



HAL
open science

Working on the identification and expression of emotions in primary schools for better oral production: an exploratory study of links between emotional and language skills

Aurélie Pasquier, Guillaume Ponthieu, Lola Papon, Vincent Bréjard, Nathalie Rezzi

► To cite this version:

Aurélie Pasquier, Guillaume Ponthieu, Lola Papon, Vincent Bréjard, Nathalie Rezzi. Working on the identification and expression of emotions in primary schools for better oral production: an exploratory study of links between emotional and language skills. *Education 3-13*, 2022, 50 (8), pp.1107-1120. 10.1080/03004279.2021.1938167 . hal-03264307

HAL Id: hal-03264307

<https://amu.hal.science/hal-03264307v1>

Submitted on 31 Jan 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

This article was first published in the British journal *Education 3-13* online in June 2021.

It was subsequently published in the same journal in print in November 2022.

Here is its reference (APA standards):

Pasquier, A., Ponthieu, G., Papon, L., Bréjard, V., & Rezzi, N. (2022). Working on the identification and expression of emotions in primary schools for better oral production: an exploratory study of links between emotional and language skills. *Education 3-13*. 50(8), 1107-1120. DOI: 10.1080/03004279.2021.1938167

Working on the identification and expression of emotions in primary schools for better oral production: an exploratory study of links between emotional and language skills

Aurélie Pasquier^{1,3}, Guillaume Ponthieu^{1,3}, Lola Papon^{1,3}, Vincent Bréjard^{2,4}, and Nathalie Rezzi^{1,3}

¹ National Higher Institute of Teaching and Education (INSPE), Aix-Marseille University, Aix-en-Provence, France

² Department of Clinical Psychology, Aix-Marseille University, Aix-en-Provence, France

³ Research Unit ADEF (Learning, Teaching, Assessment, Training, UR 4671), GCAF (Creative gesture and formative activity) program, Aix-Marseille University, Marseille, France

⁴ Research Group LPCPP (Clinical Psychology, Psychopathology and Psychoanalysis, EA 2378), Aix-Marseille University, Aix-en-Provence, France

Corresponding author: Aurélie Pasquier. Email: aurelie.pasquier@univ-amu.fr / ORCID: <https://orcid.org/0000-0002-3679-3263>

Conflicts of interest: The authors declare that there are no conflicts of interests.

Acknowledgements: This work was financially supported by the Federative Structure for Research in Education of Provence (SFERE-Provence, FED 4238, France) and the Academic Delegation for Training and Educational Innovation (DAFIP) of the Aix-Marseille Academy (France).

We would like to thank the school teachers who welcomed us as well as the students and their parents for agreeing to participate in this research.

Introduction

Research into the links between emotional and language skills in children is attracting increasing interest, particularly because of its relevance in the study of factors of academic functioning (Kwon, Kupzyk and Hanrahan 2017) and success (Denham et al. 2012; Trentacosta and Izard 2007). In recent decades, developmental psychologists have increasingly endeavoured to demonstrate the role played by language in the development of emotional skills such as the comprehension (Grazzani et al. 2018), and regulation of emotions (Cole, Armstrong and Pemberton 2010). It should also be noted that studies on the links between language and emotional skills in children generally focus more on literacy (reading and writing) abilities rather than verbal production skills amongst school-age children. Indeed, the conversational aspects inherent in language interaction are more often investigated amongst very young children and preschool age children or in the family sphere (see Harris and Pons [2003] for a review of studies on the emotional verbalisations of young children).

Identifying language as one of the factors influencing emotional skills has led several researchers to test the effect of intervention programmes on children's social skills (Bennette and Hiscock 1994; Peng et al. 1992; Pons, Harris and Doudin 2002). However, the majority of these were not implemented in a classroom context, with potential extension into different educational situations, allowing the emotional register to be worked on for purposes other than that linked mainly to the development of quality social relationships with peers and adults (Bosacki and Astington 1999; Dunn and Herrera 1997; McDowell, O'Neil and Parke 2000).

However teachers often deplore pupils' shortcomings in language expression, with the latter being linked to social inequality (Ryan, Fauth and Brooks-Gunn 2006) and academic inequality (Kastner, Raggio and May 2000). Indeed, research has demonstrated that the quantity and quality of pre-school-age children's conversations at home are good predictors of their

academic success at secondary level (Goswami and Bryant 2007; Hart and Risley 1995). While dialogical practices in primary and secondary school classes are positively linked to pupils' learning (see the systematic review by Howe and Abedin [2013]), it seems difficult for teachers, in practice, to treat oral language as a completely separate area of learning. Even though official educational programmes in many countries incorporate the development of oral skills, literacy skills remain the priority. Moreover, oral progress and assessment indicators are barely identifiable or operational in the school environment (Mercer, Warwick and Ahmed 2017).

In the context of a research project in a primary school classified as an REP (high priority education network), we offered teaching sessions aimed at developing oral comprehension and production. This moral and civic education programme¹ (French Department of Education, 2018) focused on the identification and expression of emotion is aimed at Year 5 pupils (CM1 In French) and Year 6 pupils (CM2 in French), between 9 and 11 years of age².

Language and emotional skills

Language is a complex and multifaceted concept that consists of receptive (comprehension) and productive (expression) aspects, in both the oral and written domains. Language skills involve the gradual acquisition of ability in different sub-domains of the language system and pragmatics. The development of linguistic skills is based on the phonological, morphological, syntactic and semantic systems which are involved in the knowledge of linguistic forms and their meaning. Pragmatic skills involve the ability to express and interpret meanings in different social contexts (Astington and Filippova 2005). They allow one to communicate satisfactorily

¹ This education program is intended to provide personal education (moral) and education in citizenship (civic). It has been amended several times since 2015. At the time of the study, the 2018 text was applicable.

² The two years which precede entry into secondary education in France.

from a social point of view as they include in particular the ability to understand the intentions of others and to follow conversational rules in different social contexts (Ninio and Snow 1996).

