

Effectiveness of systematic didactic workshops in improving university students' communicative competencies

Teófilo F. Valentín Melgarejo¹, Daniel J. Pariona Cervantes², Isabel A. Delzo Calderón¹, Nora E. Hinostroza Campos¹, Dionicio L. Basilio¹, Pablo L. Valentín Melgarejo¹, Víctor L. Albornoz Dávila¹, Raúl M. Lovatón¹, Pablo L. La Madrid Vivar¹, Josué C. Leandro¹, Shuffer G. Rojas¹, Flaviano A. Zenteno Ruiz¹

¹Faculty of Educational Sciences, Universidad Nacional Daniel Alcides Carrión, Cerro de Pasco, Perú

²Faculty of Economics and Accounting Sciences, Universidad Nacional Daniel Alcides Carrión, Cerro de Pasco, Perú

Article Info

Article history:

Received Dec 27, 2025

Revised Feb 16, 2026

Accepted Feb 23, 2026

Keywords:

Communicative competence

Didactic techniques

Higher education

Oral expression

Reading comprehension

Writing skills

ABSTRACT

The study examined the effectiveness of structured didactic methods in improving communicative competence among 26 undergraduate university students using a pretest–posttest experimental design. The intervention consisted of guided oral presentations, structured debates, dialogic interaction, guided writing with drafting–revision cycles, and scaffolded reading activities based on inferential and critical questioning. These techniques were implemented through a sequence of instructional workshops organized into baseline assessment, didactic intervention, and post-intervention evaluation phases. Data was analyzed using descriptive and inferential statistics, including paired-sample t-tests, effect size estimation (Cohen's d), normalized gain (Hake's g), and 95% confidence intervals (CI) to determine the magnitude and reliability of learning outcomes. The results revealed substantial improvements across all communicative domains after the intervention. At baseline, performance was low to moderate across competencies. In particular, 0.0% in writing indicates that no student met the predefined proficiency threshold at pretest, while reading comprehension showed 11.5% proficiency, and oral expression 19.2%. The performance increased markedly followed by intervention, with posttest scores were 80.8% in oral expression, 69.3% in writing, and 73.1% in reading. Such gains were statistically significant ($p < 0.001$) and had high effect sizes (Cohen's $d = 2.17$ to 2.31). Normalized gain scores ($g = 0.56$ – 0.62) reflected medium-to high-level instructional effectiveness on all competencies. The overlap of statistical results, effect sizes, and learning patterns prove that the intervention is pedagogically effective, and it is relevant to be used in the context of higher education to reinforce the oral, written, and reading abilities with the help of evidence-based teaching methods.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Teófilo F. Valentín Melgarejo

Faculty of Educational Sciences, Universidad Nacional Daniel Alcides Carrión

Cerro de Pasco, Peru

Email: tvalentinm@undac.edu.pe

1. INTRODUCTION

Communication is also one of the core competencies in higher education as it assists students in expressing ideas, communicating effectively in both academic and social aspects and mold up knowledge through the language. Oral and written communicable are important in academic and professional success as well as in life learning [1]. In modern higher-education, communicative performance is now being both considered a measurable learning outcome, as well as a marginalized skill, especially in the competency-

based curriculum and quality-assurance models that focus on measurable student learning [2]. Recent educational evaluation policies have given communication a transversal competence that is associated with academic persistence, employability and institutional accreditation-based on their relevance in many disciplines-has increased its relevance [3], [4]. Nevertheless, in spite of such acknowledgement, there is always some evidence that a lot of university students lack competence in the ability to express ideas verbally, constructive scholarly writing, and understand complex readings, particularly in learning settings where high-order cognitive processing is required [5], [6].

Theoretically, communicative competence can be seen as a multidimensional construct that combines linguistic, cognitive, pragmatic, and sociocultural aspects that enable individuals to comprehend, create as well as negotiate meaning in various [7], [8]. This construct is typically operationalized in educational research in three interconnected aspects oral expression (spoken interaction, argumentation, and presentation), written expression (textual organization, coherence and writing conventions of academic texts), reading comprehension (literal, inferential and critical understanding of texts) [9], [10] that together represent the core mechanisms through which students' access, construct, and communicate academic knowledge.

Oral expression indicates how the learners are capable of expressing their ideas fluently, carry on a dialogue format, and justify arguments within academic situations that is critical to their functioning in classroom discourse and evaluation activities. Written expressions reflect the ability to organize ideas rationally, to use disciplinary leisure, and follow the rules of the scholarly community, which makes it one of the focuses of the higher-order cognitive processing and knowledge synthesis. Comprehension, in its turn, helps students to decode, interpret, and critically analyze academic texts, which is the basis of information processing, conceptual understanding, and arguments based on evidence. More importantly, these dimensions act in a reciprocal and dynamic way: academic writing is reinforced by reading, conceptual knowledge is reinforced by writing, and oral interaction is reinforced by both understanding and expression, to create a whole communicative performance as opposed to a set of disjointed abilities. These dimensions are dynamically interacting during the learning processes and they, as a whole, contribute to knowledge building and attention to performance. Nevertheless, several studies have revealed that university students also have long-lasting challenges especially in academic writing format, clarity of arguments, and critical reading, which have adverse impacts on the learning processes and prevent any meaningful interaction with disciplinary material [11], [12].

An increasing body of literature links these shortcomings to the preponderance of the traditional modes of teaching which place more emphasis on content delivery than on learner interaction [13], [14]. A lecture-driven teaching approach usually leaves little room to engage in interaction, receive feedback, and practice communication, which leads to a separated skills learning and shallow learning. Conversely, modern instructional models are based on student-focused, active, and competence-based education that incorporates team learning, ongoing assessment, and practice [15], [16]. In this context, didactic techniques are thought of as purposefully planned instructional processes that organize the learning processes to ensure there is interaction, scaffolding, reflection, and feedback. Examples are guided oral presentations, guided debates, dialogic queries, draft revision writing, and scaffold reading on inferential and critical questions and prompts [17], [18]. These methods act as mediational actions between the instructional objectives and the student achievement and allow the learners to actively build meaning as opposed to passively receiving information. The didactic techniques can be used to promote gradual acquisition of skills by sequencing guided practice tasks with independent application, as well as enable instructors to evaluate learning by using formative feedback. Besides, when systematically used, they promote metacognitive awareness as students become aware of their communicative processes, their strengths and weaknesses, and modify the strategies to facilitate them. When applied in a coherent manner, these techniques provide an instructional context where oral interaction, written production, and reading comprehension are mutually reinforced, leading to enduring and transferable communicative competence. Empirical research shows that these techniques can lead to improved motivation, autonomy, and lasting communicative performance even at the various levels of education where they are done in a systematic manner.

Despite the growing international consensus on using active and guided instruction methods as effective towards language and communication development [19], [20], most of previous studies are concerned with individual skills (e.g., writing or reading only), short-term interventions, or descriptive studies. Limited studies have assessed the combined impact of such didactic methods on oral, written, and reading aspects of learning or on a combination of these aspects at the same time, with indicators of strong strength, namely effect sizes and normalized learning gains. This is a particularly apparent limitation in Latin American higher education, where the contextual, institutional, and resource conditions influence teaching activities. The situation in the Peruvian public-university case, where internal diagnostic testing and institutional reports have shown poor achievement scores in academic writing and reading comprehension, is particularly in the first years of study, which is structural in nature when it comes to education and humanities-related programs.

