# Correlating trainee's translating performance with the quality of their metacognitive self-evaluation

FRANCESC FERNANDEZ
Universitat Pompeu Fabra, Barcelona, Spain
francesc.fernandez@upf.edu

PATRICK ZABALBEASCOA Universitat Pompeu Fabra, Barcelona, Spain patrick.zabalbeascoa@upf.edu

#### **ABSTRACT**

This paper presents a study of correlations between the performance of trainee translators, according to their teacher's assessment, and the quality of their self-evaluation, according to their answers to metacognitive questionnaires. Two case-studies of two consecutive editions of a course in general translation from German into Spanish are dealt with. The course involved the use of post-translation metacognitive questionnaires designed to help trainees to evaluate their translating. A selection of the questionnaires (from the strongest and the weakest performances by students for each course edition) is considered. The study focuses on one item in these questionnaires that has to do with identifying translation problems and justifying their solutions. An interpretive analysis of the trainees' answers for this questionnaire item reveals that the best-performing students were more strategically and translationally aware in self-evaluating their own translating. Our conclusions are based on considering six parameters from the analysis of the trainees' answers, which are tentatively regarded as indicative of the quality of their self-evaluation.

#### **KEYWORDS**

Metacognitive questionnaires, self-evaluation, translating, problems and justifications, strategic awareness.

# 1. Introduction

This paper presents an analysis of two case-studies aimed at ascertaining whether the performance of trainee translators correlates with the quality of the self-evaluation of their translating through metacognitive questionnaires. The use of such questionnaires in translator training remains a largely unexplored research field, with only a few case-studies (e.g. Fernández, 2008, which, however, does not deal with the quality of trainees' self-evaluation of their translating).

Hence the novelty of this paper, where quality is considered on the basis of tentative indicators. They arise from the analysis of the trainees' answers to an item involving a twofold question in post-translation metacognitive questionnaires designed to help them to evaluate their own translating (including stages, strategies, and solutions). From the trainee's standpoint, this question applies to two strategically relevant actions: (i) identifying translation problems adequately solved, and (ii) justifying their solutions. We regard these two actions as functions of strategic subcompetence for trainees, departing from PACTE's definition of this concept (2008:

116) (cf. Fernández and Zabalbeascoa: forthcoming). The two functions are closely, but not exclusively, related to another function of this subcompetence, the trainees' evaluation of their own translating.

An analysis of tentative indicators accounting for the quality of this evaluation suggests that trainees who performed better, according to their teacher's assessment (marks for translating assignments), identified translation problems and justified their solutions with greater strategic and translational awareness. This correlation shows the benefit of guided translator instruction with metacognitive questionnaires promoting strategic awareness through this type of self-evaluation.

# 2. Conceptual framework

# 2.1. Identifying translation problems and justifying their solutions as functions of strategic subcompetence for trainees

The didactic concept of strategic subcompetence for trainees, as presented in Fernández and Zabalbeascoa (forthcoming), departs from PACTE's definition of this concept. For PACTE, strategic subcompetence is the most relevant of the several interrelated subcompetences that make up translation competence, in that "it creates links between the different subcompetences, as it controls the translation process" (2008: 107). According to PACTE, strategic subcompetence is the "procedural knowledge to guarantee the efficiency of the translation process" (ibid. 106) and comprises the following functions:

To plan the process and carry out the translation project [...], to evaluate the process and the partial results obtained in relation to the final purpose, to activate the various subcompetences and compensate for ant shortcomings and to identify translation problems and apply procedures to solve them (PACTE 2008: 107).

On the basis of this definition, we conceive strategic subcompetence for trainees as applying to teaching in early stages of translator training and involving the functions which we perceive to be most relevant for the development of strategic awareness. These functions result from reconsidering the ones established in PACTE's definition by introducing new functions to promote awareness, which also involves renaming some of the functions proposed by PACTE.

The functions include the activation of the various subcompetences, as well as the planning, monitoring and evaluating of the trainees' translating, as successive stages of their metacognitive reflection on this translating. This kind of introspection enables trainees to verbalise certain aspects of their translating, such as when they identify translation problems and justify their solutions.

These aspects are also functions of strategic subcompetence ('strategic subcompetence' throughout will refer to trainee translators) which are closely, but not exclusively, related to the self-evaluation of trainees' translating. These two functions are strategically relevant, as they help raise students' awareness of the decision-making process involved in translating.

