Data- Driven Learning or Changing (Bulgarian) Language Teacher's Mind

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Abstract

Background *The number of resources (articles, books, sites and etc.) about Data Driven Learning increases permanently. After googling of the phrase more than 26 000 000 entries appear on the display. [Retrieved July2013] There are explanations, theoretical studies, smart theories about the relation between Corpus Linguistics and Language Teaching. But there are not enough resources about Implementation of Data Driven Learning in practice in various languages (especially languages taught in EU).The aspects of constructing, developing, proofreading of DDL in Bulgarian Language teaching are still very productive. As to the teachers of Bulgarian language and literature, DDL is a new approach which has to be popularized and applied further on. There are few second language teachers, who use DDL, some of them have only heard of it. So the aim of this report is to present Bulgarian Language teacher's attitudes to DDL, to describe first steps of implementation of DDL in practice in secondary school.*
The thesis of the report is to investigate the strong relation between Integrating of ICT and DDL. The concept of DDL is interpreted as indicator for quality language teaching. The main argument is that DDL allows validating of language teaching, making it authentic in sense of communicative competence.
Methodology *– corpus linguistics, constructivism, authenticity of language learning*
Research Question *is what Bulgarian Language teachers should know about DDL and what should they be able to do with DDL:*

- *Knowledge about concept of DDL – key features*
- *Competences connected with implementation of DDL in BLT (Bulgarian Language Teaching)*
- *Which way for implementation of DDL is appropriate? – By the language corpora or by the Internet – GOOGLE.*

Research Procedures *are as follows:*

- *Searching of information about descriptors of DDL- in Bulgarian, in English.*
- *Survey with teachers, linguists, experts on methodology of Bulgarian Language teaching.*
- *Creating and approbation of e resources lies ahead – these are e –activities / non-e-activities – a system of teaching methods and techniques for work in a lesson for linguistic knowledge and for work in a lesson for communicative and speech skills.*

Results *The report presents and interprets the data base from the survey.*
Discussion *Productive questions concerning implementation of DDL in Bulgarian language teaching are discussed.*
Conclusion *DDL is a productive tool for validating of authenticity of Language teaching. And its implementation in Bulgarian Language teaching fosters quality of teaching and change teacher's mind.*

Background

The number of resources (articles, books, sites and etc.) about Data Driven Learning (DDL) increases permanently. After googling of the phrase *Data –Driven learning* more than 26 000 000 entries appear on the display. [Retrieved July 2013] There are explanations, theoretical studies, smart theories about the relation between Corpus Linguistics and Language Teaching. But there are not enough resources about Implementation of Data - Driven Learning in practice in various languages (especially languages taught in EU).The aspects of constructing, developing, proofreading of DDL in Bulgarian Language teaching are still very productive. As to the teachers of Bulgarian language and literature, DDL is a new approach which has to be popularized and applied further on. There are few second language teachers who use DDL, some of them have only heard of it. So the aim of this report is to present Bulgarian Language teachers' attitudes to DDL, to describe first steps of implementation of DDL in practice in secondary school.

First let us say a few words about the **notion** *Data - Driven Learning.*
This term was coined by Tim Johns, working at Birmingham University during the COBUILD era, 1980s in particular. His believes inspire followers to create approach for using language corpora in language teaching. [See his most referred article "Should you be persuaded – two samples of data-driven learning materials" [1991]. In this article T. Johns emphasized on three main effects of DDL. First effect is "helping the learner to develop the ability to see patterning in the target language and to form generalizations to account for that patterning". Second effect is "on the role of the teacher, who has to learn to become a director and coordinator of student initiated research". T. Johns considers as the third effect of DDL a revaluation of the place of the grammar in language learning and language teaching. And that effect is a grammatical description which is a product of the learner's own engagement with the evidence, that description may show a far greater degree of abstraction and subtlety. We can only agree with T. Johns and add that these effects allow connecting language teaching, corpus linguistics and constructivism into an educational philosophy.

Thus because of language-didactic aspects of the problem about data driven learning and its implementation in language learning, **methodology** for our research is based on combination from corpus linguistics, constructivism and authenticity of language learning. It is worth to emphasize on fruitful research activities at the symposium about authenticating of language teaching at University of Tübingen, especially the presented projects, administered by colleagues from University of Tübingen. [1]

Nowadays many definitions of DDL are still competing for primacy. For example, we can observe definitions, / a dominating definition includes many tasks or activities, emphasizes hypothesis-testing, heuristic way of learning and so on. One of the common definitions of DDL reads as follows "…learners of a foreign language gain insights... by using concordance programs to locate authentic examples of language use" [Davies, 2012; Sussman, 2013].

