Overview SIG Writing invited symposium for EARLI 2015 Design principles for teaching effective writing

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Paper 1. Gert Rijlaarsdam & Tanja Janssen

Paper 2. Elke Van Steendam, Mariet Raedts, Luc de Grez, Gert Rijlaarsdam, Huub van den Bergh, Luuk van Waes, & Chris Masui

Paper 3. Isabel Martínez, Elena Martín, & Mar Mateos

Paper 4. Julia Högemann, Pedro Rosário, José Carlos Núñez, Rebeca Cerezo, & Celestino Rodríguez

General symposium abstract

Meta-analyses about the state of the art on writing instruction have suggested strategy-oriented programs are more effective than other types of instruction for improving writing in students with and without learning disabilities. A large body of strategy-focused research has emerged in the last years. The research papers, however, provide little space dedicated to describe the specific instructional programs in detail. This symposium is derived from a forthcoming volume in the book series Studies in Writing that aims to present design features of effective intervention programs for writing. Moreover, the volume discusses the theoretical background and empirically based evidence which support the specific intervention programs. The central aim of this symposium is to design and illustrate a reporting system for interventions in writing research. The introducing paper of Rijlaarsdam and Janssen presents an initial standard table for reporting writing research interventions. In the other contributions effective writing interventions will be reported in such a way that they could serve as examples of good reporting practices, and set the floor for future reports. The paper of Van Steendam and colleagues compares different forms of modelling and synthesizes these in design principles for modelling or observational learning in learning-to-write contexts. The other two papers focus on writing-to-learn. Martínez and colleagues focus on the improvement of content-learning via the training of strategies involved in writing a synthesis text from multiple complementary sources. Högemann and colleagues discuss the effectiveness of three instructional programs designed to improve self-regulation skills in writing compositions.

Paper 1 | Design parameters for intervention studies in Writing Education

Gert Rijlaarsdam & Tanja Janssen

Abstract

While there is a certain standard when reporting about the dependent variables (variables, instruments, indices for validity and reliability), such a standard lacks for reporting the independent variable, the intervention as a complex and hierarchical programming of learning activities. This hampers replication and concurrent studies, theory building and communication about effective writing instruction. It also hampers dissemination and implementation of effective interventions into practice, which is the ultimate goal of educational intervention research. When the basics of the intervention cannot be understood, invalid implementation will be the result.

The central aim of this symposium was to design and illustrate a reporting system for interventions in writing research. In the other contributions effective writing interventions will be reported in such a way that they could serve as examples of good reporting practice, and set the floor for future reports. Based on these reports this introducing paper will present an initial standard table for reporting writing research interventions. For this symposium we choose strategy instruction as the focus of the volume, while this category of instructions proved to be so effective.

Extended summary

Meta analyses (from Hillocks 1986 to Graham et al., 2012) show that various types of interventions are effective in promoting writing skill. Interventions are grouped in broad types, and differences in effect between types are reported in these analyses. In research journals, intervention studies are published providing evidence on the effectiveness of that particular intervention. Seldom the intervention is laid out fully for the reader who wants to get insight in the intricacies of the intervention, to find out what the crucial ingredients could have been that contributed to the effects.

While there is a certain standard when reporting about the dependent variables (variables, instruments, indices for validity and reliability), such a standard lacks for reporting the independent variable, the intervention as a complex and hierarchical programming of learning activities. This hampers replication and concurrent studies, theory building and communication about effective writing instruction. It also hampers dissemination and implementation of effective interventions into practice, which is the ultimate goal of educational intervention research. When the basics of the intervention cannot be understood, invalid implementation will be the result.

There are two levels of reporting on interventions that should be covered for effective communication in research: the design principles that were set (related to the research questions) and the learning activities that were programmed as operationalization of each of these principles. Reporting design principles can be compared with reporting the definitions of the constructs measured as dependent variables. These constructs must be well chosen in line with the research question and theoretical framework presented. Reviewers must have enough details to be able to judge the validity of the constructs chosen.

Reporting learning activities, related to a design principle, can be compared with reporting items of an instrument that represents a certain construct. Reviewers must get insight into the learning

activities to assess the validity of the operationalization. The report of design principles and learning activities, for the experimental as well as for the comparison condition (concurrent experimental and/or control condition), must provide a basis for a validity check.