This relevance applies in particular to the justification function, since trainees often refer to successful translation strategies in justifying their solutions for the problems they have identified. By translation strategy we understand any conscious action intended to enhance a translator's performance for a given task, especially in

terms of efficiency and effectiveness, and resulting in a solution which may or may not fall within a previously recognised typology (Zabalbeascoa 2000: 120).

# 2.2. Trainees' self-evaluation of their translating within a community of apprentices through metacognitive questionnaires (MQs)

Trainees are able to evaluate their own translating, as they develop their strategic subcompetence within a community of apprentices. As such, they co-construct knowledge by using the scaffolding provided not only by the teacher, but also by their peers. By scaffolding we understand the help "which will enable a learner to accomplish a task which s/he would not have been quite able to manage on his own" (Kiraly 2000: 46).

Trainees identify adequately solved translation problems and justify their solutions as they engage in metacognitive reflection and, in particularly, as they evaluate their translating. This is one of the three processes of procedural cognition (together with planning and monitoring, Pozo et al. 2001: 226) which leads trainees to verbalize their own cognitions thereby becoming more aware of certain aspects of their translating.

This awareness process can be promoted by metacognitive questionnaires (MQs), which, applied to translator training (Fernández and Zabalbeascoa, forthcoming), we regard as mediation instruments that include a series of more or less open-ended questions, primarily about strategic subcompetence. Through these questions the process of learning how to translate strategically is broken down into more manageable chunks. Trainees deal with them by writing their answers in order to clarify their ideas and improve their reasoning. MQs can be used by students to plan, monitor or evaluate their translating, as well as to assess their own learning.

MQs have two principal aims from the teacher's perspective: (i) gradually to transfer to trainees the control and awareness of educational activities; (ii) to promote in them the intermental and the intramental dialogue as proposed by Vygotsky (1978: 42). The first aim involves fully including MQs in task sequences and leading trainees towards cognitive emancipation through appropriate feedback from the teacher according to their answers to the MQs. The second aim involves encouraging trainees to work on MQs in pairs or groups and to benefit from the resulting peer-scaffolding of knowledge.

## 3. The study

#### 3.1. Setting

The study applies to two successive editions of a university Moodle-based German-Spanish translation course, designed mostly for Catalan and other Spanish students with German as a foreign language. The first course edition (CE-1) took place in the academic year 2008-2009 and the second course edition (CE-2) in 2009-2010. The course lasted ten weeks and consisted of three modules. Module 1 lasted three weeks and, given its introductory character, involved work not on texts but on contextualized sentences designed to illustrate relevant translation problems. Module 2 lasted three weeks, and each week trainees translated a short text (about 250 words). Module 3 lasted four weeks and was devoted to a collaborative project which involved translating a single long text (about 3,000 words).

The course comprised two weekly face-to-face sessions in workshop format, with an additional two hours' autonomous work outside the classroom. It was addressed to first-year university students with no prior formal training and it was regularly attended by fifteen students in both CE-1 and CE-2 (out of twenty and eighteen enrolled, respectively). Both course editions differed in that six out of the fifteen trainees regularly taking part in CE-2 were native speakers of German (Erasmus and other exchange students), whereas there were none in CE-1. Most of these exchange students worked together with a Spanish peer from the very beginning of the course. This contributed to raising the average performance level in the group and was an effective way of coping with diversity. Teamwork was considerably less frequent in the CE-1 group, which may partly account for the fact that the initial differences between its members concerning their translating performance were hardly levelled as the course progressed.

# 3.2. Pedagogical intervention

The study results from part of a pedagogical intervention aimed at promoting trainees' planning and self-evaluation of their translating through pre- and post-translation MQs, which is the type this paper deals with.

Pre-translation MQs helped trainees to plan their translating on the basis of a brief provided by the teacher. They consisted of questions targeting pragmatic features of the source text and the prospective target text, as well as foreseeable translation problems and how they might be solved. These questions were orally worked on in class before the source text was shown, with the teacher writing down the group's answers and providing the necessary scaffolding. This included teacher's notes for the students, to be read after class, on the most significant translation problems and their possible solutions, following a functionalist approach (Nord, 2005).

