

The problem of argumentation teaching in Mexican schools

El problema de la enseñanza de la argumentación en la escuela mexicana

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Abstract

Due to the evident educational gap in the teaching and acquisition of argumentation in Mexico, in the recent Educational Reforms for Middle Education has been proposed that the Pragmadialectics theory underlies the teaching of this discourse in the curricula and course contents; however, this argumentation theory is not the base for the activities or the didactic materials used in the classrooms. These are ruled by the New Rhetoric theory of argumentation. This shows a lack of coherence between the pedagogical-theoretical approach and classroom practices. This is why the definition of the theoretical basis to sustain this discourse model in the curricula is a challenge that needs to be addressed. In this research we analyze and evaluate the curriculum, the syllabus and the Spanish textbooks for Middle school; we also analyze the curriculum, the Spanish teaching guides, and the Spanish text books for the High school that depends on the University of Querétaro. The final proposal is framed in the theoretical consideration of the need to elaborate a new model for teaching argumentation that is based on the interdisciplinary work of the fields of Linguistics, Pedagogy and Philosophy.

Keywords: argumentation, teaching, Pragmadialectics, interdiscipline.

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Resumen

Debido al evidente rezago en la enseñanza y adquisición de la argumentación en México, en las recientes Reformas Educativas para el nivel medio, se propone que la teoría de la argumentación que subyazga en los Programas y Planes de Estudio para su enseñanza sea la Pragmadialéctica; sin embargo, ésta no es la base de las actividades ni de los materiales didácticos utilizados dentro del aula, sino que éstos son regidos por la Nueva Retórica. Lo anterior muestra una falta de coherencia entre la propuesta pedagógica-teórica y la práctica dentro del salón de clases. Por ello, se plantea como reto la definición de los fundamentos teóricos que sostienen este modelo discursivo dentro de la currícula. Para este trabajo se analizan y evalúan el Plan de Estudios, los Programas y libros de texto de español para la Escuela Secundaria, así como los Programas de Estudio, las Planeaciones Didácticas de Lectura y Redacción, y los libros de texto para la Escuela de Bachilleres de la Universidad Autónoma de Querétaro. La propuesta final se sitúa en la reflexión teórica de la elaboración de un nuevo modelo de enseñanza de la argumentación basado en el trabajo interdisciplinario de la Lingüística, la Pedagogía y la Filosofía.

Palabras clave: argumentación, enseñanza, Pragmadialéctica, interdisciplina.

Higher Secondary Education¹ in Mexico is hindered by major deficits in terms of teaching and the development of students' discursive skills, mainly regarding argumentative discourse. This deficit is reflected by the results of national school tests, the evaluations of university entry exams (González Robles, 2014), and previous research on the late acquisition² of argumentative discourse (Hess Zimmermann & Godínez López, 2011; García Mejía & Alarcón Neve, 2015). This is concerning because, at the end of this educational level, around age 18, students have spent twelve years in the Mexican school system and are presumably ready to enter university.

This worrying situation was revealed by the results of the EXHALING test, which was administered to 4351 first-year students attending eleven public and private universities in Mexico City and the metropolitan area in late 2011. This test evaluated the participants' command of four linguistic skills in Spanish: listening comprehension, reading comprehension, linguistic awareness, and written expression. Results show that only 15.2% of participants reached a high performance level and that 33.9% reached an intermediate level; that is, even after entering tertiary education, more than half of students still have trouble using their mother language efficiently (González Robles, 2014).

In the written production section, 43% of participants displayed insufficient knowledge about the use of punctuation and discursive cohesion elements.

Given the debate on our country's educational backwardness and the controversial measures aimed at solving it, we researchers of language acquisition and development agree that much work needs to be done in the fields of pedagogy and didactics in order to improve teacher education; yet, we also believe that it is necessary to further examine the processes of linguistic acquisition and development that take place in the so-called Late Stages or School Stages (Primary education, between 6 and 18 years of age).

Argumentation is a type of discourse that has been shown to develop during the late stages of acquisition as a result of school instruction (van Eemeren, 2017). This discursive genre constitutes a verbal, social, and rational act aimed at convincing a reasonable critic about the acceptability of a given position by expressing a constellation of one or more supporting propositions (van Eemeren & Grootendorst, 1992; van Eemeren, 2015a, 2015b, 2017; van Eemeren & Snoeck Henkemans, 2016). As a discursive tool, argumentation aims to create an attitude of openness toward discussion through the critical analysis of multiple positions, in order to reach an agreement before making decisions. The social relevance of argumentation is clear, since

¹ The Higher Secondary Education period is known as "Baccalaureate" [Bachillerato] or "High School" in Mexico. During it, students aged 15 - 18 years prepare to enter university.

² The late language acquisition stage starts after six years of age, when children learn linguistic and discursive elements and enter formal education. This stage lasts through to adulthood.

its textual sequences appear in many of the discursive activities typical of social life, both public and private: everyday conversations, interviews, debates, legal actions, or essays. We use argumentation whenever we want to convince, persuade, or reach an agreement with an audience. Nevertheless, despite the importance of this type of discourse and its implications for academic, professional, and social success, educational systems have not granted it the attention that it deserves. As noted by Perelman (2001), children do not systematically study argumentative discourse at school, or do so at too late a stage. Mexican public schools are currently encouraging the development of argumentative discourse through various means: teaching students to write persuasive essays, present their motives, engage in critical thinking, experience freedom to express their points of view, and practice political discourse (see Plan de Estudios de Educación Básica, 2011 [2011 Elementary Education Syllabus], published by the Secretaría de Educación Pública [Public Education Office]; and Programas de Estudios 2011 [2011 Syllabuses]; as well as the Marco Curricular Común del Sistema Nacional de Bachillerato [Common Curricular Framework of the National Higher Secondary Education System], 2008).

Examining the theoretical and pedagogical basis of the curricula and syllabuses introduced as part of the current Educational Reform, as well as the didactic materials used by teachers, reveals a lack of alignment that causes a divide between what is said and what is actually done in the classroom, which prevents the comprehensive development of young students' argumentative discourse skills.

In this study, we present an analysis of one of the problems currently affecting the teaching of argumentation in Mexican schools: the lack of consistency between the theoretical principles included in the Spanish Language Curricula of the Mexican educational system and their application to the teaching of argumentation through school syllabuses and the textbooks used in the classroom. By identifying the incongruities between what curricula and syllabuses specify regarding the teaching of argumentation and the activities included in textbooks, we argue for the need to generate a new didactic method based on Pragmadialectics (van Eemeren & Grootendorst, 1992; van Eemeren 2015a, 2017) and the Genre Teaching model (Rothery, 1994), among other approaches.

Argumentative discourse in the late stages of language development

Before the 1980s, research focused on what was acquired and developed during the early stages of language development (babbling, holophrases, two-word combinations), that is, the emergence of an incipient grammar that prefigures linguistic competence (Karmiloff-Smith & Karmiloff-Smith, 2001). Some researchers even asserted that, by age five, children had acquired all the fundamental properties of language, and that they merely enriched their lexicon after that point.