Emotional skills are a multidimensional concept that, from a historical point of view, relate to the model of emotional intelligence first proposed by Salovey and Mayer in the 1990s. According to this model, emotional intelligence is the ability to perceive, understand, use and manage emotions (Mayer and Salovey 1997). This is a conception of emotional intelligence as an ability and not as a personality trait (see Sander and Scherer [2019] for a more detailed presentation). Emotional awareness (EA), which is the focus of our study, incorporates the dimensions of perception (recognising the facial, vocal and gestural emotional expressions of the people around us) and of comprehension (a conceptual knowledge of emotions based on propositional thinking and language) of emotions. EA is defined as the ability to experience differentiated subjective states, to interpret them and to imagine and identify them in others (Lane and Schwartz 1987). It is thought to follow a gradual and hierarchical developmental path, similar to the stages of cognitive development identified by Piaget. The emergence of capacities for abstraction and language enrichment accompany the transformations which constitute the capacities for differentiation and integration of emotional experience during development. According to Saarni (1999), the ability to use the vocabulary of emotions is the most important of the eight sub- skills related to the understanding of emotions. There is no doubt that the conceptual knowledge of emotions is strongly associated with language skills (Beck et al. 2012; Bosacki and Moore 2004; Cutting and Dunn 1999; Grazzani et al. 2018; Pons et al. 2003; Ruffman et al. 2003).

Language is considered as being at the centre of children's cognitive and socio-emotional development. Generally speaking, its role in emotion is being increasingly studied as it is through language that individuals can represent themselves, communicate and give meaning to their subjective experiences, and from the youngest age.

In the psychological constructionist theories of emotions, the latter are conceived of as “components” resulting from the combination of more fundamental psychological elements (such as representations of the body, exteroceptive, visual and auditory sensations, for example, and conceptual knowledge of emotional categories), not specific to emotions (see Gendron and Barrett [2009] for a historic review of approaches to the psychological construction of emotion). From this type of approach spring theories such as that of the conceptual act theory (CAT, Barrett 2006) in which emotions are considered as being constructed mental states, like cognitions and perceptions to which they are basically not dissimilar. Here language plays a constitutive role which goes beyond the mere description of emotions in retrospect. It supports the acquisition and development of the conceptual knowledge which is used to give meaning to emotions (Barrett, Lindquist and Gendron 2007; Lindquist, Mac Cormack and Shablack 2015).

A growing number of studies have provided obvious proof of positive relationships between language and emotional skills (Beck et al. 2012; Bosacki and Moore 2004; Cutting and Dunn 1999; Grazzani et al. 2018; Pons et al. 2003; Ruffman et al. 2003). Language level is mostly identified as a control variable or as an explanatory variable of individual differences in the stages of development of emotional skills, so that the higher linguistic skills are, the better is the understanding of emotions (Pons et al. 2003). But while the majority of studies tend to identify this association between language and emotional skills via an effect of the first on the second (Bohnert, Crnic and Lim 2003; Izard et al. 2001; Schultz et al. 2001; Trentacosta and Izard 2007), the nature of these links does not however appear to be clear and unidirectional (Beck et al. 2012). According to other researchers, emotion can have an impact on language (i.e. Bloom 1998; Tomasello and Barton 1994; Tomasello et al. 1996). Indeed, early language learning is thought to be based on two-year-old children’s intention to share their thoughts and feelings (Bloom 1998). Likewise, sensitivity to emotional signals is thought to support the

development of vocabulary in children aged from 18 to 24 months (Tomasello and Barton 1994; Tomasello, Strosberg and Akhtar 1996). Other studies have shown that explanatory conversations about emotions from the very youngest age (Ornaghi, Brockmeier and Grazzani 2011) or even teaching aimed at developing autonomy (Knopik and Oszwa 2019) in everyday interactional contexts improve children's emotional and social skills. So conversation is identified as a powerful mechanism of psychological development (Turnbull, Carpendale and Racine 2009). However, to our knowledge, there have been no studies focused on the influence of the development of emotional skill on the language levels of school-age children. And even fewer devoted to the development of language other than receptive.

Oral language: "oracy"

Oral language helps the child to construct meaning for crucial skills such as reading and writing (Dickinson, McCabe and Sprague 2003). Indeed, significant relationships have been identified between the oral skills of speaking and listening (oracy) and reading and writing (literacy) in school-age children (Storch and Whitehurst 2002; Boyd and Galda 2011; Wells 1999). Via interaction, children learn about social expectations with regard to the use of the language in all contexts and develop understanding of the language necessary for reading and writing (Resnick and Snow 2009).

A movement, begun in England in the 1970s, developed the concept of "oracy" to describe children's ability to use speaking and listening skills (Wilkinson 1970). The aim was to give the latter a status similar to those of reading and writing ("literacy"). Although the term "oracy" is now part of the United Kingdom's national curriculum, it is not however widely used by English-speaking researchers who more widely use the terms of "oral discourse" (Saracho and Spodek 2008) or "communication skills" (Mercer et al. 2017). Studies (for example, Vass

and Littleton [2010] and Whitebread et al. [2013], as quoted in Mercer et al. 2017) show that oral discourse stimulates children's cognitive development and its use as a cognitive and social learning tool. Communication skills form part of the language considered as an integral component of human cognition and not as a separate and distinct ability (Mercer 2008, 2013; Pinker 2007). Moreover, a consensus has been reached around the idea that learning how to express oneself in a clear and structured way orally, certainly involves exchanges in natural contexts and games, with the aim of providing concrete situations which hold meaning for the child (Portier and Peterson 2017; Saracho and Spodek 2008). Indeed, as already explained by Hewitt and Inghillieri (1993), it's not a question of "speaking for speaking's sake" but of encouraging oral work in class so that this practice becomes increasingly widespread.