The identified situation shows a definite research gap in terms of the absence of empirically tested instructional models that would illustrate how systematic and structured contributions to more profound didactic methods could be used to reinforce communicative performance in tertiary education. Although the notion of communicative competence has been previously recognized with regard to its conceptual significance, only a limited number of studies have brought about quantitative evidence of instructional effectiveness in terms of pretest- posttest comparison, confidence intervals (CI), and learning-gain criteria. Lack of such evidence restrains transfer of pedagogical theory to practical teaching activities and curricula development and teaching decision making in universities. In the absence of empirically tested models that have strong learning indicators, teachers tend to use intuitively informed or disjointed approaches that are not systematically aligned to the learning outcomes and assessment standards. Such an opening diminishes the success of curriculum planning, undermines the process of evaluation based on evidence and prevents the institutionalization of pedagogical innovations that can enhance the level of communicative performance. As a result, universities experience challenges with the establishment of coherent instructional models that would guarantee the consistent creation of oral, written, and reading skills throughout the courses and programs. This gap has been identified as one of the key areas that should be dealt with in order to enhance the process of educational evaluation and the quality of instruction.

In order to address this demand, the current study will set out to examine the impact of didactic methods meant to be structured on the acquisition of communicative competence amongst university students who are studying the course of communication and literature at the Universidad Nacional Daniel Alcides Carrion. The study employs a one-group pretest posttest quantitative-based research design to assess the effectiveness of the change in oral expression, written expression, and reading comprehension after a series of instructional workshops that are planned systematically. The originality of the research is integrated methodology that involves the combination of various didactic strategies and strict statistical analysis with the effect size estimation and normalized learning gains to offer empirical data on the effect of instruction. The current study, in contrast with the previous ones which focus on separate communicative abilities, or in which descriptive results are the main focus, considers oral expression, written expression and reading comprehension as simultaneous evaluation in one instructional model. In addition, it is possible to use complementary statistical indicators, thus being able to interpret the magnitude of the learning gains and their educational relevance of the learning gains much more precisely, which will further enhance the validity of the instructional conclusions. This synthesized model adds to the replicable and evaluation-focused framework that will improve the presence of data-driven decision-making in higher education and complement the current pedagogical studies. The results have both educational research and practical implications as they provide a teaching method that can be replicated and shown to be evidence-based, as well as contribute to advancing communicative competence as a learning outcome in higher education.

2. METHOD

Explaining the research chronologically, including the research design, research procedures (in the form of algorithms, pseudocode, or other), how to test, and data. The research was carried out in the framework of a quantitative approach with qualitative supplementary aspects, where a pre-experimental, one group pretest-posttest design was used. The choice of this design aimed at determining how the didactic techniques influence the development of the communicative competencies in university students by comparing the level of performance pre- and post-intervention. The quantitative element enabled the objective assessment of the learning gains whereas the qualitative element facilitated the explanation of the behavioral changes realized in the teaching process. The research was conducted in the orientation of applied research because it aimed at addressing a practical educational issue by applying pedagogical strategies that would help in enhancing communicative competence. The study was explanatory level, as it investigated the cause and effect correlation between didactic techniques (independent variable) and communicative competencies (dependent variable), as shown in Figure 1.

2.1. Participants and sampling

The study population consisted of 126 students enrolled in the communication and literature course of the Faculty of Education at the Universidad Nacional Daniel Alcides Carrion (Peru). From this population, a purposive sample of 26 fourth-semester students was selected to participate in the intervention. Purposive sampling was employed because the study followed a pre-experimental, one-group pretest-posttest design that required continuous participation in all instructional workshops and assessments. Only students who met the inclusion criteria regular course attendance, availability throughout the intervention period, and completion of both pretest and posttest were selected. This sampling strategy was appropriate for the instructional and exploratory nature of the study, as the primary objective was to examine within-group learning changes rather than to estimate population parameters. Methodological literature supports the use of

small, purposively selected samples in pretest–posttest designs when effect sizes and learning gains are used as primary indicators of instructional impact [21], [22]. It is, however, realized that the sampling is not probability based and the sample size is also limited, which limits the generalizability of the results. The findings then must not be interpreted as a demonstration of instructional effectiveness in a particular educational setting but as a reflection of all the students.

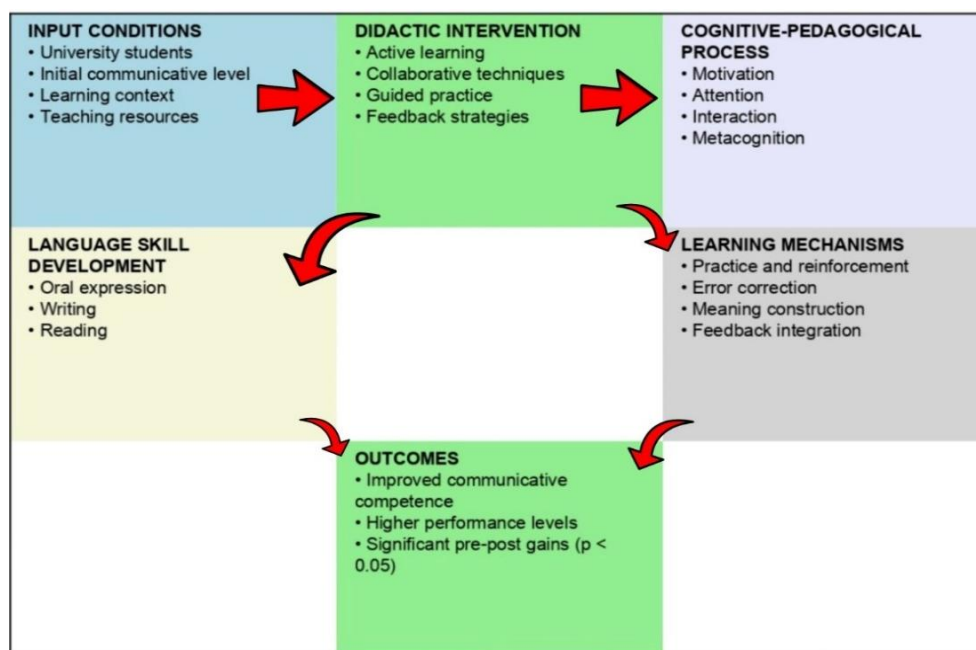


Figure 1. Conceptual model of didactic techniques on communicative competence development

2.2. Intervention design

The systematic use of didactic methods with the orientation to the development of communicative competence was the intervention that was carried out in a structured teaching time. The intervention involved: i) methods of oral expressions (guided oral presentations, dialogic interaction, and structured debates); ii) writing development techniques (writing and revision cycles and text organization exercises); and iii) reading comprehension techniques (guided reading, inferential questioning, and critical analysis activities). Three instructional workshops addressed all the competences and were founded on the principles of active learning, scaffolding, and formative feedback. The teaching lessons were carried out in an organized flow: i) activation of previous knowledge; ii) guided practice; iii) collaborative application; and iv) feedback and reflection. This organization provided a pedagogical consistency and provided the opportunity of gradual development of communication skills.

2.3. Instruments and data collection

2.3.1. Quantitative instrument

The 17-item self-assessment questionnaire was used to collect data and assessed the perceived communicative competence in three dimensions oral expression, written expression, and reading comprehension of students. The tool made the students consider the frequency of the manifestation of certain communicative behaviors in the academic settings, which is why it could be deemed as suitable to measure the perceived competence development prior to and after the intervention. The 4-point Likert scale was used to measure the responses: never, sometimes, almost always, and always. It was also consistent with the fact that the scope of the study was based on the research on communicative performance awareness and self-reflection among the learners, which are essential elements of competence-based education. The instrument was tested by the expert judgment, as the content relevance, clarity, and coherence were determined. Cronbach's alpha was found to be 0.908, which was a good internal consistency. Although self-assessment instruments may be influenced by subjective perception, their use is widely accepted in educational research when the objective is to examine perceived learning gains and instructional impact over time.

