
Original Paper

Enhancing Students in Argumentative Speech/Text, Cultivating Future Active Citizens

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Abstract

It is common knowledge that a significant amount of the knowledge is transmitted by texts at school, so students be able to deeply understand and learn what they read (Slavin, Lake, Chambers, Cheung, & Davis, 2009). Speaking and writing meaningfully is of great importance and one of the goals of every education system. Nowadays, the development of argumentative speech is crucial and of great pedagogical value for the formation of personality and the cognitive success of students. Although it is more difficult to argue than to narrate, it has been proved that students who have been trained to construct arguments at the same time they develop multiple communication skills, such as listening, speaking, reading and writing (Lunsford et al., 2009; Kuhn & Crowell, 2011) and gradually achieve to foster critical literacy and obtain life skills. Besides, we use argument in various situations of our daily communication with others, in which we aim to persuade them to adopt a point of view or a behavior. That's why it is of crucial importance to learn to use the right tools/means in order to claim our rights as active citizens.

Keywords: argumentative text, SRSD instruction, structured intervention, students' enhancement

1. Introduction

One of the major goals of Education is promoting Literacy by cultivation the various textual genres. The contact of the students and their acquaintance with them is the main goal of the Curricula in the Primary Education in order to master literacy and foster written and oral speech.

An important parameter in the development and cultivation of literacy through the teaching of language course in both primary and secondary education is the familiarization and acquaintance of students with the various textual genres (narration, description, argumentation, etc.) (Rose, 2010). Substantial training in various genre involves developing critical thinking, comprehension and text production skills, both orally and in writing (Kuhn & Crowell, 2011; Mpasakos, 1999; Xelmis, 2010). According to the genre-centered approach, the methodical presentation of the basic characteristics of each genre, such as its formal organization (superstructure) and the linguistic choices that compose it, makes it easier to distinguish the genre and their written production (Adam, 1999; Matsagouras, 2001, 2007).

Argumentative reasoning includes construction and evaluation of arguments, is a process of which more specific forms of reasoning are a part (Oaksford, Chater, & Hahn, 2008) and therefore is important for academic success and necessary for successful functioning in a democratic society (Iordanou, Kendeou, & Beker, 2016; Kuhn, 2005; Newell et al., 2011). It is traced back to the early philosophers such as Plato, Socrates and Aristotle, who considered reasoned arguments to be the core of thinking.

The argumentative text is a very demanding kind of text type in terms of difficulty for students, who have to activate complex processes and skills of "rhetorical nature" (Egglezou, 2014; Herrick, 2013). It belongs to the so-called types of directional speech, requires persuasion skills (Adam, 1999: 61) and it is associated with the teaching of persuasion and rhetoric speech.

The argumentative texts are also characterized as exponential texts, in other words, texts that describe reality or texts that present a point of view without necessarily referring to the chronology of events. The pedagogy of persuasion has been known since antiquity and Socrates was the first to demonstrate

its great importance, recognizing in dialogue its educational power, the power to lead one to reconsider one's views.

As argumentative texts we mean those in which we present our point of view, our opinion (positive or negative) on a specific issue or a claim, seeking to convince the reader/co-speaker of the correctness of our point of view by using logical arguments and supporting reasons or evidence. The communicative purpose of these texts is twofold: on the one hand, the *proof*, that is, the presentation of the arguments with presumptions and proofs to logically substantiate an assertion and on the other hand, *the persuasion*, that is, to present the views effectively in order to achieve the purpose of the text. Proof refers to logic, while persuasion refers to rhetoric and dialectics, three key-words which Aristotle includes in the definition of argumentation in his work.

Looking at any act where a speaker tries convincing another person or group, we might first see someone arguing a point. From debating in school, persuaders state a case to win over an audience in order for the latter to do something. The persuader needs a) an objective, b) an audience, and c) to reach that audience with a message. Specifically, he/she has to persuade them, as opposed to an authority figure ordering them to do something. Aristotle identified that the art of persuasion consisted of three parts: a) *Logos* (which appealing to logic), b) *Pathos* (appealing to emotions) and c) *Ethos* (which appealing to ethics, morals and character). Pathos involves delivering the argument in a way that appeals to the audience's emotions. Logos alone has facts that are cold and flat and Ethos has to do with who the persuader is. His/her identity will have a great impact on how the audience takes the message. *Logos, pathos and ethos* together direct our persuasive design.

Argumentation is involved in various situations of our daily communication with others, in which we aim to persuade them to adopt a point of view or a behavior. It is a dynamic social process that takes place between two or more people who alternate turn and seek to understand each other's view (Kuhn, Hemberger, & Khait, 2014).