Nevertheless, after observing the degree of linguistic finesse and sophistication achieved during children's schooling (Barriga, 2002; Karmiloff-Smith, 1986; Karmiloff-Smith & Karmiloff-Smith, 2001; Nippold, 1993, 2000, 2006, 2007; Ordóñez, Barriga, Snow, Uccelli, Shiro, & Schnell, 2001), authors began alluding to the late stages of language development, which encompass the structural complexity achieved between 6 and 15 years of age, coinciding with the start and end of Elementary education. Over the last decades, researchers have even paid attention to the development that takes place from 15 to 18 years of age (secondary education), which for some students represents preparation for entering the university level (Kerswill, 1996; López-Orós & Teberosky, 1998; Berman, 2004; Nippold, 1993; Nippold & Sun, 2010; Snow et al., 2009; Snow & Uccelli, 2014).

It has been demonstrated that certain linguistic elements and their functions become consolidated at a later age, including aspects of textual cohesion and coherence (López-Orós & Teberosky, 1998; Hickmann, 2004) and the linguistic packaging of information (Strömqvist, Nordqvist, & Wangelin, 2004).

In Mexico, not enough research has been devoted to the variety of linguistic aspects involved in these stages (Barriga, 2002; Aguilar, 2003; Alarcón Neve, & Palancar, 2008; Hess Zimmermann, 2010, among others). However, we know that children and young people are forced to employ their linguistic knowledge in various discursive tasks in family and school contexts. These tasks include argumentation, which requires speakers to reason about facts to convince another person. Therefore, research on this discursive genre has

targeted the intersection between the linguistic sphere and the mental operations performed by a person applying argumentation. This makes it highly interesting to study argumentative skills in adolescents and young adults (Piéraut-Le Bonniec & Valette, 1991; Nippold 2007; Hess Zimmermann & Godínez López, 2011).

This discursive practice, which possesses a complex structure and involves the use of a variety of linguistic and social/pragmatic resources, should provide evidence of development even in the later stages of language acquisition. Also, given its lack of systematic study in schools, this discursive genre should display multiple deficits. Some studies back this assumption: for instance, in 2005, Nippold, Ward-Lonergan, and Fanning worked with students aged 11, 17, 24 years to examine certain specific traits of late language development in the areas of syntax, semantics, and pragmatics. These researchers found that students' performance improved across all domains as the age increased, with improvements affecting mean production length, relative clause production, and connector use. In addition, older students included more reasons/arguments in their essays and were able to identify a variety of viewpoints, thus reflecting more flexibility of thought; nevertheless, many adolescents and adults were still unable to recognize the positions adoptable regarding an issue (for and against), and were thus unable to convey these points of view in their essays. This finding reveals the importance of working on argumentation at school and all that this involves: acquiring life experience, enriching one's knowledge by reading a variety of texts, and interacting with the written culture of formal school education to expand one's knowledge, appreciate the complexity of controversial topics, and learn how to deal with conflicting points of view.

Several studies have shown that the development of discursive genres such as argumentation is key to achieving social, academic, and professional success (Nippold, 2007), since a speaker's linguistic and discursive competence determines his/her ability to create coherent and well-organized discourses that meet his/her contextual needs. The accurate use of argumentation relies on the development of a variety of linguistic aspects, such as being able to select and understand a vocabulary that suits the discursive mode employed, being aware of the listener's needs and of the context where one's discourse will be conveyed, and knowing how to use discursive connectors properly.

Several studies have suggested that changes, both quantitative and qualitative, occur during the late stages of acquisition and lead to improvements in language production. For instance, words are added to the lexicon and verbal reasoning competence reflects subjects' linguistic and cognitive development; in addition, people attain the necessary pragmatic-discursive sophistication to produce coherent and cohesive discourses, especially due to the acquisition and better command of connectors, which can be used more effectively to link discursive elements when negotiating points of view or when attempting to convince someone to adopt a position or perform a given action (Akiguet & Piolat, 1996; Brassart, 1990; Coirier & Marchand, 1994; Crowhurst, 1987; Golder, 1996; Gutiérrez-Clellen & Iglesias, 1992; McCutchen & Perfetti, 1982; Nippold et al., 2005).

The teaching of argumentative discourse in Mexican schools

The development of argumentation in late stages of language acquisition largely depends on curricula and syllabuses and their implementation, since late linguistic development is strongly influenced by the frequent opportunities to read and write academic texts that adolescents enjoy at school. Here, they gain exposure to low-frequency syntactic structures that they would not encounter in spontaneous casual language.

In 2011, a restructuring process was implemented to modify Elementary Education curricula and syllabuses (Secretaría de Educación Pública, 2011). Specifically, secondary school documents³ propose that education should focus on students and their learning processes, generate good working environments, encourage collaboration to construct knowledge, develop students' competences, employ materials that foster learning, and address socially-relevant topics. The documents assert that schools should aim to educate citizens who can benefit from increased learning opportunities and seek to develop successful learning trajectories that consider students' personal abilities and interests. Theoretically, these new curricula and syllabuses are 3 In Mexico, the term Secondary Education refers to the schooling period aimed at students aged 12 to 15 years, which constitutes the last level of Elementary Education.

focused on the development of attitudes and values, dialog, and the search for consensus, as well as on the encouragement of tolerance and critical thinking and "all that which 21st century Mexican society needs" (sic) (Plan de estudios, 2011, p. 57). The discourse in these documents suggests that the approach encouraged has a pragmadialectic basis (van Eemeren & Grootendorst, 1992; van Eemeren, 2015a, 2015b, 2017; van Eemeren & Snoeck Henkemans, 2016), aimed at educating students to be able to argue, reason, and analyze situations and problems, constantly challenging everything, proposing solutions, negotiating, applying a variety of strategies to improve their decision-making, and valuing diversity in points of view and evidence. This aim can be observed even in education programs, when units include instructions such as these: evaluate, analyze, and interpret the contents of television shows, discuss them, and generate an argumentative text with recommendations and criticism based on your analysis (SEP. Programas de Estudio, 2011; p. 55). Nevertheless, examining how these curricula and syllabuses are actually implemented via didactic materials (textbooks) reveals a discourse shift, as the instructions provided now resemble the following: write an argumentative text about a television program; remember that argumentative texts should prove or demonstrate an idea or thesis, refute a conflicting idea, and persuade and or dissuade the addressee regarding certain behaviors, facts, or ideas (for examples, see Cueva, H. et al., 2012. pp. 109, 110, 202, 209). Thus, the instructions included in textbooks reflect a practice that is closer to New Rhetoric theory (Perelman & Olberchts-Tyteca, 1971). This lack of consistency (systematization) between the theory as presented in official documents (curricula and syllabuses) and classroom materials (textbooks) hinders the full development of late argumentative discourse.

Likewise, the Preparatory School curricula and syllabuses (Programa PRE'09, Plan de estudios 2015), vaguely establish that they aim to contribute to strengthening students' communicative skills by using real contexts and topics that they find interesting. Didactic planning follows thematic lines supported by the generic and disciplinary competences that they aim to develop (Marco Curricular Común del Sistema Nacional de Bachillerato, 2008). Two main generic competences are included in this planning: students' ability to listen, interpret, and convey pertinent messages in a variety of contexts by using suitable means, codes, and tools; and their ability to provide support for their own positions on topics of general interest and relevance, considering other points of view in a critical and reflective manner. With respect to school textbooks, it can be observed that argumentative discourse is only developed in the units focused on reviews, essays, advertising materials, letters, and political texts. In all these topics, argumentation is regarded as a tool for persuading an audience or getting other people to agree with the speaker's point of view.

Mismatch between school programs and textbooks with respect to the teaching of argumentation Based on reviews of school programs and syllabuses and the textbooks used for teaching argumentation in the classroom, two questions emerge: What is the theoretical and pedagogical basis of the approach for developing argumentation present in the current Junior High School and High School curricula? Are they consistent with the didactic approach of the didactic material used?