In this regard, oracy situations in class focused on everyday emotional experiences can therefore be an environment which promotes speaking and listening in a school context. We have chosen to use "oracy" in this article, insofar as it offers the best way of referring to "the ability of children to use speech to express their thoughts and communicate with others, in education and in life" (Alexander [2012] quoted in Mercer et al. 2017), and which refers to the importance of everyday social contexts through which these skills develop in children. The use of interactive situations focused on emotions and the sensitive experiences related to them provides, in our opinion, ideal conditions for pupils to work on their oral skills in a natural way and with a clear objective: that of better understanding themselves and others.

[This study: the French context](#)

Since the 1970s, oral language has been an area of concern for those involved in education in France in relation to combatting academic inequalities. Since 1995, educational programmes have allocated a greater role to oral language and its development in class (French

Department for Education, 2015, 2018)³. A more oral based practice often seems to be recommended when the educational system is faced with academic failure (Langlois 2012).

Despite these injunctions, it is noticeable that educational practices do not change. The resistance seems to come from teachers who justify themselves by the excessive number of pupils per class which makes oral questioning impossible (Waquet 2003). Oral work is considered by teachers much more as a communication tool (status of means) than as a learning objective (Le Cunff and Jourdain 1999). To achieve this, it would seem necessary to translate it into educational objectives. Yet the majority of studies carried out in the field demonstrate that oral work struggles to find a place in pupils' learning situations in France and elsewhere (Grandaty and Lafontaine 2016; Malec, Peterson, and Helshereif 2017).

In France, the Moral and Civic Education programme (EMC, French Department for Education, 2018) which features as one of its objectives “identifying and expressing what you feel, and understanding what others feel”, could be one of the means for developing emotional and oral skills. That is why, in the context of a research project with a volunteer primary school, we developed a Moral and Civic Education programme focused on the identification and expression of emotions and aimed at pupils between 9 and 11 years of age, with the aim of developing their oral comprehension and production⁴.

Methodology

Participants

67 children from a primary school in the south of France classified as a REP (reinforced educational priority network) were involved in this study (see Table 1). These were pupils from

³ This concern is still present in the French educational programmes published on 30 July 2020.

⁴ Oral production refers here to the ability to produce oral statements in situations of inter-individual exchange.

Year 5 (CM1, $N = 31$) and Year 6 (CM2, $N = 36$) between 9 and 11 years of age ($M_{\text{age}} = 10$ years; median age = 10 years). They all came from a very underprivileged socio-economic background and were for the most part the second-generation of an immigrant population (North Africa, Poland, Turkey).

Table 1 - Distribution of participants in accordance with group, class and gender

	Group	N	School year		Gender	
			Year 5	Year 6	Girls	Boys
	Experimental	34	16	18	19	15
	Control	33	15	18	16	17

N: Number of participants

Two groups were formed (see Table 1) randomly from three classes (one Year 5 class, one Year 6 class, and a dual level Year 5/Year 6 class):

- an experimental group consisting of Year 5 and Year 6 pupils with a ratio of 19 girls ($N_{\text{girls Year 5}} = 8$ and $N_{\text{girls Year 6}} = 11$) and 15 boys ($N_{\text{boys Year 5}} = 8$ and $N_{\text{boys Year 6}} = 7$). The average age of participants was 10 years (median age = 10 years). This group received oral-based moral and civic education focused on the identification and expression of emotions.
- and a control group consisting of Year 5 and Year 6 pupils with a ratio of 16 girls ($N_{\text{girls Year 5}} = 8$ and $N_{\text{girls Year 6}} = 9$) and 17 boys ($N_{\text{boys Year 5}} = 8$ and $N_{\text{boys Year 6}} = 9$). The mean age of participants was 10 years 3 months (median age = 10 years). This group received the “traditional” moral and civic education based on republican institutions and values.

Measures

The participants were presented with several scales and tests.

Self-administered:

The Levels of Emotional Awareness Scale for Children, LEAS-C (Bajgar et al. 2005), translated into French, is a tool designed to assess the emotional awareness of children aged 8 and over. It consists of 12 scenarios, based on everyday social situations, each one involving two people, oneself and another person. Each participant is invited to reply indicating what they and the other person could feel in each situation. (How would you feel? How would the other person feel?). The scenarios are based on four emotions (from the basic emotions described by Izard [1977]): anger, fear, happiness and sadness. Each one is presented in three different situations in mixed order. Some of them take place in a school environment, others are focused on the domestic sphere. We decided to use an adapted version of the scale with only six scenarios selected from the 12 initially provided. (Veirman, Fontaine and Van Ryckeghem 2016). This allows the testing time to be reduced, on the one hand. On the other hand, the adapted version also proves to be more reliable as only the most sensitive items are retained (Veirman, Fontaine and Van Ryckeghem 2016). The scale's rating is based on the complexity of vocabulary words related to emotions and their differentiation from each other by respondents. This questionnaire does not have a normative aim insofar as there are no "correct" responses expected, both from the point of view of form (grammatical and/or spelling errors) and substance. It is used to calculate three scores for each participant: an overall emotional awareness score (LEAS-T) and two subscores for intra-subjective emotional awareness (LEAS-S) and intersubjective emotional awareness (LEAS-O).

Externally administered:

Four Oral Language Assessment tests (Khomsî 2001) were administered to all participants individually by speech therapists. These tests are used to assess the two important parts of oral language which are comprehension (reception aspect) and oral production. They are staggered from the nursery school section (3-4 years) to Year 6 (10-11) with the aim of detecting any potential speech disorders. Of the five tests (phonology, vocabulary comprehension, vocabulary production, linguistic comprehension and production) we chose to concentrate on the assessment: 1/of vocabulary production (naming of images corresponding to objects or actions, 2/of immediate comprehension (naming of an image amongst four suggested, corresponding to a statement made orally), 3/of the overall comprehension of statements (group together the correct responses when named for a first or second time, with a second attempt being offered if there is an error with the first) and 4/of the production of statements (complete the beginning of a sentence delivered orally, to describe a situation presented in images). These choices are consistent with our study insofar as we were seeking to mainly assess the oral language skills of the participants who did not present specific language problems (phonological aspects and comprehension of words did not therefore need assessment here).

