THE EFFECT OF ALTERNATIVE ASSESSMENT METHODS ON YOUNG LEARNERS' AUTONOMY AND SELF-REGULATION: A QUASI-EXPERIMENTAL STUDY

Zoe Kantaridou[1] & Christine Hatzopoulou[2]

[1]University of Macedonia – Greece, [2] State school ELT teacher

Abstract

The aim of the study is to examine the implementation of Alternative Assessment in English as a Foreign Language (EFL) in a state primary school as proposed by the Institute of Educational Policy (IEP). Mixed research methods are employed. The quantitative data were analyzed, compared and contrasted along with qualitative data to prove that different types of Descriptive Assessment (DA) and learner portfolios have a favorable impact on Young Learners' (YL) autonomy and self-regulation. After implementing a two-month period intervention, it was found that both experimental group pupils' Relative Autonomy Index (RAI) for self-regulation and performance in the language test significantly improved in comparison to their peers in the control group. The results are discussed in relation to the pedagogical implications they have for EFL in YL.

1. Introduction

The Greek Ministry of Education recently introduced two important reforms on language education in schools: the Integrated Programme of Studies for Foreign Languages – IPFL (2016) and a pilot version of Descriptive (alternative) Assessment (DA) of learning (Ινστιτούτο Εκπαιδευτικής Πολιτικής – IEP, 2017). Both comply with the ongoing worldwide changes in society, education, schooling and learning and the demand for flexibility, teamwork, which dictate a shift to self-regulated learning, especially in foreign-language education (Kohonen, 2003).

This study is an attempt to evaluate the degree to which alternative types of assessment may lead to increased levels of self-regulation and autonomy in learning

as well as pupils' performance. It deals with the alternative type of assessment of YL as it was suggested by IEP.

2. Alternative/ Descriptive Assessment (DA)

The DA proposed shares most of the characteristics of alternative assessment such as self- and peer-evaluation and the completion of a learning portfolio. It is a holistic approach to assessment integrated into the learning process engaging the learners on a daily basis.

Alternative assessment falls into the category of criterion-referenced and formative assessment. Criterion-referenced assessment implies comparison to criteria of learning set in the curriculum rather than comparison to other students (Cameron, 2001, p. 223). Formative assessment refers to 'assessment *for* learning', i.e., it "aims to inform on-going teaching and learning by providing immediate feedback" (Cameron, 2001, p. 222). Formative assessment may provide "teachers with more frequent evidence of students' mastery of standards to help teachers make useful instructional decisions, targeting at improving students' learning" (Stiggins, 2005, p. 326). The immediate feedback involved in formative assessment provides the scaffolding that learners need for development (Mak & Wong, 2018). In effect, it provides the structure necessary for the development of perceptions of self-competence which may lead to autonomy and self-regulation (Grolnick & Raftery-Helmer, 2015).

Kohonen (2000) lists the main forms of alternative assessment in language learning as follows: oral interviews, story or text retelling, writing samples, projects and exhibitions, experiments and demonstrations, constructed response items, teacher observation, and learning portfolios. The present study describes the results of portfolio building in a class of young EFL learners.

3. Self-regulation

As learning and assessment are interwoven, so are theories of motivation, learner autonomy and self-regulation. Early theories of motivation focused on 'unconscious drives' and the function of 'stimuli and reinforcement'. Current theories bridge

internal thoughts, opinions and emotions with the final action of learning (Dörnyei, 2001).

Self-determination theory (SDT), developed by psychologists Ryan and Deci (2000), falls into the category of goal theories. It applies to academic settings and the individuals' need to feel control over their lives as well as their learning. SDT supports that intrinsic motivation exists when people feel *competent*, *related* to other people and *autonomous. Competence* relates to learners' perceptions of ability and self-efficacy beliefs developed both in academic and social contexts. It can be cultivated through flexible structure, clear instructions and positively phrased feedback (Grolnick & Raftery-Helmer, 2015). *Autonomy* is the feeling that individual actions originate from oneself without being connected with individualism. Autonomy enhances internalization, which "is defined as the process by which people actively transform external regulation into internal regulation" (Senécal et al., 1995, p. 609). Learners who innately cultivate the feeling of autonomy feel self-initiated and not externally controlled (Ryan & Connell, 1989). Teachers may not provide learners with the feeling of autonomy directly, but they can ensure interpersonal conditions that support learners' autonomy (Reeve et al., 2008). Finally, the need for *relatedness* is of vital importance for internalization. The feeling of belonging and connection with others facilitates the above transformation. When others care for the learners and treat them as individuals who can succeed and when learners feel loved and valued then relatedness is satisfied (Grolnick & Raftery-Helmer, 2015). These three needs help people feel self-determined or else be intrinsically motivated.