This kind of report could also contribute to wider and more informed and precise dissemination and implementation. Design principles can be used by curriculum designers, course developers, teachers and researchers as guidelines for designing new writing courses and curricula, and learning activities make clear what design principles mean and make implementation more precise.

The central aim of this symposium was to design and illustrate a reporting system for interventions in writing research. In this symposium, we aim to explore such a reporting system for interventions in writing. In the other contributions effective writing interventions will be reported in such a way that they could serve as examples of good reporting practice, and set the floor for future reports. Based on these report the introduction will present an initial standard table for reporting writing research interventions¹. For this symposium we choose strategy instruction as the focus of the volume, while this category of instructions proved to be so effective. In addition, a restriction to just one category of writing interventions makes it better possible to compare the design principles and the way they are operationalised in various interventions and educational cultures.

References

Graham, S., McKeown, D., Kiuhara, S. & Harris, K.R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, *104*(4), 879-896.

Hillocks, G. (1986). *Research on written composition: New directions for teaching.* Urbana, IL: National Council of Teachers of English.

Van den Bos, G. (Ed.)(2010). *Publication manual of the American Psychological Association*. 6th edition. London: American Psychological Association.

3

¹ In fact we aim to expand the standard element in APA's Journal Article Reporting Standard of describing interventions analytically (see VandenBos, 2010, page 249)

Paper 2 | Stimulating freshmen's learning through modelling in academic writing courses: from theoretical framework to instruction

Elke Van Steendam, Mariet Raedts, Luc de Grez, Gert Rijlaarsdam, Huub van den Bergh, Luuk van Waes, & Chris Masui

Abstract

In observational learning learners acquire a new skill or strategy by watching or listening to a teacher or a peer who 'models' or demonstrates the skill or the strategy under think-aloud conditions. Not all learners, however, will fully profit from watching a model. The effectiveness of observational learning depends on four constituent processes: attention, retention, reproduction and motivation (Bandura, 1986). Models usually present more information than an observer, especially a beginner, can process effectively. Hence, observers cannot learn unless they pay attention to the crucial elements in the displayed behavior. Next, they must be able to store these elements in their memory in the form of mental representations which they subsequently have to convert into actions when emulating the modeled behavior.

In this presentation we discuss intervention studies in which we facilitated university students' writing and learning activities through observation tasks. First, we discuss a number of studies in which two different forms of observational learning were used: a more inductive type of modelling in which students had to infer information on the basis of think-aloud protocols of writing processes by peers (on video) on the one hand and a more directive type of modelling in which more expert peers model a specific strategy for writing/revising a text on the other hand. In a final study, we studied the directive (explicit) and less directive (implicit) type of modelling in more detail and disentangled the effects of attention, retention and motivation in the observational learning process.

Extended summary

In our presentation we will compare and contrast different forms of modelling and synthesize these in design principles for modelling or observational learning in learning-to-write contexts.

In observational learning learners acquire a new skill or strategy by watching or listening to a teacher or a peer who 'models' or demonstrates the skill or the strategy under think-aloud conditions. Not all learners, however, will fully profit from watching a model. The effectiveness of observational learning depends on four constituent processes: attention, retention, reproduction and motivation (Bandura, 1986). Models usually present more information than an observer, especially a beginner, can process effectively. Hence, observers cannot learn unless they pay attention to the crucial elements in the displayed behavior. Next, they must be able to store these elements in their memory in the form of mental representations which they subsequently have to convert into actions when emulating the modeled behavior.

In this presentation we discuss a number of intervention studies in which we facilitated university students' writing activities through observation tasks. In these pretest – posttest design studies the effects of observation is tested on different types of written genres in students' mother tongue (L1) or a foreign language (L2). We start our presentation with a discussion of three intervention studies in which two different forms of observational learning were used: a more inductive type of modelling in which students had to infer information on the basis of think-aloud protocols of writing

processes by peers on the one hand (Raedts, Rijlaarsdam, Van Waes, & Daems, 2007; Van Steendam, Rijlaarsdam, & Van den Bergh, 2012, 2014) and a more directive type of modelling in which more expert peers model a specific strategy for writing/revising a text on the other hand (Van Steendam, Rijlaarsdam, Sercu, & Van den Bergh, 2010).

