

## Impact of Translanguaging Practices on Vocabulary Development: A Study of Primary Grade Indian Learners

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### Abstract

Purposeful use of learners' home languages in multilingual ESL classrooms can offer multiple cognitive, and linguistic benefits. Translanguaging, a successfully emerging pedagogy in multilingual contexts, can help in achieving this. To derive the benefits of using home languages in English education, it is necessary for teachers to be trained in consciously using learners' home language(s) through translanguaging. This pedagogy can support development of multilingual reading and vocabulary skills, prerequisites to school success. The present study explores the impact of translanguaging pedagogy to develop vocabulary skills while teaching reading in primary grade multilingual learners enrolled in government schools in Telangana, India. Four teachers from low-cost EMI government schools were trained and observed for teaching reading and using vocabulary in context tasks. The findings from two sources—teacher uptake in providing focussed vocabulary inputs and learner improved performance on the British Picture Vocabulary Scale (BPVS) task—bear evidence of the positive impact of translanguaging training.

**Keywords:** Multilingual ESL classrooms, reading comprehension, translanguaging pedagogy, vocabulary skills

### Introduction

Reading in a second language can be challenging for learners who start

their schooling in a language that is not their mother tongue (UNESCO GEM report, 2016; Tsimpli et al., 2020). For instance, Indian primary school learners from low SES backgrounds perform poorly on literacy, and numeracy skills when enrolled in EMI schools (Tsimpli et al., 2020; ASER 2023) as they are expected to comprehend only in English. Lack of literacy support and no exposure to English at home add to their learning challenges.

Despite the recommendation of the Indian National Education Policy (NEP, 2020, p. 13) to use mother tongue (or home languages) to scaffold learning, teachers continue to feel unsure and guilty about using learners' home languages in the classroom. Added to this are rising parental expectations (Borooah & Sabharwal, 2021) and societal pressures to use English-only mode of instruction (Anderson & Lightfoot, 2018). Multilingual children's cognitive advantage (Bialystok & Craik, 2010), and resources remain under utilised (Mukhopadhyay et al., 2022a). An outcome of this is poor comprehension skills (ASER, 2023) giving rise to a learning lag. Thus, there is an urgent need to address classroom challenges by training teachers, and equipping them with strategies that confidently allow them to use learners' home languages to teach English. However, the impact of translanguaging training on language learning is relatively under researched in India. Hence, this study aims to address the gap of impact of translanguaging training on teacher practices to develop English vocabulary of primary grade Indian learners at K1 and K2 levels of the British National Corpus (BNC).

### **Impact of Vocabulary Knowledge on Reading Comprehension**

Reading comprehension, and vocabulary knowledge are essential for school success. These involve interaction with the written language to construct meaning by building on learner schemata. One of the main components of reading is word-decoding which requires activation of vocabulary, which also aids in text comprehension (Cain et al., 2015, p. 12; Mukhopadhyay et al., 2022a). There is enough evidence to highlight the impact of vocabulary knowledge on reading comprehension (Laufer, 2020). For instance, in a recent study by Treffers-Daller et al. (2022) on primary grade Indian learners, the researchers construe that 'a lexical threshold' forms the basis of predicting learners' success in overall text comprehension. The study highlights that young Indian learners often do not comprehend the prescribed texts in English textbooks due to lack

of necessary or 'a threshold level' vocabulary knowledge comprising K1 to K2 levels of BNC words. Therefore, there is a need to cater to learners' meaning making process by employing the full repertoire of their multilingual vocabulary resources.

### **Translanguaging as a Pedagogical Tool to Improve Vocabulary Knowledge**

As we move towards 'dynamic bilingualism' (Garcia, 2009) also referred to as 'translanguaging' (Williams, 1994), its scope as a pedagogical practice allows for the use of learners' full linguistic repertoires as well as their alternation, spontaneous and planned, to develop multilingual competence. Research has shown that the existing oral vocabulary knowledge in home language(s) can be used to scaffold English vocabulary learning (Martin-Betrán et al., 2017; Mukhopadhyay, 2020) helping learners achieve the lexical threshold required for improving their inference abilities (Laufer, 2020; Traffers-Daller et al., 2022). Therefore, the use of translanguaging becomes a strategic tool to develop the ability to infer meanings of unfamiliar words within sentential, and discourse context leading to automatic word recognition and processing. This in turn would enable learners to understand a variety of texts, and different kinds of discourses.