Post-translation MQs helped trainees to self-evaluate their translating, and consisted of questions focusing on how they had proceeded to fulfil the teacher's translation brief, as well as on translation problems and their justifications for their solutions. Trainees wrote their MQ answers out of class, individually or in groups, after translating each text in the same arrangement and before submitting their translations to the teacher. Thus, their translations could include changes resulting from the reflection prompted by the post-translation MQs. The teacher commented on these also in writing, before handing them back with the corrected translations, which were then discussed in class.

#### 3.3. Corpus of the study

Our study focuses on the post-translation MQs used in module 2 of CE-1 and CE-2. They were actually used more frequently than in the other modules, as the number of texts-to-translate that they were used for was also higher. The three texts for module 2 were kept the same for CE-1 and CE-2, thereby ensuring a more reliable means for comparing results. The texts were: the registration conditions of a language course (text 1), the description of the school organising the course (text 2) and a piece from a short autobiographical story (text 3).

Six samples of post-translation MQs were considered for each of the three texts (totalling 18 samples) translated in module 2 in CE-1 and CE-2. For each text, three of the six samples were of the best performances (students with the highest marks) and the other three were samples of the poorest performances (i.e. students with the lowest

marks). For each case, we will refer to the students producing the best samples as Highs, and the students with the weakest performances as Lows. The Highs and Lows were not always the same 6 individuals in the 18 post-translation MQs of each course edition. Highs and Lows were selected according to their marks, whereby marks were given by considering not only mistakes but also good solutions.

This resulted in a corpus of thirty-six post-translation MQs done by 12 and 9 individuals or pairs of students in CE-1 and CE-2, respectively, which provided variety and representativity to the corpus. Of all the MQs considered only one was answered by a pair of students in CE-1, versus eight in CE-2 (five by Highs and three by Lows). As a result of the levelling effect induced by the more frequent teamwork in CE-2, the highest mark given to one of Lows in this course edition was slightly higher than the lowest mark given to one of the Highs, whereas in the case of CE-1 the difference between the Highs and the Lows was much more clear-cut.

# 3.4. Object of analysis

The quality of the trainees' self-evaluation was considered on the basis of their answers to a single twofold question in the post-translation MQs: "what translation problems do you think you have adequately solved, and why?" It will be referred to below as item 3, its original reference in the post-translation MQs for module 2 in both editions of the course. The 'what...?' part of item 3 pursued the identification of translation problems adequately solved. The 'why...?' part was intended to get the trainees to verbalise justifications for their solutions to these problems. In other words, item 3 targeted the two most relevant functions related to the self-evaluation of students' translating.

#### 3.5. Parameters of analysis

We dealt with the trainees' answers to the 'what' and 'why' parts of item 3 separately, which resulted in five parameters of analysis. The first parameter was: the types of problems identified as adequately solved. These types emerged after we segmented each answer into as many parts as different problems could be made out, by means of a thematic, context-sensitive analysis. Then, we grouped thematically-related items into types, following a recursive process of abstraction and generalization "partly based on participants perspectives and partly based on our own interpretation" (Creswell 2001: 20). Finally, we labelled the common core of the students' answers in the translational terms used in class, relating the emerging problem types with the instruction they resulted from. This can be illustrated by the problem type labelled 'general style conventions', which condenses the essence of such student answers as "sentences in nominal style" or "the passive voice".

Problem types were classified into three groups according to their strategic relevance (in descending order): (i) strategically more relevant problem types to do either with the conventional use of language or cross-cultural phenomena, such as 'genre style conventions' or 'culturally specific references'; (ii) strategically less relevant problem-types to do either with phenomena related to the language system or specific of the source text in question such as 'syntax' or 'vocabulary'; (iii) and

<sup>&</sup>lt;sup>1</sup> Single inverted commas are used for labels to refer to categories resulting from the analysis.

<sup>&</sup>lt;sup>2</sup> Categories directly quoted from students' answers appear in double inverted commas.

translation strategies actually mistaken for problem types, such as "fulfilling the target text-receiver's expectations".

