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Validation of the scale of implicit theories of reading comprehension (ETICOLEC) of in-service teachers

Validación de la escala de teorías implícitas de comprensión lectora (ETICOLEC) de docentes en servicio

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Abstract

The main goal of this paper is to report the design and validation of the Scale of Implicit Theories of Reading Comprehension (ETICOLEC per its Spanish acronym) with a sample of 653 Mexican middle-school teachers. In an exploratory, hypothesis-generating manner, we also examine associations between implicit theories (ITs), type of school and subject matter area. The scale consists of five subscales: receptive IT, interpretive IT, constructive-rhetorical IT, constructive-critical IT, and constructive-applicative IT. Factorial and reliability analyses yielded good psychometric properties for all the subscales. Chi-square tests did not show differences in ITs per demographic variables. However, ANOVA results suggested a higher presence of the receptive IT in private school teachers and a lower presence of the receptive IT and the constructive-rhetorical IT in Earth Science teachers vs. Language and Social Science teachers. Future research should examine these potential connections between ITs and subject matters with representative samples. The ETICOLEC can be used to describe the ITs of large teacher groups in combination with other instruments

Resumen

El objetivo principal de este trabajo es reportar el diseño y validación de la Escala de Teorías Implícitas de la Comprensión Lectora (ETICOLEC) con una muestra de 653 docentes de secundaria mexicanos. Además, con fines exploratorios de generación de hipótesis, examinamos asociaciones entre teorías implícitas (TIs), tipo de escuela y área de conocimiento de la(s) asignatura(s) impartida(s). La escala se compuso de cinco subescalas: TI- receptiva, TI-interpretativa, TI-constructiva retórica, TI-constructiva crítica y TI-constructiva aplicativa. Los resultados del análisis factorial y de fiabilidad arrojaron propiedades psicométricas adecuadas para todas las subescalas. Los resultados de chi-cuadrado no mostraron diferencias entre las TIs por variable demográfica. Sin embargo, los resultados de ANOVA sugirieron una mayor presencia de la TI-receptiva en docentes de secundarias privadas y una menor presencia de la TI-receptiva y de la TI-constructiva retórica en docentes de ciencias naturales con respecto a los de las otras áreas del lenguaje y ciencias sociales. Futuras investigaciones deberán examinar estas relaciones potenciales entre TIs y asignaturas con muestras representativas. Las implicaciones educativas de la ETICOLEC estriban en poder caracterizar las TIs de grupos grandes de docentes en servicio en combinación con otros instrumentos.

Introduction

The connection between teachers and reading is an interesting topic due to the well-known issues surrounding reading comprehension. The literature indicates that large groups of teachers show weak connections with reading, do not read often or possess limited reading habits (Asfura & Real, 2019; Granado & Puig, 2014; Larrañaga & Yubero, 2019; Meneses & Montalvo, 2014).

Within this general interest in the teachers-reading connection, research on teachers' thinking holds a prominent place. Teachers' thinking has been widely studied due to its relevance for understanding teachers' orientations and actions and, as a result, intervening to improve teaching. It has been approached from different theoretical and methodological perspectives. For example, Munita (2013) used life stories and interviews to describe pre-service Spanish teachers' beliefs, representations and knowledge (BRK). He found that strong readers believe that literary reading is useful for self-reflection, extracting life lessons and building identity. They also mentioned intertextuality. Weak readers referred mainly to how gripping the plot was and to information retrieval.

Errázuriz et al. (2019) used interviews and phenomenographic analysis in order to describe elementary Chilean teachers' conceptions of reading. They found teachers with reproductive and epistemic conceptions. The former report utilitarian reading goals and text-centred strategies. The latter connect reading with aesthetic pleasure and identity development, but some of those teachers apply reproductive conceptions to teaching. Errázuris et al. (2020) used Lordán et al. (2015) implicit theories (ITs) questionnaire; they found a mixture of reproductive and epistemic ITs, with a slight prevalence of the latter among language teachers.

