

RESULTS OF PACTE'S EXPERIMENTAL RESEARCH ON TRANSLATION COMPETENCE ACQUISITION: ACCEPTABILITY AND DECISION-MAKING

PACTE Group

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PACTE

I. INTRODUCTION

OVERALL OBJECTIVE

Acquisition of Translation Competence

PHASES

1st Translation Competence (TC) (2000-2010)

2nd Acquisition of Translation Competence (ATC) (2011-)

RESEARCH

Empirical-experimental

Process and product

6 LANGUAGE COMBINATIONS

TESTS

Exploratory studies on TC (June 2000-January 2001)

Pilot test on TC (February-April 2004)

Experiment on TC (October 2005-March 2006)

(professional translators, foreign-language teachers)

Pilot test on ATC (June 2011)

Experiment on ATC (November 2011)

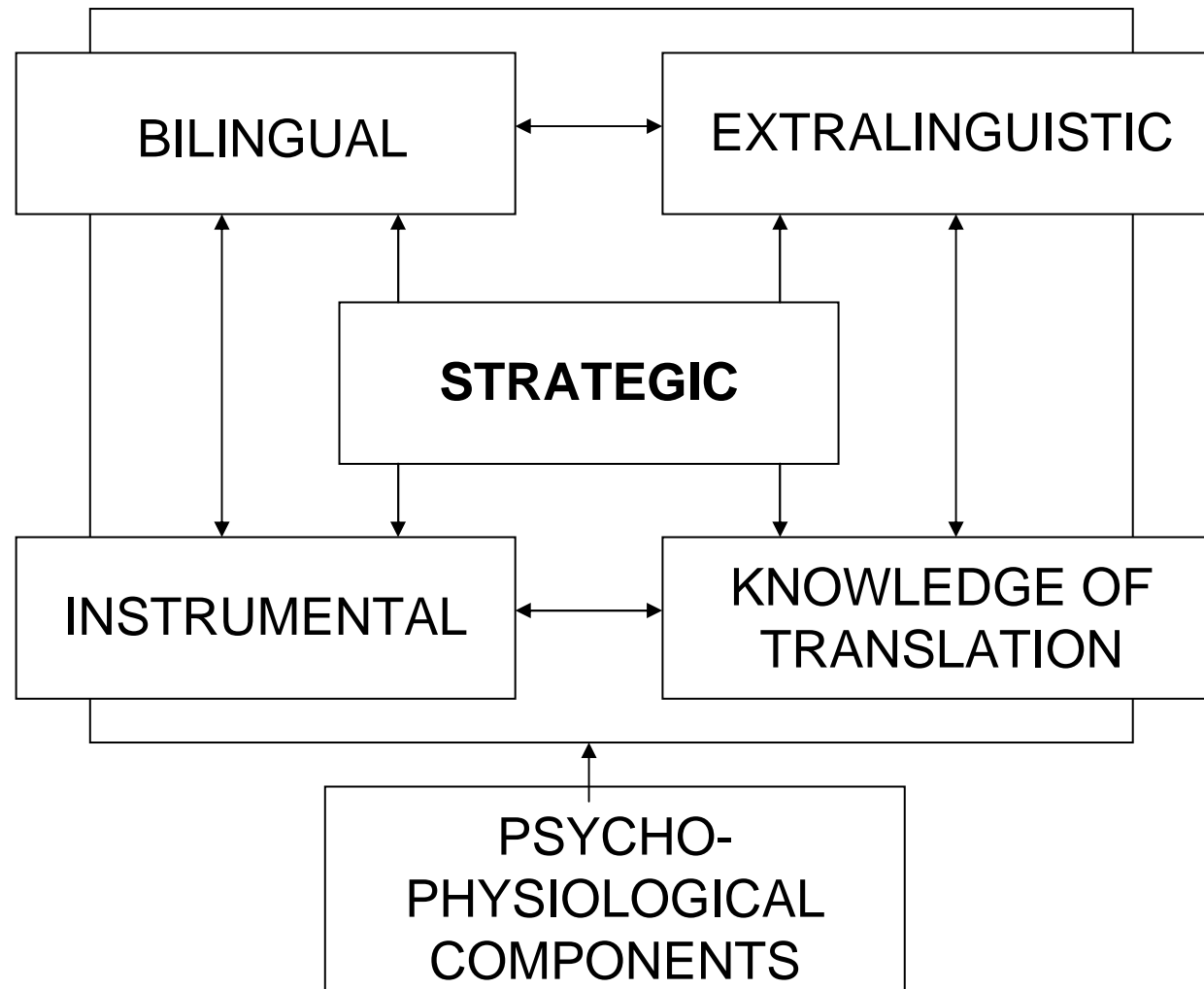
(translation trainees)