Before performing a more thorough analysis, it is necessary to introduce an overview of the two theories of argumentation that are commonly used in the teaching of this textual genre in schools: Pragmadialectics (van Eemeren & Grootendorst, 1992; van Eemeren, 2015a, 2015b, 2017; van Eemeren & Snoeck Henkemans, 2016) and New Rhetoric theory (Perelman & Olbrechts-Tyteca, 1971). Considering the five categories of analysis proposed by Wenzel (1980) for argumentation theories, these approaches have the following characteristics:

Table 1	
Characteristics of argumentation	theories.
Category	New rhetoric

Pragmadialectics

Authors	Perelman and Olbrechts-Tyteca	Van Eemeren and Grootendorst
	(1971).	(1992).
Aim of	To persuade using effective	To solve differences of opinion.
argumentation	resources.	To convince a reasonable critic using
Context	Real, concrete, and quotidian.	reasonable arguments. Establishes certain ideal conditions where interaction must take place.
Participants	Main role. All argumentation must be conducted with the audience in mind.	Active. It is essential to acknowledge the existence of the other.
Procedures	Effective argumentation techniques	A set of procedures that specify the
	are informed by the speaker's knowledge of	steps that can help solve differences of opinion
	the audience and its beliefs.	through critical discussion.
Validity	the audience and its beliefs. The validity of arguments derives	through critical discussion. Reasonableness criterion. Validity
criteria for arguments	from how effective the successive steps of	depends on the application of procedures for
	argumentation are in causing the audience	solving differences of opinion.
	to accept a position.	

Methodology

This study is based on research conducted in Chile by Cademartori and (2004); therefore, it follows a similar methodology. The corpus selected for the analysis comprises the curricula and syllabuses for secondary schools in Mexico (2011) and those of the Baccalaureate [Bachillerato] program offered by the Universidad Autónoma de Querétaro (2009), the most widely distributed textbooks for each grade (1, 2, 3) according to data published by the National Free Textbooks Commission (Comisión Nacional de Libros de Texto Gratuitos, CONALITEG), and the textbooks used in the Bachillerato program belonging to the State Public University (Universidad Pública Estatal) (Aguilar Mialma, N. et al., 2012 and 2013).

Analysis

These texts were analyzed from the perspective of each of the argumentation theories presented –New Rhetoric and Pragmadialectics– based on the suggestion put forward by Wenzel (1980) and his five lines of analysis of argumentation: aim, context, participants, procedures, and validity criteria of the arguments used. Upon this basis, guidelines were generated for the qualitative analysis of the documents. The researchers selected and classified the phrases and paragraphs whose content reflected any of the dimensions included in theories of argumentation. In some cases, the contents of these dimensions were summarized, especially in the case of curricula, syllabuses, and programs. The first two tables below present the observations and examples resulting from the analysis of the theoretical documents that support the teaching of argumentation in secondary school and the baccalaureate level (curricula, programs, and syllabuses). The next two tables present the observations and examples derived from the didactic materials (textbooks) used in the classroom to teach this discursive genre.

Table 2 Document analysis: Junior High School Curriculum and Syllabus - Spanish Language (2011).

CORE TOPIC Junior High School curriculum - 2011

Aimed at developing: attitudes and values, dialog, and the search for consensus, as well as the encouragement of tolerance and critical thinking and all that which 21st

century Mexican society needs.

Aim: enriching students' graduate profiles (argues and reasons when analyzing situations, identifies problems, formulates questions, makes judgments, proposes solutions, applies strategies, and makes decisions. Values the reasoning and the evidence presented by others and is able to modify his/her own points of view given this

To solve differences of opinion and conflicts. Aim

Context Controlled spaces, ideal conditions. Real places.

Participants Active. Aware of their role.

Procedures Explicit procedural rules + Tacit social rules. Rationality

Validity of the arguments

used

Aim: That students express and defend their opinions and beliefs using reasons, respect other people's points of view from a critical and reflective perspective, use dialog as a privileged manner of solving conflicts, and learn to modify their opinions and beliefs when they encounter reasonable arguments.

Junior High School Spanish Language syllabus - 2011

To solve differences of opinion and conflicts.

Controlled spaces, ideal conditions. Real places.

Active. Aware of their role.

Explicit procedural rules + Tacit social rules.

Rationality

This table, which outlines the programs and syllabuses of junior high school Spanish, reveals a clear tendency toward the resolution of differences of opinion and conflicts; in addition, it is interesting to note that the documents aim to prioritize rationality in the teaching of argumentation. All these features are closer to the principles of Pragmadialectics.

Table 3

Document analysis: Baccalaureate Syllabuses and Didactic Planning documents (2011).

CORE TOPIC

Bac. PRE 2009 Generic competences to be developed: 4, 6, 7, 8. (Adopts a personal position regarding topics of general interest and relevance, considering other points of view critically and reflectively. Advances points of view with an open attitude and reflects on those put forward by others. Adopts a constructive attitude, in line with

group).

Disciplinary competences to be developed: 1, 2, 3, 4, 5, 6, 9. (Argues for a point of view in public in an accurate, coherent, and creative way).

the knowledge and skills that he/

she possesses within each work

Reading and Writing I Syllabus planning document, 2015 Core topics: communication, writing and textual structure, reading competence, semantics, educational work techniques. Work is conducted in connection with thematic areas; none of them explicitly addresses argumentation, but they all cover the development of the generic and disciplinary competences of the study program.

Reading and Writing I - didactic Reading and Writing II Syllabus - HS Reading and Writing II -PRE 2009

> Aim: to strengthen students' communicative skills by employing real contexts and topics of their interest to help them construct their way of thinking, organizing their ideas, and conveying them effectively. Generic competences to be developed:

Disciplinary competences to be developed: 1, 2, 3, 4, 5, 6, 9. Reading and Writing, by promoting the development of communication competences, contributes to the education of a student who is able to communicate effectively, read, and understand not only texts, but also any communicative situation that he/she may encounter, where he/she will be able to apply knowledge and strategies to solve problems in his/ her everyday, school, and professional life in a proactive and well-grounded

Problem solving, collaborative work.

Social rules + Procedural rules.

Real.

Interactive Roles.

Problem solving, collaborative

didactic planning document,

Writing, reading competence,

connection with thematic areas;

none of them explicitly addresses

argumentation, but they all cover

the development of the generic

and disciplinary competences of

semantics, educational work

Work is conducted in

the study program.

2015

Core topics:

techniques.

work Real.

Interactive Roles.

Social rules + Procedural rules.

Reasonableness. Reasonableness.

Aim

Problem solving, collaborative

work.

Interactive Roles.

Procedures Social rules + Procedural rules.

Validity of the

arguments used

Participants

Context

Reasonableness.

Social rules + Procedural rules.

Interactive Roles.

work.

Reasonableness.

Problem solving, collaborative

6

This table, which outlines the analysis of high school syllabuses and didactic planning documents, reveals that schools are expected to develop competences related to collaborative work, the use of reasonableness, openness to dialog, and flexibility. Like Table 2, which refers to the curricula and syllabuses for junior high school, this table reveals the predominance of the pragmadialectic approach to argumentation at the high school level.

Document analysis: Junior High School textbooks.