A basic dichotomy in SDT is between extrinsic and intrinsic motivation. *Extrinsic* motivation describes engagement in an activity in order to gain a reward or avoid punishment. Under these circumstances, individuals may not gain any satisfaction or sense of fulfillment but they opt to do something in order to avoid an unpleasant situation. (Ryan & Deci, 2000). By contrast, *intrinsic* motivation characterizes individuals who are interested in an activity and the pleasure gain as an end in itself. It originates from the self, while extrinsic motivation springs from the outside. More often than not, people are engaged in tasks and activities in their everyday life that are extrinsically motivated. This is what happens with learning as well. Most

educators know that the students are called upon to perform tasks not enjoyable enough. Thus, according to Ryan and Deci (2000) teachers should promote more active learning in order to stimulate learners to eagerly engage in it. This effort is not always successful and may result in varied types of motivation, some of which may even deprive learners of their feeling of agency.

Thus, "motivation can vary greatly in its relative autonomy" (Ryan & Deci, 2000, p. 54). There are examples of tasks that are carried out not because they are interesting or challenging but because of an interesting and challenging outcome. For instance, students sometimes do tasks that will be beneficial for their later career although the task may be uninteresting at present. This type of extrinsic motivation entails some kind of personal commitment (Ryan & Deci, 2000). On the other hand, if a task is carried out in order for the students not to be punished by the parents it is a type of extrinsic motivation which "involves compliance with an external regulation" (Ryan & Deci, 2000, p. 71).
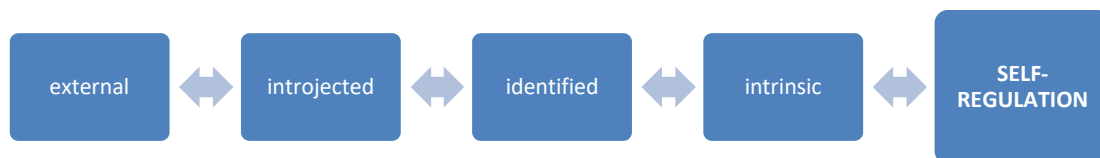

Figure 1: Motivational continuum to self-regulation
(adapted from Ryan and Deci, 2000)

Ryan and Deci regard that a continuum exists from external to the very left to self-regulation to the right (see figure 1). *External* motivation is the least self-determined motivation and the least autonomous. *Introjected* regulation, in the next stage, postulates that people still feel controlled and perform actions "in order to avoid guilt or anxiety or to attain ego-enhancement or pride" (Ryan & Deci, 2000, p. 62). In *identified* regulation individuals identify with the importance of a behavior although they may not inherently enjoy it. Finally, *integrated* regulation is the more autonomous form of motivation and occurs when identified regulation is fully absorbed by individuals. Recent studies into these dimensions have implied that

integrated and identified regulations may not differentiate (Sheldon et al., 2017). When the behavior is absorbed to such an extent that it becomes part of one's personal beliefs and values, it resembles the *intrinsic* type of motivation. In actual school context, not all teachers provide students with adequate tools to develop their inherent curiosity for learning and thus self-regulate their learning (Zimmerman, 2002). Emphasis on testing and summative assessment is considered to bring about too much extrinsic motivation, which leads learners to focus on performance rather than mastery goals (Ames, 1992). These lead to the conclusion that a range of different assessment methods should be incorporated in order to cater for different learning styles and student personality types, which may internalize educational demands differently (Seale et al., 2000).

Littlewood (1999) distinguished between two types of autonomy: proactive and reactive. In *proactive* autonomy, learners are able to set goals, determine methods and evaluate the progress. It would be applicable to more mature learners or those that are acquainted with the practice from their general school practices. *Reactive* autonomy, on the other hand, is probably more fitting for younger learners and/or those who are more used to teacher-centered education and more hierarchical social structures. The issue here is that once a certain autonomous direction is initiated, the learners are empowered to "organize their resources autonomously in order to reach their goals" (Littlewood, 1999, p.75).

