

Translation Guidelines

National Achievement Survey (NAS) Class X (Cycle 2) : 2017-18

Background

National Achievement Survey (NAS) assesses students in English, Mathematics, Science, Social Science and Modern Indian Language (MIL) at Class X (Cycle 2). The National team of NAS at NCERT is responsible for development of test items in source language (*Source language for Mathematics, Science and Social Science is ENGLISH and for MIL it is HINDI*). In order to collect nationally comparable data for NAS, the equivalence of regional language versions is a requirement, which means that the translation of materials must meet stringent quality standards in each of the state language. Thus it is crucial to ensure that the translation process does not introduce biases likely to distort national comparisons by:

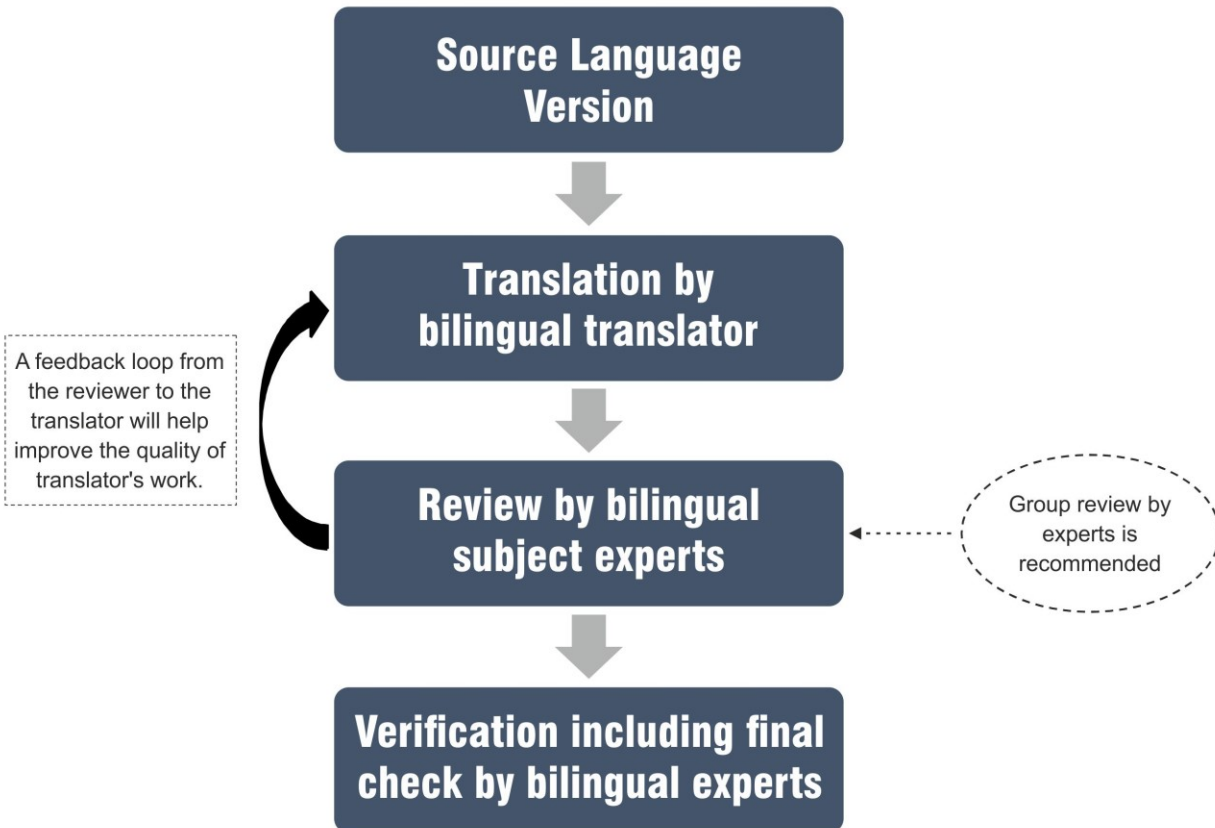
- Making the comprehension of texts, graphics or tables used as stimulus in the various test units more difficult (or easier); and
- Unintentionally modifying the difficulty of the questions asked to the student, through a formulation that changes the type of mental strategy required or the item construct.

Translation Process

The translation guideline briefly encapsulates the necessary steps to reduce the biasness and increase the comparability among the states between the NAS English language tests and its translated variants in different regional languages. For subjects–Mathematics, Science and Social Science the source language is ENGLISH and for MIL it is HINDI. So, the English/Hindi has been referred to as the **source language** and the regional languages in which the NAS tests will be translated as the **target language(s)**. A forward translation model is being proposed for translating the English language NAS tests into their regional language counterparts.