Category	Textbook a1	Textbook b1	Textbook a2	Textbook b2	Textbook a3	Textbook b3
Activity analyzed	Block IV		Block II		Block I	
according to	Area: social particip	pation	Area: study		Area: study	
the program	Text type: argumer	ntative	Text type: argumenta	ative	Text type: arguments	ative
and planning						guage: to write an essay
documents					about a topic of inte	rest.
Instructions	Write an	Critically assesses a	round-table discussic You will use	Expected learning	about a topic of inte An essay aimed at	What are essays for?
or clues for	argumentative	television program	argumentation	outcomes:	showing one's point	- Contrasting
performing the tas		and evaluates its	to persuade their	- Argues for his/her	of view subjectively	_
1 0		influence. Adopts a	_	points of view and uses		- Supporting a point of
	Remember that	position and writes	•	discursive resources	Through essays, we	11 0 1
	argumentative	a text.	other students'	when participating		Reasons for writing an
			arguments, counter	in formal discussions		essay?
	or demonstrate	is it clear that	them, and challenge		order to contribute	•
		the aim of				
	an idea or thesis,		them	opinions.		promote, to encourage.
		argumentative text		- Retrieves information	· · · · · · · · · · · · · · · · · · ·	Argumentative essay:
	idea, and persuade		activity: what did	and points of view that		conveys the author's
	and or dissuade the		you achieve? what	others put forward,	_	point of view, who uses
	addressee regarding	3	difficulties did you	integrating them into		reasoning to defend his/
	certain behaviors,		encounter?, what	the discussion and		her ideas about a given
	facts, or ideas.		can you improve	drawing conclusions	expressive, and	topic and thus convince
			regarding your	about a topic.	aesthetic.	the reader.
			ability to retrieve	In this project, you wil	1	
			the information and	need to argue for and		
			points of view that	defend your points of		
			others contribute to			
			the discussion? how	What is the purpose		
			can this help you	of your round-table		
			draw conclusions?	discussion? To solve		
			diaw conclusions.	a conflict, discuss a		
				controversial topic,		
Aim	To persuade or	To persuade or	To persuade or		To persuade or	To persuade or convince
Aim	To persuade or	To persuade or	To persuade or	establish agreements. To persuade or	To persuade or	To persuade or convince
Aim	To persuade or convince.	To persuade or convince.	convince.	establish agreements. To persuade or convince. To reach	To persuade or convince.	To persuade or convince
	convince.	convince.	convince. To draw conclusions	establish agreements. To persuade or convince. To reach agreements.	convince.	•
Aim Context	-	-	convince. To draw conclusions. Controlled place.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal	Controlled place.	Controlled place. Ideal
	convince.	convince.	convince. To draw conclusions	establish agreements. To persuade or convince. To reach agreements.	convince.	•
Context	Real place.	Real place.	convince. To draw conclusions. Controlled place. Ideal conditions.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions.	Controlled place. Ideal conditions.	Controlled place. Ideal conditions.
	Real place. Active speaker	Real place. Active speaker	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are aware	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have	Controlled place. Ideal conditions. Active speaker who	Controlled place. Ideal conditions. Active speaker who
Context	Real place. Active speaker who knows the	Real place. Active speaker who knows the	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active	Controlled place. Ideal conditions. Active speaker who is oriented toward	Controlled place. Ideal conditions. Active speaker who is oriented toward
Context	Real place. Active speaker who knows the audience and is	Real place. Active speaker who knows the audience and is	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive
Context	Real place. Active speaker who knows the audience and is oriented toward it.	Real place. Active speaker who knows the audience and is oriented toward it.	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal,	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal,
Context	Real place. Active speaker who knows the audience and is	Real place. Active speaker who knows the audience and is oriented toward it.	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal,	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive
Context	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience.	Real place. Active speaker who knows the audience and is oriented toward it.	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal,	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal,
Context	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience.	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience.	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. Participants have assigned roles. Active and aware of their role. Interactive roles that shift from one	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal,	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal,
Context	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver,	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver,	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. Participants have assigned roles. Active and aware of their role. Interactive roles that shift from one	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal,	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal,
Context Participants	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another.	Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles.	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles.
Context	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. Participants have assigned roles. Active and aware of their role. Interactive roles that shift from one	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles.	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal,
Context Participants	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to another.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another.	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles.	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles.
Context Participants	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules.	Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules.	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another. Tacit social rules. Some	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules.
Context Participants	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to another. Tacit social rules.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit procedural	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically related to the	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically related
Context Participants	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically related to the classical textual	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically related to the classical textual	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit procedural	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles. Prototypically related to the classical textual	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically related to the classical textual
Context Participants	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically related to the	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically related to the	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit procedural	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically related to the	Controlled place. Ideal conditions. Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically related to the classical textual
Participants Procedures	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically related to the classical textual model.	Real place. Active speaker who knows the audience and is oriented toward it. Passive audience. Universal, receiver, not necessarily aware of his/her role. Stable roles. Tacit social rules. Prototypically related to the classical textual model.	convince. To draw conclusions. Controlled place. Ideal conditions. Participants are awar of their role. Active. Assigned roles. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit procedural rules.	establish agreements. To persuade or convince. To reach agreements. Controlled place. Ideal conditions. eParticipants have assigned roles. Active and aware of their role. Interactive roles that shift from one participant to another. Tacit social rules. Some explicit procedural rules.	Convince. Controlled place. Ideal conditions. Active speaker who is oriented toward the audience. Passive audience. Universal, receiver. Stable roles. Prototypically related to the classical textual	Active speaker who is oriented toward ethe audience. Passive audience. Universal, receiver. Stable roles. Tacit social rules. Prototypically related to the classical textual model.

This table shows examples of instructions included in junior high school textbooks that clearly reveal a view of argumentation as a tool for persuading others and refuting their points, a notion strongly influenced by New Rhetoric theory.

Table 5

Document analysis: high school textbooks.				
Category	Reading and Writing I	Reading and Writing II		
	<u>UAQ</u>	<u>UAQ</u>		
	Unit V: Advertising texts	Unit III: Essays		
	Language function: appellative	Text type: argumentative		
	Aim: that the student acquire knowledge	Aim: providing proof in support of		
	enabling him/her to interpret all the messages	a thesis. To study the argumentative		
	conveyed by advertising texts (both superficial	structure.		
	and underlying) and comprehend their full	Generic competences to be developed:		
	meaning.	thinks critically and reflectively Adopts		
	Generic competence to be developed: listens	a personal position regarding topics of		
	to, interprets, and produces pertinent messages	general interest and relevance, considering		
	in multiple context through the use of suitable means, codes, and tools.	other points of view critically and reflectively.		
	Disciplinary competences to be developed:	Disciplinary competences to be developed:		
	identifies, organizes, and interprets the ideas,	interprets an essay considering its		
	data, and explicit and implicit concepts	content, its formal characteristics, and the		
	contained in a given text, considering the	historical and cultural context where it was		
	context where it was generated and that in	produced. Writes a brief essay that displays		
	which it is received. Argues for a point of view in	the characteristics of this text type. Values		
	public in an accurate, coherent, and creative way.	language as a tool for interpreting and		
	Values the relevance of thought and language	representing the reality that structures our		
	as tools that enable people to communicate in a	daily perceptions and experiences.		
	variety of contexts.			
Aim	To reveal manipulations. To identify	To persuade, to convince.		
	argumentation as a means for persuading and			
	convincing others.			
Context	Real.	Controlled.		
Participants	Speaker who knows the audience and is oriented	Speaker who supposedly knows the		
	toward it. Receiver who is not necessarily aware	audience and is oriented toward it. Aware		
	of his/her role. Stable, fixed roles.	of his/her role. Passive receiver. Should		
		ideally become an interactive role-playing		
Procedures	Tacit social rules.	experience. Tacit social rules. Some explicit procedural		
Troccaures	racit sociai fuics.	rules.		
Validity of	Effectiveness in the identification of persuasion.	Effectiveness in persuasion.		
the arguments used	Rationality.	Reasonableness.		