2.4. Qualitative support

To establish the student involvement, patterns of interacting and the engagement with instructional activities, complementary qualitative observations were made during classroom sessions. These were observations that were used to interpret the quantitative findings and triangulate results.

2.5. Procedure

The experiment was conducted in three-phase organized research. At the pretest level, a communicative competence questionnaire was administered on the students which was used to determine the baseline levels of performance in oral expression, written communication and reading comprehension. This baseline assessment served as a diagnostic benchmark to determine the initial competencies of the students and to assure the comparability of the end results with the results at the beginning of the intervention. Didactic techniques were adopted in the intervention phase by conducting a series of structured and well-planned workshops. The instructional tasks were particularly developed to reinforce communicative competencies, as specific strategies were based on the focus on oral expression, written production, and reading comprehension. The intervention was focused on active engagement and guided practice, as well as on the elements of integration of pedagogical strategies in accordance with communicative learning goals.

During the posttest stage, the identical assessment tool was reread to assess a learning acquisition and determine the intervention effectiveness. The procedures of data collection were the same at all stages to attain consistency, reliability and validity of the findings. Such methodological rigor enabled an effective comparison of the results in pretest and posttest as well as enabling the analysis of the instructional influence of the didactic techniques used.

2.6. Data analysis

2.6.1. Descriptive analysis

The descriptive statistics were used to summarize and describe the level of performance of the students in the measured dimensions. The average performance was presented in terms of the measures of central tendency, especially the mean, whereas the standard deviation conveyed the data concerning the dispersion and variability of the scores among the participants. Besides these, frequency counts and percentage distribution were made to characterize the responses distribution as well as to make it easy to interpret the pattern of performance across categories. These statistical indicators enabled the simple and detailed description of the data before inferential analysis.

2.6.2. Inferential analysis

Before hypothesis testing, data normality was assessed using the Shapiro–Wilk test. Although the normality test suggested acceptable distribution ($p > 0.05$), the analysis was conducted using the non-parametric Wilcoxon signed-rank test to ensure robustness given the small sample size ($n=26$) and ordinal nature of Likert-scale data. Accordingly, differences between pretest and posttest scores were evaluated using z-statistics, along with p-values and effect sizes (r). Effect sizes were interpreted following standard thresholds (small=0.1, medium=0.3, large=0.5). Additionally, Cohen's d and normalized gain (Hake's g) were computed to estimate the magnitude and instructional effectiveness of learning outcomes.

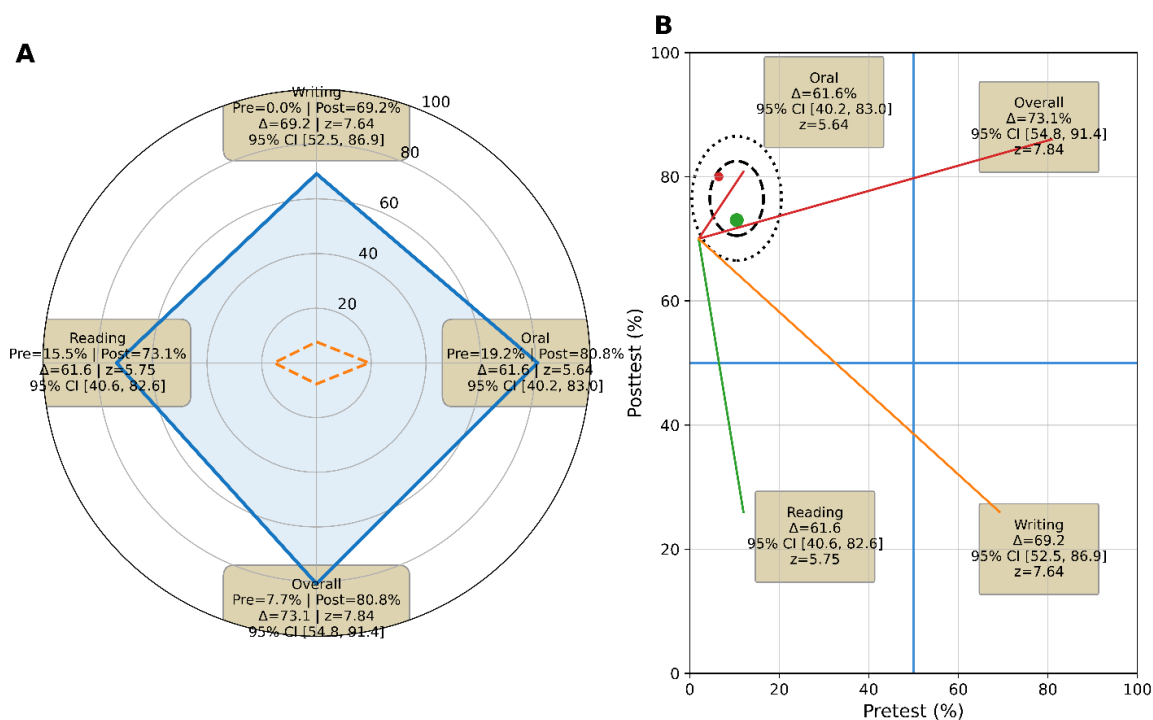
3. RESULTS

The findings indicate that there is a significant improvement in communicative skills after the use of didactic techniques, and there are steady increases in all dimensions that were assessed. Students were found to have low to moderate performance levels at baseline, especially in writing (pre=0.0%) and reading (pre=11.5%), but the oral expressions were somewhat higher at baseline (pre=19.2%). Pre=0.0% of writing at the baseline does not mean that no student was at the predetermined level of proficiency according to Likert-scale criteria, but rather that no student scored above the specified level of proficiency. In particular, the answers of all the students in the writing dimension were clustering in the low categories (never and sometimes), which implies that the main characteristics of the behaviors like the ability to organize ideas in a coherent way, following the rules of academic writing, and revising the written work were always missing during the pretest phase.

The distribution is a reflection of a uniformly low perceived writing competence before the intervention and offers a significant point of reference with which to understand later increases. All the competencies increased significantly after the intervention with the posttest results of 80.8 percent in oral expression, 69.2% in writing, 73.1% in reading and 80.8% in overall communicative competence. These gains correspond to statistically significant improvements, with large effect sizes reflected in the standardized values (oral expression: $\Delta=61.6\%$, $z=5.64$, $p<0.001$; writing: $\Delta=69.2\%$, $z=7.64$, $p<0.001$; reading: $\Delta=61.6\%$, $z=5.75$, $p<0.001$), indicating a strong impact of the didactic intervention on students' communicative

development, as presented in Figure 2. The Wilcoxon signed-rank test revealed statistically significant improvements across all communicative dimensions ($p < 0.001$).

The multidimensional trend of improvement also shows that the intervention did not stimulate one skill independently but encouraged an equal progress in communicative areas. The similarity of high posttest scores and small CI (overall competence: 95% CI [54.8, 91.4]) is a sign of effectiveness and consistency of the instructional approach. The graphical representation shows that there is a sharp change in the low performance areas towards high performance which is an indicator of a strong learning pattern. This trend supports the assumption that sequential didactic strategies incorporating guided practice, interaction, and feedback help to guide meaningful learning and enhance oral, written, and reading skills to the same extent, which contributes to the pedagogical validity of the intervention, as in Figure 2.



Note: (A) Presentation of the percentages of pretest and posttest of communicative competencies (oral expression, writing, reading, and overall competency). This figure statistical visualization based on the quadrant-based methodology of competency distribution.