The construct of ITs is widely used for exploring students' and teachers' ideas about reading. ITs are groups of implicit representations about an aspect of reality. They are both personal and social. ITs are attributional and difficult to access consciously; their functionality is pragmatic and situational (Pozo et al., 2006; Rodrigo, 1997; Rodrigo & Correa, 2001; Rodríguez & González, 1995).

Among teachers, ITs synthesise both pedagogical knowledge and personal beliefs. They are oriented toward solving practical teaching problems and they explain teachers' pedagogical styles. Their sources are the apprenticeship of observation, social thinking about education, formal theoretical learning, and the culture of each educational level or centre (Marrero, 2009; Rodríguez 2001; Jiménez, 2009). This culture is the proximal context of reference for the synthesis of in-service teachers' implicit theories as it exposes them to interactional formats, discourses, and meaningful tasks that vary across settings. Such variation explains the existence of shared ITs among groups of teachers as well as variation across groups and individuals (Jiménez, 2009; Rodrigo, 1997).

For reading ITs, several theoretical approaches and instruments have been designed drawing inspiration from Schraw and Brunning (1996) and Schraw (2000), with the goal of making ITs explicit. Some studies have used Likert scales (Makuc & Larrañaga, 2015; Lordán et al., 2015), and others have used interview protocols (Hernández, 2008; Moore & Narciso, 2011; Perales-Escudero et al., 2017). In general, they posit and/or find a three-part typology of ITs.

The nature of each one and their specific nomenclatures vary. However, in general they distinguish between (1) simpler ITs (called receptive, reproductive or linear), which in all studies refer to understanding reading as a text-based reproduction of content, and (2) more complex ones, which show more variation across studies. Since ITs are situated in school cultures, this variation is unsurprising since studies have been conducted in different countries and educational levels. Thus, the more complex ITs (called epistemic, transactional, constructive, or literary) involve more strategic and

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critical approaches (Hernández, 2008; Lordán et al., 2015, Perales-Escudero et al., 2017), self-reflection and identity building (Hernández, 2008; Makuc & Larrañaga, 2015; Perales-Escudero et al., 2017), an emphasis on intertextuality (Perales-Escudero et al., 2017) or on aesthetic pleasure (Makuc & Larrañaga, 2015).

One limitation of previous studies is that the questionnaires aimed at being applied to large samples in quantitative studies (i. e., Schraw & Brunning, 1996; Lordán et al., 2015) have been designed with and for students, not necessarily pre-service teachers. Makuc and Larrañaga's (2015) questionnaire is based partly on teachers. Nevertheless, it was designed in a context different from ours (which is Mexico, the most populous Spanish-speaking country) and with pre-service teachers rather than in-service ones. This is relevant in the light of the well-known differences between expert and novice teachers (Marrero, 2009). We could not find instruments or studies focusing specifically on in-service secondary school teachers. This educational level is particularly relevant because it lies at the onset of discipline-specific education (López-Bonilla, 2013), that is to say, of specialized reading. This is important for IT research since the various disciplines represented in curricular subjects involve different ways of relating to diverse text types. Despite this, reading in Mexican secondary schools and teachers' opinion about it have hardly been addressed (Vega et al., 2019).

We therefore think it is necessary to develop an ecologically-valid instrument to make the reading ITs held by large groups of in-service secondary school teachers explicit. Such an instrument should be short and practical to apply so that it can be combined with other instruments and procedures to investigate other dimensions of teachers' thinking about reading in complex studies. Thus, we aim at reporting the validation of the Scale of Implicit Theories of Reading Comprehension (ETICOLEC as per its Spanish acronym) with secondary school teachers in two states (provinces) of Mexico. In an exploratory manner, we identify relations among ITs and two demographic variables: school type and knowledge area.