Procedure

The two groups in the study were assessed at two different times: before (phase 1) and after (phase 2) the implementation of each moral and civic education programme. The self-administered questionnaire was delivered by two experimenters from the study to the participants during class gatherings. The set of oral language assessment tests were taken during individual interviews with a speech therapist. These assessments took place two weeks before and two weeks after the delivery of the two teaching sequences. The latter were delivered by

two experienced teachers associated with the project, and unknown to the pupils. The two lessons began in January 2019 and finished after seven sessions, delivered weekly to each group, at the end of April 2019. The length of each session was 45 minutes. They were delivered at the same time in two separate rooms, during school hours.

The education programmes tested

For the experimental group, the teaching sessions were based on the Moral and Civic Education programme (EMC/French Department of Education, 2018). We opted to work on pupils' skills linked to the culture of sensitivity based on six points: Identifying and expressing one's emotions and feelings while regulating them • Having self-esteem and being able to listen and feel empathy • Expressing one's opinion and respecting the opinion of others • Accepting differences • Being able to cooperate • Feeling that one is a member of a group. The seven sessions were devised around the following themes: (1) discovering different emotions in projected artworks, (2) identifying the main emotions inspired by a children's storybook and everyday events, (3) expressing one's emotions through different means (words, drawing, dance, etc), (4) understanding bodily perceptions, sensations and expressions, (5) understanding how emotions are expressed and regulated (different regulation processes, degree of effectiveness experienced), (6) understanding the invasive, intense, positive and negative nature of emotions, (7) acting on emotions: based on a poem, working on ways of adjusting one's reactions and sending clear messages in order to avoid misunderstandings.

With regard to the control group, the learning sequence was also based on the Moral and Civic Education programme (EMC/French Department of Education, 2018) but this time aiming at skills linked to the culture of rules and the law with four key aims: Respecting common rules • Understanding the reasons for obeying rules and the law in a democratic society • Understanding the principles and values of the French Republic and democratic societies • Understanding the relationship between rules and values. The seven sessions consisted of (1)

starting with pupils' representations of the symbols and emblems of France and then studying the Marseillaise, (2) studying the flag with a text from the official website of the Elysée Palace as a supporting document, (3) studying the currency, (4) taking a look at the French institutions with a focus on the President of the Republic, (5) studying the French parliament, (6) completing a diagram of the institutions, (7) extending the lesson to include the European Union with a comparative study of the flag, anthem, currency and Parliament.

Processing of the data

We performed the Shapiro-Wilk test which concluded that there was an absence of normal data distribution for several variables in this study. As the latter was based on a “quasi-experimental” study design, we performed descriptive and inferential analyses by comparison between our two groups using the non-parametric tests of Mann-Whitney and Wilcoxon, with the Jamovi software program (version macOS 1.2.22).

Results

The results are organised into two parts. First of all, the descriptive statistics of emotional and language variables are presented for each group (experimental versus control) in phases 1 and 2. Then, to assess whether the oral Civic and Moral Education programme focused on the identification and the expression of emotions leads to an improvement in emotional and language skills, the differences in performance between phases 1 and 2 are analysed for both groups of participants.

Descriptive statistics of emotional and language variables in phases 1 and 2

Tables 2 and 3 indicate means, standard deviations, medians, minimum and maximum scores and the results of the Shapiro-Wilk test and its significance for emotional and language variables in the two phases.

Table 2 shows that the means and the medians of the participants in the experimental and control groups in phase 1 are similar with regards to emotional and language variables. The standard deviations also indicate that both groups present the same distribution in terms of emotional and language skills, and that more than 90% of the values of each variable are within one standard deviation from the mean. Consequently, it seems that our two groups were at comparable levels before the implementation of the programmes in our study. An examination of the W and p values of the Shapiro-Wilk test revealed that we could only retain the hypothesis of normality for a few of variables for the sample of participants in the experimental and the control groups.

Table 2 - Descriptive statistics of emotional and language variables depending on group in phase 1

	Group	LEAS-S	LEAS-O	LEAS-T	Lex	IC	OC	Prod
N	Exp	34	34	34	34	34	34	34
	Control	33	33	33	33	33	33	33
Mean	Exp	13.9	12.5	15.2	31.3	21.9	29.1	20.5
	Control	13.3	12.9	15.2	31.5	21.6	29.1	21
Std. error mean	Exp	0.52	0.58	0.49	1.05	0.67	0.41	0.45
	Control	0.59	0.57	0.52	1.17	0.58	0.32	0.47
Median	Exp	14	13	15.5	31	22	29	21
	Control	14	13	16	32	21	29	21
Minimum	Exp	6	3	7	16	13	20	13
	Control	4	4	8	17	16	23	15
Maximum	Exp	19	18	20	39	30	32	25
	Control	18	19	20	43	29	33	25
Shapiro-Wilk W	Exp	0.93 ^a	0.92 ^a	0.92 ^a	0.93 ^a	0.94	0.81 ^a	0.96
	Control	0.93 ^a	0.93 ^a	0.94	0.97	0.96	0.92 ^a	0.95

LEAS-S: Level of Emotional Awareness Scale-Self, LEAS-O: Level of Emotional Awareness Scale-Other, LEAS-T: Level of Emotional Awareness Scale-Total, Lex: Vocabulary in production, IC: Immediate Comprehension, OC: Overall Comprehension, Prod: Production of statements. N: Number of participants.

^a Shapiro-Wilk's test is significant ($p < .05$), suggesting a violation of the assumption that the sample follows a normal distribution

Table 3 shows that the mean and median levels of participants in the experimental groups (LEAS-S = 16.7; LEAS-O = 15.6); LEAS-T = 17.8) and control groups (LEAS-S = 13.1; LEAS-O = 11.8); LEAS-T = 15.4) in phase 2 differed remarkably with regard to emotional variables. The standard variables also indicate that, compared to phase 1, the sample in the experimental group presented values which were closer to the mean compared with the control group. Consequently, it seems that our two groups displayed differences in level after the implementation of the programmes in our study. An examination of the W and p values of the Shapiro-Wilk test also revealed that the hypothesis of normality was retained for variables different than those identified in phase 1 for the sample of participants in the experimental and control groups.