Pintrich (2000) provides an instructional framework of the four stages of self-regulation: a) forethought, planning, and activation of prior knowledge, which motivate students to goal-setting and planning for time and effort; b) monitoring, which raises metacognitive awareness of task demands, time and help demands; c) control, which involves selection and adaptation of language learning strategies and re-clarification of task demands; and d) reaction and reflection, which involves cognitive and affective evaluations and attributions of success or failures. These stages do not operate linearly but in a cyclical or iterative manner. They engage learners in a dynamic cycle of monitoring, control and reflection of the effort, skills, and needs. The last stage of reflection is especially important to cultivate adaptive attributions, which contribute to higher academic achievement. Reflection is also one of the key elements in learner portfolios.

4. Learner portfolios and self-regulation

Research has generally supported that portfolio building will enhance the learners' self-regulation skills (Cresswell, 2000; Lam, 2014). However, certain conditions need to be safeguarded towards this end. The first condition is the inclusion of a *reflective* comment on the part of the learners on the process of drafting and revising their work and the decision process to determine the versions to be included in the portfolio. With younger learners the above may also involve some direct training in self-regulation skills and strategies. This reflection should include cognitive (linguistic, e.g., genre awareness), affective (self-efficacy-building) and behavioral dimensions (revision skills). Another condition may be grading, i.e. whether *grading* is delayed until the portfolio is complete or a grade is allocated to every draft or writing genre of its contents. This is an especially important parameter as in many educational settings there is heavy emphasis on competition and grades among the students. The final condition is the provision for multiple sources of feedback beyond the teacher generated one. Self- and peer-feedback, when smoothly integrated into the process, are especially conducive to the development of self-regulation (Lam, 2014).

Lam (2014) offers recommendations for EFL teachers willing to incorporate portfolio assessment in their classrooms with the view of promoting self-regulation. First and foremost is the adaptation of the portfolio requirements to the sociocultural background of the classroom and the instructional and assessment practices of the school; then, a bottom-up approach to portfolio contents and assessment criteria, which will enhance participative decision-making; emphasis on formative assessment of tasks with possible suspension of grading in order to ease anxiety from grade-conscious students; regular self, peer and teacher assessment of student's tasks; provision for the empowerment of learners' affective aspect such their motivation and self-efficacy, through emphasis on constructive feedback.

Investigating classroom-based portfolio assessment, Lam (2016) concluded that taking special care of the learners' affective needs during assessment and aligning teaching and portfolio contents accordingly will enhance learning. On the contrary,

emphasis on grade will inhibit learners. He recommends that teachers train their learners into the reflective aspects of portfolios and provide feedback to them.

Mak and Wong (2018) investigated the effects of employing portfolio assessment on the self-regulation development of primary school pupils in Hong Kong. Qualitative data in the above study included focus interviews with pupils, analysis of teaching material and classroom observations, among others. Mak and Wong concluded that it was the teachers' careful scaffolding that provided the necessary tools to the pupils to evolve. The instructional scaffolding included teaching material in goal-setting, activating prior knowledge, awareness of assessment criteria in writing, and self- and peer-assessment. The beneficial results for the pupils were "increased agency and goal-orientedness", "enhanced capacity to evaluate and monitor own work", "greater autonomy in handling feedback" and "willingness to undergo critical self-reflection" (Mak and Wong, 2018, pp. 9–12).

In a study with almost 300 (10/11-year-old) primary school pupils in Hong Kong, Law (2011) used an adapted instrument to measure degrees of autonomy in reading. Law calculated the relative autonomy index of her participants and statistically analyzed it in relation to their goal orientations and type of regulation. She compared two experimental conditions of direct reading instruction (drama techniques and jigsaw approach) and one control condition with no supplements to the direct reading instruction. She concluded that more autonomous types of regulation are associated with higher order skills and higher performance in reading in both experimental conditions due to the instructional scaffolding affordances provided through cooperative reading. Moreover, the jigsaw approach was found to provide more opportunities for negotiation of meaning and cooperation with peers as it produced better reading performance results than the drama techniques. The study comprises an example of culturally adapted self-regulation training.

Stefanou et al. (2004) propose three types of autonomy support for the learners: a) organizational, in terms of decision-making in classroom management issues, b) procedural, in terms of autonomy to choose material to work from and display, which encourage involvement in the task, and c) cognitive, in terms of negotiation of standards, problem-solving and help seeking, which result in long-term affective investment and higher order thinking skills.

