



Project-Based Learning and Content-Based Instruction in EFL: Developing Lexical Performance and Content Knowledge through Humanitarian Content in a Bangladeshi University

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Abstract

Integrated language–content pedagogies are increasingly advocated in EFL education, yet empirical work seldom captures linguistic and cognitive change simultaneously. This study examines whether a combined Project-Based Learning (PBL) and Content-Based Instruction (CBI) intervention, organised around Palestinian humanitarian content, was associated with concurrent change in learners' group-level lexical performance and content knowledge. In a one-group pre-test–post-test quasi-experimental design at a private university in Bangladesh, 60 second-semester undergraduates in twelve collaborative groups completed a seven-session integrated sequence, with the groups as the unit of analysis. Learning was assessed through the IELTS Lexical Resource descriptor (0–9) and an author-developed Humanitarian Content Knowledge Rubric (HCKR; 0–4), informed by AAC&U VALUE rubrics and analysed separately. Paired-samples t-tests indicated significant group-level gains in both domains (lexical: $t(11) = 16.45$, $p < .001$, $d_z = 4.75$; content: $t(11) = 14.66$, $p < .001$, $d_z = 4.23$), corroborated by a Wilcoxon signed-rank analysis ($p < .001$). The findings indicate concurrent change across a linguistic and a cognitive domain, and that multidimensional assessment offers a fuller account than single-measure evaluation.

Keywords: Content-Based Instruction, Project-Based Learning, Lexical Resource, Content Knowledge, Multidimensional Assessment, EFL, Bangladesh

Introduction

Contemporary theorising in EFL education has moved from viewing language as a discrete object of study toward viewing it as a resource for meaning-making. Learners do not just learn language forms; they use English to access information, negotiate ideas and; produce consequential outcomes. This has made teaching and learning of skills related to developing even more in demand. Language proficiency and subject knowledge together, not whether the integration of content and language should be done, but how it can be

designed and evidenced so an achievement in both areas becomes apparent.

One substantial solution to this is Content Based Instruction (CBI). Using CBI adopts cognitively stimulating topics as a means to learn the language, while applying vocabulary and grammar as tools that are used by learners as they struggle with content and original ideas; Content-driven environments can boost vocabulary experiences, enhance interaction, and increase engagement (Ding & Wang, 2026). The exposure to content, however, is not enough to ensure productive use, in that environments must provide opportunities for students to purposefully engage language in investigating, collaborating, and building meaning.

Project-Based Learning (PBL) supplies such a setting. Organised around sustained investigation of a driving problem and an authentic product, PBL repositions learners as agents who explore questions, synthesise information, and communicate understanding to an audience (Beckett & Slater, 2005; Jaya & Mortini, 2023; Song et al., 2025). When PBL and CBI are combined, language functions both as the medium of collaborative work and as an object of development. Their joint effects, however, have been studied less often than their separate contributions, and the evidence base remains uneven.

These concerns are acute in Bangladesh, where more than two decades of communicative curriculum reform have delivered uneven results and where practice frequently reverts to form-focused, examination-driven instruction offering few occasions for purposeful language use (Rahman et al., 2019; Rahman & Pandian, 2018; Ullah, 2016). Tertiary EFL learners often arrive with limited exposure to authentic content and the disengagement such conditions breed (Seraj et al., 2021; Ullah & Fatema, 2013). An integrated model coupling meaningful content with collaborative production therefore addresses a locally salient problem, yet intervention research here remains scarce.

The Problem of Evidencing Integrated Learning

Measurement is often a challenge in assessing integrated language–content instruction. Lexical/grammatical measures reflect lexical/grammatical progress but may not reflect the abilities that the learner has developed in understanding, using and expressing disciplinary knowledge; content measures reflect conceptual progress but say nothing about the language that enabled it. The use of one measure alone can then lead to a partial account, if the claim being tested is that the two grow together.

The present study pairs two complementary approaches. Vocabulary performance is examined through the IELTS Lexical Resource descriptor, which evaluates range, precision, collocational control, spelling and word formation, and flexibility. Content knowledge is examined through an author-developed Humanitarian Content Knowledge Rubric (HCKR), informed by the AAC&U Inquiry and Analysis and Integrative Learning VALUE rubrics, foregrounding accuracy, depth of understanding, application, and

integration. Analysed on their own scales, the instruments treat linguistic performance and knowledge construction as interconnected yet distinct.

Research Gap

Although PBL and CBI are each well attested individually, three gaps motivate this study: most empirical work examines either language or content outcomes, leaving underexplored how the two change concurrently; assessment in EFL intervention research frequently depends on a single index of achievement, which cannot represent the layered learning that occurs when language operates as a medium for knowledge construction; and there is little precedent for combining a standardised language descriptor with a transparent, construct-aligned content rubric. These gaps are particularly consequential for Global South tertiary contexts such as Bangladesh.

Purpose and Research Questions

To address these gaps, this study investigates the association between an integrated PBL–CBI intervention, anchored in Palestinian humanitarian content, and learners' group-level vocabulary performance and content knowledge in a Bangladeshi tertiary EFL classroom. Using a one-group pre-test–post-test design and two complementary assessment frameworks, it seeks a fuller account of learner development than a single measure can provide. Three research questions guide the inquiry:

RQ1. To what extent did learners' group-level IELTS-based lexical resource performance change between the pre-test and the post-test?

RQ2. To what extent did learners' group-level HCKR-based humanitarian content knowledge performance change between the pre-test and the post-test?

RQ3. How consistent was the direction and pattern of positive change across the twelve groups within each domain?

By foregrounding both linguistic and cognitive dimensions, the study contributes to debates on integrated language education and on the value of multidimensional assessment, while extending them to an under-represented context.

Literature Review

Project-Based Learning in EFL Contexts

Project Based Learning (PBL) is a student-centered teaching method based on inquiry, collaboration and an authentic product. It has its roots in Deweyan experiential education and communicative and task-based pedagogy (Ellis, 2003; Larsen-Freeman & Anderson, 2011), and its hallmark is a shift in the roles of the classroom so that the learner

is the one engaged in the construction of language and that language use is consequential (Beckett & Slater, 2005; Stoller, 2006). The empirical accounts show the achievements in communicative performance (Jaya & Mortini, 2023), EFL writing at tertiary level (Ilham, 2022), motivation and engagement (Admiraal et al., 2026), and the ability to critical thinking (Song et al., 2024, 2025); it promotes cognitive engagement in other languages as well as English (Mutmainnah D et al., 2023).

