

Mixed Methods Workshop  
GESIS, Mannheim  
9. 5. 2014

An Integrated Mixed Methods Research Design:  
Example of the Project „Foreign Language Learning Strategies and Achievement: Analysis of Strategy  
Clusters and Sequences“

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*This paper was funded by Czech Science Foundation – Project Nr. GAP407/12/0432  
Foreign Language Learning Strategies and Achievement: Analysis of Strategy Clusters and Sequences.*

### **Aim**

- 1) to introduce the concept of strategy sequences and clusters as theoretical construct,
- 2) to find out the typical sequences and clusters of foreign language learning strategies and their relation to achievement in language situations and tasks,
- 3) to specify the relation of strategies and achievement in foreign language at the end of lower secondary (i.e. compulsory) education.

### **Gap in the current state of the art**

What are the typical strategies and their sequences and clusters per language skills ? How are they related to achievement?

### **Theoretical framework**

The project is based on an analysis of problems of foreign language learning and instruction in the Czech Republic. Many pupils do not reach the expected language level even after many years of learning. The reason is not only the quality of instruction but also the learning strategies of pupils. More than two thirds of pupils reported not to be sure how to learn, and showed deficits in learning skills and strategy use.

The project is based on the current state of learning strategies research and theory which show that strategies do not exist separately but in sequences and clusters that have to be described and analysed in terms of their orchestration and quality of use.

The current research also shows a problem of a weak relation between learning strategies and achievement and suggests therefore to measure strategies at tasks.

### **Research question**

What are the typical clusters and sequences of foreign language (English) learning strategies for the 4 language skills (reading, writing, listening, speaking) in the connection to achievement at the end of lower secondary compulsory education?

### **Methods**

10 language tasks from standardised KET test (listening, writing, reading, speaking), each with a template (pupils' description of their strategies at a task)

Standardized questionnaires (learning and achievement motivation, attitudes towards school subject, learning strategies, teacher's strategy support questionnaire)

Unstandardized questionnaire (learning styles, demographical items)

### **Sample and sampling**

Probability sampling of lower secondary schools from South Moravian region. Full sampling of classes and pupils at the level of schools.

Administrators: researchers and then teachers.

16 schools, 462 pupils at the end of lower secondary education

### **Data analysis**

On the basis of score from the language test tasks and strategy questionnaire and motivation and style questionnaire... construction of a typology of learners or just main direction: low and high achievers.

Qualitative analysis of templates regarding strategy clusters and sequences only for low and high achievers and their subgroups.

Connecting QN and QL data.

### **Validity threats**

We don't measure learning strategies, but test taking strategies, or precisely learner strategies => it is usually measured like this, learning strategies are mirrored in the test taking strategies.

Low information value of templates data. => To use strategy questionnaire for triangulation. Later, to do interviews with 3 low and 3 high achievers.

Large amount of data for QL analysis of templates (10 per a pupil). => Detailed analysis only of low and high achievers with complete data.

Risk for data quality = big amount of pupil's time (2,5 lessons for tasks with templates, each questionnaire 10 minutes). => Teachers will get results, they got some presents or money.

Scales of questionnaires have only 3 points. => They are used only as context information, they are in their original form.

It could (but rarely) happen that the questionnaires about strategies and styles were distributed before templates, so it could structure the pupils answers in templates. => We collected this information from teachers.

Data are not anonymous – because we need to be able to interconnect all the questionnaires and pupils do the tasks during more lessons. => The most problematic parts (with high social desirability effect) are administrated by researchers.

### Research questions

1. What are the *typical strategy sequences and clusters* for different language tasks and situations in the four basic *language skills* (reading, writing, listening, and speaking)? What learning strategies and techniques constitute them?
2. Are there any *differences in these strategy clusters and sequences*? (based on pupils' general achievement level, level of language competence, gender, learning and achievement motivation, attitude towards language learning, learning style dimensions, level of strategy awareness, and teacher's class instruction)
3. How is this combination and orchestration of strategies and techniques related to *achievement* in the language task with respect to the above mentioned variables?
4. Can we build a *typology of learners* based on their strategy use and their strategy clusters/sequences? Can the typology be interpreted in the context of learning styles and cognitive styles theories?
5. Can we distinguish strategies on the basis of their *level of effectiveness*, i.e. connection to achievement?

Language task from test KET  
(reading and writing)

ÚKOL 1 (čtení a psaní)

Jméno: .....

Třída: .....

Co která informační cedule (A-H) sděluje (1-5)?

Příklad:

0 This is not a good place to leave your bags.

Odpověď: H

Odpovědi napiš sem:

1 ..... 2 ..... 3 ..... 4 ..... 5 .....

- 1 You must have a ticket to go past here.
- 2 If you want to travel Monday to Friday, this ticket is cheaper.
- 3 Please let anybody carrying a lot of luggage sit here.
- 4 You can only buy your ticket here if you have cash.
- 5 People who are travelling can eat something here.

A

These ticket machines take  
£20 and £10  
No credit cards

B

**These seats are for people  
with heavy suitcases**

C

*Sorry - restaurant is closed on  
today's London-Glasgow train*

D

**Passengers only through this gate  
Have your ticket ready**

E

**Station Café open all day  
(opposite ticket office)**

F

Passengers with  
bicycles pay £5  
extra on this train

G

**PLEASE DO NOT LEAVE  
LUGGAGE HERE**

H

**Save money:  
buy a weekly travel  
ticket here**

Na tomto úkolu jsem pracoval/a zhruba \_\_\_\_ minut.

Template – pupils write down how they were solving the task (sequences are supported by the design)

Zamysli se nad celou úlohou, tedy nad tím, jak jsi při řešení úlohy postupovala a o čem jsi při tom přemýšlela. Nyní prosím:  
Do bublin zapiš, jak jsi postupovala a o čem jsi přemýšlela: jaké jsi volila strategie k řešení úkolu, co ti při řešení úkolu pomohlo, na co ses zaměřila.  
Každý krok řešení úlohy popiš co nejpodrobněji do samostatné bubliny. Ke každému dalšímu kroku si pak dokresli novou bublinu.

1. 2. 3. 4. 5. 6.

Číslo úkolu: ..... Jméno: .....