Both variables constitute varying proximal sociocultural settings that can lead to differences in ITs (Rodrigo, 1997). It is well-known that genres and ways of relating to texts vary across disciplines (De la Paz & Nokes, 2020; Lombardi & Bailey, 2020), and can therefore influence teachers' ITs according to their subjects (Errázuriz et al, 2020). This statement of possibility shall not be considered a formal hypothesis, but it is a mere supposition that we explore with the goal of generating hypotheses for future research.

Methods

653 teachers from 75 secondary schools (private, state general, state technical and state *telesecundaria* types[1]) participated in the validation of ETICOLEC. 360 were from the state of Tamaulipas (Mexican Northeast, counties of Matamoros, Reynosa, Valle de San Fernando, Victoria, Tula, Mante, Tampico, Altamira and Madero) and 293 from the state of Quintana Roo (Mexican Southeast, counties of Othón P. Blanco, Benito Juárez, Solidaridad, Bacalar, Cozumel and Felipe Carrillo Puerto). 407 (62.3%) were women, 243 (37.2%) were men and 3 did not indicate a binary gender. The median age was 41.58 years old, with an average of 14.29 years of teaching experience. 464 teachers (71.1%) hold only a Bachelor's degree, 7 (1.1%) a specialization diploma, 171 (26.2%) a master's degree, 5 (.08%) a Ph.D. and 6 did not state their level of studies. We used simple stratified random sampling. The sampling criterion consisted in ensuring proportional representation per school type (see table 1).

We selected schools from the 2017 database of the *Plan Nacional para la Evaluación de los Aprendizajes*. The simple largely surpasses the minimum number of two respondents per item (Prat & Doval, 2005). However, it is not statistically representative of the population. It was impossible to achieve representativeness due to several factors: 1) financial and time restrictions created by funding conditions; 2)

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Table 1
Percentage of teachers per type of school and knowledge area

Type				Knowledge area*			
State general	State technical	Private	State *Telesecundaria*	Language	Natural Sciences	Social Sciences	Other
312 (47.8%)	205 (31.4%)	81 (12.4%)	47 (7.2%)	150 (23%)	130 (19.9%)	115 (17.6%)	251 (38.45)

* 7 participants did not report their knowledge area

obstacles created by the widespread mistrust toward the now-defunct *Instituto Nacional de Evaluación de la Educación* (funding agency) created by the 2013 educational reform (Gil, 2018); and 3) the impossibility of visiting some areas due to the drug-trafficking violence in Mexico.

Prat and Doval's (2005) procedure was used to build and validate the ETICOLEC. It involves five phases, described below.

1. Delimitation of the scale's goals

Studies of reading ITs generally comprise three components: comprehension theories, text theories and reader theories. Because our goal was to design a short instrument to be applied to large groups in combination with other instruments, our scale was restricted to comprehension ITs. This was reflected in the instructions' and the items' wording. Comprehension theories necessarily involve ideas about readers and texts, but these remained implicit.

2. Item and measuring instrument development

Items were developed from a review of similar studies and the analysis of semi-structured interviews with 20 secondary school teachers and 4 secondary school teacher trainers. The interview protocol was based on a literature review. The interviews allowed us to include the perspectives of the target population. This is relevant due to the culturally-situated nature of ITs. Next, an initial list of items and a Liker-type scale of answers per level of agreement was drafted.

3. Theoretical selection of items

We proceeded to an initial classification of the items in subscales. The typologies that best matched the items resulting from the procedure above (i.e. that best represented the types of answers in the interviews) were those of Hernández (2008) and Perales-Escudero et al. (2017). This was to be expected due to the cultural nature of ITs as these studies were also conducted in Mexico and, in the case of Perales-Escudero et al. (2017), with pre-service teachers. They distinguish three types of ITs: receptive, interpretative, and constructive (Hernández, 2008). Perales-Escudero et al. (2017) find three subtypes of constructive ITs in pre-service language teachers: constructive-applicative, constructive-rhetorical and constructive-critical (see table 2).