There are no uniformity and no criticality in the literature. PBL has different impacts on the English proficiency of learners depending on each learner's characteristics and instructional conditions (Mujiono et al., 2023). Earlier reports in the field of Asian higher education, however, warn against unwarranted optimism that at times has overpowered critical scrutiny (Halim et al., 2023). In self-report and brief interventions, engagement gains are often reported and how project work contributes to the retention of learning is not well-specified, nor is how it plays a role in constructs such as lexical development (Li et al., 2024). The study therefore does not assume that PBL serves as the environment for learning and the contribution of PBL must be proven.

Content-Based Instruction and the Language–Content Relationship

Content-Based Instruction is based on the premise that the best way to learn a language is in the context of meaningful content. Snow, Met, and Genesee (1989) differentiate between content-obligatory and content-compatible language, and advocate adjusting language and content goals; additional research places CBI on a continuum with Content and Language Integrated Learning (Cenoz, 2015; Coyle et al., 2010) and defines the counterbalanced demands for meaning and form it must meet (Lyster, 2007). However, content-driven instruction can increase cognitive involvement and interaction (Bula Villalobos, 2014; Ding & Wang, 2026), which makes CBI a viable source of vocabulary learning, because tasks that involve content will require accuracy in meaning-making.

Nevertheless, the language–content relationship is not without complications. The same research points to the tension between content and language goals, the fact that wherever benefits across proficiency levels are uneven, not all of what is covered in content guarantees language development (Ding & Wang, 2026). It is these caveats that make the rationale behind integration even clearer: if content does not lead to productive use by itself, it must be combined with a task structure that forces learners to initiate a deliberate use of language, what the integration of CBI and PBL is trying to achieve in practice.

Integrating PBL and CBI

Fundamentally, PBL and CBI are two sides of the same coin in terms of process and contents. PBL explains how the process is conducted through collaborative inquiry and

culminates with a product, while CBI explains what is employed in the process—which is the material comprising meaningful content. The studies conducted in isolation from one another indicate congruent results, namely, PBL promotes improved communication (Jaya & Mortini, 2023) and CBI enhances engagement and understanding in the matter (Ding & Wang, 2026). Since the components are implemented as one entity, research examines the entire concept, rather than investigating the effect of its parts.

Humanitarian Content, Critical Engagement, and Thematic Relevance

The choice of content is not neutral from a pedagogical point of view. Humanitarian topics integrate language acquisition and the development of critical thinking and awareness of the world, in accordance with intercultural citizenship approaches (Porto et al., 2018). Dialogue-motivated work with the help of written and visual texts can help English-language learners take different views on the issue (Brown, 2022a), while task-oriented approaches make it possible to intervene in the social context (Brown, 2022b). The chosen content is one of the motivating factors (Dörnyei & Ushioda, 2021), while critical thinking tasks can be successfully used even by low proficiency students in Bangladesh (Ullah et al., 2022).

In the current research, the humanitarian situation of Palestine serves as a central theme. Its significance relates less to its political implications and more to the cognitive and linguistic challenges it presents to students, who need to use language for description, analysis, and evaluation of complicated situations. As it is usually the case with Bangladeshi classes, where engagement with global issues is rarely found, such content indicates the link between language development and critical thinking being the core principle of both CBI and PBL. The selection of teaching materials was based on their relevance and availability, and their content had been verified against sources of independent journalism (Section 3.3).

Lexical Resource Development and IELTS-Based Assessment

Lexical resource, referring to the breadth, correctness, and appropriateness of the vocabulary used in communication, is an important dimension of proficiency. The knowledge of vocabulary is multidimensional and evolves incrementally rather than through memorising (Nation, 2013; Schmitt, 2008). Studies show that the successful investigation of lexis is associated with learning in context: learning in a constructivist frame facilitates the retention process (Nguyen & Le, 2023), learning through immersion and multi-modal exposure contributes to the successful learning of lexis (Khan et al., 2023), and learning through mobile-assisted and task-based learning aids the learning process (Jedi-Sari-Biglar & Liman-Kaban, 2023). In Bangladesh, the quality of the

materials determines the opportunities for meaningful learning (Ullah, 2023a, 2023b).

The study has utilized the Lexical Resource descriptor from the IELTS Writing Band Descriptors (IELTS, 2023), which assesses the vocabulary variety, accuracy, collocation capability, and spelling and adaptability. Since it has standardized indicators and an established research background, it is a reliable tool to assess lexical growth against international identification scales; it has been present in its original bands in this research but its description sees some modifications. The elicitation of all features is explained in the construct-to-task alignment (Section 3.5, Table 3).

Content Knowledge and the Humanitarian Content Knowledge Rubric

In this context, content knowledge is understood as the ability of learners to convey humanitarian content including its meaning and application in analyzing the information. Given that there is no VALUE rubric entitled "Content Knowledge" from AAC&U, the tool in question represents the Humanitarian Content Knowledge Rubric (HCKR) developed by the author and based on four dimensions of the rubric (accuracy, depth of knowledge, the application of knowledge, and integration) which draw on the AAC&U VALUE rubrics corresponding to Inquiry and Analysis and Integrative Learning (Association of American Colleges and Universities [AAC&U], 2009a, 2009b). The rubric can be found in Appendix C and its application of the dimensions can be seen in Table 3.

Theoretical Framework

The study is guided by an integrated language–content framework of three strands. The first is Snow, Met, and Genesee's (1989) model of content–language integration, coordinating language and content objectives so that subject matter generates content-obligatory and content-compatible language demands. The second is social-constructivist learning theory (Vygotsky, 1978), which frames knowledge as constructed through mediated, collaborative activity within learners' zones of proximal development. The third is the project cycle of task-based and project-based pedagogy (Beckett & Slater, 2005; Ellis, 2003; Stoller, 2006), specifying the movement from content exploration and language input through collaborative inquiry to a communicated product.

These strands converge on a single proposition: within an integrated environment, lexical development and content knowledge are distinct but co-developing outcomes of the same meaning-focused activity. Lexical resource is theorised, following Nation (2013) and Schmitt (2008), as multidimensional vocabulary use developing through repeated purposeful encounters, and is indexed by the IELTS descriptor; content knowledge is theorised as higher-order understanding, application, and integration, and is indexed by the HCKR. The framework warrants analysing the domains on their own scales rather than as

a composite.

Synthesis and the Present Contribution

Based on the reviewed literature, three points are established that PBL and CBI both contribute to:

language learning, but their effects are mediated by context; humanitarian content can enhance critical engagement by the involvement of interactive tasks; and lexical and content outcomes are best evaluated through construct-aligned instruments specified for each domain. Unresolved is whether an integrated PBL–CBI intervention can produce demonstrable, concurrent change in both domains in an under-researched Global South tertiary setting. The present study occupies this niche.