Basic structural elements of the argumentative discourse are:

- the **problem**, the main **thesis**, **our personal opinion**,
- the **main part** in which the reasoning is developed (productive, inductive, proportional reasoning, the appropriate justification is provided (proof, evidence with facts, examples, facts, stories, etc.) and an attempt is made to reconstruct the opposite positions or to counter possible counter-arguments,
- and **the conclusion**, which summarizes the claim and the justification, according to the following figure:

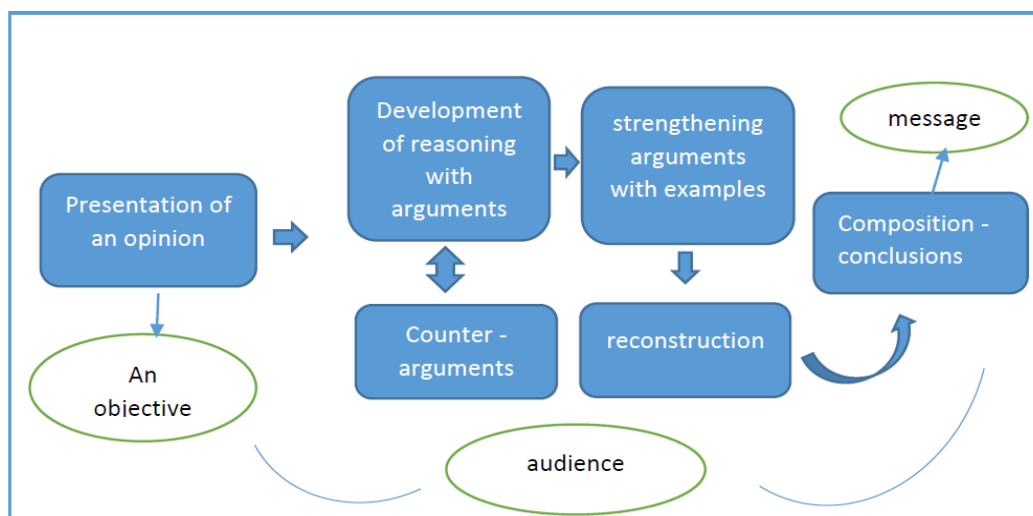


Figure 1. The Basic Structure of Argumentative Speech

In other words, argumentative reasoning is structured as an expression of an opinion/claim which the person expressing it strongly, supports it and justifies it with appropriate arguments. In fact, it is particularly interesting when the person expresses diametrically opposed views of his/her interlocutors.

In classroom, training in argumentation is an important axis of the language courses /subject, especially in the upper grades of primary school. Knowledge of the structural elements of argumentation and the cultivation of *persuasion* is of crucial interest. In fact, if the development of arguments is carried out in authentic communication circumstances, the pedagogical benefit for the students is important, as their reasoning and critical speech develop effortlessly. This is why student's education is best done through meaningful interactions with argumentative texts and playful, enjoyable, dialectical, social interactions and activities (such as role-plays, cross-scripts, debates, etc.), guided by the principles of rhetoric and persuasion (Egglezou, 2014).

The systematic, methodical and structured education of students contributes not only to the development of students' cognitive and metacognitive skills (Kuhn, 1991; Kuhn et al., 2013) but also to their social empowerment/enhancement as well as to the development of their ability to perceive intentions, purposes, motivations for actions and emotional condition of their interlocutor. It is important that each speaker be able to present his or her argument and support his or her point of view in a clear, undeniable manner, prioritizing the arguments. So it is of great significance the training of argumentation from early years (Andrews, 1995; Andrews et al., 2006, 2009; Stein & Bernas, 1999).

The formulation of the argumentative discourse is a complex, laborious and demanding process (Oostdam, 2005; Meyer, Ireland, & Ray, 2011), as it requires a high level of abstract skills and critical thinking (van Gelder, 2007), which is why its teaching is part of the last grades of elementary school, where the developmental level of students at this age favors the development of higher mental processes and logical correlations. Research shows that this type of text is more difficult for students than narrative texts (Best, Floyd, & McNamara, 2008). Its acquisition presupposes multiple and complex cognitive, linguistic, metacognitive and metalanguage skills (Iordanou, Kendeou, & Beker, 2016; Kuhn et al., 2013; Matsagouras, 2001; Papoulia-Tzelepi, 2004).

Knowledge of the structural features of this kind of text is important. Students are asked to find arguments and counter-arguments, to think and reconstruct, to evaluate the adequacy or acceptability of the arguments presented, to use the appropriate connecting elements, to ensure coherence of the text (Nakas, 2003), to utilize the appropriate strategies and to adopt the appropriate style for the occasion that will strengthen its persuasiveness. All this procedure makes them think more critical and obtain important life skills for their future. A student who can argue strongly on a subject, he/she has deeply understand the circumstances and can claim his/her right, exploiting tools and means that help him/her achieve his/her goal.

Argumentative texts often incorporate a combination of different types of text indicators and schemas, such as comparison and contrast, cause and effect, problem and solution, sequence and description.

Educating and enhancing students in argumentation based on the text-centered approach presupposes structured teaching with targeted strategies in order to help students generate ideas and critically evaluate the arguments provided. The exploitation of explicit instruction and persuasive language contributes to a dynamic social process and the cultivation of metacognitive skills of children (Kuhn et al., 2013; Kuhn, Hemberger, & Khait, 2014).

Students' contact with this type of speech cultivates and enhances at the same time the development of multiple communication skills, such as listening, speaking, reading and writing (Lunsford et al., 2009; Kuhn, Wang, & Li, 2010; Kuhn & Crowell, 2011; Newell et al., 2011) and contributes to the development of critical literacy.

The role of the teacher is very important in the education/enhancement of students in argumentation, as he/she brings students in contact with different types of reasoning: inductive-hypothetical, deductive, analogical or dialectical reasoning, which as a whole he/ she cultivates critical thinking (Matsagouras, 2007) in organized and structured learning environments such as group collaboration, interdisciplinary interaction and communication, elements which favor and promote the social basis of learning (Matsagouras, 2004).