The second analytical parameter was the degree of conceptualization for the problems identified, which was established on the basis of three categories. The first of them, involving the highest level of abstraction, were translational terms that trainees had become acquainted with in class, for instance "[rendering] sentences in nominal style". The second, involving a lower level of abstraction than translational terms, were paraphrases echoing them more or less directly, for instance, "German structures", meaning "sentences in nominal style" according to the context. The third category, involving no abstraction at all, were passages quoted from the source text containing the problem in question, for instance "Es werden folgende Gebühren einbehalten" [the following fees will be retained], as an example of 'genre-specific expressions'. Expressions quoted from students, for this third category will appear in quotation marks

The third analytical parameter was the percentage of identified problems with a justified solution. This percentage resulted from correlating the number of identified problems with the number of their justified solutions.

The fourth parameter was given by the types of justified solutions, which resulted from the same thematic, context-sensitive analysis as the problem types. Two justification-types involving two different kinds of strategies emerged: the much more numerous translation strategies, for instance 'using the conventional equivalent'; and the much rarer metacognitive strategies, such as 'following indications given in class'.

The fifth parameter was the degree of conceptualization for these justifications. It was established on the basis of the same three categories with decreasing level of abstraction as in the case of problem types: translational terms, for instance, "I have translated the specific terms for conventionalized formulae that I have found in the parallel texts"; paraphrases of such terms, for instance, "because I have not found it convenient to translate the name of the school", meaning "leaving proper names untranslated"; and passages from the target text, for instance, "he preferido traducirlo por 'los padres de mi padre'" ["I have preferred to translate it as 'my father's parents ""].

We regarded these five parameters as tentative indicators accounting for the quality of the translator trainees' self-evaluation. For us, quality is all the greater, the higher the strategic relevance of the problems identified and the percentage of these problems with a justified solution, and the higher the degree of translational conceptualization both for problem types and for the justification of their solutions and the wider the variety of such justifications or of the types that they may belong to.

#### 3.6. Research approach and questions

Our study follows the premises of qualitative research, in that "the researcher is an instrument of data collection who gathers words [...], analyzes them inductively [...] and describes a process" (Creswell 2001: 14). However, we prefer to call our approach 'interpretive', following Arumí (2006: 180), as our study does not exclude quantification and also considers data on a quantitative basis.

We carried out two case-studies, one for each of the two groups of students enrolled in CE-1 and CE-2. In so doing, we used ethnographic methodology. We consider it the natural methodology for interpreting educational reality, because of its emphasis on: empirical data, different levels of meanings, and comprehension of a process. We used investigator triangulation to ensure intersubjective plausibility.

In our approach, the study is guided by the following two research questions for the contexts of CE-1 and CE-2:

- 1) Is there a significant correlation between the trainees' level of performance and the quality of their identification of adequately solved problems?
- 2) Is there a significant correlation between the trainees' level of performance and the quality of their justification for the solutions of these problems?

These questions will be dealt with throughout the discussion of the results yielded by the analysis (cf. 3.7.), before being summarily answered in the outcomes of the study and concluding remarks (cf. 4).

#### 3.7. Results and discussion

In presenting and discussing the results of the analysis, we will consider the two casestudies corresponding to CE-1 and CE-2 separately (3.7.1 and 3.7.2). Within each of them we will also deal separately with students' identification of problems adequately solved and their justifications for their solutions. The figures for Highs and Lows in all of the tables are the averages.

# 3.7.1 Case-study 1

# a) Identification of problems adequately solved

Types of identified problems	Highs	Lows
1. Strategically more relevant problems		
General style conventions	3.0	1.5
Culturally specific references	1.2	0.3
Genre-specific expressions	0.6	0.0
TOTAL	4.8	1.8
2. Strategically less relevant problems		
Vocabulary	3.3	0.6
Source text personal style	0.6	0.0
Grammatical ambiguity	0.0	0.3
TOTAL	3.9	0.9
3. Translation strategies mistaken for translation problems		
Avoid lexical repetition	0.0	0.3
Add information implicit in the source text	0.3	0.0
Fulfil the target text-receiver's expectations	0.0	0.6
TOTAL	0.3	0.9
TOTAL for 1, 2 and 3	9.0	3.6

Table 1: Types of problems identified as adequately solved in case-study 1.

The number of problems Highs identified as adequately solved was, on average, 2.5 times more than for Lows. Highs identified strategically more relevant problems 2.5 times more frequently than Lows, and also referred to a greater number of types for such problems (three versus two). Strategically less relevant problems were identified by Highs just over four times more frequently than by Lows, whereas both student groups mentioned the same number of types, two, for these problems. Only translation strategies mistaken for translation problems were revealingly more frequently identified by Highs than by Lows, three times more. Lows also referred to more types for such strategies than Highs: two and one, respectively.