Table 3 - Descriptive statistics of emotional and language variables depending on group in phase 2

	Group	LEAS-S-2	LEAS-O-2	LEAS-T-2	Lex-2	IC-2	OC-2	Prod-2
N	Exp	34	34	34	34	34	34	34
	Control	33	33	33	33	33	33	33
Mean	Exp	16.7	15.6	17.8	32.5	24.5	30.3	21.4
	Control	13.1	11.8	15.4	33.0	25.0	30.2	21.6
Std. error mean	Exp	0.41	0.49	0.47	1.09	0.53	0.58	0.48
	Control	0.69	0.64	0.61	1.12	0.54	0.30	0.40
Median	Exp	17.0	16.0	17.5	33.0	25.0	31	22
	Control	14	12	16	33	25	30	22
Minimum	Exp	11	6	11	13	16	12	12
	Control	5	4	7	18	17	25	16
Maximum	Exp	21	21	25	42	31	32	25
	Control	21	19	22	44	32	32	25
Shapiro-Wilk W	Exp	0.97	0.91 ^a	0.95	0.91 ^a	0.96	0.42 ^a	0.87 ^a
	Control	0.98	0.98	0.93 ^a	0.98	0.96	0.86 ^a	0.92 ^a

LEAS-S: Level of Emotional Awareness Scale-Self, LEAS-O: Level of Emotional Awareness Scale-Other, LEAS-T: Level of Emotional Awareness Scale-Total, Lex: Vocabulary in production, IC: Immediate Comprehension, OC: Overall Comprehension, Prod: Production of statements. N: Number of participants.

^a Shapiro-Wilk's test is significant ($p < .05$), suggesting a violation of the assumption that the sample follows a normal distribution

Effect of the Moral and Civic Education programmes on pupil's emotional and language skills

Given the size of the sample and the quasi-systematic asymmetry of the data, we found it preferable to test the difference between the phases with a Wilcoxon test for paired samples in each group. We also tested the effects of age and gender and it appears that the latter had no

influence on the scores obtained in the experimental group in the two phases. Based on the Mann-Whitney test, an effect of gender emerged however on the scores of intersubjective emotional awareness ($U = 63, p = .009$) and total emotional awareness ($U = 77, p = .032$). It seems that in phase 2 the girls in the control group displayed better awareness of emotions and more specifically of those of others, compared to the boys. These data are in line with the literature on gender differences usually found with regard to emotional awareness (Veirman et al. 2011).

Table 4 shows that the scores in phase 2 in the experimental group are significantly higher for all the variables studied. The emotional and language skills of pupils who had received Moral and Civic Education on the identification and expression of emotions improved significantly.

Table 4 - Differences between phases 1 and 2 in the experimental group for emotional and language variables

			Statistic	p	Cohen's d
LEAS-S-1	LEAS-S-2	Wilcoxon W	33	< .001	-0.930
LEAS-O-1	LEAS-O-2	Wilcoxon W	27.5	< .001	-0.860
LEAS-T-1	LEAS-T-2	Wilcoxon W	39.5	< .001	-0.850
Lex-1	Lex-2	Wilcoxon W	165	0.032	-0.356
IC-1	IC-2	Wilcoxon W	38.5	< .001	-0.873
OC-1	OC-2	Wilcoxon W	37.5	0.001	-0.483
Prod-1	Prod-2	Wilcoxon W	83	0.003	-0.536

p = probability of absence of difference between the two variables; Cohen's d indicating the size of the effect

Table 5 indicates that the scores in phase 2 in the control group are significantly higher for a few variables only. These are the dimensions of vocabulary, and the immediate and overall comprehension of language in production. The language skills of pupils who had received education via the traditional Moral and Civic Education programme focused on the values of the French Republic improved partially as their oral production level does not seem to have changed significantly between the two phases of the study.

Table 5 - Differences between phases 1 and 2 in the control group for emotional and language variables

			Statistic	p	Cohen's d
LEAS-S-1	LEAS-S-2	Wilcoxon W	276	0.943	0.0477
LEAS-O-1	LEAS-O-2	Wilcoxon W	365.5	0.130	0.2920
LEAS-T-1	LEAS-T-2	Wilcoxon W	182	0.638	-0.0603
Lex-1	Lex-2	Wilcoxon W	91	0.006	-0.5420
IC-1	IC-2	Wilcoxon W	26	<.001	-0.9589
OC-1	OC-2	Wilcoxon W	37.5	<.001	-0.7012
Prod-1	Prod-2	Wilcoxon W	111.5	0.170	-0.2792

p = probability of absence of difference between the two variables; Cohen's d indicating the size of the effect

These results as a whole show that the emotional awareness levels (intra-and intersubjective) of the pupils in the experimental group who received Moral and Civic Education focused on the identification and description of emotions improved significantly, unlike the pupils in the control group. This result is not surprising insofar as only the participants in the experimental group received education on emotional skills.

With regard to language skills, it is noticeable that levels of vocabulary, and immediate and overall comprehension progressed in both groups. These results can be understood in two ways. Either the pupils made progress during this period due to their schooling and expected acquisition of knowledge in the general education programme. Or the pupils benefited from the teaching offered in both conditions of the study. We should remember that the control group also received teaching which was mostly delivered orally, even though the content of discussions did not involve emotions. These two explanatory hypotheses are certainly not mutually exclusive. On the other hand, only the experimental group's oral production skills improved significantly.