Three experts in reading comprehension validated this theoretical distribution. They were sent the items (previously rearranged randomly) and the conceptual definition of each subscale. They distributed the items and determined their relevance for each subscale (see content validity results section).

4. Empirical selection of items

To collect data, we requested the permission of each state's educational authorities and went to each school in person with photocopies of the scale, whichwere given to those teachers who accepted to participate voluntarily. Each copy was accompanied by a cover letter explaining the study's goals

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Table 2
Original design of the subscales

IT typology	Sub-dimensions' conceptual definition	Operational definition
Hernández (2008)	Receptive implicit theory: comprehension equals faithful reproduction of a text's message.	Items indicating that good comprehension equals the exact reproduction of a text's content (items 1, 2 and 3)
Hernández (2008)	Interpretative implicit theory: comprehension is an active process of meaning construction on the part of the reader that can give rise to multiple subjective interpretations.	Items indicating that good comprehension consists in putting subjectivity into play to generate one's own interpretations of what is read (items 4, 5, 6 and 7)
Hernández (2008) Perales-Escudero et al. (2017)	Constructive-applicative implicit theory: comprehension equals relating what is read with one's own life (knowledge and experiences) in order to apply it.	Items indicating that good comprehension consists in relating the text to prior knowledge and experience with applicative purposes (items 8, 9 and 10)
Perales-Escudero et al. (2017)	Constructive-rhetorical implicit theory: comprehension involves examining a text's communicative situation (genre, authors, readers, their motives and contexts, intertextuality) and approaching texts differently as a result.	Items indicating that good comprehension consists in interrogating the text and its communicative situation, adjusting one's way of approaching the text as a result (items 11, 12, 13, 14, 15, 16 and 17).
Perales-Escudero et al. (2017)	Constructive-critical implicit theory: comprehension involves evaluating and doubting what is read, considering its veracity, relevance and/or ideological charge.	Items indicating that good comprehension consists in critically evaluating textual content (items 18, 19 and 20).

Source: prepared by the authors.

and guaranteeing respondents' full anonymity (no names were collected). We included questions to gather information on demographic variables. For this study, we only considered the type of school and subject taught by each teacher.

5. Evaluation of psychometric properties

We analyzed the validity and reliability of each subscale through Cronbach's alpha and factorial analysis with Varimax rotation using SPSS v. 25. The effect size was calculated manually with eta square.

In an exploratory manner and after validation, we examined relations across ITs, school type and knowledge area. Teachers were grouped per subject in language (Spanish, second language), natural sciences (biology, physics, chemistry),

social sciences (geography, history, civics and ethics, state history and civics), and other (arts, mathematics, socioemotional education, various technology courses). The category "other" included teachers who taught courses in two or more knowledge areas; it comprises all *telesecundaria* teachers because they teach all or almost all subjects.

To examine the relations among the two demographic variables and Its, we conducted two tests: analysis of variance (ANOVA) and chi square, eliminating those teachers who did not declare their school type or subject. For chi square, we segmented the sample in low, medium and high levels according to the highest possible score for each subscale, and quantified the number of teachers with high scores in each subscale. We calculated one-way ANOVAs based on the mean score of each group (school type, knowledge area)

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for the answers corresponding to each IT. We conducted a Levene's test to verify the homogeneity of variances. Whenever variances were equal, we used the LSD post-hoc test. In the sole case in which they were not, we used the Games-Howell post-hoc test (Howell, 2002).

Table 3
Inter-rater agreement index

Subscale	Agreement index	Relevance
Receptive IT	1.00	2.88
Interpretative IT	0.75	2.66
Constructive-Applicative IT	0.66	2.77
Constructive-Rhetorical IT	0.86	2.71
Constructive-Critical IT	1.00	2.88

Source: prepared by the authors.

Results

Content validity analysis

The inter-rater agreement index was calculated (Escurra, 1988). The relevant number is the average of raters' scores (see table 3).