Translanguaging, a successfully emerging pedagogy in multilingual contexts, can help teachers to develop learners' vocabulary knowledge in English by activating their lexical resources through home language(s). To derive the benefits of using home languages, it is necessary for teachers to be trained to consciously use learners' home language(s) through translanguaging pedagogy. Research shows that pedagogical translanguaging can support language development and make learners feel valued as multilingual speakers (Cenoz & Gorter, 2020). The present study explores the impact of translanguaging pedagogy to develop vocabulary skills in the context of developing reading comprehension in primary grade Indian multilingual learners. It addresses the following research questions:

1. How successfully do teachers use translanguaging pedagogy to enhance learners' vocabulary?
2. Does the use of translanguaging pedagogy impact learners' vocabulary knowledge?

## The Study

The present study was a part of the British Council ELTRA project titled '*Reading for comprehension in primary school children in India: A teacher training programme*'. It was carried out in ten low SES government primary schools in Hyderabad, Telangana, India by the English and Foreign Languages University, Hyderabad in collaboration with the University of Cambridge, United Kingdom. Though the main project focussed on developing both reading and vocabulary knowledge through classroom translanguaging practices, for the purpose of this paper we focus only on the study design and findings pertaining to vocabulary development.

Aligning with the recommendations of the Indian NEP, 2020, the *MultiLiLa* project in India, conducted prior to the ELTRA project, recommended a) use of systematic multilingual inputs to develop young learners' reading comprehension skills and b) train teachers in translanguaging pedagogy to fulfil this necessity (Tsimpli et al., 2020). The ASER, 2023 survey reported that, post-Covid, academic, and cognitive competencies of young learners across India were in decline. This was corroborated by the findings of the National Achievement Survey, 2021 conducted by the Ministry of Education in Telangana revealing that the state's young learners seemed to be performing below the national average.

### *Post-pandemic Learning Loss in School-going Children in Telangana*

The learners who participated in our project spoke Telugu, Hindi, and/or Lambadi as their L1/home languages while their proficiency in English (L2) was found to be rather low, possibly due to lack of familial support in reading in home languages and English. The only support the children had was their teacher's oral input and the textbooks, which were above their proficiency levels (Tsimpli et al., 2020; Treffers-Daller et al., 2022). Post-pandemic, the teachers had also observed the learners being unable to keep up with the curriculum despite belonging to the intended age-group. Most teachers used learners' home languages as a coping strategy in an impromptu manner in class. They predominantly used Telugu, Hindi (Dakhini) to teach content in English. But the teachers were not specifically trained to use vocabulary links from home languages to enhance vocabulary knowledge in the target language. They mostly resorted to word meaning translations.

To address these learnability issues and given the significant role played

by teachers at primary level of education, the teacher-training project took off in 2022 with the following aims:

1. to orient participant teachers towards the usefulness of translanguaging pedagogy;
2. to train them in using learners' home languages to support vocabulary and comprehension multilingually.

## **Methodology**

### ***Participants***

For this study, four teachers (3 female, 1 male) who teach English to fifth-grade learners at low-SES government primary schools in Hyderabad, Telangana have been considered. All of them hold a Bachelor of Education (B.Ed.) degree and are fluent users of Telugu, and Hindi (Dakkhini) and use English for classroom communication. These teachers were selected based on their willingness to adopt new teaching strategies and design and implement a range of reading and vocabulary tasks with multilingual inputs. The teachers were observed for nine months as an intervention phase of the study. The impact of their new practices were ascertained through children's performance on a standardised English vocabulary task (described below) during the intervention phase.

Two hundred and forty-eight fifth-grade learners, who mainly speak Telugu, Hindi and Lambadi, participated in the project. For the current study, the data was collected from 55 learners from four schools from the larger pool of ten schools.

## **Procedure**

### ***Teacher Training and Collaborative Lesson Planning***

Over the course of the project, two teacher-training workshops were conducted to emphasize the use of purposeful translanguaging and its relevance in the educational context. In the workshops the following topics were covered: a) introducing translanguaging as a systematic and strategic pedagogic tool to the teachers, b) enabling teachers to reflect on the functions of home languages in instructional context, c) helping them in understanding how to purposefully alternate between language(s) as resources to improve learners' vocabulary knowledge

and comprehension skills and d) training them in using translanguaging pedagogy to develop vocabulary in context tasks aligned to different stages of text comprehension.