CURRENT PHASE

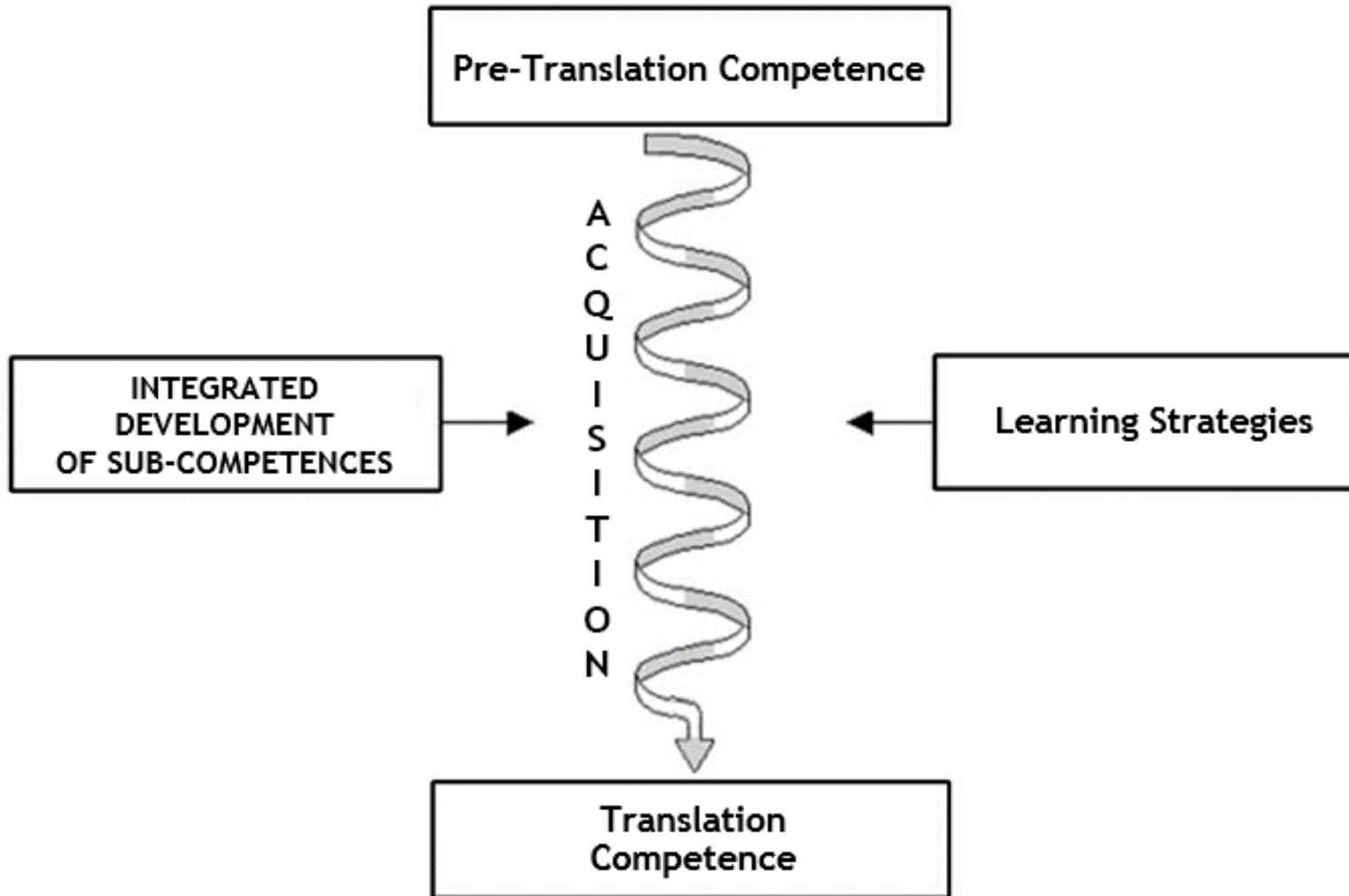
Analysis of data from experiment on ATC

The underlying system of knowledge required to translate

- ✓ Expert knowledge
- ✓ Predominantly procedural
- ✓ Comprising different inter-related sub-competences
- ✓ Important strategic component



**II. ACQUISITION OF TRANSLATION
COMPETENCE: THEORETICAL MODEL
AND RESEARCH DESIGN**



General hypothesis:

Translation competence is acquired as a result of a process of development and restructuring of different sub-competences.

Operational hypotheses:

1. Translation competence comprises several inter-related sub-competences.
2. The development of the strategic, instrumental, and knowledge of translation sub-competences is of particular importance de traducción, instrumental y estratégica.
3. Not all sub-competences develop in parallel, i.e. at the same time and at the same rate.
4. Learning-to-learn strategies must also be acquired.
5. The acquisition of translation competence is dependent upon directionality (direct/inverse translation), language pairs in use, the field of specialized translation (legal, literary translation, etc.) and the learning environment.

INDEPENDENT VARIABLE

■ Degree of experience in translation:

- Novices
- Second-year students
- Third-year students
- Fourth-year students
- Recent graduates

- Professional translators

DEPENDENT VARIABLES = (as in the TC experiment)

- Knowledge of Translation
- Translation Project
- Identification and Solution of Translation Problems
- **Decision-making**
- Efficacy of the Process
- Use of Instrumental Resources