Figure 2. Pretest-posttest comparison of communicative competencies that have statistically significant improvement after application of didactic techniques

The analysis shows that there was a distinct and consistent development in the communicative competence after the didactic intervention because of the multidimensional learning patterns that were realized in the competencies. There was a significant improvement in overall competence, oral expression, writing and reading performance between pretest and posttest with mean performance improving to around 3.78, 3.81, 3.65, and 3.11, respectively. These gains are a consistent upward learning trend and not an accidental increment in gains, and the instructional strategy had a systematic impact on the student's communicative development. The gradual nature of the learning surface also indicates that the development was gradual and structured, which supports the process of the didactic techniques implemented in the development of higher-order communicative skills, as in Figure 2. Moreover, the response-shift analysis shows that the learning gains were not only quantitative but also qualitative as indicated in redistributing the students to a higher performance category. The magnitude of improvement was strongest in writing ($\Delta \approx 0.61$) and overall competence ($\Delta \approx 0.66$), followed by oral expression ($\Delta \approx 0.57$) and reading ($\Delta \approx 0.63$). These values demonstrate a significant shift in the response levels between the lower ones and almost always and always, which proves that the intervention had significant behavioral and cognitive impacts. The fact that the improvement was more concentrated in the areas with higher responses implies that not only students raised their scores but also made their communicative performance more consistent and confident. Collectively, these results provide robust evidence that the didactic techniques implemented in the study generated a strong and multidimensional impact on communicative competence development, as shown in Figure 3. Figure 3 (a)

shows the mean pretest and posttest scores for overall communicative competence, oral expression, written expression, and reading comprehension. Figure 3 (b) shows distributional shift of student responses across Likert-scale categories from pretest to posttest.

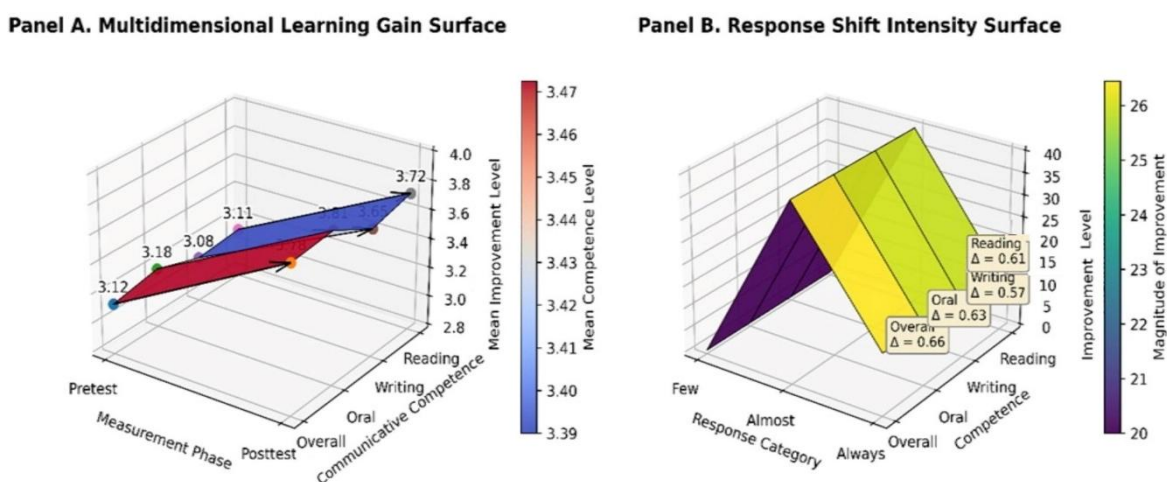


Figure 3. Dimensional visualization of communicative competence development among variables: (a) multidimensional learning gain surface and (b) response shift intensity surface

The findings elaborated in the three panels show consistent and well-developed tendency of the enhancement of communicative competence after didactic intervention. The learning patterns in Panel A indicate steady increase in the pretest-to-posttest in all the competencies with the mean scores increasing to more than 45-46 on baseline to scores of over 55 in posttest period. The similar positive patterns of overall competence, oral expression, writing, and reading reveal that learning gains were not local, but systematic, pointing to the fact that the intervention did not favor the imbalanced development of communicative domains. It is also a progressive trend, indicating not only a quantitative but also a learning consolidation, since all competencies were on a similar growth curve, which supports the success of the instructional design. Panel B complements these findings by quantifying learning efficiency through normalized gain (Hake's g). The values obtained ranged from 0.56 to 0.62, corresponding to medium-to-high learning gains, with the highest effects observed in overall competence ($g=0.62$) and oral expression ($g=0.61$). There were also significant improvements in writing ($g=0.56$) and reading ($g=0.59$) and this suggests that the intervention was very and equally impactful on the skills, as seen in Figure 4. These findings are further corroborated by Panel C where the percentage improvement is depicted, which went past 23 in all competencies and 25.4 in overall performance. The overlapping of the trajectory analysis, normalized gain and percentage improvement offer convergent evidence that the didactic techniques resulted into meaningful, sustained and pedagogically significant changes in communicative competence in all of the dimensions assessed. Figure 4 (a) demonstrates the learning patterns between pretest and posttest scores in overall, oral, writing and reading competencies. Figure 4 (b) shows the normalized learning gains (g) of Hake, which shows the success of the instructional strategy. In Figure 4 (c), the improvement in various competencies is presented as a percentage, and it demonstrates the extent to which the competencies have improved since the intervention.

The impact of the intervention is well established based on the analysis of the effect size which shows that the effect is strong and consistent in all communicative competencies. The obtained effect sizes are greater than the traditional cut-off value of a large effect ($d \geq 0.80$), meaning that the improvement identified is educational, as well as statistically significant. The strongest effect is demonstrated by overall communicative competence ($d \approx 2.31$), writing ($d \approx 2.31$), reading ($d \approx 2.28$), and oral expressions have very high effect size as well ($d \approx 2.17$), as shown in Figure 5. These values show that there was a significant change in student performance that can be credited to didactic intervention, which was way beyond what would be anticipated of natural progression or exposure to instruction. These findings are also strong because of the CI of every effect size. The confidence ranges under all competencies are far above the level of large effects, which proves high accuracy and consistency of the effects of the intervention. The concentration of the effect sizes on the top end indicates that the didactic strategies used were effective in the oral, written, and reading aspects and not in one of the skills alone. This tendency helps to draw the conclusion that the intervention resulted in a significant, generalized increase in communicative competence, and proves its strong pedagogical efficiency and its possible relevance in the wider educational framework, as in Figure 5.