This final table summarizes the elements present in high school textbooks, revealing that the appellative function of language predominates: the aims identified focus on conveying the notion that argumentation is a tool for persuading others and revealing manipulations.

This shows that the suggestions included in theoretical documents (curricula, syllabuses, and didactic planning) are based on Pragmadialectics, whereas the didactic materials (textbooks) used in the classroom follow the principles of New Rhetoric theory. Therefore, there is no unity or alignment between the idealized notions of the documents that tell teachers what "must be done" in their subjects and what teachers suggest their students to do based on the instructions provided by the didactic materials on which they base their lesson sequences in the classroom.

In this context, we are certain that it is necessary to develop a new didactic model for teaching and strengthening argumentation in schools. This goal should be based on interdisciplinary (or at least multidisciplinary) work aimed at taking advantage of the results and knowledge of professionals from a variety of areas. On its own, linguistics is not enough for dealing with and responding to the educational needs of today's real world; it is necessary to value interdisciplinary work, combine the knowledge and theories put forward by philosophers regarding argumentation, the pedagogical research conducted by education and psychology experts regarding more inclusive teaching-learning models, and the knowledge provided by language development scholars regarding the linguistic and discursive deficits of Mexican schoolchildren. This approach should make it possible to develop new, responsible, and sustainable⁴ proposals to help solve the current deficits that affect classrooms in Mexico from a variety of perspectives.

Guidelines for generating an intervention project aimed at the teaching of argumentative discourse

As pointed out by Klein (2013), the importance of interdisciplinary work has to do with the resolution of complex problems that are so broad that they cannot be tackled from a single point of view. Such is the case of argumentation teaching. Theories of argumentation have always considered a variety of linguistic, cognitive aspects of human beings to explain this phenomenon. Nevertheless, in the new argumentation theories, specifically in Pragmadialectics, which should be the approach of choice for the intervention model due to its advantages for argumentation teaching, this consideration of multiple disciplinary aspects is even clearer: as van Eemeren and Grootendorst (2009) suggest, the pragmadialectic perspective is composed of and enriched by the sum of the theory of formal dialectics advanced by Barth and Krabbe (1982), plus critical rationalism as put forward by Popper (1972, 1974) and Albert (1975), in addition to the theory of speech acts proposed by Austin (1962) and Searle (1969, 1979), and the rational theory of verbal exchange developed by Grice (1975, 1989).

This theory of argumentation, as explained by van Eemeren and Grootendorst in their book *A Systematic Theory of Argumentation* (2009), requires two parts to be regarded as complete: the descriptive level and the normative level of argumentation, which are complementary. The descriptive aspect is informed by the practice of argumentation and the challenges of this practice in real-life contexts. The normative aspect, in contrast, is based on rational norms. Both must work in harmony to respond to discursive reality. This systematic integration requires a research program that promotes a kind of interdisciplinary cooperation that combines the descriptive and the normative domains. Argumentation theory must establish methodical links between the results of research conducted in various areas, such as the findings derived from linguists' experiences regarding interpretation processes, and the propositions advanced in the field of logic in order to construct a rational system of rules for the critical exchange of ideas. This approach should yield a well-supported theoretical framework for argumentative discourse.

We value the pragmadialectic approach as the most suitable for teaching argumentation in school, since this conceptual framework constitutes a comprehensive theory that fully considers the five areas that comprise the field of argumentation studies: the philosophical, theoretical, analytic, empirical, and practical domains. This results in a balance between the view that must be established regarding the philosophy of reason and its conception, as well as the model of argumentation, the possibility of analyzing real discourse, the possibility of quickly and easily reconstructing argumentative discourse, and the generation of clear proposals for improving argumentative practices and skills, which is a key point when considering their practical application in the school context. Other theories such as radical argumentation, put forward by Anscombre and Ducrot (1994), or the theoretical insights of the New Rhetoric, presented by Perelman and Olbrechts-Tyteca (1971), have approaches that privilege some of these five components but overlook others.

Pragmadialectics, along with advancing clear proposals for improving the teaching of argumentative discursive skills in the classroom (van Eemeren, 2015a; 2016; 2017), promotes social practices that are essential nowadays, such as the development of critical thinking, tolerance, flexibility, cordial environments in the classroom, and materials that are empathetic with students' needs, among other aspects. This is in line 4 Considering the notions put forward by Frodeman (2014) regarding the need to make the system sustainable by making good use of the human, economic, and temporal resources available to us as researchers.

with the proposals currently being made in Junior High School and High School Curricula and Syllabuses; therefore, by using Pragmadialectics as the core theory for the development of didactic sequences and support materials (textbooks), it should be possible to link the notions contained in the school curriculum to classroom practices.

Among its proposals for improving students' argumentative skills, Pragmadialectics considers that teaching to use argumentation is teaching to think critically. For the creators of this theory, argumentation is a verbal, social, and rational activity aimed at convincing a reasonable critic of the acceptability of a certain point of view presenting various propositions that justify or refute the proposition expressed initially (van Eemeren & Grootendorst, 2009). The verb *to argue* refers both to the process and to the product of argumentation. When somebody uses argumentation, he/she is implicitly calling for reason (sensibility). This means that the speaker assumes that the receiver will act as a reasonable critic when evaluating his/her argumentation; therefore, when presenting his/her propositions, he/she will try to convince the listener, not persuade him/her (which entails an immediate reaction from the interlocutor), leading him/her toward a deep reflection that will enable him/her to take a decision later.

This theoretical model is dialectical because it is based on two subjects attempting to solve a difference of opinion through a methodical exchange of discussion movements. It can also be defined as pragmatic, because these discussion movements are defined as speech acts performed in a specific situation and context.

Argumentative competence is complex, and improving it requires taking into account multiple aspects, including the institutional aspects that an argumentative practice must comply with. When developing methods or proposals to improve the discursive practices of argumentation, it is necessary to take into account elements related to the production, analysis, and evaluation of discourse itself. According to van Eemeren and Grootendorst (2009) and van Eemeren (2017), the conditions that must be taken into account if teachers wish to make good use of the methods developed by argumentation theoreticians are:

- that their academic institution give them the chance to do so by providing enough space in the curriculum;
 - that they be aware of the latest findings of argumentation research;
 - that they propose solutions to the lack of suitable material for teaching argumentation;
- that they organize the course so that they progress gradually toward the achievement of their teaching-learning goals;
- that they consider students' ages, interests, and abilities, bearing in mind that students already possess some information, and that they take advantage of this knowledge to promote a deeper reflection capable of leading them to innovative ideas.

From a pragmadialectic perspective, the quality of the production, analysis, and evaluation of argumentation can only increase by improving the quality of the communication and interaction between participants; in addition, it is necessary to work on improving the participants' individual ability to speak, write, read, and listen to argumentative discourse; also, time must be invested in developing individual abilities to doubt, question, criticize, and expose weak points in one's and other people's knowledge. Given these challenges for school education, we again stress the idea that an intervention program that includes all these components can only be developed by working multidisciplinarily, and preferably interdisciplinarily. After all, not only the analytical minds of philosophers and logicians must play a key role in the study of argumentation; we also require the skills of linguists and empirical social scientists, especially those involved in discourse analysis and communication studies. The social knowledge of psychologists and education experts regarding the didactic environment of schools must also be taken into account when generating an intervention plan.