The teachers were introduced to the translanguaging reading model developed by Mukhopadhyay et al. (2022b) to divide units into three stages—pre-, while- and post-reading with focussed inputs on vocabulary in context (for a full description refer to 2022b). The model was used to help the teachers plan lessons with optimised and structured translanguaging opportunities from home languages to teach English. Post-training, the teachers collaborated with the research team to create systematic lesson plans with meaningful translanguaging inputs. After finalising the multilingual vocabulary bank for each text, they were guided in creating different vocabulary activities to cater to learner-needs at different stages of reading lessons. This helped them to strategise on ways to purposefully use the learners' home languages to enhance English vocabulary development, and in overall text comprehension.

## **Tools and Tasks Used**

### ***Classroom Observations***

Classroom observations were conducted to understand the uptake of the teachers from the training as well as the challenges they faced in creating, and implementing the lesson plans. They were also provided an opportunity to receive feedback and deeply reflect on their pedagogical moves, and design of teaching and learning materials (TLM). Teacher practices were documented using field notes during classroom observations. Each teacher was observed in thirty-minute classes during which the following were documented: chronology of the lessons, task implementation, teacher-learner rapport and their attitudes, learner participation, translanguaging instances, challenges faced in implementing lesson plans and vocabulary tasks, and their impromptu decision-making during the lessons.

### ***British Picture Vocabulary Scale (BPVS) Task***

Learner performance was collected using the BPVS task (Dunn et al., 1982). This task forms an estimate of learner vocabulary at K1 to K2 levels. This task assessed learners' receptive (hearing) vocabulary as 7

sets of words (12 words each) in an increasing order of difficulty. The pictures generally include nouns for areas such as animals, toys and emotions, verbs and attributes. For each word, one has to identify the picture depicting the word from a set of four pictures (refer to Appendix 1). Based on their responses, the number of Basal sets and Ceiling sets are calculated. If a learner does not identify (0 to 1) words (i.e. minimum errors) in a set, then the set is considered as a Basal set and if she does not understand up to 8 or more words out of 12 (i.e. maximum errors) then the set is considered as a Ceiling set. Thus, the high number of Basal sets and low number of Ceiling sets would indicate fewer errors, depicting improved vocabulary knowledge. The task was administered to the learners in two phases— pre- and during-intervention, separated by a gap of four months.

### ***Data Analysis***

Teacher practices were thematically analysed, following Braun and Clarke's model (2006, 2021) to identify the uptake and challenges teachers face in employing the translanguaging approach to teach vocabulary. Teacher moves were coded through an inductive process, guided by the structure of the lesson plan. This helped in identifying three potential translanguaging vocabulary strategies teachers employed. The impact of using the translanguaging vocabulary strategies on the learners was examined by comparing their performance in the BPVS task on basal and ceiling sets in pre- to during-intervention using descriptive and inferential statistics.

### **Findings**

The findings are presented to answer each research question.

#### **RQ1: How successfully do teachers use translanguaging to enhance learners' vocabulary?**

Table 1 reports the inputs provided to help teachers understand the various functions of translanguaging as a pedagogic practice and how they can help in developing learners' vocabulary skills. It also shows the common uptake across the four teacher-participants from the translanguaging training in their teaching practices.

**Table 1.** *Inputs from Teacher-Training Workshops vs. Teacher Practices*

Important pedagogical features on developing vocabulary knowledge	Were inputs given in the workshop?	Were the teachers able to adopt the inputs into their classroom practices?
Using multilingual vocabulary bank	yes	yes
Using learners' home languages to elicit meaning of given vocabulary	yes	yes
Using learners' home languages to explain meaning through examples	yes	yes

It is noteworthy that the teachers adopted all the three inputs. During the collaborative lesson-planning sessions, the four teachers made attempts to create multilingual vocabulary banks that would help consolidate the words and phrases integral to overall text comprehension (an example is provided in Appendix 2, Table 2). Additionally, they were able to employ a more learner-centred approach by finding opportunities to use learners' home languages to elicit meaning, and further provide explanations through examples activating the learners' background knowledge (see excerpts 1 & 2 below).

The findings from the thematic analysis of the common classroom practices across the four teachers are presented in Figure 1.