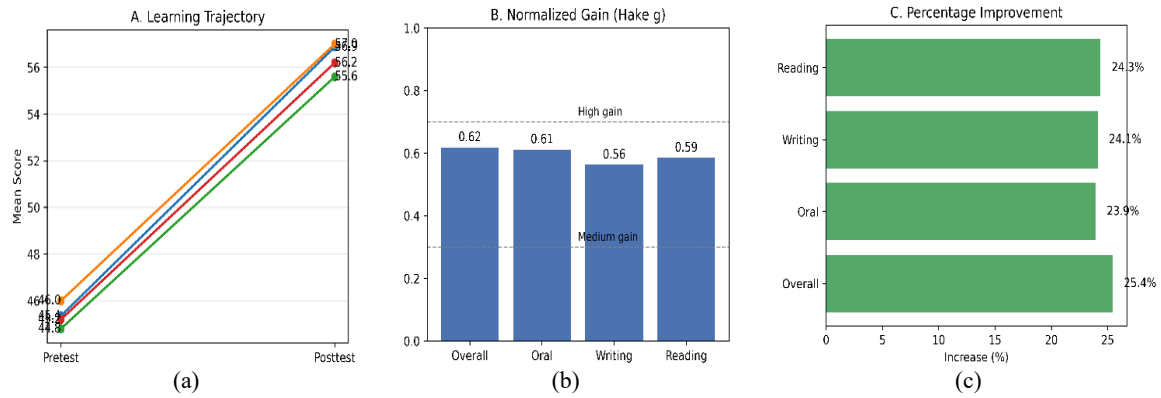
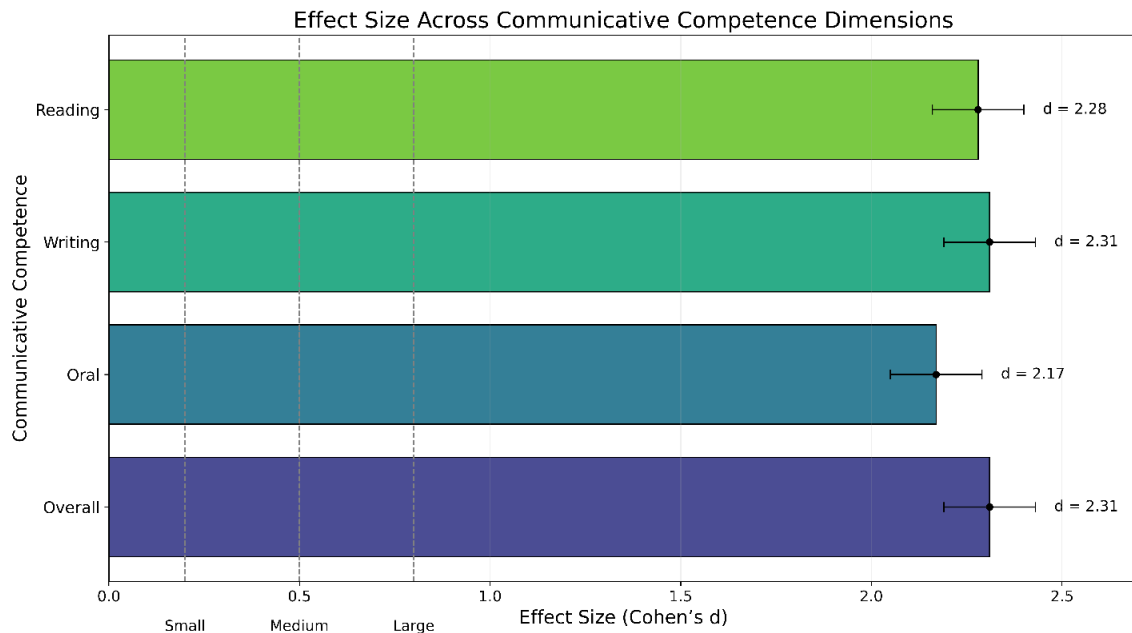


Figure 4. The development of communicative competence after the didactic intervention: (a) pretest-posttest learning curve in terms of overall, oral, writing, and reading competencies, (b) Hake’s g gains through normalized learning, and (c) percentage improvement by competency



Note: Horizontal bars represent Cohen’s *d* values with corresponding CI for overall, oral, writing, and reading competencies. Dashed reference lines indicate conventional thresholds for small (0.20), medium (0.50), and large (0.80) effects, showing that the intervention produced predominantly medium-to-large improvements across all competencies.

Figure 5. Effect magnitude of the didactic intervention on communicative competencies

4. DISCUSSION

The research study provides a good empirical evidence that systematic application of didactic techniques can do a lot to the development of communicative skills among university students. The pretest-after test comparison revealed that the instructional intervention resulted in significant educational effects on all the areas of oral expression, writing, reading, and general communicative competency instead of marginal performance change effects. In the case of communicative competence, the levels at the baseline were low and moderate, particularly in writing and reading as it conforms to the results of Bastos [23] and Guzmán-Simón *et al.* [24], which demonstrated the persistence of the weakness in the higher-level language skills. The result of posttest scores (69% and up on all competencies) and posttest scores (over 80% on oral expression and overall competence) were observed to be strong, as in Figure 1. In addition to the numeric growth of posttest scores, the shift in the low performance at the beginning of the test to the higher levels of performance indicates a qualitative change in the communicative behavior of students. Specifically, the transition to higher Likert scales (never and sometimes to almost always and always) could indicate a better

self-control, awareness of the task, and strategic application of language in the academic life. This means that the intervention not only led to competence acquisition but also enhanced stability and purpose in communicative practice.

These effect sizes are unusually large (Cohen's $d \approx 2.17-2.31$), but one should take them with due caution. A number of factors contributing to the inflation of the estimates of the effect size could have been methodological in nature, such as a lack of a control group, pre-experimental one-group design, and the relatively small sample population. Moreover, the fact that the participants were aware of participating in an instructional intervention might have created a Hawthorne effect, which enhanced the involvement and self-reported improvement. These aspects do not nullify the findings but indicate that the resultant effects are upper-bound estimates of instructional impacts instead of conclusive magnitude of causation. Further, such greatness of the effects could also be attributed to relative homogeneity of the instructional situation, in which all respondents were subjected to identical amount of content, instructor, and evaluation standard. This kind of situation is likely to decrease within-group variability, which exaggerates standardized effect size estimates. Therefore, even though the results could be used in order to support the high instructional effectiveness, their interpretation should prioritize on instructional potential, as opposed to clear magnitude of effect.

The magnitude and maintenance of the increase in the competencies shows that the intervention was part of the overall acquisition of communication skills rather than the selective acquisition of skills in the single area. This multi-dimensional tendency supports those theoretical perspectives which suppose that communicative competence is a multifunctional construct; it involves the cognitive, linguistic, and social aspects [25]. The identified shifts towards the more preferable performance types and statistically significant standardized effects (z values 5.64-7.64, $p < 0.001$) suggest that the didactic methods proved effective in promoting the learning of the skills and also the performance consolidation. Similar findings have been reported that has paid attention to the active and guided teaching methods that lead to the enhanced involvement of students and encourage the application of language to the real-life scenarios [26], [27].

The extent and regularity of the recorded gains can be attributed further by the combined character of the workshops of combining oral expression, written expression and reading comprehension in a deliberate manner instead of addressing them as independent abilities. Cognitive input of reading activities was applied as input to writing activities whereby the students had to interpret, synthesize and critique texts before they could produce any written response. These written works were then used to make an oral presentation, debate and provoke dialogic conversations to further strengthen conceptual learning by verbalizing it. This circularity of integration enabled every communicative dimension to reinforce and maintain the others which had a cumulative learning effect, consistent with the socio-constructivist and competence-based learning models. More importantly, the workshops did not consider communicative skills as the separate instructional goals but as the processes that mutually reinforced each other. The comprehension activities of reading created conceptual input, the writing activities involved the process of transforming and organizing the input, and the oral activities involved the process of defending ideas written publicly. It was this instructional congruence that provided repeated inter-modal transfer opportunities and probably exaggerated the learning outcomes and minimized fragmentation of skills.

The multidimensional and trajectory-based analyses in Figures 2 and 3 give further insight on the learning process as they prove that the gains were gradual and organized instead of sudden and discontinuous. The mean competence scores improved regularly between pretest and posttest in all domains, and this represented a coherent learning process that is consistent with the concepts of constructivist and socio-cognitive learning theories [28]. The normalized gain values ($g = 0.562$ to 0.62) are medium to high in point, this implies that there was high instructional efficiency and much better than what is usually reported in the traditional lecture-based university teaching. These findings are in line with the past research indicating that problem-based learning, collaborative methods, and explicit instructional scaffolding are very effective in enhancing communicative performance [29].