Translation of Tests will include the following processes:

- Translation by a translator which will be followed by review of the translated papers by a group of subject experts and a final round of check, verification and vetting by a verifier.



- **PLEASE DO NOT TRANSLATE FRONT PAGE.**
- There are three booklets in each subject. Each test booklet of Mathematics, Science Social Science and Modern Indian Language (MIL) is having 60 items.
- Translate **Mathematics, Science and Social Science** test booklets from **English** (source language) into regional language (target language).
- **MIL** test having two parts:
 - i) Reading Comprehension have total five passages in each booklet, consisting first 30 items in a booklet. Two passages are common in each booklet.
 - ii) Language element/grammar consisting next 30 items (31-60) in a booklet.
- Translate **Reading Comprehension** part, i.e., passages and respective items written in **Hindi** (source language) into regional language (target language).

- **PLEASE DO NOT TRANSLATE LANGUAGE ELEMENT ITEMS AS IT IS FROM HINDI BOOKLETS.** Construct Language element/grammar items (30 items) specific to regional language.
- **WHILE TRANSLATING MAINTAIN THE POSITION OF ITEMS AND THEIR KEYS SAME AS IN THE SOURCE LANGUAGE.**
- While translating , observe following:
 - i. error if any in source version
 - ii. item in which translation difficulties were faced

Document above observations, if any, in the following table:

Sr. No.	Issues	Test Item Number			Remarks
		Test Form 1	Test Form 2	Test Form 3	
1.	Error, if any, in source version				
2.	Item in which translation difficulties were faced				

Qualifications, Roles and Responsibilities

Translator

The translator will need to independently translate the test items (once for each subject) and document the translations. He/she will be expected to incorporate modifications in the translated tests as suggested by the subject specific reviewers. A qualified professional translator may not have subject specific expertise. However, he needs to have complete mastery over both the source and target languages. In an ideal case, he/ she should have had previous experience in developing tests and assessments for students. The state may hire bilingual language experts for this task.

Subject Specific Reviewers

Subject experts will need to review the translations and check the translation accuracy between the source and the target tests. Reviewers may suggest changes in the translations and the same will need to be communicated to the translator. Reviewers will be expected to maintain complete documentation of the changes suggested by them. Bilingual SCERT/ Board experts with excellent domain knowledge may be used to review the items.

Verifier

Verifier needs to check the overall linguistic accuracy of the translations with special emphasis on grammar and spellings. He/she will be expected to vet and certify the translated version of the test.

Generic Translation Guidelines

Please adhere to the guidelines given below while translating the source language tests into target language tests.

1. **Respect the layout and presentation shown in the source document**

Often, a translated document is longer than the source, due to the peculiar characteristics of each language. Usually *this* does not have a significant effect on student performance. However, sizeable/ significant differences in the number of pages between the source and the target language tests should be avoided (e.g.) situations wherein, students need to turn a page to read the complete question in the target language, which appeared on a single page, with text and questions given side by side in the source language needs to be avoided.

Key points to remember:

- Ensure that the instructions given to the students are consistent with the final test layout (e.g. When giving instructions such as “as shown in the diagram *below*” or “in the box *above* you is given a formula”, check to ensure that the diagram is indeed, given below and the box above in the target version).
- If **necessary**, use **only a slightly** smaller/bigger font in the target test than what has been used in the source test.
- Ensure that titles/subtitles, numbering of lines/paragraphs/items are the same in the target and the source versions of the test.
- Ensure that words/expressions that are, emphasised in the source text by using bold/italics/underlining/capital letters are given equivalent emphasis in the target version also.
- Ensure that the text within text boxes present within/ along the pictures/ graphs in the target language also get translated.
- Ensure no alterations occur between the source and the target language test versions during printing of the tests (e.g.) check for compatibility of graphical layout between both the versions, specifically with regards to grey-shaded picture elements.

2. Linguistic Difficulty

Avoid complicating/simplifying the vocabulary and the grammar in the target text. As a general rule, translators should try their best to avoid translating *technical words* in the source text by using easier words/paraphrases that use *common language/colloquial terms*. Similarly, *common language/colloquial terms* used in the source test should not be translated into more ‘technical’/ ‘scientific’/ ‘literary’ expressions in the target test.

Use of “colloquial terms” vs “scientific terminology” is an important challenge when questions in Mathematics, Science and Social Science need to get translated.

Common language often uses less than precise words to describe mathematical /chemical/physical/biological concepts – sometimes ‘common’ words may even convey misconceptions, such as ‘weight’ could mean ‘mass’; ‘heat’ could mean ‘temperature’, ‘circle’ used to mean ‘disk’, etc. If everyday life contexts are used, it is recommended NOT to use ‘common language/ colloquial terms expressions into the ‘technical’ terminology.