Methodology Research Design

The study employed a one-group pre-test–post-test quasi-experimental design to examine changes in learners' group-level lexical resource and humanitarian content knowledge, participants being assessed before and after treatment (Capili & Anastasi, 2024). It was selected because the research was conducted within an intact classroom in which random assignment and an equivalent control group were not feasible—conditions typical of authentic educational settings, for which quasi-experimental approaches are appropriate (Creswell & Creswell, 2018). The two dependent variables were lexical resource (IELTS) and humanitarian content knowledge (HCKR), and the analysis is interpreted as change associated with the intervention rather than causal effect.

Context and Participants

The study was conducted at a private university in Bangladesh, in a tertiary-level English classroom. Participants were 60 second-semester undergraduate EFL learners in a required English course; a purposive strategy was adopted because the class was accessible and aligned with the study's objectives, which bounds generalisability. Learners were organised into twelve stable collaborative groups of five, which operationalised PBL's collaborative-inquiry principle and defined the unit of analysis. The sequence centred on Palestinian humanitarian issues, an authentic, cognitively demanding context fostering critical reflection.

Instructional Framework and Materials

The intervention combined CBI and PBL in one continuous process: CBI employed humanitarian subject matter as the basis for language learning using authentic reading texts, multimedia resources, and organized conversation while PBL was comprised of group inquiry work that eventually resulted in the creation of posters. The components of the intervention included two reading tasks and structured multimedia resources organized in a way helping learners move from understanding the context to critical and problem-solving thinking.

Crisis in Gaza: What to Know and How to Help (International Rescue Committee, 2025)—the first article—provided information about the context and vocabulary related to the topic which helped the learners to guess the meaning from the context. The second article, How to Stop Israel from Starving Gaza (Sachs & Fares, 2025), was more argumentative in nature and made the learners scrutinize the humanitarian problems, and evaluate the responses. There were three short video documentaries and news videos to enhance comprehension and provide context for the vocabulary.

The selection of materials was made based on four criteria, which include (1) thematically relevant to the central inquiry, (2) linguistically simple for second-semester students, (3) diverse sources varying from humanitarian and journalistic sources to analytical ones, (4) verifiable information. All the multimedia sources are shown in Table 1, whereas the detailed information is available in Appendix F.

Table 1: Multimedia and Text Sources Used in the Intervention

#	Resource title	Producer / outlet	Date	Type	Instructional function
R1	Crisis in Gaza: What to Know and How to Help	International Rescue Committee	23 October 2025	Web article	Background knowledge; topic vocabulary
R2	How to Stop Israel from Starving Gaza	Sachs & Fares / Al Jazeera	4 September 2025	Opinion article	Argument; solution-oriented analysis
V1	The Palestinian Suffering (Short Documentary Essay)	Archived classroom video; uploader not recorded	6 March 2025	Short documentary essay	Overview of Palestinian humanitarian suffering; descriptive vocabulary and reflective engagement
V2	New Recording of Child Hind's Last Moments Released	Archived news video; uploader not recorded	19 February 2024	News video	Civilian experience and the case of Hind Rajab; empathy, chronology, and evidential discussion
V3	Body of Missing Palestinian Girl Hind Rajab Found in Destroyed Car	Al Jazeera Newsfeed	10 February 2024	Newsfeed video	Consequences of conflict for children; factual reporting and cause-effect language
V4	Israeli Forces Demolish a Palestinian Home in Hebron	Al Jazeera Newsfeed	29 December 2021	Newsfeed video	Home demolition, displacement, and rights-related vocabulary
V5	Moment Palestinians Rescue Children from Rubble in Gaza	Archived news video; uploader not recorded	19 October 2023	News video	Emergency rescue, civilian protection, and descriptive/explanatory language
V6	Palestinian Mother Mourns Children Killed in Israeli Strikes on Gaza	Archived news video; uploader not recorded	20 March 2025	News video	Bereavement, civilian loss, and ethically framed evaluative language

Note. R = reading text; V = video segment. The video titles are reproduced from the archived instructional manuscript. Where the original uploader, publication date, or URL was not preserved in the teaching record, this is stated transparently rather than reconstructed.

Instructional Procedure

The intervention unfolded across seven sessions (Table 2). In Session 1 (baseline), learners completed a pre-test before any input, responding collaboratively to two prompts: how the experience of Palestinians might reshape their sense of themselves as global citizens, and what actions might promote peace and alleviate suffering. Sessions 2 to 4 delivered the integrated instruction, as learners engaged with the materials, joined guided discussion, and developed posters identifying and analysing humanitarian challenges and proposing solutions. In Sessions 5 and 6, each group delivered a three-minute poster presentation; in Session 7, learners responded to the same two prompts, enabling direct comparison.

Table 2: Session-by-Session Overview of the Integrated PBL–CBI Intervention

Session	Content objective	Language objective	Materials	Scaffolding	Student activity / output	Feedback & assessment
1 (Baseline)	Activate prior knowledge of the humanitarian context	Elicit baseline descriptive/evaluative vocabulary	Prompt sheet	Prompt modelling; group norms	Collaborative written response to two prompts (pre-test text)	Pre-test scored on both rubrics (blind)
2	Build contextual knowledge of the crisis	Introduce topic vocabulary; inference from context	Reading R1; vocabulary log	Guided reading; think-aloud modelling	Read, annotate, build group glossary	Formative oral feedback
3	Examine causes and humanitarian challenges	Descriptive and explanatory language	Videos V1–V3	Viewing guide; sentence frames	Note-taking; group discussion	Formative peer feedback
4	Evaluate responses and solutions	Argumentative/evaluative language	Reading R2; videos V4–V6	Comparison grid; modelled argument	Begin poster; draft claims and solutions	Formative feedback on poster drafts
5	Consolidate analysis into a product	Presentation and cohesion devices	Poster templates	Presentation rehearsal; checklist	Finalise poster; rehearse	Formative rehearsal feedback
6	Communicate analysis to an audience	Oral academic register	Completed posters	Q&A protocol	3-minute group poster presentation (PBL product)	Peer and instructor response
7 (Post-test)	Demonstrate consolidated understanding	Deploy learned vocabulary in writing	Prompt sheet (same as S1)	None (assessment condition)	Collaborative written response to same two prompts (post-test text)	Post-test scored on both rubrics (blind)

Note. Each response at Sessions 1 and 7 was produced collaboratively by the five-member group and constitutes one group-level data point. Each session occupied one scheduled class period; presentation sessions also included the three-minute presentation delivered by each group.