Notably, the response-shift analysis shows that not only quantitative but also qualitative gains were obtained in learning. There was an overall shift to the high response categories (never) as the students left the intermediate response categories (almost always) and showed more confidence, autonomy, and stability in the communicative behavior, which reflected higher levels of confidence, independence, and stability. This qualitative change is especially applicable in the context of higher education, where communicative competence is directly related to academic performance, career preparation, and socialization [30], [31]. The fact that the improvement in oral, written, and reading abilities has been balanced also contributes to the assumption that communicative competence can be best developed when instruction is provided as an integrated one as opposed to the training of the skills in bits.

In Figure 4, the analysis of the effect size is presented and it provides strong evidence of the practical and educational sense of the intervention. The effect sizes (Cohen d) are very high (Cohen d lies between 2.17 and 2.31) which is highly more than the traditional standard and indicates that the improvements that have been identified are substantial changes in the performance of students. Such

magnitudes are not so widespread in the educational research and indicate the strength of didactic model applied in the present research. The low confidence interval of these effects is yet another reason that the findings are strong and valid and that the intervention brought the same benefits to a sample of participants. Other studies of active and communicative methodology have shown also strong effects, but often on lesser scale, which recommends the peculiar influence of the methodological structure didactical approach applied in the present case [32]–[34]. These results are in line with previous studies which show that active and guided instructional methods are more effective in promoting communicative performance as compared to the usual lecture-based instructional methods [26], [29], [34].

Nevertheless, the effect sizes in the current study are larger than what is generally found in similar interventions in higher education as the effect sizes are generally moderate to large. This disparity can be explained by the systematic organization of the instructional methods, the clear correspondence of instructional tasks to the assessment aspects, and the heavy emphasis on communicative practice in the situation of a specific course. Accordingly, the paper expands on previous literature as it offers quantitative data on the possible effect of an integrated didactic model within a Latin American institutional context of a public-university. In contrast to the earlier literature where moderate effects are reported after using any of the isolated instructional strategies, the current results can indicate the possibility of synergistic effects when multiple didactic techniques are incorporated within a unified, coherent framework. This confirms recent critiques within the literature that propose integrative instructional paradigms wherein pedagogy, assessment, and learning outcomes are aligned instead of making use of interventions based on single methods [35].

Consequently, the triangulated evidence shows high effectiveness of the didactic techniques that have been employed in enhancing communicative competence because descriptive statistics, learning curves, normalized improvement were converged, and the size of effects estimated. These findings correspond to the existing pedagogical models which note the interaction, guided practice, feedback, and learner-centered models as the most effective elements of developing competence [35], [36]. Besides this, the results also highlight the potential of such practices in the treatment of chronic shortages of communicative skills among the population in the universities, particularly where language and communication are core academic and professional competencies. This study demonstrates that well designed and strategically introduced didactic means will lead to high, consistent, and educationally significant communication competence improvement among university learners. The solidity and soundness of the results explain the rationale behind the inclusion of these instructional habits in the curriculum of post-secondary education institutions and supports their applicability in the areas of improving academic performance and labor market preparedness. The given research should be formulated to longitudinal designs, control-group research, and application to other disciplinary settings to prove the validity of the given instructional model and generalize it even further. These restrictions suggest that the results could only be taken as the sign of the instructional feasibility and efficiency in a particular pedagogical context, and not as the universally applicable results. The findings can therefore be interpreted as a basis of further experimental confirmation and not as definite evidence of causal superiority of this technique compared to other methods of instruction.

4.1. Limitations and impact on interpretation

Although it contributed to the study, there are a number of limitations to the study that need to be taken into account when reading the results. This relates to the use of a non-probabilistic and purposive sample that restricts generalization of the results to the general context of instruction. The use of a self-evaluation tool can also create bias in the responses because the perceived competence does not necessarily represent the actual performance that is measured objectively. Moreover, there is no control group because the lack of control group limits causal inference. To confirm the current findings and further their investigation in the future, randomized or quasi-experimental designs, bigger sample, and complementary performance-based measures should be used.

5. CONCLUSION

The present study indicates that there is a decisive and stable positive tendency in the formation of communicative competence among the students of higher education institutions after a complex didactic intervention is carried out in a structured and integrated way. Although the pre-experimental one group pretest posttest design does not allow making strong causal statements, the statistically significant gains, the high learning gains as well as the high effect sizes indicate that the intervention had some education value in the studied situation. The logical integration of reading comprehension, written expression and oral interaction into single sequence of teaching were some of the factors that led to balanced development in communicative aspects. Also, the interpretive power of the quantitative data is supported by qualitative observations in classrooms where the teacher highlights a higher level of interaction, oral participation

confidence, and writing autonomy. Although such promising findings, small purposive sample and the use of self-assessment measures have limitations to generalizability and might not sufficiently represent the objective changes in performance. The results are thus supposed to be exploratory and contextual. The research will need to include controlled or quasi-experimental design with larger, probabilistically selected samples and performance-based evaluation instruments to increase the internal and external validity in future research. Moreover, the analysis of how such integrated didactic models could be employed in the digital and hybrid settings would also be pertinent to the investigation of the scalable, evidence-based approach in enhancing communicative competence in various higher-education settings.

ACKNOWLEDGMENTS

All the authors are highly thankful to the Department of Communication and Literature, Faculty of Education Sciences, Universidad Nacional Daniel Alcides Carrión Peru for their moral support.

FUNDING INFORMATION

Authors state no funding involved.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Teófilo F. Valentín Melgarejo	✓	✓	✓	✓	✓	✓		✓	✓	✓				✓
Daniel J. Pariona Cervantes		✓			✓	✓		✓	✓	✓	✓	✓		
Isabel A. Delzo Calderón	✓		✓	✓		✓	✓			✓	✓		✓	✓
Nora E. Hinostroza Campos	✓		✓		✓		✓			✓		✓		
Dionicio L. Basilio		✓		✓		✓			✓					
Pablo L. Valentín Melgarejo	✓		✓		✓		✓		✓	✓		✓		✓
Víctor L. Albornoz Dávila	✓		✓			✓			✓			✓		
Raúl M. Lovatón	✓				✓			✓		✓	✓		✓	✓
Pablo L. La Madrid Vivar	✓	✓	✓		✓				✓	✓	✓		✓	
Josué C. Leandro	✓		✓		✓		✓		✓	✓		✓		✓
Shuffer G. Rojas	✓		✓			✓			✓			✓		
Flaviano A. Zenteno Ruiz		✓		✓	✓	✓		✓		✓		✓		✓

C : **C**onceptualization

M : **M**ethodology

So : **S**oftware

Va : **V**alidation

Fo : **F**ormal analysis

I : **I**nvestigation

R : **R**esources

D : **D**ata Curation

O : Writing - **O**riginal Draft

E : Writing - Review & **E**ding

Vi : **V**isualization

Su : **S**upervision

P : **P**roject administration

Fu : **F**unding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

The research related to human use has been complied with all the relevant national regulations and institutional policies in accordance with the tenets of the Helsinki Declaration and has been approved by the authors' institutional review board or equivalent committee.

DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author, [TFVM], upon reasonable request.




