



Research data as an aid in teaching technological competence in subtitling

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PACTE competences

- Translation competence involves declarative and procedural knowledge
- 5 sub-competences
 - Bilingual – procedural knowledge to communicate between two languages,
 - Extralinguistic – declarative knowledge about the world (in general and field-specific),
 - Knowledge of translation – declarative knowledge about translation and the profession,
 - **Instrumental – procedural knowledge related to the use of resources and technologies applied to translation,**
 - Strategic – procedural knowledge required to ensure the efficacy of the translation process, it controls the translation process by creating links between sub-competences.

EMT competences

- Translation service provision competencies – how to market services, negotiate with a client, manage time and budget, handle invoicing, etc.
- Language competence – how to summarise texts
- Intercultural competence – how to understand presuppositions or allusions
- Data-mining competence – how to search terminology databases and familiarity with a series of databases
- Thematic competence – knowledge about a specialist field of knowledge
- **Technological competence – how to use a particular translation tool**

Technological competence in EMT

- = mastery of tools
 - Knowing how to use effectively and rapidly and to **integrate a range of software** to assist in correction, translation, terminology, layout, documentary research
(for example text processing, spell and grammar check, the internet, translation memory, terminology database, speech recognition software)
 - Knowing how to adapt to and **familiarise oneself with new tools**, particularly for the translation of multimedia and audiovisual material
 - Knowing how to prepare and **produce a translation in different formats** and for different technical media

Study on subtitles

Study

- An eyetracking study of the subtitling process research on a group of professional subtitlers and subtitling students
- Eyetracker: SMI Red Mobile 250 Hz, screenrecording
- Subtitling software
 - EZTitles
 - Edlist
- Pre-test questionnaire
 - Demographics
 - Experience
- Semi-structured interviews



Main research question

How is technological competence manifested in professional's performance?

Hypotheses

1. Task completion time
 - Professionals will have a lower task completion time
2. Text reduction
 - Professionals will have a higher text reduction ratio in the interlingual subtitling task
3. Workflow
 - Professionals will use more specialised online resources
 - Professionals and novices will have a different workflow

Study materials

- Interlingual subtitling
 - English to Polish
 - 1 min. 25 sec.
 - American TV series *The Newsroom*
 - English transcription was provided
 - Task: translation and spotting
- Intralingual subtitling for the deaf and hard of hearing (SDH)
 - Polish to Polish
 - Polish TV series *Hotel 52*
 - 2 min.



Experimental set-up



Demographics

- 18 participants
 - 12 Professionals
 - 6 Novices
- Gender
 - 3 men
 - 15 women
- Mean age: 31.66 (SD 10.93)

Experience in interlingual subtitling

How long have you been subtitling films?	No.	Percentage
0-1 year	1	5%
1-3 years	1	5%
3-6 years	0	0%
over 6 years	6	33%
I don't subtitle interlingually	6	33%
I'm a student without professional experience	4	22%

Experience in SDH

How long have you been doing SDH?	No. of people	Percentage
Less than a year	2	11%
1-3 years	2	11%
3-6 years	4	22%
over 6 years	1	5%
I don't do SDH	5	27%
I'm a student without professional experience	4	22%

Experience in translation (apart from AVT)

How long have you been doing translation or interpreting?	No. of people	Percentage
Less than a year	2	11%
1-3 years	2	11%
3-6 years	1	5%
over 6 years	6	33%
I don't have any experience in general translation	5	27%
I'm a student without professional experience	2	11%

Place of training

Place	No. of people
University	11
In-house	4
University & in-house	1
Self-taught	2



00:52:06:3 P12_Newsroom.ezt Video2_The Newsroom.avi - 25 fps Preview Mode Profile [P12]

Subtitle View Video Titles Tools Help Check Subtitles... Fix Subtitles... Format...