Instruments

IELTS-Based Lexical Resource Assessment. Lexical resource was assessed using the Lexical Resource criterion of the IELTS Writing Band Descriptors (IELTS, 2023), which evaluates vocabulary range, accuracy, appropriateness, collocational control, and flexibility on a nine-band scale. The descriptor provides internationally recognised benchmarks and was adapted for research use while retaining its original band definitions (Appendix B).

Humanitarian Content Knowledge Rubric. Humanitarian content understanding was assessed using the author-developed Humanitarian Content Knowledge Rubric (HCKR), a task-specific 0–4 instrument informed by the AAC&U Inquiry and Analysis and Integrative Learning VALUE rubrics (AAC&U, 2009a, 2009b). It evaluates accuracy of knowledge, depth of understanding, application, and integration, reflecting tasks that required learners to explain significance, analyse problems, and propose responses. The complete rubric appears in Appendix C.

Construct-to-Task Alignment. To establish content validity, each assessment dimension was mapped to the task features intended to elicit it. Table 3 sets out this alignment across the two prompts and the poster task, and makes visible any dimension elicited only weakly, which is noted among the limitations.

Table 3: Construct-to-Task Alignment for the IELTS and HCKR Dimensions

Framework / dimension	How the task elicits it	Primary eliciting task
IELTS — Range of vocabulary	Describing a complex, unfamiliar humanitarian context requires varied lexis beyond everyday words	Prompt 1; poster
IELTS — Precision / accuracy	Explaining causes and effects rewards precise word choice over approximation	Prompt 2; poster
IELTS — Collocational control	Topic register (e.g., humanitarian aid, ceasefire, displacement) demands conventional collocations	Readings → prompts
IELTS — Spelling / word form	Extended written responses expose control of form	Prompts 1–2 (written)
IELTS — Flexibility	Shifting from description to argument to recommendation requires flexible expression	Prompt 2; poster
HCKR — Accuracy of knowledge	Responses must represent the humanitarian situation factually	Prompt 1; poster
HCKR — Depth of understanding	Prompts ask learners to explain significance, not restate facts	Prompt 1
HCKR — Application	Prompt 2 asks for practical actions, applying understanding to solutions	Prompt 2; poster
HCKR — Integration of ideas	The poster requires synthesising readings, video, and discussion into one argument	Poster (PBL product)

Note. Prompt 1 = perspective-change prompt; Prompt 2 = practical-action prompt (see Section 3.4 and Appendix A). The poster presentation is the culminating PBL product.

Unit of Measurement, Scoring, and Reliability

Two features of the measurement warrant statement. First, the pre-test and post-test responses were produced collaboratively by each five-member group, which generated a single written response at each time point, scored on both rubrics. The unit of measurement is therefore the group text, and the constructs are best understood as group-level performance rather than individual attainment—a deliberate consequence of the collaborative design, in which knowledge is co-constructed (Vygotsky, 1978), that also bounds the inferences the data can support.

Second, scoring followed an identical protocol at both time points, with each group text evaluated independently by two raters. For IELTS Lexical Resource, each rater assigned the single best-fit band (0–9) whose profile most closely matched the text, using half-band judgements between adjacent descriptors. For the HCKR, each rater scored the

four dimensions from 0 to 4 and averaged them. The two raters' scores were averaged and rounded to one decimal place; where they differed by more than one band or point, raters re-scored, which explains the one-decimal values in Tables 4–6.

Because both instruments yield ordered band judgements treated as continuous after averaging, inter-rater consistency is most appropriately indexed by an intraclass correlation coefficient (ICC) or a quadratic-weighted kappa, which—unlike unweighted Cohen's kappa—credit partial agreement between adjacent bands (Koo & Li, 2016; McHugh, 2012). Prior to scoring, raters completed a calibration session, independently scoring practice responses and discussing discrepancies until a shared interpretation was reached. Texts were anonymised, coded, and intermixed so that raters could not tell whether a response was a pre-test or a post-test.

Two trained EFL raters independently scored the anonymised texts after jointly reviewing the descriptors and practice examples; because the original pre-reconciliation rating sheets were not retained, no chance-corrected reliability coefficient (ICC or weighted kappa) is claimed, and this absence is treated as a measurement limitation.

Researcher Positionality

The intervention was designed and delivered within the researcher's own institutional context, a positionality with acknowledged methodological implications. Proximity afforded ecological validity and knowledge of learners' needs but also introduces possible expectancy and reactivity effects, and scoring by involved raters may be susceptible to confirmation bias. Independent double scoring against fixed descriptors, with anonymisation and time-point blinding (Section 3.6), was adopted partly to mitigate the latter; the former is revisited among the limitations.

Data Analysis

Pre-test and post-test responses were analysed quantitatively, with each group's aggregated score as the unit of analysis (twelve observations per domain). The frameworks use different scales—IELTS (0–9) and HCKR (0–4)—so the domains were analysed separately, without cross-scale conversion. For each, descriptive statistics summarised performance and a paired-samples t-test examined the pre–post difference with its 95% confidence interval and the effect size d_z ; Wilcoxon signed-rank and sign tests served as sensitivity analyses, and RQ3 examined the consistency of change across groups. Effect sizes are read against established benchmarks (Plonsky & Oswald, 2014; Cohen, 1988), but aggregation results in an over inflated standardised effects that the values of d_z represent a consistent pattern, not precise values.

Ethical Considerations

The research used in the study was educational research in the classroom according to the procedures of the institution. The archived record does not include an ethics-committee approval number, therefore an ethics-committee approval number is not claimed. Because

the intervention was provided by the student's own instructor, and care was taken to not disclose the intervention to other teachers, were not coerced into participating, written informed consent was obtained, and learners did not have to participate. Participants were informed that participation was voluntary and not related to their grades. Only consented, anonymised

Data from the groups were analysed and research scores were not used for the purpose of grading. Discussion emphasis was on analysis not on printing the details of the graphic; concluded with a reflective debriefing.

Results

Analytical Approach

This section reports the quantitative findings for the two domains, lexical resource (IELTS, 0–9) and content knowledge (HCKR, 0–4). Because the frameworks measure distinct constructs on different scales, results are presented separately. Descriptive statistics first characterise performance at each point; paired-samples t-tests, with confidence intervals and nonparametric checks, then evaluate the pre–post difference. The twelve groups constitute the unit of analysis, so the findings describe group-level change.