For translating the technical terms that are uncommon in the target language, translator may in some circumstances, use the term which best describes the term in the target language along with the term in English, in brackets. However, this is only acceptable if the doing so, is standard practice within the textbooks produced in the State.

3. Idioms and metaphorical expressions

Too literal translation of *idiomatic* expressions (specifically in English) should be avoided.

Failure to find a fluent equivalent expression of the idiomatic expression in the target language may result, in meaningless passages or sentences.

As far as possible, make sure that the symbolic meaning of English expressions such as “to see to it”, “in small steps”, “to disappear into thin air” is adequately translated through similar idioms in your language.

4. Use of nouns and verbs

Do not use nouns in the target language test, when the author has used verbs in the source language, or vice versa. In the following example, when the above substitution *has* taken place, it can be seen that, ‘a’ has become more difficult than ‘b’:

- a) The presence of humour in a violent scene can increase the chances that viewers will imitate or learn aggression.
- b) When humour is present in a violent scene, viewers are likely to imitate or learn aggression.

Situations such as above should be avoided.

5. Use of active vs. passive phrases in sentences

During translations, ensure that translations do not convert an *active phrase* in the source text to a *passive one* in the target text, or vice versa.

In the following example, the difficulty level of version 'b' has increased, because of its expression in the passive form.

- a) Many Indian families, traditionally, present their children with hundreds of problems of this type.
- b) In India traditionally, hundreds of problems of this type are presented to children by their families.

Thus to create an effective and powerful content in a regional language use active voice. This will help in making the content more direct which will lead to a better understandability. Along with the content in regional language, usage of active voice helps to simplify the translation of the created content.

6. Negations

While framing sentences, avoid the use of double negatives. In the following example, the 'b' version is more difficult than 'a', because of the replacement of a negative term (harmless) by a double negation (is not harmful):

- a) This does not mean that the violence in cartoons is harmless.
- b) This does not mean that the violence in cartoons is not harmful.

7. Reference chains

Modify, as little as possible, any reference chain(s) given in the passage. A reference chain is the set of incidences in the text, where the same character/ notion is referred to, by using different language tools (pronouns, synonyms, etc.).

The following passage, from an article on violence on TV, is quite complex. It contains three reference chains, one relating to the notion of violence (V), the other to the notion of punishment (P), and the third referring to the young viewer (Y):

"If the punishment (P1) for violence (V1) is delayed until the end of the program, this deterrent (P2) may go unnoticed by a young child (Y1). Punishment (P3) must occur in the same scene for a younger viewer (Y2) to connect it (P4) to the original aggressive behaviour (V2) which gave rise to it (P5)."

In a case of this type of question, translators should strive to preserve the nature of the elements of the source text:

- Repeat the word if the author repeated it (punishment in P1 and P3).
- Use a synonym if the author used one (violence in V1 / aggressive behaviour in V2; punishment in P1 and deterrent in P2).
- Use the combined repetition and synonym when this is the case with the author (young child in Y1 and younger viewer in Y2).
- Use pronouns where the author uses them (P4, P5).

In many languages, repeating words in a text is less readily accepted than in English, thus, translators often tend to use synonyms rather than repeating same words. Note, however, that the text above will become more difficult, for example, if you choose to avoid the repetition in P3 by using a synonym (*sanction* instead of *punishment*), or in Y2 by using a reference by position (*the latter* instead of *younger viewer*).

8. Generic articles

The English article **a** (“*a cell*”, “*a molecule*”) is often used to convey a general meaning, such as in the sentence: “*The milk of a cow, a goat and a human do not contain the same amounts of proteins*”.

This characteristic of English makes it different from other languages; where such articles are normally used to refer to an *individual* cow, or wolf, or cell, or molecule. To prevent misinterpretation, especially when translating Science materials, translate expressions in the way, that is, used in the target language to express the same “general” idea.

For example, the sentence “*A tidal power station uses a different method to generate electricity from many other power stations*” needs to be turned into plural when translated into Hindi (“*Tidal power stations use a different method to generate electricity than other power stations*”).

9. Key and distracter length in MCQs

Translators must ensure that, lengths of the key (correct answers) and any of the distracters *do not get* unnecessarily shortened/elongated as a result of the translations. Long answers are more attractive than short ones; therefore, the question might become easier in one target version if the correct answer is more elaborate (relative to other options), than in the source version. On the other hand, the question might become more difficult if a distracter stands out from the others because it is longer than in the source version.