Degree of conceptualization (for problem identification)	Highs	Lows
Translational terms	3.0	0.9
Paraphrases	4.2	2.1
Source text passages quoted	1.5	0.6
TOTAL	8.7	3.6

Table 2: Degree of conceptualization for identified problem types in case-study 1.

Highs identified translation problems with a greater degree of conceptualization than Lows. In so doing, they not only used translational terms three times more frequently, but they also resorted twice as much to paraphrases and 2.5 times more frequently to source-text passages. Correlation can thus be observed for CE-1 between the level of the trainees' performance and the quality of their identification of adequately solved problems. Highs identified a greater number of strategically relevant problems than Lows, and did so with a higher degree of conceptualization.

# b) Justification of the solutions for the identified problems

Highs justified their solutions for a percentage of identified problems (78.6%) which lies twenty points above the figure for Lows (58.3%), thereby bearing witness on their greater translational awareness.

Types of problems with justified solutions according to relevance	Highs	Lows
Strategically more relevant problems	4.2	1.8
Strategically less relevant problems	3.0	0.3
Translation strategies mistaken for translation problems	0.0	0.3
TOTAL	7.2	2.4

Table 3: Types of problems with justified solutions in case-study 1.

Highs also justified the solution for strategically more relevant problems two and a half times more frequently than the Lows, as in the case of problem identification. With regard to strategically less relevant problems, Highs justified their solutions up to ten times more than Lows. Such a difference proves much bigger with respect to problem identification (four times more) than in the case of strategically more relevant problems. This may confirm the greater translational awareness of Highs in justifying their solutions to translation problems. Significantly, translation strategies mistaken for problems proper were justified only by Lows, who, in so doing, actually justified what was already a justification.

Strategies: translational and metacognitive	Highs	Lows
1. Translational		
Use the conventional equivalent	2.1	1.2
Take the co(n)text into account	1.5	0.3
Add information for the target text-reader	0.6	0.3
Add the grammatical subject in Spanish	0.3	0.3
Consult parallel texts	0.3	0.0
Maintain the same style as the source text	0.3	0.0
Leave proper names untranslated	0.3	0.0
Avoid lexical repetition	0.3	0.0
Conform to target text-grammar	0.3	0.0
Comprehend the source text adequately	0.3	0.0
TOTAL	6.3	2.1
2. Metacognitive		
Follow instructions and advice given in class	0.6	0.0
TOTAL	0.6	0.0

Table 4: Types of justifications for solutions in case-study 1.

In justifying the solution for the identified problems, Highs mentioned translation strategies three times more frequently than Lows. Using the conventional equivalent was the most frequently cited strategy by both. This can be explained by the fact that 'general style conventions' was the most frequently identified problem type by both Highs and Lows, given the conventionalized character of the two textual genres that texts 1 and 2 belonged to.<sup>3</sup>

Highs deployed a wider range of translation strategies than Lows, ten compared to four. They also resorted to all strategies more frequently than Lows or just as frequently, thereby providing evidence of greater strategic awareness. This correlates with the fact that only Highs used a metacognitive strategy that also points to greater strategic awareness: following instructions and advice given in class.

Degree of conceptualization (for justifying solutions)	Highs	Lows
Translational terms	3.3	0.3
Paraphrases	3.9	1.8
Target text-passages quoted	1.5	0.3
TOTAL	8.7	2.4

Table 5: Degree of conceptualization for the justifications of solutions in case-study 1.

Highs justified their solutions for the problems they had identified with a greater degree of conceptualization than Lows, as they used translational terms up to eleven times more than Lows. It had been only three times more frequent in the case of problem identification, which highlights a remarkable difference between Highs and Lows regarding their translational awareness in justifying solutions.

Paraphrases were more often resorted to by Highs than by Lows, just over twice as frequently. The difference with respect to problem identification remained, though, practically the same. In turn, passages from the target text were quoted five times more frequently by Highs than by Lows, but only 2.5 times more passages from the source text had been quoted in the case of problem identification.