**Figure 1.** *Translanguaging Strategies for Teaching Vocabulary (Adapted from Mukhopadhyay et al., 2023)*

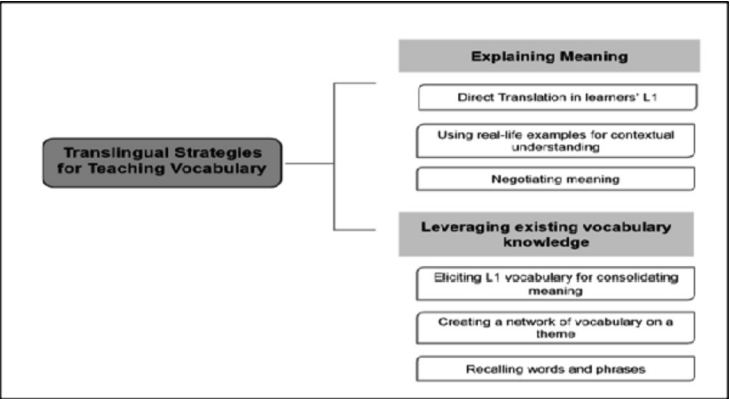


Figure 1 indicates that all the four teachers have predominantly leveraged learners' vocabulary knowledge in their home languages (e.g. Telugu and Hindi) to *elicit, explain, recall, and negotiate* meaning of words and



phrases. This would scaffold learners' lexical inferencing or vocabulary in context skills.

### *Translanguaging Strategies for Teaching Vocabulary*

The teachers used learners' language resources to provide explanations and help them understand the meaning of contextualised words and phrases. A few excerpts have been provided below to illustrate such translanguaging instances.

Translation of words and phrases, a common strategy in Indian classrooms, can be used effectively when paired with some useful cross-linguistic elicitation techniques. For instance in excerpt 1 the teacher explains how dry the pond was, as depicted in the text, after attempting to elicit the meaning of dry as 'hard' in Telugu (*gatti-ga*) from the learners.

*The teacher reads out a line from the text 'The pond was now a wide stretch of caked earth'. He asks what the 'cake' refers to here: 'Cake.. ante em undhi?'. When the learners are unable to figure out the meaning in relation to the context of drought, he explains that it means that it is hard: 'gatti...gatti-ga (Hard...hard). He points at the picture and asks 'Gati-ga aiponda kada?' (The mud becomes hard, right?). He explains 'Atla aipondi cheruvu' (that is how the pond became).*

### **Excerpt 1: Conveying Meaning in Learners' Home Languages**

In Excerpt 2, the teacher wants to elicit the existing Telugu knowledge of the learners and use their world knowledge (or schemata) to consolidate understanding of 'pet'. To tap into learners' critical thinking skills and making lexical inferences, she asks them if a street dog can be labelled a pet. She goes on to explain that they are *stray* (and not pet) animals.

*The teacher asks (in Telugu) what 'pet' means in Telugu and the students answer 'janthu' and she tells them (in Telugu) that it is not the exact meaning. One of the learners give the correct Telugu equivalent 'kempu janthu'. She questions them- if they can call a dog living in the streets as a pet- 'What do you call them? Is it a pet?' and the students disagree while one of them says that they are 'wild animals'. The teacher clarifies (in Telugu) saying that it is not a pet or a wild animal and that it is a 'stray' or 'street dog'. The animals we raise at home are pets, she explains (in Telugu).*

### **Excerpt 2: Eliciting Background Knowledge**

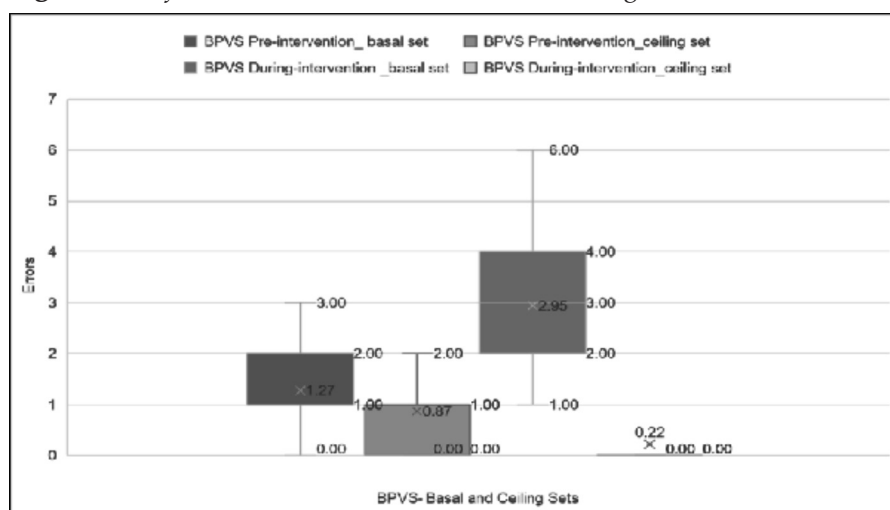
However, while implementing the tasks from the lesson-plans the teachers faced certain challenges. Some found it difficult to understand the significance of inserting cross-linguistic vocabulary tasks for the different stages of the lesson ( pre-, while- and post-) as opposed to their

pre-training practice of teaching vocabulary mainly before the reading the text in a unit using only word translations.