The literature review and research highlights the positive effects of teaching argumentative speech to primary school students (Andrews, Torgerson, Low, McGuinn, & Robinson, 2006; Brassart & Veevaert, 1992; Dolz, 1996; Englezou, 2014), while the systematic teaching contributes to the production of structured and quality texts in various ways. Teaching of argumentative discourse is based on the scientific background of Vygotsky's socio-cultural theory (1978) and social construction/social constructivism (Winne & Hadwin, 2010).

1.1 The Research

The present research was implemented in three schools (urban, suburban and rural area) of Chania, in Crete, in order to teach, train and enhance students in the development of argumentative speech/writing and the use of persuasion. For that reason, we selected 6th grade students who are going to transit to High School in order to train them in argumentation, so that they are well-prepared for their transition to the Secondary, where subjects are more demanding and they will need to come in contact with such texts.

1.2 The Purpose of Research

The aim of this research was the implementation of a structured intervention based on interactive teaching models and on the Self-Regulated Strategy Development in order to get our students in contact with argumentative texts and be practiced in the structure of them with the use of counter-arguments and reconstruction arguments on case studies, hypothetical scenarios and texts from newspapers, articles, etc. Our aim was to enhance students in exploiting strong arguments in their daily conversations and interactions, so they can think critically and become the future active citizens of our society. Our sample was trained in composing and writing cohered and cohesive argumentative texts.

1.3 Research Questions

This study attempted to answer the following research questions:

- Did the experimental group students outperformed from *pre* to *post* phase in writing well-structured and more cohesive argumentative text?
- Had the intervention program significantly affected and to what extent on students?
- Did the experimental group students show from *pre* to *post* phase more appropriate behavior during the writing process than the control group children?
- Was there any difference among students from urban, semi-rural or rural areas?
- Did the genre play any role to the writing ability of students?
- Did the students with special difficulties had significant improvement on the performance of argumentative structure and use after the implementation of intervention?

2. Methodology

The intervention program was implemented in six primary school classes in Chania, Crete, Greece of different social –economical level. Our sample consisted of 134 sixth grade children (68 boys and 66 girls) aged 11.9 to 12.4 (M= 12.2). Following statistical procedures we divided our sample in two groups: the experimental (N= 67) and the control group (N= 67). In the experimental group (33 boys and 34 girls) the researcher trained student's skills in constructing arguments by giving them certain instructions about planning and writing well-structured and complete oral/ written argumentative texts by using mixed teaching models and approaches which included direct teaching, scaffolding, experiential teaching, explicit instruction, differentiated strategies and the Self-Regulated Strategy Development (Graham, 2018, 2019). These approaches aimed to increase genre specific knowledge, writing efficacy, strategic behavior, self-regulation skills and motivation among students of various ability levels. In the control group the researcher simply read and discussed a series of well-structured argumentative texts that corresponded to the sixth grade student's abilities and demanded from students to recognize arguments in texts without following any specific program.

2.1 Study's Design

The research is a quasi-experimental study with a control group and an experimental group in which targeted intervention was applied. Before the intervention program and for internal validity reasons, we assessed the sample of students with a series of tests. First, we assessed sixth grade students with LAMDA Test (Skaloumpakas & Protopapas, 2008) in order to identify any reading difficulties. Then, we evaluated student's ability to write argumentative texts (students wrote one argumentative text before and two after the intervention program and we take the mean of the two evaluations trying to capture children's actual skills and abilities).

Student's ability to write argumentative texts at the *pre* and *post* test phase was assessed with these criteria: a) knowledge of the correct structure of an argumentative text which assessed with a climax of 0-2 points, if students proved that know to introduce an opinion, to support it with arguments and counter arguments, to reconstruct it, and reach to a conclusion. It is also assessed the coherence by the use of textual indicators. In meta-analysis which is conducted three months after the first *post* test phase, we assessed the same criteria, in order to check if students of experimental group exploit the knowledge of the training program after the end of intervention and if they continued to have the same progress in exploiting arguments.

2.2 Intervention Program

The intervention lasted twelve weeks and included the teaching of the structure of argumentative speech for six weeks, the practice in case studies where it was necessary to record arguments for or against a subject, its investigation from all points of view using arguments and counter-arguments, the attempt to reconstruct, to compose and to conclude to a solution. Techniques such as problem solving and debates through role-playing games and collaborative, interactive forms of communication were used. More analytically, we implement the intervention program exploiting the potential of SRSD strategy, which include the follow steps:

- Detection and Exploitation of background Knowledge of students in order to investigate the skills needed for our purpose.
- Introduction of the structure of a good argumentative text and its special characteristics of this specific genre. Graphic organizers were exploited to make understandable the structure of argumentative text. After getting acquainted with the structural elements of this kind of genre, the students analyzed a text written with the support of the researcher, looking for the structural elements of the argumentative text as well as for he connecting elements and the textual indicators that ensured its coherence.
- Implementation of **POW** technique (**P**ick my ideas, **O**rganise my notes, **W**rite and say more).
- Discussion of the genre through various examples.
- Training and implementation of argumentative texts structure as it is shown in figure 1, exploiting direct instruction, loud thinking, scaffolding and experiential teaching methods in order to activate more the students in learning procedure.
- Memorization of the model exploiting mnemonic and graphic organizers.
- Support of the model genre through various techniques and strategies (problem solving methods, debates through role-playing games, collaborative, interactive forms of communication, exploitation of technology). In this stage, students had many chances to practice the model through role playing and discussion and write argumentative texts in a collaborative way as a team work. Support from researcher was provided only when it was needed.
- Implementation of the model by each student independently in different situations and case studies. The role of researcher in this phase was encouraging, supportive. Students had to perform in writing what they had acquired from the program by themselves without any help or support.
- After the completion of the intervention program in the experimental group, all the students wrote a second argumentative text in article form (post-test), in order to investigate the possible long terms effect of the model.