In a first intervention study, Raedts et al., (2007) compared the learning effects of 144 first-year students in an academic writing task: a synthesis of research literature. Students in the controllearning condition practised the new text genre by five exercises of ascending difficulty. Students in the experimental learning condition observed six pairs of video-based peer models performing the last writing exercise of the control group under think-aloud conditions. After each video, students in the learning-by-observation condition had to evaluate and reflect on either the weak or the strong model's writing approach. The results show that observational learning had a positive effect on students task knowledge and writing performances. Also in Van Steendam et al. (2012, 2014) students had to infer information about successful writing strategies, in this case revision processes, on the basis of comparing different types of revisers. Following studies by Wallace et al. (cf. Wallace & Hayes, 1991), students revising collaboratively watched both a more global and a more local revisor prior to a collaborative revision task of an opinion essay in English as a foreign language. Results showed that dyads in the observation conditions of the cross-lagged panel design study outperformed dyads in a control group not only with regard to the frequency of correctly transformed number of lower-order (LOCs) and higher-order concerns (HOCs) but also had a much more recursive and less linear revision process than pairs in the other condition. Additionally, they also displayed more metacognitive and meta-analytic activities (Braaksma, Rijlaarsdam, Van den Bergh, & Hout-Wolters, 2004).

In a third study, university students revising individually and collaboratively were shown a more explicit, directive peer model who demonstrated the different steps to take in a revision strategy prior to an emulation revision task (Van Steendam et al., 2010). The condition was compared to a more traditional practising condition in which students practised the revision strategy collaboratively prior to the revision task. Results show that with regard to revision quality no significant difference was found between students revising individually in the observation condition and the practising condition. However, for the students revising collaboratively, the observation condition turned out to be the more effective condition as dyads in that condition revised better than dyads in the practising condition.

The studies discussed above thus illustrate that modelling, both as a more directive (explicit) type of modelling and as a less directive (implicit) type of modelling, is more effective than more traditional practising conditions with regard to students' writing and revision products and processes.

In a final, fourth study, we studied the directive (explicit) and less directive (implicit) type of modelling in more detail and disentangled the effects of attention, retention and motivation in the observational learning process. We tested an explicit and an implicit version of an instructional video in which a peer model demonstrates a successful five-step writing strategy to write up a research synthesis represented by a mnemonic in a pretest – posttest design study. Results show that students in the explicit-strategy-condition had a more accurate representation of the new writing task compared to students in the implicit-strategy-condition and wrote cognitively more complex summaries than students in the implicit-strategy-condition.

In our presentation we will describe the learning activities and the instructional actions carried out to improve the effectiveness of the observation tasks by triggering and enhancing students' attention, retention and motivation level.

References

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice- Hall.
- Braaksma, M., Rijlaarsdam, G., van den Bergh, H., & Hout Wolters, B. A. M. (2004). Observational learning and its effects on the orchestration of the writing process. Cognition & Instruction, 22, 1–36. doi:10.1207/s1532690Xci2201_1.
- Raedts, M., Rijlaarsdam, G., Van Waes, L., & Daems, F. (2007). Observational learning through videobased models: Impact on students' accuracy of self-efficacy beliefs, task knowledge and writing performance. In G. Rijlaarsdam (Series Ed.) and P. Boscolo & S. Hidi (Volume Eds.), Studies in Writing, Volume 19, Writing and Motivation (pp. 219-238). Oxford: Elsevier Science and Technology.
- Van Steendam, E., Rijlaarsdam, G., Sercu, L., & Van den Bergh, H. (2010). The effect of instruction type and dyadic or individual emulation on the quality of higher-order peer feedback in EFL. *Learning and Instruction*, 20(4), 316-327.
- Van Steendam, E., Rijlaarsdam, G., van den Bergh, H. (2012, July). *Collaborative revision of other students' writing in a foreign language*. Paper presented at 13 Sig Writing Conference, Porto.
- Van Steendam, E., Rijlaarsdam, G., & Van den Bergh, H. (2014, August). *The interplay between instruction, group composition and interaction in EFL collaborative revision*. Paper presented at EARLI SIG Writing, Amsterdam.
- Wallace, D. L., & Hayes, J. R. (1991). Redefining revision for freshmen. *Research in the Teaching of English*, 25(1), 54–66.
- Rijlaarsdam, G., Braaksma, M., Couzijn, M., Janssen, T., Raedts, M., Van Steendam, E., Toorenaar, A., & Van den Bergh, H. (2008). Observation of peers in learning to write, Practice and Research. *Journal of Writing Research*, 1(1), 53-83.