In fact, the teaching of argumentation represents a genuine chance to consider the mutual cooperation of multiple disciplines, but also constitutes a unique situation for nurturing individuals' competences which enable them to develop interdisciplinary thought. This is important because lacking these competences often leads to major limitations during adulthood, for example, when joining teams composed of professionals from various disciplines or multiple fields of inquiry, and even from different institutions.

From this pragmatic perspective, Frodeman (2014) proposes some of the abilities and virtues necessary for establishing one's identity and engaging in interdisciplinary work and which are essentially valuable for having fruitful discussions, such as having an open mind toward new points of view, being able to acknowledge failings in one's points of view and/or admit that one is wrong, being generous when interpreting other people's position and motivations, and being honest, modest, and trustworthy. In this vein, Newell (2001) notes that being able to listen and expand one's views are two key skills for engaging in interdisciplinary work. Likewise, Field and Lee (1994) highlight the necessity of being sensitive to bias and developing critical thinking. All of these contributions about how individuals think, act, and interact via discourse are essential in the notion of argumentation developed by Pragmadialectics. In this regard, we can value the proposal advanced by Repko (2008), who suggests that certain cognitive skills must be developed in individuals such as perspective-taking techniques (understanding multiple points of view about a topic), integrating conflicting intuitive notions derived from alternative disciplines, and developing interdisciplinary knowledge, among others. All of these skills/virtues related to interdisciplinary work are also a core part of argumentative skills. Therefore, argumentation can go from having only an intellectual meaning to acquiring a social one. A world that is more inclusive, more respectful of diversity, more proactive, and harmonious would be possible if all those of us who take part in educational matters employed all these ideas to promote among young people, even children, a way of discussing and supporting arguments and reaching agreements with one's interlocutors that is closer to Pragmadialectics.

In order to do this, we suggest working on the creation of an intervention model for the teaching of argumentation in the classroom. In Mexico, the current approaches to teaching argumentation and the construction of argumentative discourse have multiple problems, including a lack of theoretical basis to support teachers' pedagogical and didactic practices in the classroom. The curriculum must leave room for an approach to argumentation teaching based on a theory that encourages critical thinking and shows students how to argue rationally in order to reach agreements that facilitate social coexistence, thereby educating subjects who are critical, flexible, and tolerant; in other words, the education world should not perpetuate the notion that the only aim of argumentative discourse is to persuade or manipulate others. As Camps and Dolz (1995) point out:

For all the actors of a democracy, knowing how to argue is the fundamental means to defend their ideas, critically examine others' ideas, counter malicious arguments, and solve many conflicts of interest. For young persons or adolescents, knowing how to use argumentation can be even more relevant: it enables them to channel, through discourse, their differences with family and society (p. 7).

For that didactics and pedagogy of argumentation to be possible, it is necessary to enlist specialists capable of developing classroom materials that follow the genre teaching model advanced by Rothery (1994) and the constructivist, psychogenetic, and competence-based approaches. These current teaching approaches are well suited to the pragmadialectic theoretical approach, since they are informed by a holistic and multidisciplinary perspective of argumentation teaching-learning and encourage collaborative work through projects and tasks, which makes it possible for students to develop their knowledge, skills, attitudes, and values. In addition, they regard learning as a process that moves forward through successive rearrangements of knowledge, which sets in motion the student's conceptualizations and helps him/her contrast them with other people's, a view that poses challenges and is grounded on the notion that knowledge construction is recursive (Alvarado, 2007; Nippold, 2010; Snow & Uccelli, 2014; Camps 1996; 2003; Kaufman & Rodríguez, 2001).

With respect to the model advanced by Rothery (1994), which we suggest adopting, it is considered to be suitable, because in it the social context and the construction of the space for negotiating knowledge are [based on phases that are] not fixed but developed throughout all of the model's stages. In addition, this model is explicitly aimed toward controlling and critically orienting the discourse studied. This model also promotes conveying explicit information about the stages to be followed, because making this knowledge manifest becomes part of the experience shared by teachers and students. Making this knowledge explicit and sharing it with the learning group helps students feel equal with respect to the acquisition of this specific

textual genre, aided by an objective reference framework within which students and teachers will work together to achieve visible goals.

The context of a shared experience shapes the structure of each phase of the pedagogical model and that of the cycle in general. This also shows how linguistic choices operate to enable students to move into the zone of proximal development, thanks to scaffolding that is gradually removed.

Students who work with their teacher during the scaffolding and joint construction process will reach a clearer understanding of how to write texts regarded as appropriate for each discursive genre and will be able to draw on:

- 1. Their current knowledge of how language is organized in a given discursive genre.
- 2. Their previous experience writing similar texts assisted by the teacher.
- 3. Appropriate knowledge about the topic that they have compiled, organized, and prepared with the teacher's help.

Several tests have shown that students, after being trained to produce a genre, naturally recycle information and recreate the genre based on their own perspective when a new challenge or context is presented.

Finally, this intervention proposal would be pointless if there were no components to be evaluated and contrasted in order to determine students' progress at the end of the school cycle. Linguistic research provides guidelines for identifying the least developed linguistic and discursive aspects of Mexican students and those in other educational communities such as that of the USA (Nippold et al., 2005; Snow, 2015). We know that certain pragmatic-discursive aspects must be evaluated, such as flexibility in ideas and opinions, adherence to argumentation lines, and critical thinking, as well as semantic-syntactic elements such as the use of connectors, the use of evaluative terms, the use of school-level vocabulary, and mean clause length, all of which tend to be parameters of linguistic maturity that can be developed in order to improve young students' argumentative practices.

Closing remarks

Authors have pointed out that academia has responsibilities toward the society that supports it (Frodeman, 2014). Researchers who, like us, also engage in educational classroom work, are committed to the type of citizens who we are educating. With respect to the proposal introduced in this article, we strongly believe that only the work of interdisciplinary teams can generate solutions to one of Mexico's educational problems: the lack of alignment between the curricula and syllabuses for schools and the didactic materials used to teach argumentation in the classroom. We expect that the set of observations and reflections presented will result in benefits and provide new knowledge about the advantages of considering Pragmadialectics and interdisciplinary work in academia and the educational system for the improvement of school practices. We also expect these suggestions will promote reflection among administrators and teachers regarding what can be done at each educational level to improve, through practical means, students' performance in the field of language and communication, specifically with respect to the development of argumentative discourse.

Interdisciplinary work, as well as work focused on argumentation development, enables us to exert a positive influence our country's decision-making processes linked to public policy. We consider that it is essential to boost these competences to enable people to develop fully and comprehensibly as citizens. We agree with Crowhurst (1990) regarding the fact that people who have benefited from a broad-ranging and strong education that is not limited to literacy learning, but which enables them to truly acquire their language and improve their linguistic, discursive, and communicative competences, are more likely to adopt a position regarding relevant topics and convince their colleagues, other citizens, the government, and bureaucrats (by encouraging them to reflect critically). When the problems facing society are analyzed upon the basis of reason, clarity, and logic, the likelihood of arriving at balanced solutions increases dramatically. Given its importance, more time must be devoted to nurturing students' argumentative competence, since this can benefit not only individuals but also society as a whole.