Pre-test Performance

Table 4 reports baseline performance. Prior to the intervention, IELTS-based lexical resource scores ranged from 5.7 to 6.8 ($M = 6.25$, $SD = 0.36$, $Mdn = 6.25$, $IQR = 5.97–6.53$), and HCKR-based content knowledge scores ranged from 2.4 to 3.1 ($M = 2.78$, $SD = 0.21$, $Mdn = 2.80$, $IQR = 2.68–2.92$). The spread indicates modest variation in initial performance across groups in both domains.

Table 4: Pre-test Performance by Group

Group	IELTS Lexical Resource (0–9)	HCKR Content Knowledge (0–4)
Hexagon	6.5	2.8
Unknown	6.8	3.0
Sloths	6.2	2.7
Rose	5.8	2.5
Sisimpur	6.7	3.1
Three Stars	6.6	3.0
Unity Force	5.9	2.6
Three Idiots	6.1	2.8
4 Star	6.4	2.9
Team Vision	5.7	2.4
Lotus	6.0	2.7
Bosom Buddies	6.3	2.9
Mean	6.25	2.78
SD	0.36	0.21

Note. N = 12 groups. Scores are group values on each framework's original scale; the two scales are not combined.

Post-test Performance

Following the intervention, performance rose across all groups in both domains (Table 5). IELTS-based lexical resource scores ranged from 7.2 to 8.2 ($M = 7.78$, $SD = 0.31$, $Mdn = 7.85$, $IQR = 7.57–8.00$), and HCKR-based content knowledge scores ranged from 3.3 to 3.8 ($M = 3.57$, $SD = 0.14$, $Mdn = 3.60$, $IQR = 3.50–3.62$). Every group recorded a higher score than at baseline on both measures, indicating a consistent direction of change.

Table 5: Post-test Performance by Group

Group	IELTS Lexical Resource (0–9)	HCKR Content Knowledge (0–4)
Hexagon	7.8	3.6
Unknown	8.0	3.7
Sloths	7.5	3.5
Rose	8.2	3.8
Sisimpur	8.1	3.7
Three Stars	8.0	3.6
Unity Force	7.6	3.4
Three Idiots	7.4	3.5
4 Star	7.9	3.6
Team Vision	7.2	3.3
Lotus	7.7	3.5
Bosom Buddies	8.0	3.6
Mean	7.78	3.57
SD	0.31	0.14

Note. N = 12 groups. Scores are group values on each framework's original scale; the two scales are not combined.

Pre-test to Post-test Change by Domain

Table 6 presents pre-test and post-test values alongside gain scores for each domain. In the lexical domain, group gains ranged from 1.2 to 2.4 bands ($M = 1.53$, $SD = 0.32$, $Mdn = 1.45$, $IQR = 1.30–1.70$), the largest by Group Rose, which entered with the lowest baseline; in the content domain, gains ranged from 0.6 to 1.3 points ($M = 0.78$, $SD = 0.19$, $Mdn = 0.75$, $IQR = 0.70–0.80$). Figure 1 shows the paired trajectories, every group line rising in both domains, so the consistency of positive change is visible at the level of individual groups (RQ3). The larger gains among lower-scoring groups may reflect convergence but are also the signature of regression to the mean in a single-group design, so they are reported descriptively and revisited among the limitations.

Table 6: Pre-test to Post-test Change by Domain

Group	IELTS Pre	IELTS Post	IELTS Gain	HCKR Pre	HCKR Post	HCKR Gain
Hexagon	6.5	7.8	+1.3	2.8	3.6	+0.8
Unknown	6.8	8.0	+1.2	3.0	3.7	+0.7
Sloths	6.2	7.5	+1.3	2.7	3.5	+0.8
Rose	5.8	8.2	+2.4	2.5	3.8	+1.3
Sisimpur	6.7	8.1	+1.4	3.1	3.7	+0.6
Three Stars	6.6	8.0	+1.4	3.0	3.6	+0.6
Unity Force	5.9	7.6	+1.7	2.6	3.4	+0.8
Three Idiots	6.1	7.4	+1.3	2.8	3.5	+0.7
4 Star	6.4	7.9	+1.5	2.9	3.6	+0.7
Team Vision	5.7	7.2	+1.5	2.4	3.3	+0.9
Lotus	6.0	7.7	+1.7	2.7	3.5	+0.8
Bosom Buddies	6.3	8.0	+1.7	2.9	3.6	+0.7
Mean	6.25	7.78	+1.53	2.78	3.57	+0.78
SD	0.36	0.31	0.32	0.21	0.14	0.19

Note. N = 12 groups. IELTS = Lexical Resource (0–9); HCKR = Humanitarian Content Knowledge (0–4). Gains are reported within each scale and are not compared across scales.

Figure 1. Paired pre-test–post-test trajectories for the twelve groups in each domain. Thin lines show individual groups; the bold line shows the group mean.

Inferential Analysis

Paired-samples t-tests were conducted separately for each domain (twelve groups; $df = 11$). Lexical resource increased from pre-test ($M = 6.25$) to post-test ($M = 7.78$), a gain of 1.53 bands, 95% CI [1.33, 1.74], $t(11) = 16.45$, $p < .001$, $d_z = 4.75$; content knowledge from pre-test ($M = 2.78$) to post-test ($M = 3.57$), a gain of 0.78 points, 95% CI [0.67, 0.90], $t(11) = 14.66$, $p < .001$, $d_z = 4.23$. Because twelve aggregated units cannot be assumed normal, Wilcoxon signed-rank and sign tests corroborated the result (Wilcoxon $p < .001$; sign test 12/12 improving, $p < .001$; Table 7). The very large effect sizes reflect aggregation and indicate a consistent group-level pattern, not a precise individual estimate.

Table 7: Paired-Samples t-Test Results with Confidence Intervals and Nonparametric Sensitivity Analyses

Domain	Pre M (SD)	Post M (SD)	Mean gain [95% CI]	t(11)	p	dz	Wilcoxon p	Sign test
IELTS Lexical Resource (0–9)	6.25 (0.36)	7.78 (0.31)	1.53 [1.33, 1.74]	16.45	<.001	4.75	<.001	12/12, <.001
HCKR Content Knowledge (0–4)	2.78 (0.21)	3.57 (0.14)	0.78 [0.67, 0.90]	14.66	<.001	4.23	<.001	12/12, <.001

Note. N = 12 groups; df = 11. Domains analysed separately on their original scales. dz is the paired-samples standardised effect size (mean gain ÷ SD of gains). The sign-test entry reports the number of groups improving out of twelve.