This leads us to claim that a correlation can also be established in CE-1 between trainees' performance and the quality of their justifications for solutions to translation problems as identified by them. Highs both justified the solution for a higher percentage of problems than Lows and this also applied more frequently to strategically relevant problems. In the case of Highs, these justifications involved both translation strategies, which they used to a greater extent and in a wider range than Lows, and metacognitive strategies, as well as a higher degree of conceptualization

# 3.7.2 Case-study 2

a) Identification of problems adequately solved

Types of identified problems	Highs	Lows
1. Strategically more relevant problems		
Genre-specific expressions	1.8	0.9
General style conventions	1.2	1.2
Culturally specific references	0.3	0.0
TOTAL	3.3	2.1
2. Strategically less relevant problems		
Vocabulary	0.3	1.2

<sup>&</sup>lt;sup>3</sup> While actually being constituent parts of the same genre, i.e. the language-course leaflet, the course registration conditions and the description of the school organizing it, appear to be so functionally distinct as to be considered instances of two different textual genres (cf. Fernández 2010: 67 and 145).

Syntax	0.3	1.2
Source text personal style	0.9	0.3
Grammatical ambiguity	0.3	0.0
TOTAL	1.8	2.7
3. Translation strategies mistaken for translation problems		
Leave proper names untranslated	0.0	0.6
TOTAL	0.0	0.6
TOTAL		

Table 6: Types of problems identified as adequately solved in case-study 2.

Highs identified a slightly smaller average number of translation problems than Lows, (5.1 compared to 5.4), unlike CE-1, probably owing to the levelling effect of the increased teamwork taking place among the members of the CE-2 group.

As for CE-1, identification applied to a higher average number of strategically more relevant problems in the case of Highs than of Lows (3.3 against 2.1). The difference, though, was smaller than in CE-1 (4.8 against 1.8), possibly by virtue of the above mentioned levelling effect. Highs also referred to a larger number (3) of types for such problems than Lows (2), as was exactly the case in CE-1. Though differently ranked, these problem types coincided with the findings in CE-1, thus revealing the relevance of MQs in helping trainees to identify translation problems.

Unlike CE-1, Highs identified a smaller average number of strategically less relevant problems than Lows (1.8 versus 2.7), as well as more types for such problems (four vs. three), possibly as result of the levelling effect. Three out of four of these problem types coincided with those referred to in CE-1, which points again to the usefulness of MQs.

Unlike CE-1, Highs mistook no translation strategies for problems in CE-2. Lows did, but their average number of translation strategies mistaken for problems was somewhat smaller than in CE-1 (0.6 vs. 0.9). In addition, they referred only to one type of such strategies, against two in CE-1, which may again be related to the minor differences between Highs and Lows in CE-2.

Degree of conceptualization (for problem identification)	Highs	Lows
Translational terms	3.9	3.0
Paraphrases	0.9	1.5
Source text-passages quoted	0.6	1.2
TOTAL	5.4	4.7

Table 7: Degree of conceptualization for identified problem types in case-study 2.

Highs identified translation problems by using a higher average number of translational terms than Lows, as in CE-1. The difference between Highs and Lows (3.9 to 3) was, however, considerably lower than in CE-1 (3 to 0.9), likely owing to the minor differences in level within the group. In CE-2 translational terms were the only category to do with the degree of conceptualization for the identified problems whose average number was larger for Highs than for Lows, unlike CE-1.

In CE-2, Lows resorted to a greater number of paraphrases on average than Highs (1.5 to 0.9), and to source text-passages (1.2 to 0.6). In both cases the difference was smaller than in CE-1 (2.1 to 4.2, and 0.6 to 1.5, respectively), which may well be correlated, again, to the more homogeneous level of the CE-2 group.

Though less extensive than in CE-1, given the levelling effect of increased teamwork, a correlation is also observable between the trainees' level of performance and the quality of their problem identification skills in CE-2. Highs not only identified strategically more relevant problems more frequently than Lows, but their problem identification involved the use of more translational terms too.

#### b) Justification of the solutions for the identified problems

Despite having identified a slightly smaller average number of translation problems than Lows (5.1 to 5.4), Highs justified a greater percentage of such problems than Lows (70.5% vs. 60%), thereby showing greater translational awareness. The difference between both student groups, though, was smaller than for CE-1 (78.6% vs. 58.3%), possibly as a consequence of minor differences in the CE-2 group, regarding their level.