It is relevant for students to acquaint themselves with the principles whereby argumentation is

constructed, organized, and used, since their social life will daily cause them to encounter distant or contrary positions regarding various topics. When disagreements or conflicts of opinion arise, argumentation emerges as a resource –as a path enabling people to negotiate which privileges human understanding and critical reasoning over violence, authoritarianism, or manipulation (Cademartori & Parra, 2004).

Schools, through their academic staff, have the obligation to review their curricula and syllabuses as well as the didactic materials to be used in the classroom, so that the latter operate as clear examples and guidelines regarding what they seek to develop in students. These curricular changes can be effectively conducted only by forming interdisciplinary teams within collegiate bodies, which should be capable of visualizing educational problems from a variety of perspectives and then define a single method to work on them, thus facilitating the generation of innovative and efficient proposals.

It is in this spirit that we consider that the present study can serve as a model for future research that addresses this need to review and evaluate the theoretical documents and the didactic materials used to teach linguistic-discursive practices in schools.

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References

- Aguilar, C. A. (2003). Análisis de frecuencias de construcciones anafóricas en narraciones infantiles. *Estudios de Lingüística Aplicada*, 38, 33-43.
- Aguilar Mialma, N., Álvarez, M., Bárcenas, J. García, K., y Valerio, A. (2012). *Lectura y Redacción I: Libro y Cuaderno de Trabajo*. México: Universidad Autónoma de Querétaro.
- Aguilar Mialma, N., Álvarez, M., Bárcenas, J. García, K. López, S., Pedraza, A., y Ruiz, M. (2013). *Lectura y Redacción II: Libro y Cuaderno de Trabajo*. México: Universidad Autónoma de Querétaro.
- Akiguet, S. & A. Piolat. (1996). Insertion of connectives by 9- to 11- year old children in an argumentative text. *Argumentation*, *10*, 253-270.
- Alarcón Neve, L. J., y Palancar, E. (2008). Predicación secundaria depictiva en el discurso narrativo de los niños en edad escolar. En E. Diez-Itza (Ed.). Estudios sobre desarrollo de lenguaje y educación/ Studies on language development and Education. Monografías de Aula Abierta No. 32 (pp. 65-74). Oviedo: ICE-Universidad de Oviedo.
- Albert, H. (1975). Traktat über kritische Vernunft. Tübigen: Mohr.
- Alvarado, M. (2007). *Modelo de intervención constructivista para facilitar el proceso de alfabetización inicial*. Campaña de alfabetización en Querétaro.
- Anscombre, J. y O. Ducrot. (1994). La argumentación en la lengua. Madrid: Gredos
- Austin, J. L. (1962). How to do Things with Words. Nueva York: Oxford University Press.
- Barriga, R. (2002). Estudios sobre habla infantil en los años escolares...un solecito calientote. México: El Colegio de México.
- Barth, E. M.,& E. C. W. Krabbe. (1982). From Axiom to Dialogue. A philosophical study of logic and argumentation. Berlin and New York: Walter de Gruyter.
- Berman, R. A. (2004). Between emergence and mastery: The long developmental route of language acquisition. In R. A. Berman (Ed.), *Language development across childhood and adolescence. Trends in language acquisition research*, *3*, (pp. 9-34). Amsterdam: John Benjamins.
- Brassart, D.G. (1990). Retour sur Mir Rose, ou comment analyser et représenter le traitement argumentative (écrit)? *Argumentation*, *4*, 299-332.
- Cademartori, Y., y Parra, D. (2004). Reforma Educativa y Teoría de la Argumentación. Signos, 33(48), 69-85.
- Camps, A. (1996). Proyectos de lengua entre la teoría y la práctica. Revista Cultura y Educación, 2, 43-77.
- Camps, A. (2003). Miradas diversas a la enseñanza y el aprendizaje de la composición escrita. *Revista lectura y vida*, 24, 2-11.
- Camps, A., yDolz, J. (1995). Introducción: enseñar a argumentar: un desafío para la escuela actual. *Comunicación, lenguaje y educación, 25*, 5-8.
- Casar, E., García, J., Rodríguez, C., y Eimanns, E. (2014). Español 3. México: Castillo.
- Coirier, P., & Marchand, E. (1994). Writing argumentative texts: a typological and structural approach. In G. Eigler y T. Jechle (Eds.). *Writing current trends in European research* (pp. 163-182). Freiburg: HochschulVerlag.
- Crowhurst, M. (1987). Cohesion in argument and narration at three grade levels. *Research in the Teaching of English*, 21, 185-201.
- Crowhurst, M. (1990). Teaching and learning the writing of persuasive/argumentative discourse. *Canadian Journal of Education*, 15, 348-359.
- Cueva, H. y A. De la O. (2012). Español 1. México: Trillas.
- Cueva, H. y A. De la O. (2013). Español 2. México: Trillas.
- Cueva, H. y A. De la O. (2014). Español 3. México: Trillas.
- Diario Oficial de la Federación. (2008). Acuerdo Secretarial No. 444 por el que se establecen las competencias que constituyen el Marco Curricular Común del Sistema Nacional del Bachillerato. México: SEP.

- Field, M., Lee, R.,& Field, M.L. (1994). Assessing Interdisciplinary Learning. *New Directions in Teaching and Learning*, 58, 69-84.
- Frodeman, R. (2014). Sustainable Knowledge: A Theory of Interdisciplinarity. UK: PalgraveMacmillan.
- García Mejía, K. P., y Alarcón Neve, L.J.(2015). ¿Cómo conectan los jóvenes escolares sus ideas para argumentar? Análisis del uso de conectores en su discurso. *Entreciencias*, *3*(7), 253-262.
- Golder, C. (1996). Le développement des discours argumentatifs. Laussane: Delachaux y Niestlé.
- González Robles, R.O. (2014). Habilidades lingüísticas de los estudiantes de primer ingreso a las instituciones de Educación Superior. México: ANUIES.
- Grice, H. P. (1975). Logic and Conversation. In P. Cole y J. L. Morgan (Eds.), *Syntax and Semantics 3: Speech Acts* (pp.41-59). New York: Academic Press.
- Grice, H. P. (1989). Studies in the Way of Words. Cambridge: Harvard University Press.
- Gutiérrez-Clellen, V. & Iglesias, A.(1992). Causal coherence in the oral narratives of Spanish-speaking children. *Journal of Speech and Hearing Research*, 35, 363-372.
- Hess Zimmermann, K. (2010). Saber lengua. Lenguaje y metalenguaje en los años escolares. México: El Colegio de México.
- Hess Zimmermann, K., y Godínez López, E. M. (2011). Desarrollo argumentativo durante la adolescencia: usos y funciones de los marcadores textuales de argumentación. En K. Hess Zimmermann, G. Calderón, S. A. Vernon, y M. Alvarado (Eds.), *Desarrollo lingüístico y cultura escrita: puntos, acentos, historias, metáforas y argumentos* (pp. 175-190). México: Porrúa- UAQ.
- Hickmann, M. (2004). Coherence, cohesion, and context in narrative development: some comparative perspectives. In S.Strömqvist & L. Verhoeven (Eds.), *Relating events in narrative: Typological and contextual perspectives* (pp. 281-306). Hillsdale, NJ: Lawrence Erlbaum.
- Karmiloff-Smith, A. (1986). Some fundamental aspects of language development after age 5. In P. Fletcher y L. Garman (Eds.), *Language acquisition* (pp. 455-474). New York: Cambridge University Press.
- Karmiloff, K., & Karmiloff-Smith, A. (2001). *Pathways to language: From fetus to adolescent*. Cambridge, Mass: Harvard University Press.
- Kaufman, A. M., y Rodríguez, M. E. (2001). La escuela y los textos. Argentina: Santillana.
- Kerswill, P. (1996). Children, adolescents, and language change. Language Variation and Change, 1, 177-202.
- Klein, J. (2013). The Transdiciplinary Moment(um). Integral Review, 9(2), 189-199.
- López-Orós, M y Teberosky, A. (1998). La evolución de la referencia en catalán. *Infancia y Aprendizaje, 21*(3), 75-92.
- McCutchen, D. (1996). A capacity theory of writing: working memory in composition. *Educational Psychology Review*, 8, 299-325.
- McCutchen, D. & Perfetti, C. (1982). Coherence and connectedness in the development of discourse production. *Text*, 2, 113-139.
- Newell, W. (2001). A Theory of Interdisciplinary Studies. Issues in Integrative Studies, 19, 1-25.
- Nippold, M. A. (1993). Developmental markers in adolescent language: Syntax, semantics, and pragmatics. *Language, Speech, and Hearing Services in Schools, 24*, 21-28.
- Nippold, M. A. (2000). Language development during the adolescent years: Aspects of pragmatics, syntax, and semantics. *Topics in Language Disorders*, 20(2), 15-28.
- Nippold, M. A. (2006). Language Development in School-Age Children, Adolescents, and Adults. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics* (pp. 4456-4461). USA-UK: Elsevier.
- Nippold, M.A. (2007). Later Language Development. School-Age Children, Adolescents and Young Adults. EUA: Pro-Ed.
- Nippold, M. A., & Sun, L. (2010). Expository writing in children and adolescents: A classroom assessment tool. *Perspectives on Language Learning and Education: Adolescent Language*, 17, 100-107.
- Nippold, M. (2010). Language Sampling with Adolescents. Plural Publishing: UK.