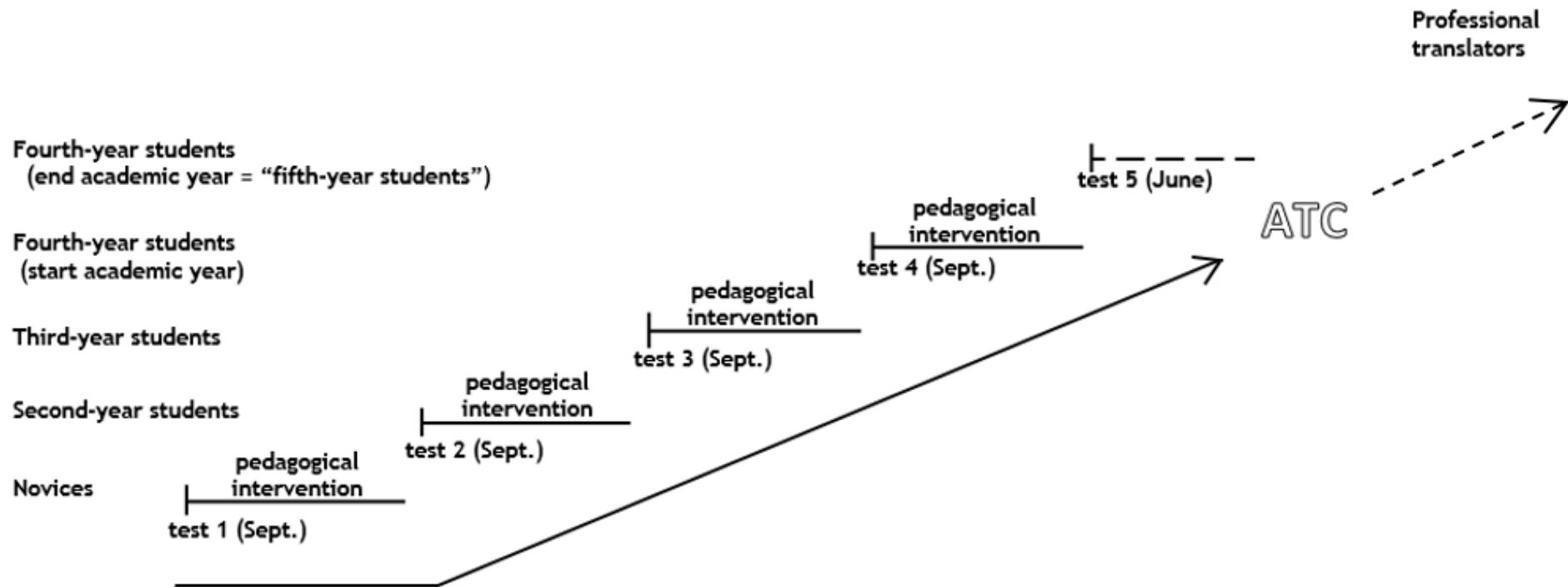
20 indicators

- **Acceptability as a transversal indicator**

Measurements from cohorts of 1st year, 2nd year, 3rd year
and final-year students

- Advantages
 - Data collected in one year
 - Validated instruments available from the TC experiment

Simulation of a longitudinal study



EXPERIMENTAL UNIVERSE

- Students from different years in the FTI/UAB Degree in Translation and Interpreting
- 6 language combinations (as in the TC experiment)

SELECTION PROCESS

- Pre-selection questionnaire
- 5 cohorts of approx. 30 subjects each
(fourth-year students and recent graduates took the older, unadapted Translation and Interpreting degree course).

SAMPLE

- 130 subjects

CONTROL GROUP

- 35 translators from the TC experiment

Instruments validated in the TC experiment:

- Observation: on-screen real-time recordings
Camtasia
- Questionnaires:
 - Knowledge of Translation Questionnaire
 - Translation Problems Questionnaire (revised)
- Texts:
 - Rich Points
 - Criteria for acceptability
- Corpus of electronic texts
WordSmith Tools

- Direct translation
- Completion of a questionnaire on the translation problems encountered
- Inverse translation
- Completion of a questionnaire on the translation problems encountered
- Completion of the Translation Knowledge Questionnaire

DECISION-MAKING

↔ Related to Strategic & Instrumental sub-competences

(PACTE 2009)

Decisions made during the translation process, that involve the use of automatized and non-automatized cognitive resources (internal support) and the use of different sources of documentation (external support)

☐ Instruments:

- ✓ Translations
- ✓ Translation process recordings (*Camtasia*)

☐ Indicators:

- ✓ **Sequences of actions**
- ✓ Type of internal support (Automatized / Non-Automatized)
- ✓ **Acceptability**