Types of problems with justified solutions according to relevance	Highs	Lows
Strategically more relevant problems	2.4	0.9
Strategically less relevant problems	1.5	2.7
Translation strategies mistaken for translation problems	0.0	0.3
TOTAL	3.9	3.9

Table 8: Types of problems with justified solutions in case-study 2.

Highs justified a greater average number of strategically more relevant problems than Lows (2.2 to 0.9), as in CE-1. The difference was still much smaller than in CE-1 (4.8 versus 1.8) probably for the same reasons as before. As was the case in CE-1, the difference was somewhat larger than in relation to problem identification. Highs thus showed greater translational awareness in justifying solutions than in identifying the corresponding problems compared to Lows.

Unlike CE-1, Highs justified a lower average number of strategically less relevant problems than Lows (1.5 to 2.7), as was also the case with problem identification in CE-2 and possibly on the same grounds. Having not identified them at all, Highs did not justify translation strategies mistaken for translation problems, as in CE-1. Lows did, and exactly in the same proportion as in CE-1.

Translation strategies	Highs	Lows
Use the conventional equivalent	1.8	0.9
Take the co(n)text into account	0.3	1.8
Add information for the target text-reader	0.3	0.0
Add the grammatical subject in Spanish	0.3	0.0
Consult parallel texts	0.3	0.0
Fulfil the target text-receiver's expectations	0.0	0.3
Maintain the same style as the source text	0.9	0.0
Avoid literal translation	0.0	0.3
Conform to target text-grammar	0.0	0.6
TOTAL	3.9	3.9

Table 9: Types of justifications for solutions in case-study 2

In justifying solutions to translation problems, CE-2 Highs used exactly the same average number of translation strategies, as Lows, 3.9, unlike for CE-1. Using the conventional equivalent was the most frequently cited strategy by both, as for CE-1. The reason is that genre-specific expressions, to be adequately conveyed through their conventional equivalent in the target language, were the most frequently identified problem type in CE-2.

CE-2 Highs referred to no metacognitive strategies, unlike CE-1 Highs. As in CE-1, though, they deployed a wider variety of translation strategies than Lows. The difference between both student groups as for the number of such strategies, six versus five, was, however, considerably smaller than in CE-1, ten to four.

Degree of conceptualization (for justifying solutions)	Highs	Lows
Translational terms	2.1	1.5
Paraphrases	2.1	2.4
Target text-passages quoted	0	1.2
TOTAL	4.2	5.1

Table 10: Degree of conceptualization for the justifications of solutions in case-study 2.

CE-2 Highs justified their solutions with a greater degree of conceptualization than Lows only with regard to translational terms, unlike CE-1 Highs, as the average number of these terms in CE-2 was, respectively, 2.1 and 1.5. Such a difference was smaller than in the case of problem identification in CE-2, 3.9 versus 3, again compared to CE-1 Highs. Thus, CE-2 Highs did not reveal a greater degree of translational awareness in justifying their solutions than in identifying the corresponding problems with respect to Lows, in contrast with their behaviour in CE-1.

Compared to CE-1, CE-2 Lows used a larger average number of paraphrases than Highs (2.4 versus 2.1) to justify solutions. This had also been the case with problem identification in CE-2, where the difference between both student groups was, however, bigger (1.5 to 0.9). Unlike CE-1, CE-2 Lows quoted a greater average number of target text-passages than Highs (1.2 to 0). This happened after they had also quoted a larger number of source text-passages in identifying problems, but with a smaller difference with respect to CE-2 Highs (1.2 to 0.6).

From what we have seen, in CE-2 the trainees' level of performance appears to correlate with the quality of their justifications of solutions, too. This happens to a smaller degree than in CE-1, as was the case with problem identification in CE-2 and, quite likely, on the same grounds. Such a correlation proves, though, significant, as Highs not only justified the solution for a higher percentage of problems than Lows, but this applied to a greater extent to strategically more relevant problems. In so doing, Highs used a wider variety of translation strategies and a higher average number of translational terms.

#### 4. Outcomes of the study and concluding remarks

We will now summarily answer the two research questions guiding the present study and consider its main contributions and didactic implications.