Outline Ghost box

39 Skąd wiesz?
Pracujesz w IT. 10:01:17:12 10:01:17:16

41 - Nie, piszę blog.
- Żartujesz?
Are you kidding? 10:01:17:16 01:14 10:01:19:05

43 I think we're in the first hours of
a serious story. 10:01:19:05

Preview List

- 39 Skąd wiesz?
Pracujesz w IT. 10:01:15:20 01:17 10:01:17:12
- 41 - Nie, piszę blog.
- Żartujesz? 10:01:17:16 01:14 10:01:19:05
- 43 I think we're in the first hours of
a serious story. 10:01:19:05

Timeline

10:13 (204/1036) Modified Insert English (United States) Open Native Mode



00:08:46.5

on-TheNewsroom.doc [Tryb zgodności] - Microsoft Word użytek nie...

Wstawianie Układ strony Odwołania Korespondencja Recenzja Widok

Wklej Wstawianie

What?
I'm sorry to interrupt
Can I talk to Mac for just a second?
Your guy here is a pain in the ass.
An oil well exploded in the Gulf of Mexico.
The Coast Guard's searching for missing crew members.
I'll fill you in at the 6:00 rundown.
There's more.
He doesn't need to hear this right now.
Let's go outside.
No, if Don doesn't want me to hear it, I'd like to hear it.
Oh, blow me.
I want you to not use that language in front of women and to forever not suggest that image to me.
What's on your mind?
Who are you?
Jim Harper, my senior producer.
Senior? Is he old enough to drive at night?
What happened?
Two calls within five minutes of each other.
The first one was from a friend of mine at BP in London saying he's sitting in meetings where they don't know how to cap the well.
Jesus.
The oil is still spilling?
Yeah, at a pretty alarming rate. The first estimate was about 10,000 gallons an hour.
My guy says it's closer to 100,000 and could get as high as a quarter of a million.
Why is this well different from other wells?
The depth. I need one of your staffers. He's... I don't know his name.
He sits in the back. He's... he's the one with...
Are you trying to say the Indian stereotype of an IT guy?
Yes.

Strona 1 z 1 Wyrazy: 254 Angielski (Dlań Zdobroczone) 100%

EdiList - C:\Users\View X\Desktop\POB_Newsroom.stl

Plik Edycja Konfiguracja Pomoc File

00:15:23

Wideo	Światy	Całość	Dodaj	Usuń
00:10:14				
00:12:05				
00:00:04	00:01:17	78.0	27 (18/5/0)	4
00:12:09				
00:14:22				
00:00:04	00:02:14	7.8	20 (15/3)	5
00:15:01				
00:19:14				
00:00:04	00:04:14	11.6	54 (10/42)	6
00:19:18				
00:00:00	00:19:17	8.9		7
00:00:00				
00:00:00				
00:00:00	00:00:01	8.0		8

Pozostało 122 dni.

0 00:15 Video_The Newsroom.avi 0:01:22
25fps
Europe

Początek Koniec

Start Zapisz

Science Sports Gaming Education
Psychology Psychiatry Linguistics Training
Human Factors Human Computer Interaction Usability

Sample screenrecording (1)

The screenshot displays the EZTitles IV software interface in Edit Mode. The main window shows a video clip with subtitles. The current subtitle being edited is: "in front of women and to forever not suggest that image to me." The video frame shows a man and a woman in a newsroom setting. The subtitle text is displayed in a black box at the top of the video frame. The video frame also shows the subtitle "What's on your mind? Who are you?" and "Jim Harper, my senior producer." The software interface includes a menu bar (File, Edit, Format, Subtitle, View, Video, Titles, Tools, Help), a toolbar, and a timeline at the bottom. The timeline shows the video's duration from 10:00:12:00 to 10:00:30:00. A preview list on the right side shows a list of subtitles with their start and end times and preview images. The preview list includes: 13: "in front of women and to forever not suggest that image to forever" (10:00:16:00 - 10:00:19:21), 14: "What's on your mind? Who are you?" (10:00:20:00 - 10:00:21:06), 16: "Jim Harper, my senior producer." (10:00:21:06 - 10:00:21:06), and 17: "Jim Harper, my senior producer." (10:00:21:06 - 10:00:21:06). The software also shows a comment box, an edit box, and a timeline with a red diamond indicating the current subtitle's position.