**RQ 2: Does the use of translanguaging pedagogy impact learners' vocabulary knowledge?**

To answer this research question we analysed learners' performance (N=55) in the BPVS task administered to them before teacher-training and four month into the intervention phase. Figure 2 given below, illustrates the impact of the translanguaging strategies on vocabulary enhancement.

**Figure 2.** Performance on BPVS Task Pre and During Intervention



The findings reveal that for Basal sets at the pre-intervention stage, the average errors were only 1 set (lower quartile-Q1= 1.27) and during intervention it increased to 3 sets (median-Q2= 2.95). It means that the learners were able to identify more words in during-intervention stage, therefore the total number of errors decreased. Similarly for Ceiling sets at the pre-intervention stage, the average was 1 set (upper quartile-Q3= 0.87) and it decreased to 0 (Median-Q2= 0.22) at the during-intervention stage. This implies that the learners were able to identify more words which resulted in a decrease in the number of errors in the Ceiling set and corresponding rise in the Basal set.

This decrease in number of errors, and corresponding increase in correct responses for both Basal and Ceiling sets indicate that there is higher

word meaning recognition during intervention. This trend is statically proved by a one-way ANOVA test suggesting significant improved performance across Basal and Ceiling sets ( $f(3,216) = 78.30^*$ ,  $p < 0.00$ ) during intervention phase. Further, psot hoc independent t-test results strengthened the observation by revealing the significant differential performance in both the Basal ( $t(78) = -7.50^*$ ,  $p < 0.00$ ) and Ceiling ( $t(93) = 4.70^*$ ,  $p < 0.00$ ) conditions.

In addition, a pearson product moment correlation test between pairs of the Basal and Ceiling tests in pre- and post-intervention conditions showed the Basal sets significantly and weakly correlate ( $r(df, 53) = .30^*$ ,  $p < 0.05$ ) while the Ceiling sets significantly and moderately correlate ( $r(df, 53) = .40^*$ ,  $p < 0.05$ ). Furthermore there was significant, weak and inverse relation between Basal set 2 and Ceiling set 2 ( $r(df, 53) = -.27^*$ ,  $p < 0.05$ ) showing that as vocabulary knowledge in English improves, there is decrease in the ceiling set and corresponding increase in Basal set.

The learners' improved vocabulary performance on the BPVS task during the intervention phase can be attributed to teacher attempts at use of systematic or pedagogical translanguaging with focussed vocabulary inputs.

### **Implications**

Since vocabulary development is the most necessary aspect of building reading comprehension in young learners, it is necessary for ESL teachers to analyse the vocabulary in the textbook and understand the suitability of textbook vocabulary or lexical complexity for learners (Treffers-Daller et al., 2022). Teachers can be trained to do a lexical analysis using a software like Lex-tutor (Cobb, 2022). Using this software teachers can identify the K-level difficulty of words and plan transalanguaging vocabulary inputs employing a variety of home languages. To prepare for multilingual vocabulary inputs, teachers can create multilingual vocabulary banks using words, phrases, and idiomatic expressions. Learners can be asked to draw comparisons of meanings of new English vocabulary (words, phrases and collocations) to the ones with similar meanings in their home languages (refer to Table 2, Appendix 2 ).

The task of creating a multilingual vocabulary bank brings forth another implication of the study—highlighting the linguistic comparison of multiple languages in context, and designing vocabulary tasks. For instance teachers can consider the set of three activities in Figure 3 to

Figure 5 given in Appendix 3. These are a part of a lesson-plan for the text from which the vocabulary bank was created and included in Table 2, Appendix 2. The activities are aimed to help learners systematically develop meanings of words and phrases using their knowledge of home languages to process word meaning in English. These step-wise activities can help learners form cross-linguistic connections to build word relationships such as synonyms, antonyms and fixed expressions across languages. It can raise their metalinguistic awareness as they learn to strategically use their home languages to increase vocabulary in English. It can eventually increase their lexical breadth and depth.