2.3 Results of the Study

Exploiting all the above methodological instruments and the required data collected, we made the suitable analysis (one way ANOVA and χ^2) in order to investigate the effectiveness of the intervention program. The data collected were analyzed using descriptive statistics (mean, standard deviation, frequency count and percentage) to measure *pre-test* and *post-test* students' performance in writing argumentative texts.

As we can see in *Table 1*, significant improvement in the performance from the *pre* to *post* phase of the study was made by the children in the experimental group compared with those in the control group in writing argumentative texts.

Table 1. Pre-test and Post-test Student's Mean Scores of the Experimental and Control Group

	Experimental	Control		
Pre-test	0.45	0.47	t-test	P
Post-test	1.61	0.59	14.84	.001

More analytically and in relation to previous measurements, *Table 2 and 2.1* show that significant improvement of the experimental group compared to the control group in terms of the average final degree of awareness of the argumentative structure and the final average of coherent organization of the texts ($p=.000$). Students' improvements in final written performance of argumentative text ranged from 40-80 percent. That means that at the post-test phase more than 45 percent of the children referred these elements in their written texts.

Table 2. Structural Elements, Where Experimental Group Made Significant Improvements (Post-test Phase)

Experimental group		
	Percentage %	
Argumentative structure	Pre-test	Post test
Development of opinion	22%	87%
arguments	32%	73%
Counter-arguments	7%	68%
reconstruction	0%	57%
Synthesis/composition	2%	75%
conclusion	10%	92%

Table 2.1. Pre-test and Post-test Student's Mean Scores of the Experimental and Control Group in Structure and Coherence

	Pre-test		Post -test		p
	Exp.	Control	Exp.	Control	
structure	9.78	9.82	11.62	9.82	.000
coherence	2.72	2.62	3.82	2.70	.000

It was also assessed the effectiveness of this program (*Table 3*) on student's behavior and internal motivation development during the writing process. Significant changes on student's ability to organize and plan their writings as well as on student's behavior and internal motivation was noted.

Table 3. Experimental Group's Improvements (Percentage, Mean Scores) from the *Pre to Post* Test Phase in Using of Strategy Techniques, in Showing Appropriate Behavior and Internal Motivation Development during the Writing Process

Experimental group			
	Percentage%		
	Pre-test	Post -test	P
Strategy techniques	2%	78%	.001
Appropriate Behavior	9%	81%	.001
Internal Motivation	4%	82%	.001

We also evaluated the impact of school type in the performance of students. The statistical analysis showed that what really matters is the implementation of structured instruction and the knowledge of teachers to do so. *Table 4* shows no importance difference among the three schools where the intervention was implemented.

Table 4. Experimental Group's Improvements from the Pre to Post and after Post Test Phase According to School Type

Experimental group				
Type of school	Pre-test	Post -test	second post test	P
Urban area	0.42	1.62	2.38	.001
Semi-urban area	0.37	1.58	2.32	.001
Rural area	0.44	1.63	2.31	.001

Moreover, we investigated if the genre plays significant role in the performance of writing argumentative texts and we noticed a slight superiority of girls over boys, as it seems in *Table 5*.

Table 5. Experimental Group's Improvements from the *Pre to Post* and after *Post* Test Phase According to Genre (Male/Female)

Experimental group				
Type of school	Pre-test	Post -test	second post test	P
Boys	0.47	1.62	2.32	.005
Girls	0.42	1.61	2.34	.005

During the study, we were also concerned about the performance of children with special difficulties. We noticed that many of the sixth grade students who couldn't focus on the task and based on other peer's efforts, gradually they found the procedure interesting and concentrated seriously on their writings, after the demonstration of writing style of argumentative text and the role –playing on the case studies

they performed in their small groups. The role of researcher's intermediation was to encourage those students and create a more differentiated learning environment, giving multiple chances to test their abilities according to their learning profile and their capacities.

Table 6. Experimental Group's Improvements (Percentage, Mean Scores) from the *Pre to Post* Test Phase in Using of Strategy Techniques, in Showing Appropriate Behavior and Internal Motivation Development during the Writing Process with Emphasis on Students with Difficulties

Experimental group	Percentage%		Pre-test		Post -test		p
	Pre-test	Post -test	M	SD	M	SD	
Strategy techniques	2%	78%	.00	.00	1.47	.72	.001
Appropriate Behavior	9%	81%	.49	.48	1.52	.58	.001
Internal Motivation	4%	82%	.37	.49	1.55	.55	.001

Finally, we noticed a significant improvement on students behavior after the implementation of program intervention, pointed out the positive attitude among debates and on their oral/written performance on constructing arguments and claim their rights.