Summary of Findings

Across both domains, the intervention was associated with consistent, statistically significant improvement. Every group improved on both measures; lexical resource rose by an average of 1.53 bands and content knowledge by 0.78 points, each with a very large paired effect size confirmed by nonparametric tests. Group-level lexical resource increased markedly (RQ1), content knowledge significantly (RQ2), and positive change was consistent across all twelve groups (RQ3). Because the analysis rests on aggregated group-level scores, these results indicate robust group-level change rather than individual change or definitive causal effects.

Discussion

This research investigated whether the combination of Project-Based Learning (PBL) and Content-Based Instruction (CBI) instruction, centered around humanitarian content, was associated with any improvements in students' vocabulary and content knowledge skills. The results show large group-level gains in both of the skills studied across all twelve groups. In interpreting these results, two caveats must be borne in mind. First, because the intervention was a single whole, the study does not allow separation of the effects of PBL and CBI. Second, the data concerned group scores, not individual scores. Taking these limitations into account, the findings are consistent with the idea that language can change alongside content in a well-designed integrated environment.

Lexical Development through Contextualised Use

The notable improvement in the group-level IELTS vocabulary resource (RQ1) coincides with the notion of CBI which states that lexicon is most successfully acquired through context. The humanitarian content provided constant targeted exposure to lexical items of description, argumentation and evaluation throughout the cooperative project works. This comes in line with data stating that lexical retention and employment are enhanced in content-rich environments (Jedi-Sari-Biglar & Liman-Kaban, 2023; Khan et al., 2023; Nguyen & Le, 2023). However, the fact that PBL and CBI worked jointly does not allow asserting the impact of the richness of content independently of the collaborative work organization.

Content Knowledge through Collaborative Inquiry

The notable enhancement of group-level HCKR-based knowledge (RQ2) confirms the hypothesis of PBL that understanding occurs when learners build knowledge through inquiry, cooperation, and meaningful artifacts. In the role of analysts who questioned humanitarian knowledge and expressed analysis in a poster, and evaluated with the rubric focusing on understanding and construction more than memory, learners manifested improvements demonstrating analytical involvement beyond mere surface understanding, which supports the findings of the studies stating that PBL raises critical thinking and understanding (Song et al., 2025) as well as that project-based writing increases involvement over time (Li et al., 2024) while emphasizing the warnings that these improvements are presented rather than measured (Mujiono et al., 2023).

Concurrent Change and the Case for Multidimensional Assessment

The third research question concerned consistency of change across groups, and the most consequential result is that lexical and content gains co-occurred in every group. This should be characterised precisely: both domains improved concurrently and consistently, but the study did not test whether gains in one predicted gains in the other. The concurrent change is consistent with the proposition, shared by CBI and PBL, that language functions as a tool for constructing and communicating knowledge rather than a separate attainment. Assessing both domains separately made the dual trajectory visible in a way a single measure could not.

Contribution to Research on PBL–CBI Integration

The study advances the literature on integrated language–content pedagogy in

three ways. Empirically, it provides evidence of concurrent linguistic and cognitive change from a single integrated intervention, more often theorised than evidenced. Methodologically, it models the pairing of a proficiency-referenced lexical descriptor with a higher-education content rubric. Contextually, it extends this inquiry to an under-represented Bangladeshi tertiary classroom. The study does not claim the superiority of PBL–CBI over alternatives, nor to separate its components, but shows the integrated model was associated with meaningful, measurable, dual-domain change in a Global South setting.

Limitations

Several limitations qualify these claims. The one-group design lacks a control group, so although improvement was consistent, it cannot isolate the intervention as the sole cause; maturation, testing effects, and regression to the mean cannot be ruled out, and the largest gains among lower-baseline groups are themselves a signature of regression to the mean. Because PBL and CBI were delivered together, change cannot be attributed to either component; and because the analysis rests on aggregated group-level scores from collaboratively produced texts, the very large effect sizes are partly an artefact of reduced within-unit variance and caution is required in transferring findings to individuals. Purposive sampling within a single institution constrains generalisability, and the exclusively quantitative design cannot illuminate the processes through which integration supported learning.

Implications

Theoretical Implications

The concurrent change in lexical resource and content knowledge lends empirical weight to the claim that language and content are not competing objectives but mutually constitutive dimensions of learning. The findings are consistent with a conception of vocabulary development as embedded in meaning-making rather than antecedent to it, and suggest that models of integrated instruction should theorise assessment as inherently multidimensional.

Pedagogical Implications

For EFL educators, instruction combining purposeful language use with cognitively demanding content can broaden learning beyond a narrow focus on linguistic accuracy—especially where communicative reform has struggled to displace examination-driven practice (Ullah, 2016). Three design principles are salient: assessment should align

with the full range of objectives, capturing both language and knowledge with instruments calibrated to each (see Rabbi et al., 2026); ethically and affectively significant themes furnish authentic reasons to communicate when embedded in collaborative, inquiry-driven tasks; and the quality and authenticity of materials condition what integration can achieve (Ullah, 2023a).

Policy Implications

At the level of curriculum and policy, the study speaks—tentatively—to Global South tertiary systems seeking to modernise English provision. As a proposition for further investigation, it is consistent with the possibility that integrated, content-rich models can be enacted within existing structures and that teacher-development and assessment frameworks could target multidimensional outcomes rather than single proficiency indices. Realising integration depends on accessible professional development—including online and MOOC-based provision (Alam et al., 2022; Ullah, 2023b)—and on strengthening prospective teachers' pedagogical-content knowledge in pre-service preparation (Alam et al., 2024).

Directions for Future Research

Future work should strengthen causal inference and analytic grain. Designs with comparison groups—including component-isolating conditions contrasting the full PBL–CBI package against PBL-only or CBI-only variants—larger, more diverse samples, and individual-level data would permit more secure claims about effects and differential development, and longitudinal designs could establish whether gains are retained. Qualitative and mixed-methods studies drawing on learner reflections, interviews, and the project artefacts are needed to illuminate how PBL–CBI integration supports learning. Replication across contexts, themes, and proficiency levels would further test transferability.

Conclusion

This study examined whether integrating Project-Based Learning with Content-Based Instruction, around Palestinian humanitarian content, was associated with learners' language and content development in a Bangladeshi tertiary EFL classroom. Using a one-group pre-test–post-test design and group-level analysis, it found consistent, statistically significant, very large group-level gains in both IELTS-based lexical resource and HCKR-based content knowledge across all twelve groups. The claims are bounded by the design: associated, group-level change rather than individual change, component-specific effects,

or definitive causation. Future studies that utilize comparison groups, individual-level longitudinal analysis, and qualitative evidence can establish how integrated teaching advances language and knowledge construction.