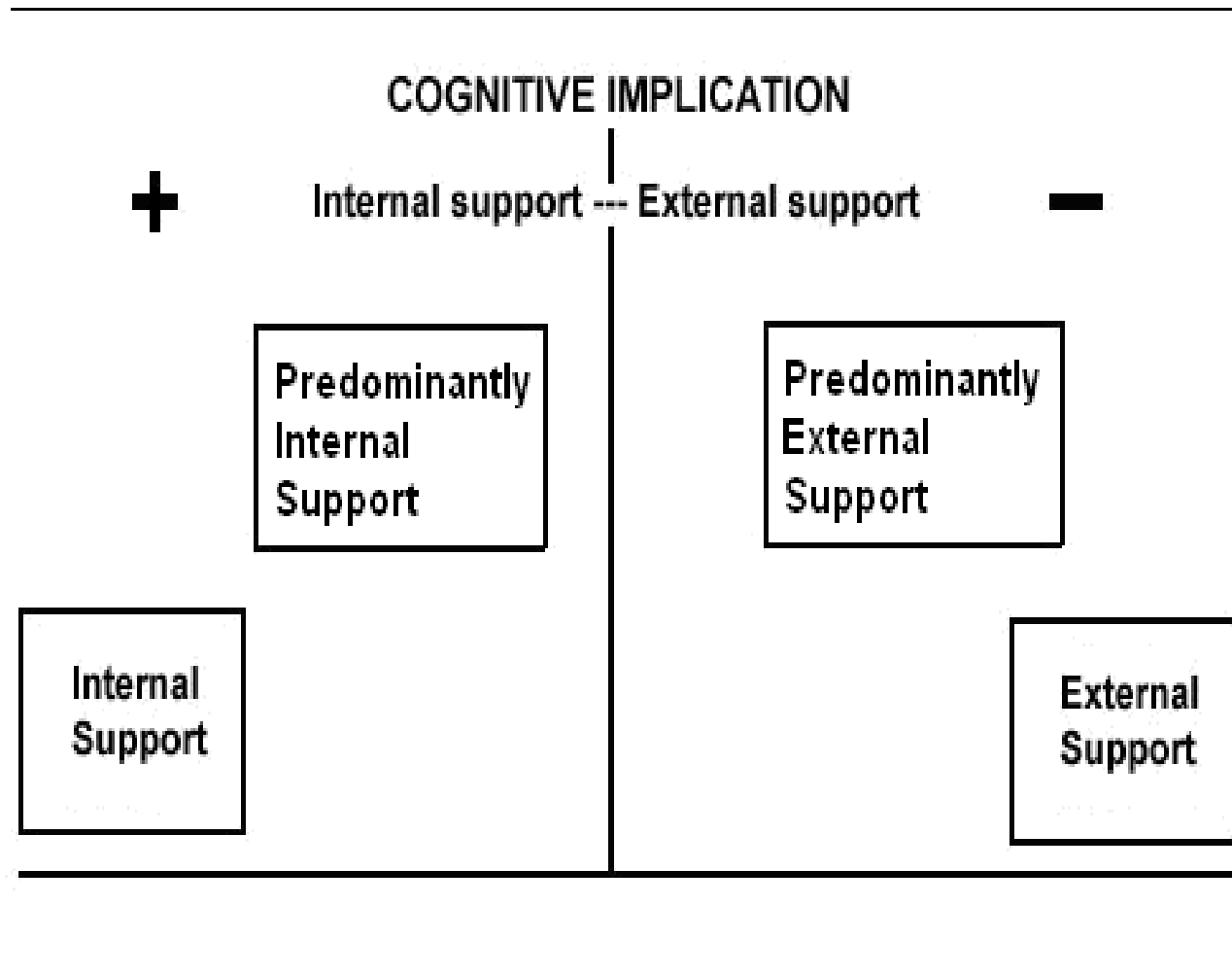
ACTIONS

PS: Provisional solution

DS: Definitive solution

CON: Consultation

- **CON BL** (little cognitive implication): bilingual resources.
2 categories: CONBL-C, CONBL-NC
- **CON AL** (greater cognitive implication): All others
- **CON-0**



■ INTERNAL SUPPORT (IS)

The DS is based on IS only

e.g. DS ; DS – CONⁿ

■ PREDOMINANTLY INTERNAL SUPPORT (PIS)

Any combination of consultations that does **not** contain CONBL-C

e.g. PS - CON AL - CON AL - CON BL (NC) - DS

■ PREDOMINANTLY EXTERNAL SUPPORT (PES)

Any combination of consultations that contains CONBL-C

e.g. PS - CON AL- CON AL- CON BL (C) – DS

■ EXTERNAL SUPPORT (ES)

The DS is based exclusively on CONBL-C

e.g. CON BL (C) – DS ; CON BL (C) – DS - CONⁿ

III. RESULTS



RESULTS

SEQUENCES OF ACTIONS

Direct Translation	IS	PIS	PES	ES
1 st	17.3%	40.4%	19.2%	23.1%
2 nd	11.0%	57.6%	22.0%	9.3%
3 rd	8.9%	34.8%	31.9%	24.4%
4 th	18.6%	28.6%	33.6%	19.3%
Graduates	12.2%	38.9%	31.1%	17.8%
Translators	36.5%	42.4%	15.3%	5.9%
Expert translators (top 9)	31.1%	51.1%	13.3%	4.4%



RESULTS

SEQUENCES OF ACTIONS

Direct Translation	IS	PIS	PES	ES
1 st	17.3%	40.4%	19.2%	23.1%
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Translators	36.5%	42.4%	15.3%	5.9%
Expert translators (top 9)	31.1%	51.1%	13.3%	4.4%

The use of the sequence **INTERNAL SUPPORT** is less frequent at the beginning of ATC.