3. Discussion

The purpose of this study was to investigate the effect of an intervention program which aimed to train and enhance students in argumentative speech/text in order to obtain critical skills as a future active citizen. The intervention was based on the principles of the Self-Regulated Strategy Development and exploited certain teaching models such as the direct and explicit instruction, scaffolding, experiential teaching methods in a differentiated learning environment (Tomlinson, 1999), taking into account the developmental level of students and their needs in a try to well prepare them for their transition in Secondary. The results of the data analysis revealed significant improvement in the performance from the *pre to post* phase of the study on students' production of well-organized and coherent argumentative speech/text. These results are in accordance of our research that has been conducted and emphasizes that the systematic education and practice of students in argumentation significantly improves students' skills in this field and strengthens them in the production of better quality texts (Andrews, Torgerson, Low, & McGuinn, 2009; Brassart, 1991; Brassart & Veevaert, 1992; Dolz, 1996).

The intervention program had also significant effects on qualitative aspects of our sample students' writings. On this perspective, the majority of the students after the implementation of the intervention program produced cohesive argumentative texts with appropriate morph-syntactical structure. Moreover, the effectiveness of this program on student's behavior and internal motivation development during the writing process was remarkable. It is worth to be noted that even students with learning difficulties experienced academic progress. They managed to follow main stream classroom curriculum, showing significant improvement in relation to the structure of their argumentative text and to the presence of counter arguments, reconstruction and synthesis. Direct Instruction, scaffolding, and Meichenbaum's model of thinking aloud (1977), as well as graphic organizers and technology helped the majority of the students to better understand the structure of an argumentative text and its importance for effective planning and drafting procedures. Moreover, the Self-Regulated Strategy Development and the experiential teaching methods such as debates, scenarios, case studies and role –plays helped the experimental group to deeply comprehend the necessity of using the appropriate connecting elements and to ensure coherence of the text (Nakas, 2003), or appropriate inductive-hypothetical, deductive, analogical or dialectical reasoning and persuasiveness, activating critical thinking. In addition, this program contributed to the understanding of how important it is for everyone to support an opinion, justifying each time the path of his/her reasoning and strengthen it by choosing the appropriate means of persuasiveness. The experimental group was also being benefited to synthesize different opinions,

concluding to the most useful for them. Furthermore, highlighting some of our findings, it is proved that this intervention helped experimental group to organize their ideas based on a concrete design and to enhance their ability to plan very carefully before writing (Graham, 2008). Due to the structured instruction, all students, including those with learning difficulties, ameliorated their behavior during the oral/writing process as many of them understood better the whole process through the alternatives teaching methods, felt very comfortable with themselves as all the procedures were implemented in a collaborative way, developing internal motivation (Boscolo, 2009). These findings are consistent with De La Paz and Graham (1997, 2002) study in which the implementation of the Self-Regulated Strategy Development particular techniques has been proven very effective on students' attitudes to text production, especially for weak learners with learning difficulties ones (Sadler & Graham, 2007).

In this way, it was proved that a systematic, methodic and structured instruction contributes not only to the development of students' cognitive and metacognitive skills but also to their social empowerment as well as to the development of their communications skills. A well-trained student obtains the ability to perceive intentions, purposes, motivations for actions and emotional condition of their interlocutor, whatever his/her social or economic background is. According to Babiniotis (2008), argument speech favors social interaction, which involves a disagreement. This is in agreement with literature review (Harris et al., 2008; Harris & Graham, 2009).

The contact of students with this kind of textual genre also contributes to the cultivation of their critical thinking, training them in the noble dialectical confrontation of views, while actively involving them in the construction of knowledge through participatory processes (Egglezou, 2014). In addition, it helps them to use various kind of reasoning and to be critical of what they say, allowing them to reflect on their own views, to modify, compromise or adopt other views, as a result of the new knowledge that has been developed (Bryson & Scardamalia, 1996). Our study's results have confirmed all the above mentioned studies including those of Croirier (1996), De La Paz (2005), De La Paz & Graham (2002), De Smedt and Van Keer (2014), Fulkerson (1996), Graham, Harris and Mason (2005), Graham, Gillespie and Mc Keown (2013), and Iordanou, Kendeou and Beker (2016), in the field of enhancement of argumentative writing skills. The authors provide a powerful claim that teachers might use SRSD for argumentative writing with primary or middle school students to enhance students' argumentative writing skills and content area understanding. Important considerations for each stage of SRSD instruction are also provided, with excellent examples of developing background knowledge, considerations in use of self-talk, use of innovative means to introduce argument and counterargument (using a video), and more (Harris, 2018).

The positive and very promising results of the intervention include the development of reasoning, dialogue and critical thinking, as well as the active participatory exploratory attitude adopted by students. In addition, there are obvious improvements in students' cognitive, metacognitive and communication skills as well as their ability to converse with others trying to substantiate their point of view correctly and convincingly. Also, according to socio-linguistic research, the practice of students in understanding and producing oral argumentative speech implies a clear improvement in the level of understanding and production of written arguments (Egglezou, 2014) and in general of their written speech. Finally, the contact of students with this textual genre contributes to the enhancement of future democratic active citizens who will respect their interlocutor and their views, even if they are diametrically opposed to their own.