## Conclusion

The findings of the study reveal that systematic training in use of translanguaging strategies impacts learners' receptive vocabulary development in English. Thus, the findings of the study have significant pedagogical implications for training ESL teachers. Strategies to enhance translanguaging vocabulary teaching could be included in multilingual teacher training modules while the efficacy of such strategies can be validated through future research.

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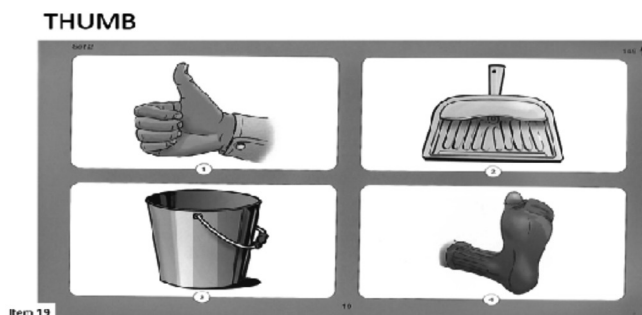
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## Appendix 1: Vocabulary Test: BPVS

### Sample Task Item from BPVS



## Appendix 2: Multilingual Vocabulary Bank

**Table 2.** Sample of Multilingual Vocabulary Bank for a Paragraph from the Lesson 'Karate Kitten' in the English Textbook of Class 5, SCERT Telangana

English	English meaning	Telugu	Hindi
pet	an animal that is kept in the home as a companion and treated kindly	పెంపుడు జంతువు Pempudu jantuvu	पालतू paaletoo
cage	a space surrounded on all sides by bars or wire, in which animals or birds are kept	పంజరం Panjarah	गिरा pinjar
responsible	to have control and authority over something or someone and the duty of taking care of it, him, or her	బాధ్యత Badyata	जवाबदार javaabadear
homemaker	a person who manages a home and often raises children instead of earning money from a job	గృహిణి Grihini	गृहणी gruhani
alone	without other people	ఒంటరిగా Ontariga	अकेला akeela
several times	more than two and fewer than many; some	చాలా సార్లు Chala sarlu	कई बार kaee bar
days passed	a period of time that has gone by or when recounting an event that has happened in the past	రోజులు గడిచాయి Rojulu gadichayi	दिन बीत गए din beet gaye
on my own	unaccompanied by others; alone or unaided	నా స్వంత నా Na svanta na	अपने दम पर apne dam par

## Appendix 3: Cross-Linguistic Vocabulary Tasks

**Figure 3.** Set of Vocabulary Tasks for Enabling Linguistic Comparison–Task 1

*Step 1 : Teacher writes English words on the board.*

English	Telugu meaning 1	Telugu meaning 2	Hindi meaning
small			
near			
buy			
day			

**Instruction 1:** Read English words on the board. Do you know the Telugu meanings of these words? Discuss with your group and one of you will share the answer with the class. (5 minutes)



**Figure 4.** Set of Vocabulary Tasks for Enabling Linguistic Comparison—Tasks 2 and 3:

Step 2: She then writes the Telugu words on the board. If the children do not know, she reads the words for them

English	Telugu
small	చిన్నది Chinnadi
Near	సమీపంలో Samipamla
buy	కొనుగోలు Konugolu
day	రోజు Roju

**Instruction 2:** Do you know the opposite words for the Telugu words written on the board? Discuss in your group and one of you will share the answer. (5 minutes)

**Instruction 3:** Can you tell me an English word for the Telugu opposite in column 3? Discuss in your group. If you don't know, I will tell you. (5 minutes)

English	Telugu	Telugu Opposite
small	చిన్నది Chinnadi	
Near	సమీపంలో Samipamla	
buy	కొనుగోలు Konugolu	
day	రోజు Roju	

(Note: for column three - Telugu Opposites the teacher needs to fill the responses from the children)

English	Telugu	Telugu Opposite	English word for Telugu opposite
small	చిన్నది Chinnadi		big
Near	సమీపంలో Samipamla		far
buy	కొనుగోలు Konugolu		sell
day	రోజు Roju		night

**Figure 5.** Set of Vocabulary Tasks for Enabling Linguistic Comparison—Task 4

**Instruction 4:** Now match the pairs of the opposite words.

a.	small	1	night
b.	Near	2	big
c.	buy	3	far
d.	day	4	sell

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