Discussion

The main aim of this study was to examine whether it is possible to improve the oral production of children aged between 9 and 11 via emotion-focused teaching in class. In the experimental group but not in the control group, children's emotional awareness and oral production progressed significantly between pretest and posttest. In accordance with our expectations and the literature (Beck et al. 2012; Lindquist et al. 2015) the results tend to show that language and emotion are linked. Indeed, we were able to notice that compared to the participants (control group) who had received oral instruction based on academic content, those who took part in sessions focused on the identification, description and regulation of emotion made significant progress in their skills in the oral production of statements. In this respect, it seems that innovative educational practices which encourage oracy in situations which call on emotional experience contribute to the development of oral language and listening and empathy skills.

The originality of our study lies in the language skill targeted. Indeed, the majority of studies investigating links between language and the understanding of emotions place the emphasis on receptive vocabulary (Beck et al. 2012; Bosacki and Moore 2004; Cutting and

Dunn,1999; Izard et al. 2001; Trentacosta and Izard 2007) or expressive vocabulary, unspecific to emotions (Streubel et al. 2020), as an indication of language skill. Our programme shows that work focused on the comprehension and expression of emotions can encourage the development of general skills in the production of oral statements. For example, work based on artworks which convey emotional signals enabled the pupils in the experimental group to identify the emotions represented but also to express those they felt on contact with them.

In addition, although sensitivity to emotional signals and the intention to express one's thoughts and feelings encourage the acquisition of language amongst very young children (Bloom 1998; Tomasello and Barton 1994; Tomasello et al. 1996), our study shows that the development of emotional skills helps to develop oral language skills amongst children aged between 9 and 11 years.

In studies conducted in a school environment, interventions often target the understanding of emotions where language acts as a control variable (Grazzani et al. 2018; Pons et al. 2002; De Stasio, Fiorilli and Chiacchio 2014). Here it was about placing the pupils in an oral language learning situation and drawing on their experiences with different teaching aids. In this respect, the links between language and emotion were tackled from our point of view by the use of oral language (oracy) in social interaction (Mandler 2004; Tomasello 2005) in order to develop language production skills.

These results must nevertheless be considered with caution due to the limitations inherent in, on the one hand, the size and composition of the sample, and on the other, the choice of tools used. As regards the first, our sample was relatively restricted. However, this is an exploratory study which aims to be replicated with a larger sample. In addition, the sample is composed of pupils from two different year groups (one Year 5 class, one Year 6 class and a dual level Year 5/Year 6 class). In order to be able to compare the assessment of the participants in the pretest and posttest, while complying with the host school's organisation, we had to create

our groups with a mix of ages. Individual differences (Streubel et al. 2020) and inter-individual differences (Pons and Harris 2005; Nook et al. 2019) exist in the development of children's emotional and language skills. Even though emotional understanding seems to naturally develop with age, it appears that inter-individual differences in terms of emotional understanding remain stable despite the influence of an education programme on emotions (Pons and Harris 2005). Other more recent data also show that the period between 6 and 10 years of age is thought to be particularly conducive to the maturation of the understanding of emotional words (Nook et al. 2019) and that this is thought to be linked to the depth of vocabulary specific to emotions (Streubel et al. 2020). One might therefore think that the participants in our study who received the emotion-focused programme were able to benefit even more from this teaching. Another limitation lies in the use of an oral language assessment tool while there is little research in this field (Malec et al. 2017), particularly in the French language (Gaul Bouchard, Fitzpatrick and Olds 2009). Even though the ELO oral language assessment test has well-known qualities it also has limitations which seem more linked to a lack of information provided by its creator than to a poor assessment performance (see lists of criteria met by oral language assessment, in accordance with the psychometric analysis carried out by Gaul Bouchard et al. [2009]). Moreover, we were keen to carry out an assessment of the target components of oral language and not of general verbal content as proposed by other standardised tests deemed to be more reliable (for example, the WISC-IV). A final limitation concerns the length of the study and more particularly of the programme tested with the experimental group. Several teaching sequences during an academic year or even two would doubtless have allowed us to obtain greater effects. However, the teachers very quickly reported an evident change in the level of oral production and the atmosphere in each class and in the yard amongst the pupils, where the role allocated to language and discussion was more marked.

Finally, our research work could have implications at several levels. First of all from a scientific point of view by providing brand-new data on the impact of a programme of work for oral language based on natural situations linked with pupils' emotional experience. The programme tested here, focused on the identification and expression of emotions, provided us with a context for research into oral skills which proved its relevance. Indeed, an education programme based in reality gives meaning to language production situations in class. On the basis of the results of this study, one might think from a formative point of view of co-designing education programmes along with practitioners in the field on the development of oral skills and abilities in self-expression, in various fields. The aim being that this programme, designed for pupils aged between 9 and 11 years, would be usable with other ages after a few educational adjustments.