In general, writing is a highly demanding and complex task (Graham & Alves, 2021), dependent on several modulating factors of cognitive and emotional nature. As our study has shown, writing argumentative text requires the implementation of a set of specific mental processes and cognitive effort related to planning, organizing the reasoning and finding strong arguments and proves to support it (De La Paz & Graham, 1997; MacArthur, Graham, & Fitzgerald, 2006; O' Halloran, 2009). Consequently, explicit instruction and more targeted strategies that promotes and facilitates this challenging task are required. Our findings also are in agreement with many surveys which highlighted the importance of strategies and differentiated processes for improving student performance in text production (Best, Floyd, & McNamara, 2008; Graham, Harris, & Mason, 2005; Graham, 2020; Meyer, Ireland, & Ray, 2011; Piolat, Roussey, & Gombert, 1999; Sklaveniti, 2005; Toulmin, 2003; Torrance et al., 2007; Wong, Hoskyn, Jai, Ellis, & Watson, 2008).

Finally, studies have shown that students master their writing skills in primary school starting from elementary grades through structured writing intervention and evidence-based writing practices (Graham & Alves, 2021). Our study results confirm all the above mentioned studies, giving emphasis on the supportive and reflective learning environment that exploit differentiated practices and playful, enjoyable, dialectical, and social interactions and activities in order to create a challenging, interesting and constructive environment for all students, where everyone may feel self-competent and capable for success.

4. Conclusions

Participating in a conversation and constructing argument to support one's opinion, it is a demanding, beneficial and constructive skill with great academic and social extensions. Mastering to speech or write in a reasonable and persuasive way presupposes structured training and a challenging environment to develop critical thinking, cognitive, metacognitive and certain communication skills. Structured Instruction and effective pedagogical models may contribute to train our students to converse with others, trying to substantiate their point of view correctly and convincingly. Educating students to write argumentative text with a well-structured instruction enriched with a variety of strategies and techniques contributes to better understand all the students the basic elements of a structured and coherent text with convince. It also helps student to organize their ideas and construct the suitable argument (Galbraith & Torrance, 1999). Consequently, practice of students in understanding and producing oral argumentative speech implies a clear improvement in the level of understanding and production of written arguments and a clear improvement in self- regulation. Systematic training and enhancement of students in any kind of text with self- regulated programs and differentiated models and strategies contributes to the acquisition of metacognitive skills with long-term impact, improvement and stability.

The role of the teachers is very important as his/her ability and knowledge may contribute effectively to help student achieve academic and emotional success. He/ She should be supportive, encouraging, motivating, and help them being reflective. A teacher can help students understand, perceive the facts and organize their ideas effectively, monitoring self- esteem. It is important for a teacher to be aware of the various models, techniques and strategies in order to be able to guide students to meet their needs. Most importantly, a teacher should have the flexibility to exploit the right methodological and pedagogical tools and techniques in order to enhance all students to be developed on a cognitive, emotional and social level, ensuring a stable and long-term effects in their improvement.

5. Recommendation

This research should be tested on a larger sample of students and in different areas and ages in order to explore the effectiveness of the intervention in primary and secondary where the academic difficulty is higher. It would be a good idea if this intervention program was applied to all grades students in order to be a continuum in the education of students in argumentation. It would also be beneficial if this intervention was applied to more difficult kinds of texts.

References

- Adam, J. M. (1999). *Linguistique textuelle. Des genres de discours aux textes*. Paris, Nathan.
- Andrews, R. (1995). *Teaching and learning argument*. London: Cassel.
- Andrews, R., Torgerson, C., Low, G., & McGuinn, N. (2009). Teaching Argument Writing to 7- to 14-Year-Olds: An International Review of the Evidence of Successful Practice. *Cambridge Journal of Education*, 39(3), 291-310.
- Andrews, R., Torgerson, C., Low, G., McGuinn, N., & Robinson, A. (2006). *Teaching Argumentative Non-Fiction Writing to 7-14 Year Olds: A Systematic Review of the Evidence of Successful Practice Technical Report in, Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Babinotis, E. (2008). *Lexikon for School and Office*. Athens: Centre of Lexicology.