Lo (2010) argues that the greatest challenge for the teachers who wish to implement portfolio assessment in their classrooms is to balance the degree of scaffolding and guidance afforded to the students. This balancing depends on the students' age, their level of familiarization with the process of portfolio completion and the degree of self-regulation they exhibit. In Lo's (2010) study, despite the fact that the students were at university level, they lacked such maturity and experience, and the extent of decision-making and scaffolding on the part of the teacher was considerable at least in the initial stages. This finding has direct implications for our study which involves primary school students at the beginning of their language learning journey. Lo also reported that the main benefits of the students after the portfolio assessment process fall under four domains: cognitive (in the terms of expanding vocabulary and gaining general knowledge about cultures), affective (positive attitudes on language learning, enhanced interest, sense of achievement and enjoyment), social (cooperation with peers) and metacognitive (increased awareness of own strengths and weaknesses).

5. The present study

The overall aim of this research is to provide insight into the suitability of DA as proposed by the IEP for primary education. The study uses a model of convergent parallel mixed methods, as both quantitative (a questionnaire and a language test) and qualitative (student self-assessment handout) data were collected at the same time and contributed to the overall outcome (Creswell, 2014). The quantitative methods present more objective, measurable data and comprise the basis of the study while the qualitative ones provide more insights by the pupils who are directly involved and can strengthen and illustrate the quantitative results. This is especially useful in the investigation of complex issues (Dörnyei, 2007). Based on the SDT model of self-regulation and having applied alternative assessment methods such as those proposed by IEP, a quasi-experimental research design was implemented, where two classes were randomly assigned to experimental or control groups.

5.1 Research questions

The following research questions address whether DA affects motivation and learner competence and helps pupils become more autonomous learners:

1. What is the effect of DA on pupils' regulation types (intrinsic, identified, introjected, extrinsic)?
2. What is the effect of DA on pupils' self-regulation and autonomy (RAI index)?
3. What is the effect of DA on pupils' language outcomes?
4. Does training in DA affect pupils' differently in relation to their level of competence?
5. Which are the pupils' perceptions of the DA methods used?

5.2 Participants

The participants in this research were forty 3rd Grade pupils, aged 9, from two classes of a public primary school in the western suburbs of Thessaloniki. It is considered a convenience sample (Dörnyei & Taguchi, 2010) as the second author had access to them as their EFL teacher. In both classes the pupils were at A1-A2 level of competence in English according to the Common European Framework of Reference for Languages (Council of Europe, 2020). The particular school serves about 250 pupils of varying levels of socio-economic status. Participants were equally distributed in gender. The experimental group (22 pupils: 11 boys and 11 girls) and the control group (18 pupils: 9 boys and 9 girls) were randomly selected.

5.3 Instruments

Three instruments were used for the purposes of the research. The first instrument employed is a questionnaire examining pupils' motivation and self-regulation (Appendix I). It is an adaptation of the academic Self-Regulation Questionnaire (SRQ-A) (Ryan & Connell, 1989). Its aim is to clarify the type of motivation each pupil unconsciously represents. It consists of four parts, each asking pupils to respond to the following questions: (a) "Why do I do my homework?", (b) "Why do I work on my classwork?", (c) "Why do I try to answer hard questions in class?" and (d) "Why do I try to do well in school?". The question in each part is followed by eight items to be answered on a 4-point Likert scale: 4=very true, 3=sort of true, 2=not very true,

1=not at all correct. In each part, there are items corresponding to one of the four regulation types: intrinsic, identified, introjected and external.

As noted earlier, the more control types of regulation, external and introjected have a negative weight while the more autonomous types, such as identified and intrinsic have a positive one. To calculate the overall regulation of the students the Relative Autonomy Index (RAI) is calculated as a heuristic device. The formula suggested for SRQ-A was used: {2xIntrinsic+ Identified- Introjected- 2xExternal Regulation}. RAI scores may range from -2 to +2. The Cronbach alphas of the four scales of regulation of the adapted SRQ-A used in the present study are: external *α*=0.829, introjected *α*=0.673, identified *α*=0.451, intrinsic *α*=0.822.

The second instrument is a language test used for both the control and experimental group. It was designed based on the first three units of the assigned course book, Magic Book 2 (Alexiou & Mattheoudakis, 2011). It included 10 graded activities testing the new grammar and vocabulary the pupils would be exposed to during the intervention period and amounted to a total score of 60. The Cronbach alpha of the language test showed very good internal consistency both for the pre and the post intervention period (a=0.842 and a=0.802, respectively).