RESULTS

SEQUENCES OF ACTIONS

Direct Translation	IS	PIS	PES	ES
1 st	17.3%	40.4%	19.2%	23.1%
2 nd	11.0%	57.6%	22.0%	9.3%
3 rd	8.9%	34.8%	31.9%	24.4%
4 th	18.6%	28.6%	33.6%	19.3%
Graduates	12.2%	38.9%	31.1%	17.8%
Translators	36.5%	42.4%	15.3%	5.9%
Expert translators	31.1%	51.1%	13.3%	4.4%

PREDOMINANTLY INTERNAL SUPPORT is, generally (except for the 4th year), the most frequently used sequence.



RESULTS

SEQUENCES OF ACTIONS

Direct Translation	IS	PIS	PES	ES
1 st	17.3%	40.4%	19.2%	23.1%
2 nd	11.0%	57.6%	22.0%	9.3%
3 rd	8.9%	34.8%	31.9%	24.4%
4 th	18.6%	28.6%	33.6%	19.3%
Graduates	12.2%	38.9%	31.1%	17.8%
Translators	36.5%	42.4%	15.3%	5.9%
Expert translators	31.1%	51.1%	13.3%	4.4%

The use of the sequences **PREDOMINANTLY EXTERNAL SUPPORT** and **EXTERNAL SUPPORT** by students increases from the 3rd year on.

RESULTS

SEQUENCES OF ACTIONS

Direct Translation	IS	PIS	PES	ES
1 st	17.3%	40.4%	19.2%	23.1%
2 nd	11.0%	57.6%	22.0%	9.3%
3 rd	8.9%	34.8%	31.9%	24.4%
4 th	18.6%	28.6%	33.6%	19.3%
Graduates	12.2%	38.9%	31.1%	17.8%
Translators	36.5%	42.4%	15.3%	5.9%
Expert translators	31.1%	51.1%	13.3%	4.4%

The use of the sequence **EXTERNAL SUPPORT** decreases considerably in the 2nd year.



RESULTS

SEQUENCES OF ACTIONS

Inverse translation	IS	PIS	PES	ES
1 st	14.2%	19.5%	25.7%	40.7%
2 nd	5.8%	25.8%	30.8%	37.5%
3 rd	7.9%	28.6%	36.4%	27.1%
4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%



RESULTS

SEQUENCES OF ACTIONS

Inverse translation	IS	PIS	PES	ES
1 st	14.2%	19.5%	25.7%	40.7%
2 nd	5.8%	25.8%	30.8%	37.5%
3 rd	7.9%	28.6%	36.4%	27.1%
4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%

The use of the sequence **INTERNAL SUPPORT** decreases from 1st to 2nd year.



RESULTS

SEQUENCES OF ACTIONS

Inverse translation	IS	PIS	PES	ES
1 st	14.2%	19.5%	25.7%	40.7%
2 nd	5.8%	25.8%	30.8%	37.5%
3 rd	7.9%	28.6%	36.4%	27.1%
4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%

The use of the sequence **PREDOMINANTLY INTERNAL SUPPORT** increases with training.



RESULTS

SEQUENCES OF ACTIONS

Inverse translation	IS	PIS	PES	ES
1 st	14.2%	19.5%	25.7%	40.7%
2 nd	5.8%	25.8%	30.8%	37.5%
3 rd	7.9%	28.6%	36.4%	27.1%
4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%

The use of the sequence **PREDOMINANTLY EXTERNAL SUPPORT** increases with training until the 4th year.