With regard to the first question, to do with a possible significant correlation between the trainees' level of performance and the quality of their identification of adequately solved problems, such a correlation does indeed exist. It can be seen more clearly in the first course edition (CE-1) group, possibly due to the levelling effect of increased teamwork in the second course (CE-2) group. The coincidences between both groups are still relevant enough to support the claim that problem identification by Highs (the strongest performing trainees) presents better quality in strategic and translational terms than by Lows (the weakest performing trainees). Highs consistently identified a greater average number of strategically more relevant problems, whereas Lows more frequently referred to translation strategies mistaken for problems. In addition, the identification of translation problems by Highs involved a larger average number of translational terms, whose greater level of abstraction entailed a higher degree of conceptualization, too.

As for the second question, to do with a possible significant correlation between the trainees' level of performance and the quality of their justification of translational solutions, this correlation is also more clearly seen in CE-1. If we focus on significant coincidences between both course editions, we can observe that the justification of solutions by Highs presents a higher level of strategic and translational quality. Highs justified their solutions for a larger percentage of problems identified as adequately solved than Lows, and they also more frequently justified solutions for strategically more relevant problems. The difference between Highs and Lows in the justification of their solutions was higher than in the case of their identification. Thus, Highs showed more awareness of strategically more relevant problems in justifying their solutions than in identifying them compared to Lows. This greater strategic awareness also applies to strategies mistaken for problems. Highs identified them to a lesser extent than lows, but they did not justify their solutions at all, unlike Lows. Highs deployed a wider range of translation strategies too, whose average number lay above that for Lows. In addition, they also used a higher average number of translational terms than Lows, as had been the case with problem identification.

We would now like to present the three main contributions of the study, as relevant for metacognitively oriented, research-based translator training aimed at helping trainees to improve self-evaluation of their translating in a collaborative learning environment.

The first contribution is the set of indicators accounting for the quality of the trainees' self-evaluation of their translating. The correlation between the quality of trainees' self-evaluating and the quality of their translating performance validates such indicators within the scope of this small-scale study, in our opinion. These indicators represent a valuable starting point for more extensive empirical research that may contribute to further validation and refinement.

The second contribution is the finding that better performances from trainee translators were followed by better self-evaluations of their translating through post-translation metacognitive questionnaires (MQs). Such higher-quality self-evaluating was the case for both problem identification and justifications of target text solutions, as validated by the coinciding results for CE-1 and CE-2. This entailed a higher degree of both strategic and translational awareness.

The third contribution is the finding that, where teamwork was extensively engaged in, in CE-2, it had a positive effect on the quality of the trainees' translation performance and, likewise, on the quality of the self-evaluation of their translating. This is supported by the fact that of all post-translation MQs considered for study in CE-2, more than the half of those that were answered in pairs belonged to the Highs group.

Finally, we would like to mention the two main didactic implications of the study, as related to the previous contributions and as applying to post-translation MQs to include student-relevant support meeting better student needs and to be used on the basis of enhanced peer-interaction

The first didactic implication draws on the correlation between the quality of the Highs' self-evaluation of their translating and their more successful performance as translators. It involves redesigning post-translation MQs, starting with item 3, by providing the necessary pedagogical assistance for weak trainees so that they can evaluate their translating with the same kind of strategic and translational awareness as Highs and improve their performances as translators accordingly.

The second didactic implication draws on the promoting effect of teamwork, as favouring socially shared self-regulation leading to incipient expertise. It involves not only encouraging trainees to answer post-translation MQs in teamwork from the very beginning of the course, but also asking them to make these MQs electronically accessible to all their peers, so that weak trainees in particular can benefit from the increased interaction within the whole group

#### 5. Appendix

- 1 Have you learnt anything new about the subject-matter of the source text? If so, what?
- 2 Have you consulted any information source to get (more) background information on the subject of the source text? If so, which ones?
- 3 Which translation problems do you think you have solved adequately and why [do you think so]?
- 4 What would you recommend to a peer who hasn't yet translated this text but is going to, or an instance of the genre it belongs to?
- 5 Have you checked your translation for coherence, by reading it again without looking at the source text several days after completing it and by making sure that it was comprehensible for another Spanish speaking person?
- 6 Have you checked your translation for stylistic problems by looking up odd-sounding combinations of: a) noun + adjective or prepositional clause
  - b) verb + noun

that can be found in parallel texts, monolingual dictionaries or electronic corpora?

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