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Appendices

Appendix A

Pre-test and Post-test Prompts

The same two open-ended prompts were used at baseline (Session 1) and post-test (Session 7). Each group produced one collaborative written response.

Prompt 1 (perspective change). How might learning about the experiences of Palestinians change the way you see yourself as a human being and as a global citizen?

Prompt 2 (practical action). What practical actions could people take to promote peace and help reduce human suffering?

Administration instructions. Each group was instructed to respond in English and to produce one collaborative written response addressing both prompts during one scheduled class period. No fixed word limit was imposed. At pre-test, responses were completed before exposure to the instructional materials; at post-test, the same prompt sheet was used under comparable classroom conditions. No direct teacher assistance was provided during either assessment.

Appendix B

Adapted IELTS Lexical Resource Descriptor

The IELTS Writing Task 2 Lexical Resource descriptor was adapted for research use by paraphrasing its band-level distinctions and applying them only to the lexical features elicited by the study tasks. The wording below is original to this manuscript and does not reproduce the published IELTS descriptor verbatim. Raters considered range, precision, appropriateness, collocation, spelling and word formation, and flexibility of expression. Half-band scores were permitted when a response lay clearly between two adjacent levels.

Table B: Paraphrased IELTS-Based Lexical Resource Scale Used for Research Scoring

Band	Paraphrased lexical descriptor
9	Vocabulary is exceptionally broad, precise, natural, and flexible. Sophisticated lexical choices and collocations are consistently controlled; spelling or word-formation slips are extremely rare and do not affect communication.
8	A wide range of vocabulary is used flexibly and accurately. Less common items and collocations are handled skilfully, with only occasional minor lapses in choice, spelling, or formation.
7	The range is sufficient for clear flexibility and precision. Some less common vocabulary is used, and awareness of register and collocation is evident. A small number of lexical or spelling errors may occur without reducing clarity.
6	Vocabulary is generally adequate and appropriate for the task. Meaning remains clear, although range may be restricted or word choice imprecise. Attempts at wider expression may produce errors, but communication is not impeded.
5	The lexical resource is limited but sufficient for basic task completion. Common vocabulary is often accurate, yet repetition, simplification, and inappropriate choices are noticeable. Errors may occasionally make reading difficult.
4	Vocabulary is narrow, basic, repetitive, or partly unrelated to the task. Reliance on memorised chunks may be evident, and errors in choice, spelling, or formation can obstruct meaning.
3	Only a very small range is available. Word choice and word formation are frequently inaccurate, and the reader must work hard to recover the intended meaning.
2	Lexical production is extremely restricted, consisting mainly of isolated or memorised expressions. Control of meaning and form is minimal, so communication is barely possible.
1	Only a few isolated English words are produced, with no functional lexical resource for conveying a message.
0	No scorable English response is produced, or the task is not attempted.

Appendix C

Humanitarian Content Knowledge Rubric

The Humanitarian Content Knowledge Rubric (HCKR) is an author-developed, task-specific instrument informed by the AAC&U Inquiry and Analysis and Integrative Learning VALUE rubrics. It does not claim to be an AAC&U "Content Knowledge" rubric. The HCKR uses four dimensions aligned with the study prompts and poster task. Each dimension is scored from 0 to 4; the four scores are averaged to obtain the rater's overall HCKR score.

Table C: Humanitarian Content Knowledge Rubric (HCKR)

Dimension	Level	Descriptor
Accuracy of knowledge	4	Information is consistently accurate, specific, and appropriately qualified; no material misconception is evident.
	3	Information is mostly accurate and relevant, with only minor omissions, overgeneralisation, or imprecision.
	2	Some relevant knowledge is accurate, but important details are missing, generalised, or partly confused.
	1	Knowledge is fragmentary and includes substantial inaccuracies or unsupported assertions.
	0	No relevant or assessable humanitarian knowledge is demonstrated.
Depth of understanding	4	Explains causes, consequences, significance, and human implications with sustained analysis and recognition of complexity or perspective.
	3	Explains the issue clearly and moves beyond description, though analysis or perspective-taking is not consistently developed.
	2	Provides a basic descriptive account with limited explanation of relationships, causes, consequences, or significance.
	1	Offers isolated statements with little explanation or conceptual connection.
	0	No meaningful understanding is demonstrated.
Application of knowledge	4	Proposes feasible, context-sensitive, and ethically aware actions that are explicitly justified by the information presented.
	3	Proposes relevant and generally feasible actions with some explanation of how they address the identified problem.
	2	Suggests broad or familiar actions, but links to the problem are weak, generic, or insufficiently justified.
	1	Offers vague, impractical, or weakly relevant actions with little connection to the issue.
	0	No application or proposed action is provided.
Integration of	4	Synthesises ideas, evidence, and perspectives into a coherent

ideas		interpretation or argument; relationships among sources and claims are explicit.
	3	Connects several relevant ideas or sources into a generally coherent account, with minor gaps in synthesis.
	2	Presents more than one relevant idea, but mainly juxtaposes them rather than integrating them.
	1	Relies on isolated facts or assertions with no meaningful connection among ideas.
	0	No integration of ideas is evident.

Appendix D Scoring Guide

Each group response was anonymised, assigned a random code, and intermixed across time points. Raters worked independently before any reconciliation discussion. The scoring guide below separates lexical performance from humanitarian content knowledge and prohibits combining the two scales.

Table D: Scoring Sequence and Decision Rules

Step	Decision rule
1. Read for meaning	Read the complete group response once without assigning a score. Do not infer individual contributions.
2. Score IELTS lexical resource	Use Appendix B only. Consider range, precision, appropriateness, collocation, spelling/word formation, and flexibility. Assign the single best-fit band; use a half band only when evidence is genuinely split between adjacent levels.
3. Score HCKR dimensions	Using Appendix C, assign one whole-number score (0–4) to each of the four dimensions. Do not reward language sophistication in the content score.
4. Calculate the rater's HCKR score	Average the four dimension scores. Retain the dimension-level ratings in the scoring sheet.
5. Record scores independently	Raters must not consult each other until every text has an initial score from both raters.
6. Revisit large discrepancies	Re-score when IELTS ratings differ by more than one band or an HCKR dimension differs by more than one point. Discuss evidence against descriptors, then enter revised independent judgements rather than negotiating a midpoint.
7. Calculate reported scores	Average the two raters' final IELTS bands and the two raters' HCKR means; round only the reported value to one decimal place.
8. Preserve reliability data	Retain all initial pre-reconciliation ratings for ICC or weighted-kappa analysis. Never calculate reliability from the final averaged scores.
9. Keep domains separate	Report IELTS and HCKR results on their original scales. Do not create a composite score or compare raw gain magnitudes across scales.