RESULTS

SEQUENCES OF ACTIONS

Inverse translation	IS	PIS	PES	ES
1 st	14.2%	19.5%	25.7%	40.7%
2 nd	5.8%	25.8%	30.8%	37.5%
3 rd	7.9%	28.6%	36.4%	27.1%
4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%

Greater use of the sequence **EXTERNAL SUPPORT** in 1st year evolves towards increasing use of **PREDOMINANTLY EXTERNAL SUPPORT** in the 4th year.



RESULTS

SEQUENCES OF ACTIONS

Inverse translation	IS	PIS	PES	ES
1 st	14.2%	19.5%	25.7%	40.7%
2 nd	5.8%	25.8%	30.8%	37.5%
3 rd	7.9%	28.6%	36.4%	27.1%
4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%

The use of the sequence **EXTERNAL SUPPORT** decreases with training.



RESULTS

SEQUENCES OF ACTIONS

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4 th	8.3%	29.0%	37.2%	25.5%
Graduates	15.2%	33.3%	31.4%	20.0%
Translators	13.9%	41.8%	25.5%	18.8%

The sequences **PREDOMINANTLY EXTERNAL SUPPORT** and **EXTERNAL SUPPORT** are the most frequently used in all years, and they account for two thirds of the decisions taken.

DIRECT TRANSLATION

1. Title (a metaphor). Problem: to catch the reader's attention
2. Technical term. Problem: extralinguistic
3. Reference chain. Problem: textual
4. Element with explication. Problem: textual
5. Especially rich point. Problem: intentionality

INVERSE TRANSLATION

1. "Indiano... fortuna del americano". Problem: extralinguistic; textual.
2. "Gobierno alfonsino". Problem: extralinguistic
3. "Desenfreno y dilapidación". Problem: linguistic
4. "La geografía comarcal... ". Problem: intentionality
5. "común... trona". Problem: intentionality; textual; extralinguistic



ACCEPTABILITY Categories

Meaning	Function	Language	Category	Numeric value
A	A	A		
A	A	SA		
A	SA	A	A	1
A	SA	SA		
SA	A	A		

A	A	NA		
A	SA	NA		
A	NA	A		
A	NA	SA	SA	0.5
SA	SA	A		
SA	SA	SA		
SA	A	SA		

A	NA	NA		
SA	SA	NA	NA	0
...				

RESULTS ACCEPTABILITY

Direct translation	Mean
1 st	0.45
2 nd	0.59
3 rd	0.63
4 th	0.65
Graduates	0.70
Translators	0.73
Expert translators	0.96

Acceptability begins to increase gradually from the 2nd year onwards until training is complete.

Inverse translation	Mean
1 st	0.31
2 nd	0.36
3 rd	0.39
4 th	0.51
Graduates	0.49
Translators	0.52
Expert translators	0.48

There is a marked increase between 3rd and 4th year.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Direct translation	1 st	2 nd	3 rd	4 th	Graduates	Translators	Expert translators
IS	0.47	0.46	0.63	0.56	0.64	0.73	0.93
PIS	0.54	0.59	0.67	0.78	0.66	0.79	0.98
PES	0.55	0.67	0.56	0.69	0.80	0.73	1.00
ES	0.27	0.59	0.67	0.50	0.84	0.45	0.75

In the TC experiment **PREDOMINANTLY INTERNAL SUPPORT** was the sequence that led to best acceptability results in direct translation in the group of translators.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Direct translation	1 st	2 nd	3 rd	4 th	Graduates	Translators	Expert translators
IS	0.47	0.46	0.63	0.56	0.64	0.73	0.93
PIS	0.54	0.59	0.67	0.78	0.66	0.79	0.98
PES	0.55	0.67	0.56	0.69	0.80	0.73	1.00
ES	0.27	0.59	0.67	0.50	0.84	0.45	0.75

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RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

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IS	0.47	0.46	0.63	0.56	0.64	0.73	0.93
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PES	0.55	0.67	0.56	0.69	0.80	0.73	1.00
ES	0.27	0.59	0.67	0.50	0.84	0.45	0.75