Reliability and exploratory factorial analyses

We ran an exploratory principal components factorial analysis with Varimax rotation for the scale as a whole. After defining the factors, we estimated their reliability. Table 4 shows that the items coalesced in factors that were consistent with the theoretical assumptions. Adequate reliability was attained for all the subscales. The full instrument can be found in appendix 1.

Table 4
Factorial analysis and internal consistency of each subscale

	Descriptives		Exploratory Factorial Analysis			Reliability	
Item	M	SD	Factorial Weight	Eigen Value	% Variance	α	Item Quantity
1. Constructive-rhetorical implicit theory							
12	3.90	0.892	0.777		16.99	0.842	7
11	3.51	1.011	0.684				
15	3.75	0.922	0.670				
14	3.85	0.860	0.663				
13	4.03	0.743	0.596				
16	3.79	0.895	0.585				
17	3.61	0.985	0.316				
2 .Receptive implicit theory							
1	4.38	0.942	0.847		12.86	0.721	3
2	4.14	0.908	0.802				
7	3.98	0.914	0.481				
3. Constructive-critical implicit theory							
20	3.59	0.948	0.739		12.53	0.783	3
19	3.47	0.958	0.713				
18	3.78	0.939	0.700				
4. Interpretative implicit theory							
5	3.02	1.144	0.828		10.90	0.682*	4
6	3.45	1.062	0.723				
4	3.62	1.091	0.682				
3*	2.73	1.048	0.526				
5. Constructive-applicative implicit theory							
9	3.48	1.097	0.816		9.84	0.733	3
10	3.49	1.052	0.793				
8	4.27	0.817	0.377				

Source: prepared by the authors. *If item 3 is deleted, then α =0.726.

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Analysis of relations among participants' ITs and demographic variables

For this exploratory analysis, first we present the distribution of teachers per TI according to the TI for which they scored highest during the validation of the ETICOLEC (see table 5).

Tabla 5
Distribution of teachers per IT (n=653)

Implicit Theory	Number of Teachers
Receptive	281
Interpretative	20
Constructive-Applicative	69
Constructive-Rhetorical	56
Constructive-Critical	55
Mixed theories	172

Source: prepared by the authors.

As shown in table 5, the receptive IT is the most widely distributed in the sample, followed by the three types of constructive ITs. The least distributed one is the interpretative IT. Besides, 172 teachers scored high in more than one subscale, and 130 of those show the receptive IT, mostly combined with one of the constructive ITs (n=106) and scarcely with the Interpretative IT (n=24). In other words, the receptive IT is the most widely distributed one,

being present in 411 participants. The constructive ITs and the interpretative IT are less distributed and found in several combinations.

A chi-square test of independence was conducted to examine the relation between secondary school types and ITs. The result was not significant, X^2 (15, N=645) = 14.6, p > .05 and five cells (20.8%) had values lower than 5 in the expected counts.

A chi-square test of independence was also conducted to examine the relation between knowledge area and Its, which resulted non-significant as well, X^2 (15, N=646) = 20.49, p > .05. Three cells (12.5%) had values lower than 5 in the expected counts. Next, ANOVA results for variation in ITs per school type are presented (table 6).

A one-way ANOVA test showed significant differences in the presence of the receptive IT among teachers in private schools (M = 4.40, DS = 0.49), general state schools (M = 4.15, DS = 0.72), technical state schools (M= 4.08, DS = 0.80) and *telesecundarias* (M = 4.26, DS = 0.78, F (3.641) = 4.02, p < .01. The effect size was small (eta square = 0.013). An LSD post-hoc test revealed that private secondary school teachers have significantly higher scores for the receptive IT than those in general and technical schools (p < .01). The remaining comparisons according to school type showed no significant differences. Below, the variation in ITs per knowledge area is presented (table 7).