In our opinion, key features of DDL (and we use them in our survey as a research tool) are as follow:
- Implementation of authentic examples of target language in use (in this case this is Bulgarian as L1 and L2)
- These examples are excerpted from annotated and verified language corpus and serve receptive or productive activity in the classroom.
- And the main function of DDL is to make language learning authentic fostering learner's communicative competence.

Following the methodology mentioned above we state our point of view on the topic about DDL or **thesis**. The **aim** of the report is to investigate the strong relation between Integrating of ICT and DDL. The concept of DDL is interpreted as an indicator of the quality of language teaching. The **main argument** is that DDL allows validating of language teaching, making it authentic in sense of communicative competence.

The key factor in this process is teacher education. So to explore the arguments for our thesis we formulate **research question** as follows: what should Bulgarian Language teachers know about DDL and what should they be able to do by means of DDL:

- Knowledge about the concept of DDL – key features. We describe them in this survey briefly, because of share of knowledge.

- Competences connected with implementation of DDL in BLT (Bulgarian Language Teaching). In order to answer the question we give various options for using some examples of language concerning various context of teaching: a) teaching language units as sentence, word (teaching morphology and syntax); b) teaching spelling; c) teaching reading; d) teaching writing a composition; and e) assessment by test items as well. So we fix two types of lessons: for learning language as a structure and for learning language as an activity.

- Which way for implementation of DDL is appropriate? – By the language corpora or by the Internet – i.e. GOOGLE?

We prefer following **research procedures**:
- Searching of information about descriptors of DDL- in Bulgarian, in English.
- Survey with teachers, linguists, experts on methodology of Bulgarian Language teaching

- Creating and approbation of e -resources lies ahead – these are e –activities / non-e-activities – a system of teaching methods and techniques for work during a lesson for linguistic knowledge and for work during a lesson for communicative and speech skills.

Content and structure of the survey (The language of the survey is Bulgarian, because we are interested in teaching Bulgarian). Content of the survey covers various domains: grammar – morphology and syntax; vocabulary; spelling; reading comprehension; writing (composition and retelling), assessment.

There are several components in the survey.

1) A short instruction with brief explanation what to do and why. **2**) Short explanation of the notion of DDL, using descriptors found in the Internet. **3)** Brief explanation of requirements for the corpus of written learners' texts; **4**) references to the Bulgarian language corpora (including thesaurus Bulgarian Word Net) **5)** important aspects of implementation of the corpus of written learners' texts; **6**) Reasons for using of DDL; **7**) Advantages of using of DDL and **8)** sample (handout) of using of DDL in Bulgarian Language Lesson; **9**) topic for brief discussion;

10) Number of situations for teaching Bulgarian accompanied by various options for choice.

The options of using the examples of language use are the following: **a)** textbook; **b**) available Bulgarian language corpus; **c**) texts in the Internet which the teacher has chosen; **d**) texts in the Internet which the learners have chosen; **e**) handbook or reference book; **f)** learners' written texts; and other options.

The participants were asked to justify their choice.

Finally the experts were asked to say if they would recommend to their colleagues the implementation of DDL in teaching of Bulgarian. If the answer is positive, the experts were asked to say which topics they prefer for using of DDL.

Participants in the survey 40 emails were sent to the experts from all over the country. But we received answers only from 20 of them. We prefer personal knowing of participants in the survey. So we can rely on their expertise. There are three types of experts: teachers in Bulgarian from primary and secondary schools (9), university lecturers in Bulgarian Language teaching (4); linguists – university lecturers too (5); editor from National Publishing House (1) and expert from Ministry of Education and Science (1).[See Fig.1].

Results

Before the survey some suggestions are made as follows:

There is strong relation between: A) type of expertise and type of choice; B) type of attitudes and type of choice; C) age and type of choice; D) between pedagogical experience and type of choice.

We can summarize the results of the survey as follows.

All of the experts will recommend DDL to their colleagues. So we can summarize that all experts, participated in the survey, have positive attitudes to use DDL in Bulgarian language teaching.