Paper 3 | Design principles for teaching effective reading and writing to learn contents

Isabel Martínez, Elena Martín, & Mar Mateos

Abstract

The presentation will focus on the teaching of interactive use of reading and writing as a learning tool. Different meta-analyses about interventions focused on reading and writing instruction have suggested the effectiveness of strategy-oriented programs for improving these competences in students. For that reason, the main goal will be to analyse the theoretical and empirical grounded principles of an effective strategy-oriented program.

This intervention focuses specifically on the improvement of content-learning in upper primary education via the training of strategies involved in writing a synthesis text from multiple complementary sources on a particular topic. All these strategies are taught through different methodologies promoting the transfer control to the students (Fidalgo, García, Torrance, & Robledo, 2009; Graham & Harris, 1993).

This presentation will focus on explaining the learning activities, the sequence followed and the instructional actions carried out to improve content-learning. A detailed analysis of each phase of the intervention, a summary of previous intervention studies supporting the effectiveness of strategy intervention in improving topic-learning and the key components of the program will be provided.

Extended summary

In today's information society, it is necessary to compare, contrast and integrate information provided from several types of source in order to transform the information into knowledge (Pozo & Postigo, 2000). With this in mind, it is important to teach students how to create written syntheses of information from a number of different texts. However, there are very few studies that have proposed teaching the necessary strategies for creating these syntheses. Furthermore, the majority of such studies have been carried out in higher education settings (Boscolo, Arfé & Quarisa, 2007; Segev-Miller, 2004).

Therefore, the WSL (Writing Synthesis to Learn) program presented in this symposium has been designed to teach students in the final grade of primary education how to use reading and writing appropriately as tools to learn the content which the texts aim to convey. It deals with an intervention focused on the teaching strategies involved in the drafting of a written synthesis from various texts. The advantages of this type of instruction, involving both reading and writing (Graham & Harris, 1996; Mateos, 2001; Torrance, Fidalgo & García, 2007; Zimmerman, 2000) as well as the integrated use of the two together, (Raphael & Englert, 1990; Wray & Lewis, 1997) have been widely studied.

The specific objective is that the students learn to read and write by selecting, drafting, connecting and integrating the information coming from different texts with the goal of learning these contents in a profound and constructive way.

The WSL program focuses on strengthening the development of the strategies involved in the process of drafting a synthesis through diverse teaching methods. The strategies taught through this intervention are: (1) selecting important ideas from the source texts, (2) elaborating upon the

information using prior knowledge, (3) organizing the content, and (4) integrating information from both source texts. Through different teaching methods, based on the progressive transfer of control, autonomy and self-regulation of the learning process is encouraged among students. Based on previous studies (Wray & Lewis, 1997), all the strategies are taught using a variety of methods, such as (1) teacher modeling, (2) collaborative activity, (3) guided activity, (4) students' individual activity and (5) the support of a written guide. Thanks to the implementation of this program, as different studies have shown, the students are able to achieve a number of important goals that provide them with a quality learning experience.

The WSL program consists of 12 sessions that are divided into three phases. In each phase, a different synthesis task is carried out, thereby offering the students an increasing degree of control as the program progresses. Throughout the stages, therefore, there is a decrease in the number of activities carried out by the instructor and an increase in the number of activities that the students are in charge of themselves. Additionally, the students engage in collaborative writing in order to facilitate the transition between the teacher modeling phases and those of working on their own.

The WSL program, based on the results derived from a number of studies carried out, is effective and enables 6th-year primary school students to make better syntheses from two source texts containing complementary information, thereby learning their contents in a more profound and constructive way (Martínez, 2012).

A number of implications for education can be seen in the application of this intervention. Although many studies have pointed out the intrinsic difficulties in performing synthesis tasks (Mateos & Solé, 2009; Segev-Miller, 2004), the WSL program shows that specifically teaching how to carry out a synthesis can help students to make better use of reading and writing as instruments in knowledge construction.