There is a marked increase between 2nd and 3rd year.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Direct translation	1 st	2 nd	3 rd	4 th	Graduates	Translators	Expert translators
IS	0.47	0.46	0.63	0.56	0.64	0.73	0.93
PIS	0.54	0.59	0.67	0.78	0.66	0.79	0.98
PES	0.55	0.67	0.56	0.69	0.80	0.73	1.00
ES	0.27	0.59	0.67	0.50	0.84	0.45	0.75

Acceptability using the sequence **PREDOMINANTLY INTERNAL SUPPORT** increases until the 4th year and slightly decreases in the group of graduates.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Direct translation	1 st	2 nd	3 rd	4 th	Graduates	Translators	Expert translators
IS	0.47	0.46	0.63	0.56	0.64	0.73	0.93
PIS	0.54	0.59	0.67	0.78	0.66	0.79	0.98
PES	0.55	0.67	0.56	0.69	0.80	0.73	1.00
ES	0.27	0.59	0.67	0.50	0.84	0.45	0.75

A relevant difference can be observed between the 1st and the 2nd year in relation to **PREDOMINANTLY EXTERNAL SUPPORT** and **EXTERNAL SUPPORT**.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Inverse translation	1 st	2 nd	3 rd	4 th	Graduates	Translators
IS	0.25	0.43	0.36	0.42	0.41	0.52
PIS	0.30	0.44	0.43	0.67	0.61	0.64
PES	0.38	0.30	0.43	0.54	0.42	0.45
ES	0.30	0.34	0.30	0.31	0.38	0.32

Acceptability using the sequence **INTERNAL SUPPORT** increases from the 1st to the 2nd year.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Inverse translation	1 st	2 nd	3 rd	4 th	Graduates	Translators
IS	0.25	0.43	0.36	0.42	0.41	0.52
PIS	0.30	0.44	0.43	0.67	0.61	0.64
PES	0.38	0.30	0.43	0.54	0.42	0.45
ES	0.30	0.34	0.30	0.31	0.38	0.32

In general, **PREDOMINANTLY INTERNAL SUPPORT** is the sequence leading to best acceptability results. Acceptability increases gradually with training until the 4th year.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

Inverse translation	1 st	2 nd	3 rd	4 th	Graduates	Translators
IS	0.25	0.43	0.36	0.42	0.41	0.52
PIS	0.30	0.44	0.43	0.67	0.61	0.64
PES	0.38	0.30	0.43	0.54	0.42	0.45
ES	0.30	0.34	0.30	0.31	0.38	0.32

Acceptability using the sequence **PREDOMINANTLY**
EXTERNAL SUPPORT gradually increases until the 4th year.



RESULTS

SEQUENCES OF ACTIONS & ACCEPTABILITY

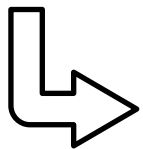
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PIS	0.30	0.44	0.43	0.67	0.61	0.64
PES	0.38	0.30	0.43	0.54	0.42	0.45
ES	0.30	0.34	0.30	0.31	0.38	0.32

No clear tendency is observed.

IV. CONCLUSIONS

1. As the ATC process progresses, the use of the **INTERNAL SUPPORT** sequence leads to better results where acceptability is concerned.
2. In general, it is the use of the **PREDOMINANTLY INTERNAL SUPPORT** sequence that leads to best results as the ATC process progresses. Acceptability increases gradually.
3. The new generations use the **EXTERNAL SUPPORT** and **PREDOMINANTLY EXTERNAL SUPPORT** sequences to a greater extent than translators from TC experiment and, in terms of acceptability, with better results.

- **PREDOMINANTLY INTERNAL SUPPORT** and **INTERNAL SUPPORT** were the sequences that the translators and expert translators used most frequently (especially in the case of direct translation).
- As the ATC process progresses, the predominant use of cognitive resources leads to better results where acceptability is concerned.
- The new generations are more familiar with ICTs (**EXTERNAL SUPPORT** and **PREDOMINANTLY EXTERNAL SUPPORT**).



It is necessary to stimulate the use of internal support (i.e. Learning to make decisions without resorting to external support so often when translating) to a greater extent.



Our data has been obtained from students corresponding to a particular educational context.

PACTE

Thank you!

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PACTE Group

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