Concerning relation between: A) type of expertise and type of choice [See Fig. 2] Linguists prefer to use DDL in Bulgarian language teaching giving following reasons: to show tendencies in development of Bulgarian; to illustrate dynamic processes of language usage, to explain that language is a system, to show the flexibility of language usage in various context, for discourse analyses; to teach how to explore the language in use. But when the teacher has to teach formal language, its norms and rules, he/she prefers textbook because of expertise of textbook's authors. Specialists in Bulgarian language methodology follow pedagogical point of view and prefer well-founded combination of DDL, texts from the Internet and traditional means as textbook, handbook, learners' texts. Some of them prefer DDL as method of active learning and for test assessment especially for children with Bulgarian as L2. [See Fig. 2]. Teachers have heard about DDL from the survey. Most of them want to know more about implementation of DDL and to use it in classroom. They suppose to use it in teaching language usage, working on mistakes, proofreading and editing, retelling, and composition. The expert from Ministry of Education follows reasonable conservatism because of the nature of education. The editor strongly prefers textbook, handbook, and workbook. [See Fig.3] But anyway she is interested in DDL.
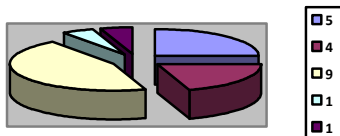
Fig 1.Type of expertise: linguists -5 people, methodology specialists- 4 people, teachers – 9 people, editor -1 and expert in Ministry- 1.

Number of Expert	Status	Pedagogical experience	Teaching Bulgarian in the country or abroad
1	Linguist	13 years	University in Bulgaria (Sofia)
2	Teacher in Secondary school	5 years	Abroad (Germany)
3	Teacher in primary school and PhD student	14 years	School in a small village in Bulgaria
4	University lecturer on Methodology of Bulgarian language teaching	29 years	University in Bulgaria (Veliko Tyrnovo)
5	Teacher in Secondary school	13 years	School in a small town
6	Linguist	13 years	University in Bulgaria (Sofia)
7	Linguist – male	11 years	University in Bulgaria (Sofia)
8	Teacher in primary school	25 years	School in a big city
9	Editor in National Publishing house	9 years	Sofia
10	Teacher in secondary school	14 years	Abroad (Germany)
11	University lecturer on Methodology of Bulgarian language teaching	6 years	University in Bulgaria (Sofia)
12	Linguist	23 years	University in Bulgaria (Sofia)
13	Expert from Ministry of Education and Science	10 years	Ministry of Education and Science
14	University lecturer on Methodology of Bulgarian language teaching	29 years	University in Bulgaria (Sofia)
15	Teacher in secondary school	2 years	School in a small town
16	Linguist	11 years	University in Bulgaria (Sofia)
17	University lecturer on Methodology of Bulgarian language teaching	24 years	University in Bulgaria (Plovdiv)
18	Teacher in secondary school	25 years	Abroad (Moldova)
19	Teacher in secondary school	29 years	School in a small town
20	Teacher in secondary school	24 years	School in the capital - Sofia

Fig. 2 Experts' profile

Number of expert	Textbook	Available Corpus	Texts in the Internet, chosen from teacher	Texts in the Internet, chosen from learners	Handbook, workbook	Learners' texts	Other
1	A,B,C, D,	A,B,C, D,	A,B,C, D,		A,B,C, D,		
2	A,B,C,D,E,F	A,B,C,D,E,F	A,B,C,D,E,F	A,B,C,D,E,F	A,B,C,D,E,F	A,B,C,D,E,F	
3		A,B,C,D,E,F					
4	A	B, C, D, E,F	B,C			E,F	
5		A,B,C,D,E,F					
6	A,B, C,D,E,F	A,B, C,D,E,F			C,D,E,F	D,E,F	
7		A,B,C,D,E,F					E dictionaries
8	A,B,C,D,E,F				A,B,C,D,E,F	A,B,C,D,E,F	
9	A,B,C,D,E,F				A,B,C,D,E,F		
10	A, B ,D	B, D	C,E,F	C	C , F	D,E,F	
11		A,B,C,D,E				F	Literary texts for F
12	A,B,C,D,E,F	A,B,C,D,E,F	E	F, E		F,E	
13	B	D		C, F		A,E	
14	A,B,	A,B,C,D	E,F	F		F,E	
15	B,C,E,F	A, C	C, D ,F	C	C,D,E	C,F	
16	A, D	B, C				F,E	
17	A	A, B, C,D,E,F					
18	A,B	B, C, D,E,F			D		
19	E,F	A, B, D,E	F	F		C	
20	D,E	A,D,F	B, C,D,F	A, D	D,E	D	

Fig. 3 Relation between options for choice and topics of lessons

Legend: morphology- A, syntax-B, vocabulary- C, test (assessment) - D, retelling - E, composition –F

Discussion

Results from the survey rise questions for productive discussion. How to combine traditional and nontraditional methods of language teaching and learning? How to combine strong linguistic point of view and strong pedagogical point of view? How to make this process successful?

Conclusion

Data-Driven Learning is a productive tool for validating of authenticity of Language teaching. And its implementation in Bulgarian Language teaching fosters quality of teaching and changes teacher's mind.

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