In short, it seems useful and pertinent to teach primary school students to synthesize information from various source texts as a way of getting them to make good use of reading and writing as learning tools.

Paper 4 | Promoting self-regulatory skills in writing through story-tool and SRSD model: A study with fourth graders

Julia Högemann, Pedro Rosário, José Carlos Núñez, Rebeca Cerezo, & Celestino Rodríguez

Abstract

The present work focuses on the promotion of Self-Regulated skills in writing through 3 different instructional formulas. For many young struggling writers it is crucial to intervene as early as possible, providing them effective strategies for their learning. This study investigated the effectiveness of three instructional programs designed to improve self-regulation skills in writing compositions of 414 fourth graders' (21 classes), namely: (i) the self-regulated strategy development (SRSD) model proposed by Graham and Harris (2003) which is based on teaching students, writing and self-regulation strategies; (ii) a combined program that includes the previous SRSD model plus the story-toll of "Sarilhos do Amarelo [yellow trials and tribulations]" developed by Rosário, Núñez & González-Pienda (2007) with the aim of promoting students' use of self-regulated learning (SRL) strategies; (iii) and finally, an extension of the latter instructional program by adding suggestive feedback given by teachers after each writing task. Following a pre-post design with repeated measures along five months, instructional programs were compared to a control group that followed its own school curriculum. A summary of each instructional program and differential components of each one will be provided. In accordance with previous findings of Graham and Harris (2003), the SRSD model was seen to significantly improve the average writing quality of compositions, although its conjunction with the "Sarilhos do Amarelo" story-toll lead to an overall superior performance and improvement in composition skills. In turn, adding suggestive feedback to instructional programs was not found to provide a conclusive effect on the quality of compositions.

Extended summary

Knowing that Self-regulated Strategy Development (SRSD) has proven to be a highly effective instructional writing program, with more then 100 studies (Graham, Harris & McKeown, 2013), this study examines the potential benefits of the SRSD model (Graham and Harris, 2003) and the benefits of adding it to the story-tool "Sarilhos do Amarelo [Yellow trials and tribulations]" (Rosário, Núñez-Pienda & González-Pienda, 2007).

Moreover, since feedback is considered to be a powerful tool in enhancing student's learning (Bergh, Ros & Beijaard, 2013), it has been equally assessed in the present study. Therefore, the purpose of this paper is to examine the effectiveness of three instructional programs (i.e., SRSD model; SRSD model plus the story-tool; and the latter plus feedback) designed to improve self-regulation skills in writing compositions of young writers.

The participants were 414 fourth graders attending 21 classes in six elementary schools located in northwestern Portugal. The fourth-grade classes were randomly assigned to four conditions, with five intact classes participating in each condition: i) SRSD instruction only; ii) SRSD plus the story-toll of "Sarilhos do Amarelo [Yellow trials and tribulations]"; iii) an extension of the latter instructional program by adding feedback; iv) and a comparison condition.

The study involved a quasi-experimental pre-post design with repeated measures along five months. Pre-test was administrated two weeks before the start of the instructional program. All students

wrote a story (with topics previously defined by the authors) and completed a survey to assess their attitude, self-efficacy and self-regulation toward writing.

Writing instruction was carried out in all conditions, with the exception of the comparison condition, by the first author, once a week, in one-hour regular Portuguese language class. Furthermore, all conditions (including comparison) wrote once a week a story and fulfilled a survey (suchlike the pretest story survey). In the case of the comparison condition, students were instructed by their regular teacher.

The material for teaching story writing via the SRSD model (Graham and Harris, 2003) was adapted to the Portuguese students by following the structure and the specific goals of SRSD. The first author carried out the six stages of the SRSD model along five months (i.e., eleven sessions).

The instructional program "Sarilhos do Amarelo" [Yellow trials and tribulations]" (Rosário et al., 2007) was embedded into the previous SRSD model. The program included the same practical tasks of SRSD, however the sessions started with the reading of the book chapters that provided opportunities to learn useful self-regulated strategies while the characters were facing different challenges. The characters' behavior, based on children's real life situations, allowed them to distance themselves from the situation and to reflect about what was happening. This learning permits them to transfer it to their own life and learning tasks (i.e., writing,).