REFERENCES

- [1] R. González-Fernández, A. Ruiz-Cabezas, M. C. M. Domínguez, A. B. Subía-Álava, and J. L. D. Salazar, "Teachers' teaching and professional competences assessment," *Evaluation and Program Planning*, vol. 103, p. 102396, Apr. 2024, doi: 10.1016/j.evalprogplan.2023.102396.
- [2] T. Tuononen and A. Parpala, "The role of academic competences and learning processes in predicting bachelor's and master's thesis grades," *Studies in Educational Evaluation*, vol. 70, p. 101001, Sep. 2021, doi: 10.1016/j.stueduc.2021.101001.
- [3] Á. R. López, J. E. Souto, and M. L. A. Noblejas, "Improving teaching capacity to increase student achievement: the key role of communication competences in higher education," *Studies in Educational Evaluation*, vol. 60, pp. 205–213, Mar. 2019, doi: 10.1016/j.stueduc.2018.10.002.
- [4] N. Guskova and E. Golubovskaya, "Enhancement of academic performance through developing cross-cultural communicative competence: a case study of students majoring in economics," *Journal of Language and Education*, vol. 9, no. 1, pp. 76–88, Mar. 2023, doi: 10.17323/jle.2023.13989.
- [5] A. Mahmoud, "Students' perceptions of silence, wait time, and participation in EFL class-rooms," *Research Studies in English Language Teaching and Learning*, vol. 4, no. 1, pp. 685–704, Jan. 2026, doi: 10.62583/rselt.v4i1.122.
- [6] D. Hidayati, "Assessment of project-based learning: evaluating its impact on students' writing proficiency and academic outcomes," *English Language and Literature in Education Journal*, vol. 1, no. 1, pp. 1–11, 2023, doi: 10.63011/ep6nxx37.
- [7] V. T. Laughlin, J. Wain, and J. Schmidgall, "Defining and operationalizing the construct of pragmatic competence: review and recommendations," *ETS Research Report Series*, vol. 2015, no. 1, pp. 1–43, Jun. 2015, doi: 10.1002/ets2.12053.
- [8] S. Whyte, "Revisiting communicative competence in the teaching and assessment of language for specific purposes," *Language Education & Assessment*, vol. 2, no. 1, pp. 1–19, Apr. 2019, doi: 10.29140/lea.v2n1.33.
- [9] X. Han, J. Yao, L. Wang, and J. Zhang, "Individual complex problem-solving performance in a team context: the role of two levels of psychological capital," *Acta Psychologica*, vol. 262, p. 106043, Feb. 2026, doi: 10.1016/j.actpsy.2025.106043.
- [10] A. W. Li and S. Graham, "How reliable and valid is peer evaluation in adolescents' L2 argumentative writing?" *Assessing Writing*, vol. 67, p. 100992, Jan. 2026, doi: 10.1016/j.asw.2025.100992.
- [11] H. Ahmad and S. R. Shah, "Teacher agency and professional development: a study on Cambridge English teacher program in the Arabian Gulf," *Cogent Education*, vol. 9, no. 1, p. 2080352, Dec. 2022, doi: 10.1080/2331186X.2022.2080352.
- [12] J. Lu, "The development of EFL teacher agency for research in a domestic visiting scholar program in China: a case study," *Acta Psychologica*, vol. 262, p. 106161, Feb. 2026, doi: 10.1016/j.actpsy.2025.106161.
- [13] L. Zhang, J. Li, and L. Tsung, "Activity systems in transition: GenAI-mediated thesis writing strategies and contradictions among Chinese doctoral students in Australia," *System*, vol. 138, p. 104002, Apr. 2026, doi: 10.1016/j.system.2026.104002.
- [14] M. Alfaleh, "Sustainable AI-driven assessment in higher education: a systematic review of fairness, transparency, pedagogical innovation, and governance," *Sustainability*, vol. 18, no. 2, p. 785, Jan. 2026, doi: 10.3390/su18020785.
- [15] Y. Yau, Y. C. Shen, and L. B. Hooi, "Leveraging human pose estimation for diagnostic feedback: action research on instructional mediation and sustainable learning in coach education," *Acta Psychologica*, vol. 263, p. 106128, Mar. 2026, doi: 10.1016/j.actpsy.2025.106128.
- [16] H. Kazemy, A. Ravari, Z. Kamiab, F. Iranmanesh, and T. Mirzaei, "Integrating AI-supported adaptive learning with cooperative jigsaw strategy for generation Z nursing students: a mixed-methods study," *Next Research*, vol. 6, p. 101426, Apr. 2026, doi: 10.1016/j.nexres.2026.101426.
- [17] M.-J. DePalma and K. P. Alexander, "Harnessing writers' potential through distributed collaboration: a pedagogical approach for supporting student learning in multimodal composition," *System*, vol. 77, pp. 39–49, Oct. 2018, doi: 10.1016/j.system.2018.01.007.
- [18] M. Early and S. Marshall, "Adolescent ESL Students' Interpretation and Appreciation of Literary Texts: A Case Study of Multimodality," *The Canadian Modern Language Review*, vol. 64, no. 3, pp. 377–397, Mar. 2008, doi: 10.3138/cmlr.64.3.377.
- [19] Y. Kim, S. Kang, Y. Nam, and S. Skalicky, "Peer interaction, writing proficiency, and the quality of collaborative digital multimodal composing task: Comparing guided and unguided planning," *System*, vol. 106, p. 102722, Jun. 2022, doi: 10.1016/j.system.2022.102722.
- [20] P. J. Woods and Y. Copur-Gencturk, "Examining the role of student-centered versus teacher-centered pedagogical approaches to self-directed learning through teaching," *Teaching and Teacher Education*, vol. 138, p. 104415, Feb. 2024, doi: 10.1016/j.tate.2023.104415.
- [21] J. W. Creswell and J. D. Creswell, *Research design: qualitative, quantitative, and mixed methods approaches*, 5th ed. Thousand Oaks, CA: Sage Publications, Inc., 2017.
- [22] L. Cohen, L. Manion, and K. Morrison, *Research methods in education*, 8th ed. London: Routledge, 2018.
- [23] A. Bastos, "Higher-order thinking in foreign language learning," *Advances in Social Sciences Research Journal*, vol. 4, no. 5, pp. 90–118, Mar. 2017, doi: 10.14738/assrj.45.2788.
- [24] F. Guzmán-Simón, J. J. Torres-Gordillo, and K. Caballero, "Understanding assessment processes for communicative competence through an analysis of teachers' reported practice," *Education Sciences*, vol. 10, no. 4, Apr. 2020, doi: 10.3390/educsci10040116.
- [25] J. M. Dewaele, "Interindividual variation in self-perceived oral proficiency of English L2 users," in *Intercultural Language Use and Language Learning*, E. A. Soler and M. P. S. Jordà, Eds. Dordrecht: Springer Netherlands, 2007, pp. 141–165, doi: 10.1007/978-1-4020-5639-0_8.