Note. Illustrative anchors should be drawn from the original calibration set and attached to the archived scoring guide. They are not reproduced here because no calibration responses were included in the manuscript package.

Appendix E

Detailed Multimedia and Text Source Information

Note: This appendix expands Table 1 (Section 3.3) with source-level detail.

R1 — Crisis in Gaza: What to Know and How to Help

Producer / outlet: International Rescue Committee

Date: 23 October 2025

URL / access link: <https://www.rescue.org/crisis-in-gaza>

Length (word count): ≈970 words (current live version; see access-date note below)

Language: English

Session used: Session 2

Summary: An informational web article outlining the scale of humanitarian need in Gaza following the October 2025 ceasefire — casualty and displacement figures, damage to health infrastructure, four priority actions (aid delivery, open border crossings, durable peace, sustained funding), and an overview of IRC's protection, health, nutrition, cash, and water/sanitation programming in Gaza and the West Bank.

Full citation: International Rescue Committee. (2025, October 23). Crisis in Gaza: What to know and how to help. Retrieved from <https://www.rescue.org/crisis-in-gaza>

Access-date note: This page is marked “Last updated: July 16, 2026” on the live site — later than the manuscript's stated first-access date of 23 October 2025. The word count and some details above reflect the current version, not necessarily what students read; if a saved/archived copy from the intervention period exists, it should replace this entry.

R2 — How to Stop Israel from Starving Gaza

Producer / outlet: Sachs & Fares / Al Jazeera

Date: 4 September 2025

URL / access link: <https://www.aljazeera.com/opinions/2025/9/4/how-to-stop-israel-from-starving-gaza>

Length (word count): ≈1,080 words

Language: English

Session used: Session 4

Summary: An opinion/argumentative article by Jeffrey D. Sachs and Sybil Fares contending that Israel's actions in Gaza constitute mass starvation with US complicity, and proposing six concrete international actions (severing ties with Israel, UN recognition of Palestine, suspending Abraham Accords relations, suspending Israel from the UN General Assembly, halting tech exports supporting the war, and deploying a UN protection force).

Full citation: Sachs, J. D., & Fares, S. (2025, September 4). How to stop Israel from starving Gaza. Al Jazeera. Retrieved from <https://www.aljazeera.com/opinions/2025/9/4/how-to-stop-israel-from-starving-gaza>

V1 — The Palestinian Suffering (Short Documentary Essay)

Producer / outlet: Omar Jibawi (YouTube)

Date: 6 March 2025

URL / access link: <https://youtu.be/jMJnWVrgGP0>

Running time: 6:04

Language: English

Session used: Session 3

Summary: [insert 2–3 sentence summary of content/argument]

Full citation: Jibawi, O. (2025, March 6). The Palestinian suffering (short documentary essay) [Video]. YouTube. <https://youtu.be/jMJnWVrgGP0>

V2 — New Recording of Child Hind's Last Moments Released

Producer / outlet: Middle East Eye

Date: 19 February 2024

URL / access link: <https://youtu.be/BGh9fqcty0g>

Running time: 2:47

Language: English

Session used: Session 3

Summary: A short news video reporting that the Palestine Red Crescent Society (PRCS) released a new audio recording of Hind Rajab, a Palestinian child, during her final moments. Hind was trapped alone in a car near Israeli tanks, with family members killed around her, and was killed as the Israeli army struck the ambulance sent to rescue her.

Full citation: Middle East Eye. (2024, February 19). New recording of child Hind's last moments released [Video]. YouTube. <https://youtu.be/BGh9fqcty0g>

V3 — Body of Missing Palestinian Girl Hind Rajab Found in Destroyed Car

Producer / outlet: Al Jazeera Newsfeed

Date: 10 February 2024

URL / access link: https://youtu.be/_Y4yu8UoSpc

Running time: 1:57

Language: English

Session used: Session 3

Summary: A short news video reporting that the body of six-year-old Hind Rajab was found in the car where her family were killed by Israeli gunfire in Gaza City, with the ambulance sent to rescue her found burnt out nearby, along with the remains of two medics.

Full citation: Al Jazeera English. (2024, February 10). Body of missing Palestinian girl Hind Rajab found in destroyed car [Video]. YouTube. https://youtu.be/_Y4yu8UoSpc

V4 — Israeli Forces Demolish a Palestinian Home in Hebron

Producer / outlet: Al Jazeera Newsfeed

Date: 29 December 2021

URL / access link: https://youtu.be/xnaAcMcC_N8

Running time: 1:20

Language: English

Session used: Session 4

Summary: A short news video in which Palestinian women confront Israeli forces as bulldozers demolish their home in Hebron in the occupied West Bank, captioned “They destroy and we build.”

Full citation: Al Jazeera English. (2021, December 29). Israeli forces demolish a Palestinian home in Hebron [Video]. YouTube. https://youtu.be/xnaAcMcC_N8

V5 — Moment Palestinians Rescue Children from Rubble in Gaza

Producer / outlet: Channel 4 News

Date: 19 October 2023

URL / access link: <https://www.youtube.com/watch?v=FKgFjty1YHo>

Running time: 2:11

Language: English

Session used: Session 4

Summary: A short news video showing Palestinians pulling children from the rubble of a house in Jabalia refugee camp, northern Gaza, after it was struck by an Israeli airstrike.

Full citation: Channel 4 News. (2023, October 19). Moment Palestinians rescue children from rubble in Gaza [Video]. YouTube. <https://www.youtube.com/watch?v=FKgFjty1YHo>

V6 — Palestinian Mother Mourns Children Killed in Israeli Strikes on Gaza

Producer / outlet: Middle East Eye

Date: 20 March 2025

URL / access link: <https://www.youtube.com/shorts/9MZIJULJeUY>

Running time: 0:24

Language: English

Session used: Session 4

Summary: A short news video showing a Palestinian mother mourning her children, killed in Israeli air strikes on Gaza, reported alongside a toll of at least 95 Palestinians killed across Gaza since dawn that day, per Al Jazeera Arabic.

Full citation: Middle East Eye. (2025, March 20). Palestinian mother mourns children killed in Israeli strikes on Gaza [Video]. YouTube. <https://www.youtube.com/shorts/9MZIJULJeUY>