References

- Astington, J. W., & Filippova, E. (2005). Language as the route into other minds. In B. F. Malle (Ed.), *Other minds: How humans bridge the divide between self and others* (pp. 209–222). New York, NY: Guilford Press.
- Bajgar, J., Ciarrochi, J., Lane, R.D., & Deane, F.P. (2005). Development of the Levels of Emotional Awareness Scale for Children (LEAS-C). *British Journal of Developmental Psychology*, *23*, 569–586.
- Barrett, L. F. (2006). Solving The Emotion Paradox: categorization and the experience of emotion. *Personality and Social Psychology Review*, *10*, 20–46.
- Barrett, L.F., Lindquist, K.A., & Gendron, M. (2007). Language as context for the perception of emotion. *Trends in Cognitive Sciences*, *11*, 327–332.
- Beck, L., Kumschick, I. R., Eid, M., & Klann-Delius, G. (2012). Relationship Between Language Competence and Emotional Competence in Middle Childhood. *Emotion*, *12*(3), 503–514.
- Bennett, M., & Hiscock, J. (1994). Children's understanding of conflicting emotions: A training study. *The Journal of Genetic Psychology*, *154*, 515–524.
- Bloom, L. (1998). Language development and emotional expression. *Pediatrics*, *102*, 1272–1277.
- Bonhert, A.M., Crnic, K.A., & Lim, K.G. (2003). Emotional competence and aggressive behavior in school-age children. *Journal of Abnormal Child Psychology*, *31*, 79–91.
- Bosacki, S., & Astington, J. (1999). Theory of mind in preadolescence: Relations between social understanding and social competence. *Social Development*, *8*, 237–255.
- Bosacki, S., & Moore, C. (2004). Preschoolers' understanding of simple and complex emotions: Links with gender and language. *Sex Roles*, *50*, 659–675.
- Boyd, M. P., & Galda, L. (2011). *Real talk in elementary classrooms: Effective oral language practice*. New York, NY: Guilford.
- Cole, P. M., Armstrong, L. M., & Pemberton, C. K. (2010). The role of language in the development of emotion regulation. In S. D. Calkins & M. A. Bell (Eds.), *Human brain development. Child development at the intersection of emotion and cognition* (pp. 59–77). Washington, D.C.: American Psychological Association.
- Cutting, A., & Dunn, J. (1999). Theory of mind, emotion understanding, language, and family background: Individual differences and interrelations. *Child Development*, *70*, 853–865.
- De Stasio, S., Fiorilli, C., & Chiacchio, C. D. (2014). Effects of verbal ability and fluid intelligence on children's emotion understanding. *International Journal of Psychology*, *5*(49), 409–414.
- Denham, S.A., Bassett, H.H., Way, E., Mincic, M., Zinsser, K., & Graling, K. (2012). Preschoolers' emotion knowledge: Self-regulatory foundations, and predictions of early school success. *Cognition & Emotion*, *26*(4), 667–679.

- Dickinson, D. K., McCabe, A., & Sprague, K. (2003). Teacher rating of oral language and literacy (TROLL): Individualizing early literacy instruction with a standards-based rating tool. *The Reading Teacher*, 56(6), 554–564.
- Dunn, J., & Herrera, C. (1997). Conflict resolution with friends, siblings and mothers: A developmental perspective. *Aggressive Behavior*, 23, 343–357.
- Gaul Bouchard, M.-E., Fitzpatrick, E.M., & Olds, J. (2009). Psychometric Analysis of Assessment Tools Used with Francophone Children. *Revue canadienne d'orthophonie et d'audiologie*, 3(33), 129–139.
- Grandaty, M., & Lafontaine, L. (2016). *L'enseignement de l'oral à l'école*. Toulouse, France: Presses Universitaires du Midi.
- Grazzani, I., Ornaghi, V., Conte, E., Pepe, A., & Caprin, C. (2018). The Relation Between Emotion Understanding and Theory of Mind in Children Aged 3 to 8: The Key Role of Language. *Frontiers in Psychology*, 9, 724.
- Gendron, M., & Barrett, L. F. (2009). Reconstructing the Past: A Century of Ideas About Emotion in Psychology. *Emotion Review*, 4(1), 316–339.
- Goswami, U., & Bryant, P. (2007). *Children's cognitive development and learning. Research Report 2/1a: The Primary Review*. Cambridge: University of Cambridge.
- Harris, P.L., & Pons, F. (2003). Perspectives actuelles sur le développement de la compréhension des émotions chez l'enfant. In J.M. Coletta & A. Tcherkassof (Eds.). *Emotions: cognition, langage et développement* (pp. 209-228). Sprimont, Belgique: Pierre Mardaga.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. New York: Brookes.
- Hewitt, R., & Inghilleri, M. (1993). Oracy in the Classroom: Policy, Pedagogy, and Group Oral Work. *Anthropology and Education Quarterly*, 24(4), 30–317.
- Howe, C., & Abedin, M. (2013). Classroom dialogue: a systematic review across four decades of research. *Cambridge Journal of Education*, 43(3), 325–356.
- Izard, C., E. (1977). *Human Emotions*. New York: Plenum Press.
- Izard, C.E., Fline, S., Schultz, D., Mostow, A., Ackerman, B.P., & Youngstrom, E.A. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science*, 12, 18–23.
- Kastner, J., Raggio, D., & May, W. (2000). The relationship between language skills and later academic achievement in children. *Archives of Clinical Neuropsychology*, 15(8), 787–788.
- Khomsy, A. (2001). *ELO: évaluation du langage oral*. Paris, France: ECPA.
- Knopik, T., & Oszwa, U. (2019). Self-determination and development of emotional-social competences and the level of school achievements in 10–11-year-old Polish students. *Education 3-13*, 48(8), 972-987.

- Kwon, K., Kupzyk, K.A., & Hanraham, A.R. (2017). Emotional Expressivity and Emotion Regulation: Relation to academic functioning Among Elementary School Children. *School Psychology Quarterly*, 32(1), 75–88.
- Lane, R.D., & Schwartz, G.E. (1987). Levels of emotional awareness: a cognitive-developmental theory and its application to psychopathology. *American Journal of Psychology*, 144, 133–143.
- Langlois, R. (2012). *Les précurseurs de l'oralité scolaire en Europe: de l'oral à la parole vivante*. Rouen, France: Presses Universitaires de Rennes.
- Le Cunff, C., & Jourdain, P. (1999). *Enseigner l'oral à l'école primaire*. Paris, France: Hachette Education.
- Lindquist, K.A., Mac Cormack, J.K., & Shablack, H. (2015). The role of language in emotion: predictions from psychological constructionism. *Frontiers in Psychology*, 6, 444.
- Malec, A., Peterson, S.S., & Elshereif, H. (2017). Assessing Young Children's Oral Language: Recommendations for Classroom Practice and Policy. *Canadian Journal of Education*, 40(3), 362–392.
- Mandler, J. M. (2004). Two kinds of knowledge acquisition. In J. M. Lucariello, J. A. Hudson, R. Fivush, & P. J. Bauer (Eds.), *The development of the mediated mind: Sociocultural context and cognitive development* (pp. 13–32). Mahwah, NJ: Psychology Press.
- Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3–31). New York: Basic Books.
- McDowell, D., O'Neil, R., & Parke, R. (2000). Display rule application in a disappointing situation and children's emotional reactivity: Relations with social competences. *Merrill Palmer Quarterly*, 46, 306–324.
- Mercer, N. (2008). Talk and the development of reasoning and understanding. *Human Development*, 51, 90–100.
- Mercer, N. (2013). The social brain, language, and goal-directed collective thinking: A social conception of cognition and its implications for understanding how we think, teach and learn. *Educational Psychologist*, 48, 148–168.
- Mercer, N., Warwick, P., & Ahmed, A. (2017). An oracy assessment toolkit: Linking research and development in the assessment of students' spoken language skills at age 11-12. *Learning and Instruction*, 48, 51–60.
- Ministère de l'Éducation Nationale (2015). *Programme d'enseignement du cycle de consolidation (cycle 3)* (Bulletin Officiel spécial n°11 du 26-11-2015).
- Ministère de l'Éducation Nationale (2018). *Programme d'enseignement moral et civique de l'école et du collège (cycles 2, 3 et 4)* (Bulletin Officiel n° 30 du 26-7-2018).
- Ninio, A., & Snow, C. E. (1996). *Pragmatic development*. Boulder, CO: Westview Press.
- Nook, E. C., Stavish, C. M., Sasse, S. F., Lambert, H. K., Mair, P., McLaughlin, K. A., & Somerville, L. H. (2019). Charting the Development of Emotion Comprehension and