- Nippold, M., Fanning, J. L., & Ward-Lonergan, J. M. (2005). Persuasive writing in Children, Adolescents, and Adults: a study of Syntatic, Semantic, and Pragmatic Development. *Language, Speech and Hearing Services in Schools*, *36*, 125-138.
- Núñez, R., y Escalante, B. (2013). Español 2. México: Castillo.
- Núñez, R., y Escalante, B. (2014). Español 1. México: Castillo.
- Ordóñez, C; Barriga, R; Snow, C; Uccelli, P; Shiro, M., y Schnell, B. (2001). Sintaxis y discurso. Dos áreas de investigación en la adquisición del español oral. *Revistalatina de pensamiento y lenguaje*, *9*, 131-163.
- Perelman, C., & Olberchts-Tyteca, L. (1971). *The New Rhetoric: a treatise on Argumentation*. EUA: University of Notre Dame.
- Perelman, F. (2001). Textos argumentativos: su producción en el aula. *Lectura y vida. Revista latinoamericana de lectura*, 22(2), 32-45.
- Piéraut-Le Bonniec, G., & Valette, M. (1991). The Development of Argumentative Discourse. In G. Péraut-Le Bonniec, & M. Dolistsky (Eds.), *Language Bases...Discourse Bases. Some aspects of contemporary french-language psycholinguistics Research* (pp. 245-267). Amsterdam/Philadelphia: John Benjamins.
- Popper, K. (1972). Objective Knowledge. An Evolutionary Approach. Oxford: Clarendon Press.
- Popper, K. (1974). Conjectures and Refutations. The Growth of Scientific Knowledge. London: Routledge & Kegan Paul.
- Repko, A. (2008). Assessing Interdisciplinary Learning Outcomes. Academic Exchange Quarterly.
- Rothery, J. (1994). Exploring Literacy in School English (Write it Right Resources for Literacy and Learning). Sydney: Metropolitan East Disadvantaged Schools Program.
- Searle, J. (1969). Speech Acts. An Essay in the Philosophy of Language. Cambridge: Cambridge University Press. Searle, J. (1979). Expression and Meaning: Studies in the Theory of Speech Acts. Cambridge: Cambridge
- University Press.
- Secretaría de Educación Pública. (2011). Plan de Estudios 2011. Educación Básica. México: SEP.
- Secretaría de Educación Pública. (2011). *Programas de Estudio 2011.Educación Básica Secundaria. Español.* México: SEP.
- Snow, C. (2015). About perspective-taking. SERP PROJECT.
- Snow, C., Lawrence, J. F., & White, C. (2009). Generating Knowledge of Academic Language among Urban Middle School Students. *Journal of Research on Educational Effectiveness*, 2(4), 325-344.
- Snow, C., y Uccelli, P. (2014). Más allá de la narrativa: aprendiendo otros discursos necesarios para la escuela. EnR.Barriga (Ed.). *Las narrativas y su impacto en el desarrollo lingüístico infantil* (pp. 749-763). México: El Colegio de México.
- Strömqvist, S., Nordqvist, A., & Wangelin, A. (2004). Writing the Frog Story. Developmental and Cross-Modal Perspectives. In S. Strömqvist & L. Verhoeven (Eds.), *Relating Events in Narrative. Typological and Contextual Perspectives* (pp. 359-394). New Jersey: Lawrence Erlbaum.
- Universidad Autónoma de Querétaro. (2009). *Programa de Lectura y Redacción I. Plan de Estudios PRE09*. Escuela de Bachilleres "Salvador Allende".
- Universidad Autónoma de Querétaro. (2009). *Programa de Lectura y Redacción II. Plan de Estudios PRE09*. Escuela de Bachilleres "Salvador Allende".
- Universidad Autónoma de Querétaro. (2015). *Planeación didáctica Lectura y Redacción I*. Escuela de Bachilleres "Salvador Allende".
- Universidad Autónoma de Querétaro. (2015). *Planeación didáctica Lectura y Redacción II*. Escuela de Bachilleres "Salvador Allende".
- Van Eemeren, F. (2015a). Bingo! Promising Developments in Argumentation Theory. In F.H. Van Eemeren, Reasonableness and Effectiveness in Argumentative Discourse. Fifty Contibutions to the Development of Pragma-Dialectics (pp. 55-77). Heidelberg etc.: Springer. Argumentation Library 27.

- Van Eemeren, F. (2015b). From ideal model of critical discussion to situated argumentative discourse. The step-by-step development of the pragma-dialectical theory of argumentation. In F.H. Van Eemeren, Reasonableness and Effectiveness in Argumentative Discourse. Fifty Contibutions to the Development of Pragma-Dialectics (pp. 127-148). Heidelberg etc.: Springer. Argumentation Library 27.
- Van Eemeren, F. (2017) (Ed.). Prototypical Argumentative Patterns. Exploring the Relationship between Argumentative Discourse and Institutional Context. Amsterdam/Philadelphia: John Benjamins. Argumentation in Context 9.
- Van Eemeren, F., & Grootendorst, R. (1992). Argumentation, Communication and Fallacies: A Pragmadialectical Perspective. EUA: Routledge.
- Van Eemeren, F., & Grootendorst, R. (2009). A Systematic Theory of Argumentation: The Pragma-dialectical approach. EUA: Cambridge UniversityPress.
- Van Eemeren, F., & Snoeck Henkemans, A.F. (2016). *Argumentation, Analysis and Evaluation*. New York-London: Routledge.
- Wenzel, J. (1980). Perspectives on Argument. En Rhodes & Newell (Eds.) *Proceedings of the Summer Conference on Argumentation, SCA/AFA*.