Table 6
Variation in ITs per school type (n=645)

	M (SD					
	Private (n=81)	General (n=312)	Technical (n=205)	*Telesecundaria* (n=47)	F (3,645)	Effect
R-IT	4.40 (0.49)	4.15 (0.72)	4.08 (0.80)	4.26 (0.78)	4.02*	.018
I-IT	3.19 (0.82)	3.18 (0.79)	3.23 (0.74)	3.27 (0.71)	0.32	.001
Ca-IT	3.78 (0.79)	3.74 (0.79)	3.78 (0.80)	3.85 (0.79)	0.75	.003
Cr-IT	3.87 (0.66)	3.78 (0.62)	3.71 (0.65)	3.87 (0.69)	1.50	.007
Cc-IT	3.68 (0.73)	3.57 (0.82)	3.66 (0.76)	3.65 (0.80)	0.74	.003

*p < .01

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Table 7
Variation per knowledge area (n=646)

	M (SD)					
	Language (n=131)	Natural Sciences (n=130)	Social Sciences (n=115)	Other (n=217)	F (3.646)	Effect
R-IT	4.18 (0.71)	3.87 (0.71)	4.21 (0.76)	4.25 (0.61)	8.05**	.036
I-IT	3.20 (0.73)	3.17 (0.77)	3.17 (0.83)	3.23 (0.76)	0.20	.000
Ca-IT	3.70 (0.80)	3.60 (0.80)	3.71 (0.78)	3.83 (0.78)	2.61	.012
Cr-IT	3.85 (0.69)	3.58 (0.64)	3.78 (0.60)	3.83 (0.62)	5.24*	.023
Cc-IT	3.58 (0.88)	3.48 (0.71)	3.61 (0.77)	3.71 (0.78)	2.53	.011

*$p < .01$. ** $p < .001$

A one-way ANOVA test indicated that there were significant differences in the presence of the receptive IT among teachers of different knowledge areas: language (M = 4.18, DS = 0,71), natural sciences (M = 3.87, DS = 0.71), social sciences (M=4.21, DS = 0.76), and other (M=4.25, DS = 0.61), F (3.642) = 9.05, p < .001. The effect size was small (eta square = 0.036). A Games-Howell post-hoc test showed that natural science teachers obtain significantly lower scores for this IT than language teachers (p < .05), social science teachers (p < .019) and teachers of other knowledge areas (p < .001). The latter show the receptive IT to a greater extent than all others.

There were also significant differences in the presence of the constructive-rhetorical IT among teachers of different knowledge areas: language (M = 3.85, DS = 0.69), natural sciences (M = 3.58, DS = 0.64), social sciences (M=3.78, DS = 0.60), and other (M=3.71, DS = 0.78), F (3.641) = 5.24, p < .01. Language teachers (those who teach Spanish or a second language) hold the highest mean; natural science teachers hold the lowest mean. The effect size was small (eta square = 0.023). The LSD post-hoc test showed that natural science teachers have significantly lower scores for this IT than language teachers(p < .001), social science teachers (p < .05), and those of other knowledge areas (p < .001).

Conclusions

Reading ITs are an under-researched topic in Mexican secondary education. In light of this gap, we aimed at validating the ETICOLEC scale to identify secondary school teachers' implicit beliefs about reading. The factorial and validity analysis showed good psychometric properties and resulted in the grouping of items in five factors. The finding of three distinct types of constructive ITs is to be highlighted. It can be explained by the cultural context, which is different from that of other studies, and by the fact that our study, unlike many others, was conducted with in-service teachers. These teachers have had a chance to be educated in specific school cultures that could influence their ITs (Jiménez, 2009; Marrero, 2009).

The results indicate that teachers mostly show a receptive IT that tends to combine with the three types of constructive ITs, which are roughly equal to the epistemic ITs of other studies. Thus, the findings in general match those reported by Errázuriz et al. (2019) and Errázuriz et al. (2020) with in-service teachers. We think that the relatively widespread presence of the constructive ITs, which are nonetheless a minority, is a favorable finding as it would suggest better practices in the teaching of reading. Nevertheless, we do not know if the teachers activate these ITs during teaching or if they reserve them for their own reading. Future

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studies should examine the connection between ITs and teaching practices.