Abstraction From Childhood to Adulthood Using Observer-Rated and Linguistic Measures. *Emotion*, 20(5), 773–792.

Ornaghi, V., Brockmeier, J., & Grazzani, I. (2011). The role of language games in children's understanding of mental states: a training study. *Journal of Cognitive Development*, 12, 239–259.

Peng, M., Johnson, C., Pollock, J., Glasspool, R., & Harris, P.L. (1992). Training young children to acknowledge mixed emotions. *Cognition and Emotion*, 6, 387–401.

Pinker, S. (2007). *The stuff of thought: Language as a window into human nature*. London: Penguin.

Pons, F., Harris, P.L., & Doudin, P.-A. (2002). Teaching emotion understanding. *European Journal of Psychology of Education*, 17(3), 293–304.

Pons, F., Lawson, J., Harris, P.L., & de Rosnay, M. (2003). Individual differences in children's emotion understanding: Effects of age and language. *Scandinavian Journal of Psychology*, 44, 347–353.

Pons, F., & Harris, P. L. (2005). Longitudinal change and longitudinal stability of individual differences in children's emotion understanding. *Cognition and Emotion*, 19(8), 1158–1174.

Portier, C., & Peterson, S. S. (2017). Rural Northern Canadian Teachers' Discoveries about Young Children's Oral Language. *Language and Literacy*, 2(19), 109–126.

Resnick, L. B., & Snow, C.E. (2009). *Speaking and listening for preschool through third grade*. Newark, DE: International Reading Association.

Ruffman, T., Slade, L., Rowlandson, K., Rumsey, C., & Garnham, A. (2003). How language relates to belief, desire, and emotion understanding. *Cognitive Development*, 18, 139–158.

Ryan, R. M., Fauth, R. C., & Brooks-Gunn, J. (2006). *Childhood Poverty: Implications for School Readiness and Early Childhood Education*. In B. Spodek & O. N. Saracho (Eds.), *Handbook of research on the education of young children* (pp. 323–346). Hillsdale, N.J.: Lawrence Erlbaum Associates Publishers.

Saarni, C. (1999). *The development of emotional competence* (1st ed.). New York, USA: Guilford Press.

Sander, D., & Scherer, K. R. (2019). *Traité de psychologie des émotions*. Paris, France: Dunod.

Saracho, O.N., & Spodek, B. (2008). Oracy: social facets on language learning. In R. Evans & D. Jones (Eds.), *Metacognitive Approaches to Developing Oracy. Developing Speaking and Listening with Young Children* (pp. 127-137). New York: Routledge.

Schultz, D., Izard, C. E., Ackerman, B. P., & Youngstrom, E. A. (2001). Emotion knowledge in economically disadvantaged children: Self-regulatory antecedents and relations to social difficulties and withdrawal. *Development and Psychopathology*, 13, 53–67.

Storch, S.A., & Whitehurst, G.J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38, 934–947.

- Streubel, B., Gunzenhauser, C., Grosse, G., & Saalbach, H. (2020). Emotion-specific vocabulary and its contribution to emotion understanding in 4- to 9-year-old children. *Journal of Experimental Child Psychology, 193*, 104790.
- Tomasello, M., & Barton, M.E. (1994). Learning words in non-ostensive contexts. *Developmental Psychology, 30*, 639–650.
- Tomasello, M., Strosberg, R., & Akhtar, N. (1996). Eighteen-month-old children learn words in non-ostensive contexts. *Journal of Child Language, 23*, 157–176.
- Tomasello, M. (2005). *Constructing a language: A usage-based theory of language acquisition*. Cambridge, MA: Harvard University Press.
- Trentacosta, C.J., & Izard, C.E. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion, 7*, 77–88.
- Turnbull, W., Carpendale, J. I. M., & Racine, T. P. (2009). Talk and Children's Understanding of Mind. *Journal of Consciousness Studies, 6-8*(16), 140–66.
- Veirman, E., Brouwers, S.A., & Fontaine, J.R.J. (2011). The Assessment of Emotional Awareness in Children. *European Journal of Psychological Assessment, 27*(4), 265–273.
- Veirman, E., Fontaine, J. R. J., & Van Ryckeghem, D. L. (2016). A Componential Emotion Approach for the Assessment of Emotional Awareness in Youth. *Psychological Assessment, 28*(11), 1416–1426.
- Waquet, F. (2003). *Parler comme un livre. Oralité et savoir du XVIe au XXe siècle*. Paris: Albin Michel.
- Wilkinson, A. (1970). The concept of oracy. *English Journal, 59*(1), 71–77.
- Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education*. Cambridge, United Kingdom: Cambridge University Press.