10. Truncated Questions

Truncated questions are multiple choice questions, where the stem is an incomplete sentence, and the student has to select the most appropriate answer among four proposed “endings”.

Translators need to ensure that, all proposed endings in the target language have the same grammatical match with the incomplete stem; otherwise the item will measure grammar skills instead of the intended process.

11. Respect literal matches

If the wording of a question, literally *matches* words contained in the text, translators need to take care that the same holds true in the target language test too. If, on the contrary, the author of the question, uses a different *expression* from that of the text (synonym), do not simplify the student’s task by using words directly from the text in the stem or distracters.

For example, if the text states:

“On his way to the train station, Arnav bought an apple. On the train, Arnav ate the apple, along with the orange his mother had given him”.

And the question stem states:

“What did Arnav buy *on his way to the train station*?”

It is clear that the *question writer deliberately intends to provide a clear reference to the location of the text*. So this should **not** be replaced with a translation equivalent to:

“What did Arnav buy *before he got on the train*?”

Key points to remember:

1. Ensure instructions in both the source and target language are exactly the same: special care needs to be taken when translating instructions, particularly with regards to indications contained in the source version on whether *only one answer* or *more than one answer* are expected from the student.
2. Translators should try to reproduce the order in which the author has presented different pieces of information contained in the stem of a question.
3. Mis-translations sometimes occur in extremely “easy” sentences, just because they seem so simple, thus, making the translator pay less attention! Translators need to pay equal attention to all questions. It may occur in a multiple-choice questions, that some of the alternatives proposed only differ by one key detail.
4. Translators need to be particularly vigilant in such cases: it often happens that, during translations, the element that makes the difference between both distracters is mistakenly toned down, thus weakening the question itself.

12. Documentation

- When translating the test papers, some adaptations may need to be made to suit the local context. All suggested adaptations need to be documented.
- Any problems or uncertainties faced during the translation process should be documented and the documentation needs to be shared with the question writers.

13. What should be adapted, what should not be adapted?

a) Do not include explanatory notes nor additional instructions

In some cases, translators may be tempted to add a footnote or an explanation to provide the meaning of a particularly difficult word. Please note that such adaptations should be avoided as much as possible.

b) Adapt mathematical symbols, abbreviations and formulas.

Adapt the abbreviations of units of measurement and the symbols used for mathematical operations. The general principle is that translators should adapt to the *conventions* mentioned in the textbooks produced by states.

Careful attention needs be paid to when translating the following:

- Units which sometimes are expressed in different written forms (“cl, ml”, vs “cL, mL”)
- Symbols for multiplication may differ (.), or (*) or (x)
- Approximation is sometimes noted (\sim) or (+/-)
- The captions/units of measure/coordinates of the axes must practically be translated every time

c) Check the use of mathematical and scientific terminology

Mathematical and scientific language is far less “universal” than it is often said to be. It is therefore, essential for the translators to include members who are competent in Mathematics and Science, or for its work to be carefully checked by specialists.

d) Check “common language” quantitative expressions

Translators need to be particularly careful in translating all “common language” expressions in Mathematics questions. Many of these *expressions* are less equivalent than they seem to be across languages. Differences occur, for example, in the way various languages count certain things, and on whether the first (or last) item should be included in the total. (e.g.) in items where intervals are specified (such as “*Temperatures between 60°C and 74°C*”), the boundary values (60 and 74°C) are considered as included in the interval in certain languages, but as excluded in other languages.

e) Place value

The format of place value must be preserved. For example, 2,00,000 should NOT be adapted to 200,000 or 2 lakh.

f) Some names should NOT be adapted:

- In some literary texts, the names of characters, places, currencies are part of the universe described by the author; therefore, the only acceptable changes are those slight spelling adaptations that are generally used in your State.
- Do not adapt the names of institutions or agencies (unless there is a well-known state version of the name)
- Do not adapt proper names of people and locations such as those given in geographical maps.

14. Main theme should be maintained

Content in regional language should be performed along with maintaining the decorum and aura of the items in the source language.

15. Syntax and semantics

The format and the logic of the item should be given the priority, as the students need the aura of content to let themselves engage with the content. Semantics means the logic, the way item sentences are separated or like each sentence sustains the content accordingly the translation should be done.

16. Keep sentences brief

Sentences are the structure of the content body. Content in regional language boosts the readability if the proper and brief sentence is presented that is easy to read and understand. The sentence should portray the meaning, not only the language but the combination of good hold on language. The content used should not provide a cue to the answer.

17. Use of single words to elaborate about a concept

A single word is enough to express rather than elaborating on the concept about it. Content in regional language favors the brief and exact things to strike the mind of the student without jumping the hurdles and searching for the meaning.