_methods_quantitative
- Tvedt, M. S., Bru, E., & Idsoe, T. (2021). Perceived teacher support and intentions to quit upper secondary school: Direct, and indirect associations via emotional engagement and boredom. *Scandinavian Journal of Educational Research, 65*(1), 101-122. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/00313831.2019.1659401>

- Vaccaro, D. T., & Sabella, L. D. (2018). Impact on student learning: monitoring student progress. *Journal of Practitioner Research*, 3(1), 5. Retrieved from <https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1070&context=jpr>
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge MA: MIT Press.
- Wagner, C. R. (2006). The school leader's tool for assessing and improving school culture. *Principal Leadership*, 7(4), 41-44. Retrieved from https://www.redorbit.com/news/education/847037/the_school_leaders_tool_for_assessing_and_improving_school_culture/
- Wang, J., Zhang, X., & Zhang, L. J. (2022). Effects of teacher engagement on students' achievement in an online English as a foreign language classroom: The mediating role of autonomous motivation and positive emotions. *Frontiers in Psychology*, 13, 950652. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.950652/full>
- Waters, L. (2017). Visible well-being in schools: The powerful role of instructional leadership. *Australian Educational Leader*, 39(1), 6-10. Retrieved from <https://search.informit.org/doi/abs/10.3316/INFORMIT.774496527078277>
- Zahed-Babelan, A., Koulaei, G., Moeinikia, M., & Sharif, A. (2019). Instructional leadership effects on teachers' work engagement: Roles of school culture, empowerment, and job characteristics. *CEPS Journal*, 9(3), 137-156. Retrieved from https://www.pedocs.de/frontdoor.php?source_opus=18161

Eva B. Nogadas, Raymunda L. Apostol
THE MEDIATING EFFECT OF SCHOOL CULTURE ON THE RELATIONSHIP
BETWEEN INSTRUCTIONAL LEADERSHIP OF SCHOOL HEADS AND TEACHER
ENGAGEMENT OF PUBLIC ELEMENTARY SCHOOL TEACHERS

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).