Sample screenrecording (2)

The screenshot displays the EZTitles IV software interface in Edit Mode. The main window shows a video frame with subtitles. The subtitle text is: "W Zatoce Meksykańskiej wybuchł szyb naftowy." (Segment 5) and "Straż przybrzeżna szuka zaginionych członków The Coast Guard's searching for missing crew members." (Segment 6). The timeline shows the video progress, with a red diamond indicating the current position. A 'Preview List' on the right shows a list of subtitle segments with their start and end times. The bottom of the interface shows an audio waveform and a video preview strip.

00:10:27:4

P09_Newsroom.ezt Video2_The Newsroom.avi - 25 fps Edit Mode Profile [Ola Gańko]

File Edit Format Subtitle View Video Titles Tools Help Check Subtitles... Fix Subtitles... Format...

Outline Ghost box

5 W Zatoce Meksykańskiej wybuchł szyb naftowy.

10:00 10:00

Comment

Edit

10:00:09:05

01:21

10:00:09:06

10:00:09:08

6 Straż przybrzeżna szuka zaginionych członków The Coast Guard's searching for missing crew members.

13/36 6/36 2/36 28/36

Outline 5 of 40 subtitles -58/28

7 I'll fill you in at the 6:00 rundown.

Preview List

5 10:00:05:08 01:23 10:00:07:06

Outline W Zatoce Meksykańskiej wybuchł szyb naftowy.

6 10:00:07:10 01:21 10:00:09:06

Outline Straż przybrzeżna szuka zaginionych członków The Coast

7 10:00:09:08 01:03 10:00:10:11

Outline I'll fill you in at the 6:00 rundown.

8 10:00:10:13 01:15 10:00:12:03

Timeline

9:22 (781/1536) Modified Insert English (United States) Open Native Mode

Results

Task completion time

- Novices spent 39% more time in subtitling
- And 56% more time in SDH

	Subtitling (average time in minutes)		SDH (average time in minutes) EZTitles only
	EZTitles	EDlist	
Professionals	55 (SD 18.38)	67.33 (SD 26)	19 (SD 6.52)
Novices	77 (SD 10.07)	-	43 (SD 5.65)

Mouse clicks vs. key strokes in EZTitles in interlingual subtitling

	Mouse clicks	Key presses	User events (TOTAL)	Mouse clicks as percentage of user events
Professionals	273	5411	5685	4%
Novices	489	4307	4796	10%

Mouse clicks vs. key strokes in Edlist in interlingual subtitling

	Mouse clicks	Key presses	User events (TOTAL)	Mouse clicks as percentage of user events
Professionals	1313	2486	3799	35%

Text reduction in the interlingual subtitling task

- Professionals – 38%
- Novices – 36%

	Number of words	Number of characters
Professionals	218 (SD 11.45)	1231
Novices	225 (SD 6.10)	1240
Source text	354	1178

Workflow

- Spotting and translation
 - Novices: independent **spotting** and **translation** stages in the workflow
- Revision
 - Novices: several revision rounds
 - Professionals: only one round or the revision of specific parts of the clip
- Watching the clip before starting to translate
 - Novices: all
 - Professionals: only 3

Use of resources

- Awareness of the tool
 - Only two participants used EZTitles unit converter
 - A minority used EZTitles check function
- Online resources
 - Google as a corpus and to access other resources
 - Wikipedia was widely used by professionals and participants alike
 - Only one participant used ProZ

Suggestions for using research data in class

- Show screenrecordings of the subtitling workflow and make them conscious of the decision-making process
- Show how subtitlers solve problems in various ways and how long it took them to solve them
- Data from interviews

Summary & conclusions

- Completion time
 - Professionals have a shorter task completion time owing to higher technological competence
 - Professionals are faster as they rely more on keystrokes rather than mouse clicks
- Workflow
 - Similar use of resources (Google, Wikipedia)
 - Novices – watching the whole clip first
- Text reduction
 - Similar in professionals and novices

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