- Best, R. M., Floyd, R. G., & McNamara, D. S. (2008). Differential Competencies Contributing to children's comprehension of Narrative and expository texts. *Reading Psychology, 29*, 137-164.
- Boscolo, P. (2009). Engaging and motivating children to write. In B. Beard, D. Myhill, J. Riley, & M. Nystrand (επιμ.), *The SAGE handbook of writing development* (pp. 300-312). Los Angeles: Sage.
- Brassart, D. G. (1992). Negation, concession and refutation in counter-argumentative composition by pupils from 8 to 12 years old and adults. *Argumentation, 6*(1), 77-98.
- Brassart, D. G., & Veevaert, A. (1992). *Enseigner-apprendre le texte argumentatif au CE2*. C.R.D.P. Ville, Francais.
- Bryson, M., & Scardamalia, M. (1996). Fostering reflectivity in the argumentative thinking of students with different learning histories. In *Reading & Writing Quarterly. Overcoming Learning Difficulties, 12*(4), 351-384.
- Coirier, P. (1996). Composing argumentative text. In G. Rijlaarsdam et al. (Eds.), *Theories, Models and Methodology in Writing Research*. Amsterdam: Amsterdam University Press.
- De La Paz, S. (2005). Teaching historical reasoning and argumentative writing in culturally and academically diverse middle school classrooms. *Journal of Educational Psychology, 97*(2), 139-158.
- De La Paz, S., & Graham, S. (1997). Strategy instruction in planning: Effects on the writing performance and behavior of students with learning difficulties. *Exceptional children, 63*, 167-181.
- De La Paz, S., & Graham, S. (2002). Explicitly teaching strategies, skills, and knowledge: writing instruction in middle school classrooms. *Journal of Educational Psychology, 94*(4), 687.
- De Smedt, F., & Van Keer, H. (2014). A Research Synthesis on Effective Writing Instruction in Primary Education. *Procedia - Social and Behavioral Sciences, 112*, 693-701. <http://doi.org/10.1016/j.sbspro.2014.01.1219>
- Dolz, J. (1996). Learning argumentative capacities. *Argumentation, 10*(2), 227-251.
- Egglezou, F. (2014). Argumentative literacy and rhetorical citizenship: The case of genetically modified food in the institutional setting of a Greek primary school. In Christian Kock, & Lisa Villadsen (Eds.), *Contemporary Rhetorical Citizenship*. Amsterdam: Leiden University Press.
- Egglezou, F. (2014). Teaching the Argument in Primary School. *Theory and Praxis*. Athens.
- Fulkerson, R. (1996). *Teaching the Argument in Writing*. Urbana: National Council of Teachers of English.
- Galbraith, D., & Torrance, M. (1999). Conceptual processes in writing: From problem solving to text production. In M. Torrance, & D. Galbraith (Eds.), *Knowing what to write. Conceptual processes in text production* (pp. 1-12). Amsterdam: Amsterdam University Press.
- Graham, S. (2008). *Effective writing instruction for all students*. Renaissance Learning. Retrieved July 24, 2015, from http://test.updc.org/assets/files/resources_by_topic/literacy/SummerWriting13/Effective-Writing-for-All-Students-Vanderbilt.pdf
- Graham, S. (2018). The writer(s)-within-community model of writing. *Educational Psychologist, 53*, 258-279. <https://doi.org/10.1080/00461520.2018.1481406>
- Graham, S. (2019). Changing how writing is taught. *Review of Research in Education, 43*, 277-303. <https://doi.org/10.3102/0091732x18821125>.
- Graham, S. (2020). The sciences of reading and writing must become more fully integrated. *Reading Research Quarterly, 55*(S1), S35-S44.

- Graham, S. (2021). *A walk through the landscape of writing: Insights from a program of writing research*. Arizona State University.
- Graham, S., & Alves, R. A. (2021). Research and teaching writing. *Reading and Writing*, 34, 1613-1621.
- Graham, S., & Harris, K. R. (2018). Evidence-based writing practices: A meta-analysis of existing metaanalyses. In R. Fidalgo, K. R. Harris, & M. Braaksma (Eds.), *Design Principles for teaching effective writing: Theoretical and empirical grounded principles* (pp. 13-37). Brill Editions.
- Graham, S., Gillespie, A., & McKeown, D. (2013). Writing: importance, development, and instruction. *Reading and Writing*, 26(1), 1-15. <http://doi.org/10.1007/s11145-012-9395-2>.
- Graham, S., Harris, K. R., & Mason, L. H. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: the effects of self-regulated strategy development. *Contemporary Educational Psychology*, 30, 207-241.
- Harris, K. R., & Graham, St. (2009). Self-regulated strategy development in writing: Premises, evolution, and the future. *British Journal of Educational Psychology. Monograph Series*, II, 6, 113-135.
- Harris, K. R., Graham, S., Mason, L. H., & Friedlander, B. (2008). *Powerful Writing Strategies for All Students*. Baltimore: Brookes.
- Herrick, J. (2013). *The History and theory of Rhetoric*. London, N.Y.: Routledge Ltd.
- Ioardanidou, K., Kendeou, P., & Beker, K. (2016). Argumentative reasoning. *Handbook of Epistemic Cognition* (pp. 39-53). Routledge.
- Kuhn, D. (1991). *The Skills of argument*. Cambridge, UK: Cambridge University Press.
- Kuhn, D. (2005). *Education for thinking*. Cambridge, MA: Harvard University Press.
- Kuhn, D., & Crowell, A. (2011). Dialogic Argumentation as a Vehicle for Developing Young Adolescents' Thinking. *Psychological Science*, 22, 545-552. <http://doi.org/10.1177/0956797611402512>
- Kuhn, D., Hemberger, I., & Khait, V. (2014). *Argue with me: Argument as a path to developing Students' thinking and writing*. Bronxville, NY: Wessex Press.
- Kuhn, D., Wang, Y., & Li, H. (2010). Why argue? Developing understanding of the purposes and values of argumentative discourse. *Discourse Processes*, 48(1), 26-49.
- Kuhn, D., Zilmer, N., Crowell, A., & Zavala, J. (2013). Developing norms of argumentation: Metacognitive, epistemological, and social dimensions of developing argumentative competence. *Cognition and Instruction*, 31(4), 456-496.
- Lundsford, A., Wilson, K., & Eberly, R. (2009). *The Sage Handbook of Rhetorical Studies*. Thousand Oaks: Sage.
- Matsagouras, H. (2001). *Keimenokentriki prosegisi tou graptou logou*. Athens: Gregoris.
- Matsagouras, H. (2007). *School Literacy: Functional, Critical, Scientifical*. Athens: Gregoris.
- McArthur, C., Graham, S., & Fitzgerald, J. (Eds.). (2006). *Handbook of writing research*. New York: The Guilford Press.
- Meichenbaum, D. (1977). *Cognitive behavior modification: An integrative approach*. Plenum.
- Meyer, B. J. F., Ireland, J. J., & Ray, M. N. (2011). *Connecting reading and writing: Applying the structure strategy to persuasive texts*.
- Mpasakos, P. (1999). *Argument and Judgement*. Athens: Nesos.
- Nakas, A. (2003). How children define words. *Language*, 56, 70-84.