The last instructional program followed the same structure of the latter one, differing in one specific task: after the writing of the story (once a week), teachers gave individual and qualitative feedback to each written composition to enhance student writing. This specific task aimed to foster the student's capability to reflect more deeply about their papers and to select the right strategies to improve qualitatively in their next assignment.

Following a pre-post design with repeated measures once a week and along five months, five measures were obtained from each student. The student's SRL Strategies Inventory (Rosário, Núñez, González-Pienda, Cerezo, & Valle, 2010) rated on a 5-point Likert scale, assesses nine self-regulated learning strategies regarding to the three phases of the SRL process: planning, execution and evaluation. To assess their attitude toward writing, students had to answer to seven questions from a 4-item scale, developed by Graham, Berninger and Fan (2007). The third measure, which is defined by five questions from a 4-item scale, measured students' efficacy for planning and writing a paper (Graham, Harris, & Mason, 2005). The items from the last two measures were translated and adapted to the Portuguese population. Writing quality was as well scored, adapting the Harris and Graham's (1996) story grammar scale and adding to it a set of criteria adopted in the 4th grade Annual National Assessment (Educational Progress Test in the Portuguese language, 2014). Stories written by students were scored by their own teacher on a 5-point scale, with a score of 1 representing the lowest quality of writing and a score of 5 the highest quality. Furthermore, the quality of teachers' feedback (last instructional program) was as well analyzed according to the written stories.

Data collection ended by July 2014 and are currently being analyzed; however preliminary results from the participants obtained in the Annual National Assessments (Educational Progress Test in the Portuguese language, 2014), seem to indicate that the SRSD model significantly improves the average writing quality of compositions, although its conjunction with the "Sarilhos do Amarelo" story-toll lead to an overall higher performance and improvement in composition skills. On the other

hand, unlike to what was expected, adding teacher's feedback to instructional programs was not found to provide a higher effect on the quality of the compositions than the other conditions.

Theoretical and educational significance of the research

This work supports previous studies showing that students who receive training in SRL strategies (e.g., goal setting, time management, help seeking) seem to engage more deeply in school tasks and obtain better academic achievement (e.g., Rosário, González-Pienda et al., 2010), particularly in improving writing quality even in struggling writers, as shown by Graham, McKeown, Kiuhara and Harris (2012). Moreover, previous findings of the current research indicates that the student's writing skills can be more enhanced if SRL story-toll programs are added to SRSD writing instruction.

References

Bergh, L., Ros, A., & Beijaard, D. (2013). Teacher feedback during active learning: Current practices in primary schools. *British Journal of Educational Psychology*, *83*, 341–362

Graham, S., & Harris, K. R. (2003). Students with learning disabilities and the process of writing: A meta-analysis of SRSD studies. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities (pp. 323–344)*. New York: Guilford Press.

Graham, S., Harris, K., & Mason, L. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: *The effects of self-regulated strategy development*. *Contemporary Educational Psychology, 30,* 207-241

Graham, S., Berninger, V., & Fan, W. (2007). The structural relationship between writing attitude and writing achievement in first and third grade students. *Contemporary Educational Psychology, 32,* 516-536

Graham, S., McKeown, D., Kiuhara, S., Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational*, 104(4), 879-896. doi: 10.1037/a0029185

Graham, S., Harris, K. R., & McKeown, D. (2013). The writing of students with LD and a meta-analysis of SRSD writing intervention studies: Redux. In L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of Learning Disabilities* (2nd ed., pp. 405–438). NY: Guilford Press.

Harris, K. R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation* (2nd ed.). Cambridge, MA: Brookline Books.

Rosário, P., Núñez, J.C., & González-Pienda, J.A. (2007). *Sarilhos do Amarelo*. Porto: [Yellow's trials and tribulations]. Porto: Porto Editora.

Rosário, P., González-Pienda, J.A., Pinto, R., Ferreira, P., Lourenço, A. & Paiva, O. (2010). Efficacy of the program "Testas's (mis)adventures" to promote the deep approach to learning. *Psicothema, 22* (4), 828-834.

Rosário, P., Núñez, J. C., González-Pienda, J., Cerezo, R., & Valle, A. (2010). Yellow's trials and tribulations project. In: J. Fuente Arias, & M. Ali Eissa, (Eds.), *International Handbook on Applying Self-regulated Learning in Different Settings*. Almería: Education & Psychology I+D+i.