- [26] Z. Li and J. Li, "Using the flipped classroom to promote learner engagement for the sustainable development of language skills: a mixed-methods study," *Sustainability*, vol. 14, no. 10, p. 5983, May 2022, doi: 10.3390/su14105983.
- [27] H. Li, R. Majumdar, M.-R. A. Chen, and H. Ogata, "Goal-oriented active learning (GOAL) system to promote reading engagement, self-directed learning behavior, and motivation in extensive reading," *Computers & Education*, vol. 171, p. 104239, Oct. 2021, doi: 10.1016/j.compedu.2021.104239.
- [28] S. Kharroubi and A. ElMediouni, "Conceptual review: cultivating learner autonomy through self-directed learning & self-regulated learning: a socio-constructivist exploration," *International Journal of Language and Literary Studies*, vol. 6, no. 2, pp. 276–296, Jun. 2024, doi: 10.36892/ijlls.v6i2.1649.
- [29] Y. Wu, X. Lu, and C. Lin, "Bridging disciplines: enhancing integrative thinking via collaborative problem-based learning in higher education," *Thinking Skills and Creativity*, vol. 58, p. 101939, Dec. 2025, doi: 10.1016/j.tsc.2025.101939.
- [30] X. Liu, Z. Xu, and H. Wang, "Examining the association between cultural intelligence and linguistic confidence: the mediating roles of cross-cultural adaptation and interpersonal communication competence in international students in China," *SAGE Open*, vol. 15, no. 2, pp. 1–15, Apr. 2025, doi: 10.1177/21582440251336507.
- [31] P. Hardie, A. Darley, L. Langan, A. Lafferty, S. Jarvis, and C. Redmond, "Interpersonal and communication skills development in general nursing preceptorship education and training programmes: a scoping review," *Nurse Education in Practice*, vol. 65, p. 103482, Nov. 2022, doi: 10.1016/j.nepr.2022.103482.
- [32] P. Miralles-Sánchez, J. Rodríguez-Medina, and R. Sánchez-Ibáñez, "Evaluation of didactic units on historical thinking and active methods," *Humanities and Social Sciences Communications*, vol. 11, no. 1, p. 1032, Aug. 2024, doi: 10.1057/s41599-024-03546-9.
- [33] O. de Pietro, M. de Rose, and A. Valenti, "Methodologies and technologies to support didactics for competences. Realization of an active and participatory teaching activity in a university context," *Journal of E-Learning and Knowledge Society*, vol. 13, no. 1, pp. 113–127, 2017.
- [34] A. Carvalho, S. J. Teixeira, L. Olim, S. de Campanella, and T. Costa, "Pedagogical innovation in higher education and active learning methodologies – a case study," *Education + Training*, vol. 63, no. 2, pp. 195–213, Nov. 2020, doi: 10.1108/ET-05-2020-0141.
- [35] N. Bremner, N. Sakata, and L. Cameron, "The outcomes of learner-centred pedagogy: a systematic review," *International Journal of Educational Development*, vol. 94, p. 102649, Oct. 2022, doi: 10.1016/j.ijedudev.2022.102649.
- [36] A. A. Aldino *et al.*, "Analytics of learner-centered feedback: a large-scale case study in higher education," *Computers & Education*, vol. 237, p. 105360, Nov. 2025, doi: 10.1016/j.compedu.2025.105360.

BIOGRAPHIES OF AUTHORS






Teófilo F. Valentín Melgarejo    is an assistant professor at the Faculty of Education Sciences, Universidad Nacional Daniel Alcides Carrión, Peru, where he teaches and conducts research in the areas of communicative competence, teaching methodology, and didactic strategy design. He has published multiple peer-reviewed studies on didactic strategies and reading comprehension, including work demonstrating the effectiveness of structured instructional techniques in improving student learning and research on competency-based performance in initial teacher training. His research interests include communicative competence development, instructional design, competency-based education, and empirical evaluation of pedagogical interventions. He can be contacted at email: tvalentinm@undac.edu.pe; tevame2020@gmail.com.






Daniel J. Pariona Cervantes    is senior lecturer, Ph.D. in Economics, specialist in strategic planning and balanced scorecard, investment projects, economic policy, curricular plans, university teaching, university self-evaluation and accreditation, economic research, educational research, virtual learning platforms, and information and communication technology (ICTs). He can be contacted at email: dparionac@undac.edu.pe.






Isabel A. Delzo Calderón    did undergraduate studies at the Daniel Alcides Carrión National University; master's degree in Research and University Teaching-Inca Garcilaso de la Vega University; doctoral student, specializing in Educational Sciences at the National University of the Center of Peru-Huancayo; current principal ordinary teacher in the Academic Program of Communication and Literature of the Faculty of Educational Sciences of the Daniel Alcides Carrión National University. She can be contacted at email: idelzoc@undac.edu.pe.






Nora E. Hinostroza Campos    did doctor of Educational Administration; master of Higher Education Teaching; bachelor of Education, professor at the Faculty of Educational Sciences of the Program of Studies in Social Sciences, Philosophy and Educational Psychology at the Daniel Alcides Carrión National University-Peru. She is research professor with experience in accreditation for development. She can be contacted at email: ncamposh@undac.edu.pe.






Dionicio L. Basilio    is a research professor registered with RENACYT, he holds a Ph.D. in Educational Sciences and a master's degree in Educational Research and Technology, specializing in History and Geography. His research focuses on methodological strategies, educational innovation, environmental education, biodiversity and interculturality, identity, and the humanities. He currently teaches at the Daniel Alcides Carrión National University of Pasco, Peru. He can be contacted at email: dlopezb@undac.edu.pe.






Pablo L. Valentín Melgarejo    did his master's degree in Education, specializing in Educational Research and Technology. He completed doctoral studies in Education and a master's degree in Education with a specialization in Teaching and Research in Higher Education. Bachelor's degree in Primary Education. Professor at the Faculty of Educational Sciences of the Daniel Alcides Carrión National University-Peru. He can be contacted at email: pvalentinm@undac.edu.pe.






Víctor L. Albornoz Dávila    is a lecturer at the Faculty of Educational Sciences, Daniel Alcides Carrión National University. He got Master of Science in Education, specializing in University Didactics, Enrique Guzmán y Valle National University-LA CANTUTA. His academic interests include education, quantitative analysis, and the integration of scientific reasoning in teaching. He can be contacted at email: vlalbornozd@undac.edu.pe.






Raúl M. Lovatón    is an associate professor in the Faculty of Education Sciences at the Universidad Nacional Daniel Alcides Carrión, Peru. His research focuses on educational assessment, curriculum development, and pedagogical innovation in higher education. He can be contacted at email: rmaipartidal@undac.edu.pe.






Pablo L. La Madrid Vivar    is a faculty member in the Faculty of Education Sciences at the Universidad Nacional Daniel Alcides Carrión, Peru. His academic interests include educational research, learning strategies, and instructional planning in higher education. He can be contacted at email: plamadridv@undac.edu.pe.






Josué C. Leandro    is an associate professor at the Faculty of Educational Sciences of the Daniel Alcides Carrión National University. He holds a Doctorate in Educational Sciences from the Enrique Guzmán y Valle National University of Education (UNE). He is the author of the book “Methods and Techniques of University Study”. He has worked in institutions of the Ministry of Education, the Daniel Alcides Carrión local education management unit (UGEL), and primary schools in the Daniel Alcides Carrión province and the Pasco region. He can be contacted at email: jhaconl@undanc.edu.pe.



Shuffer G. Rojas    holds a bachelor’s degree in Education with a specialization in Educational Computing and Informatics, and a second specialization in Technology. He has completed doctoral studies in Education, a master’s degree in Educational Management, and a master’s degree in Didactics and Information and Communication Technology. His research focuses on education, ICT-supported didactics, and artificial intelligence applied to teaching and learning processes, with an emphasis on developing digital skills and improving the quality of education. He can be contacted at email: shuffer.gr@undac.edu.pe.



Flaviano A. Zenteno Ruiz    is a full professor and director in the area of Mathematics and Physics at the Universidad Nacional Daniel Alcides Carrión, Peru. Doctor of Education, Master in Mathematics Education, specializing in Public Investment Projects, and with a diploma in Information and Communication Technologies in Basic Education. His research focuses on education and mathematics teaching using ICTs. His research interests include science education, mathematical reasoning, and innovative teaching methodologies in higher education. He can be contacted at email: fzentenor@undac.edu.pe.