- Newell, G. E., Beach, R., Smith, J., VanDerHeide, J., Kuhn, D., & Andriessen, J. (2011). Teaching and Learning argumentative reading and writing: A review of research. *Reading Research Quarterly*, 46(3), 273-304.
- Oaksford, M., Chater, N., & Hahn, U. (2008). Human reasoning and argumentation: The probabilistic approach. In J. E. Adler, & L. J. Rips (Eds.), *Reasoning: Studies of human inference and its foundations* (pp. 383-413). Cambridge, UK: Cambridge University Press.
- O'Halloran, K. (2009). Implicit dialogical premises, explanation as argument: a corpus-based reconstruction. *Informal Logic*, 15-53.
- Oostdam, R. (2005). Assessment of Argumentative Writing. In G. Rijlaarsdam, H. van den Bergh, & M. Couzijn (Eds.), *Effective learning and teaching of writing*. A handbook of writing in Education. Boston/Dordrecht/New York/London: Kluwer Academic Publishers.
- Papoulia-Tzelepi, P. (2004). Scaffolding the Argumentative Writing Via Human Rights Teaching in the Greek Elementary School. *Educational Studies in Language and Literature*, 4(2). <http://doi.org/10.1007/s10674-004-1593-7>
- Piolat, A., Roussey, J., & Gombert, A. (1999). *The development of Argumentative Schema in Writing*. Amsterdam University Press.
- Protopapas, A., & Skaloumpakas, Ch. (2008). Assessment of reading fluency for the identification of reading difficulties. *Psychology: the Journal of the Hellenic Psychological Society*, 15(3), 267-289. https://doi.org/10.12681/psy_hps.23840
- Rose, D. (2010). Writing as Linguistic Mastery: The Development of Genre-Based Literacy Pedagogy. In R. Beard, D. Myhill, & M. Nystrand (Eds.), *The Sage Handbook of Writing Development* (pp. 151-166). Great Britain: Sage Publications.
- Sadler, B., & Graham, S. (2007). The relationship between writing knowledge and writing performance among more and less skilled writers. *Reading and Writing Quarterly*, 23(3), 231-247. <http://doi.org/10.1080/10573560701277575>
- Skaloumpakas, Ch., & Protopapas, A. (2008). *Test LAMDA*. Ministry of Education. EPEAEK.
- Sklaveniti, X. (2005). *Argument in Education. Concept, Importance and Models*. Athens: Ethnikon & Kapodistrian University, PTDE.
- Slavin, R. E., Cheung, A., Groff, C., & Lake, C. (2008). Effective reading programs for middle and high schools: A best evidence synthesis. *Reading Research Quarterly*, 43(3), 290-322.
- Slavin, R. E., Lake, C., Chambers, B., Cheung, A., & Davis, S. (2009). *Effective Reading Programs for the Elementary Grades: A Best-Evidence Synthesis*. The Best Evidence Encyclopedia of Johns Hopkins University School of Education's Center. Institute of Education Sciences, U.S. Department of Education.
- Stein, N., & Bernas, R. (1999). *The Early Emergence of Argumentative Knowledge and Skill*. University Press.
- Tomlinson, C. A. (1999). *The Differentiated Classroom: Responding to the Needs of All Learners*. Alexandria, USA: ASCD.
- Torrance, M., Fidalgo R., & Garcia, J. N. (2007). The teaching ability and effectiveness of cognitive self-regulation in sixth grade writers. *Learning and Instruction*, 17(3), 265-285.
- Toulmin, S. (2003). *The Uses of Argument*. New York: Cambridge University Press.
- VanGelder, T. (2007). Rationale: *Making People Smarter Through Argument Mapping*. Retrieved March 11, 2015, from <http://timvangelder.com/2007/05/07/rationale-making-people-smarter/>
- Vygotsky, L. S. (1978): *Mind in Society: Development of Higher Psychological Processes*. Harvard University Press Cambridge, Massachusetts London, England.

- Winne, Ph., & Hadwin, A. F. (2010). *Self-Regulated Learning and Socio-Cognitive Theory*. <http://doi.org/10.1016/B978-0-08-044894-7.00470-X>
- Wong, B. Y. L., Hoskyn, M., Jai, D., Ellis, P., & Watson, K. (2008). The Comparative Efficacy of Two Approaches to Teaching Sixth Graders Opinion Essay Writing. *Contemporary Educational Psychology*, 33(4), 757-784.
- Xelms, S. K. (2010). *Planning, Implementation and Evaluation of Educational Program: Argument and Ethical Judgement*. Athens: Ethnikon & Kapodistrian University.