ANOVA tests of ITs per secondary school type show a trend toward the prevalence of the receptive IT in private secondary schools. This is a suggestive result since, in Mexico, the material conditions of private schools are better than those of state ones (INEE, 2019). In principle, this could lead to more sophisticated ITs. A plausible explanation for this finding lies in considering variables such as teachers' qualifications, pre-service and in-service training (Medrano & Ramos, 2019) and the culture of this type of educational centre (Jiménez, 2009). These variables should be examined by future research contrasting the sociocultural settings of private and state secondary schools.

Despite their exploratory nature, the results of ANOVA per knowledge area show interesting trends that are consistent with previous studies. For example, they reveal a lower presence of the receptive and constructive-rhetorical ITs in natural science teachers. This finding matches the distinct reading practices of teachers in this area (Rodríguez, 2001). For the constructive-rhetorical IT, the difference favors language teachers, which is consistent with the higher presence of the epistemic IT (Errázuriz et al., 2020).

School subjects constitute varying sociocultural settings for reading because reading practices differ across discourse communities. Then, the stronger presence of the constructive-rhetorical IT in language teachers is not surprising since they specialize in reading comprehension. In Mexico, the educational system has recently begun to emphasize rhetorical practices such as intertextual reading, specifically in language subjects (Vega et al., 2019). If confirmed by more rigorous studies, the limited presence of the rhetorical IT in teachers of other areas would point to a need to extend and enhance rhetorical reading practices across the curriculum. Doing so would be particularly relevant in the light of the usefulness of such practices to confront the infodemic of fake news about COVID-19 and other contemporary sociopolitical phenomena.

Notes

1. The Mexican secondary school is an educational level that precedes A-levels and roughly matches Spanish *Educación Secundaria Obligatoria*. *Telesecundaria* is a type of state secondary school where courses are taught using televised content broadcast by the Ministry of State Education. One single teacher oversees (almost) all courses, which are located in rural and impoverished urban areas. Technical secondary schools are a type of state secondary school where trades are taught.

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Appendix 1. The ETICOLEC Scale

Think about what understanding a text well means to you. Indicate your degree of agreement or disagreement with the way that each of the phrases below completes the following statement: "From your perspective, understanding a text well involves… "

1=Completely disagree 2=Disagree 3=Neither agree nor disagree 4=Agree 5=Completely agree					
1. Understanding the text's main ideas.	1	2	3	4	5
2. Understanding the text messages accurately.	1	2	3	4	5
3. Restricting understanding exclusively to the text's message.	1	2	3	4	5
4. Understanding the text's message freely (the reader constructs meaning freely).	1	2	3	4	5
5. Understanding the text according to my own intentions.	1	2	3	4	5
6. Reframing the text's message according to my own opinion.	1	2	3	4	5
7. Develop my own understanding from the text's message.	1	2	3	4	5
8. Relating the text to my previous knowledge.	1	2	3	4	5
9. Relating the text to my own life.	1	2	3	4	5
10. Applying the text's message to my own life.	1	2	3	4	5
11. Identifying relevant information about the author.	1	2	3	4	5
12. Identifying the text's historical and cultural context (for example: when it was written, the circumstances at the moment).	1	2	3	4	5
13. Discovering the text's implicit messages.	1	2	3	4	5
14. Discovering the author's purposes.	1	2	3	4	5
15. Discovering the types of readers addressed by the author.	1	2	3	4	5
16. Contrasting the text's messages with those of other, related texts.	1	2	3	4	5
17. Adjusting my way of reading to the type of text I am reading.	1	2	3	4	5
18. Doubting the truthfulness of the text's messages.	1	2	3	4	5
19. Interrogating the author's ideological stance.	1	2	3	4	5
20. Assessing the relevance of the text's message to my own context.	1	2	3	4	5