The final instrument is the self-assessment handout suggested by the IEP and was used for the pupils of the experiment group only. It was given at the end of each class session, twice a week (appendix II). As the original handout suggested by the IEP guide (Ινστιτούτο Εκπαιδευτικής Πολιτικής – IEP, 2017, Vol. C) was deemed rather long, it was adapted in that it included only six questions, translated into Greek and formatted to become more appealing for YL. Its six questions addressed issues the participants liked or not throughout a particular session, what they found easy or difficult and if they liked co-operating with their peers. This final instrument related with the reflective aspect of the learners' portfolio.

5.4 *Teaching intervention*

The teaching intervention for the experimental group included the incorporation of the following in the classroom:

- self and peer correction in dictation, drawing dictation, handicraft dictation to practice and/or revise colors, parts of the body and seasons,

- role-playing (on the dialogues of the course book), dramatization of the story in a mute video,

- kinesthetic games: 'Simon says' (parts of the body), miming games (to practice present continuous), mystery game (to revise seasons),

- board games: Bingo (articles, colors, parts of the house, clothes), matching game

  (seasons and months; countries and animals and present simple), spot the difference in groups (prepositions of place), guess who (clothes), crosswords and hidden words (vocabulary consolidation)

- creating a poster: "Friends don't fight"

Learner portfolios included short written assignments, learners' drawing and handicraft tasks as well as their weekly self-assessment handouts.

5.5 Procedure

The two-month period DA intervention was implemented in the experimental group only. It started on 10th January 2019 and was completed on 10th March 2019. The control group followed the school syllabus as it is usually done without incorporating any alternative assessment method. The experimental syllabus was enriched with the activities described in section 4.4 practicing all four skills throughout each of the 15 sessions in various combinations. The motivation questionnaire and the language test were administered to the pupils of both the experimental and control group both prior to and after the two-month intervention.

5.6 Data analysis

SPSS version 24 software was used for the quantitative part of the study. Cronbach Alpha was used to measure the reliability of the language test and the questionnaire and *t*-test analyses were utilized to compare results between the experimental and control groups and between the pupils' pre- and post-stage performance and motivation levels. The qualitative data from the answers of the self-assessment handout were dealt with using thematic analysis (Braun & Clarke, 2006) and they were carefully coded into themes and subthemes.

6. Results and discussion

The objective of the current research was to examine the degree to which the experimental group which was under a two-month DA intervention period might end up more self-regulated and with better language outcomes than their counterparts who received no such treatment. Below we present the results and discuss them in an effort to answer the research questions.

6.1 The effect of DA on pupils' regulation types (intrinsic, identified, introjected, extrinsic)

Statistically significant differences emerged in the *t*-test comparison between the experimental and the control groups as far as the components of self-regulation are concerned. The independent sample *t*-test indicated that before the intervention the two groups differed statistically in their external (*t*(38)2.642, *p*=0.012) and introjected regulation (*t*(38)3.524, *p*=0.001); the control group scored higher (external: M=3.43, introjected: M=3.37) than the experimental one (external: M=3.08, introjected: M=2.94). These differences lost their significance in the post intervention stage, although the control group's scores were still higher (external M=3.06, introjected M=2.72) than the experimental's (external M=2.74, introjected M=2.50). In the post intervention stage, identified motivation increased more in the experimental group (difference=0.21) than in the control (difference=0.10) but this difference was not statistically significant. Last, intrinsic regulation demonstrated statistically significant results (*t*(38)-1.993, *p*=0.050) in that the experimental group scored higher (M=3.17) than the control group (M=2.77).

Table 1: Means and (SD) of the self-regulation scales in the pre and post intervention stages, Cronbach *a* and *p*-values in the *t*-test analysis

SELF-REGULATION SCALES	EXPERIMENT GROUP			CONTROL GROUP			*p* value	
	pre	post	Difference	pre	post	Difference	pre	post
EXTERNAL	3.08* (0.38)	2.74 (0.61)	-0.34	3.43* (0.45)	3.06 (0.63)	-0.37	0.012	0.116
INTROJECTED	2.96* (0.29)	2.78 (0.52)	-0.18	3.37* (0.48)	3.01 (0.59)	-0.36	0.001	0.213
IDENTIFIED	3.29 (0.50)	3.50 (0.27)	0.21	3.52 (0.41)	3.62 (0.31)	0.10	0.138	0.186
INTRINSIC	2.93 (0.42)	3.17* (0.58)	0.24	3.04 (0.59)	2.76* (0.70)	-0.28	0.519	**0.053**
RAI	0.03 (1.29)	1.57* (1.98)	1.54	-0.64 (1.30)	0.03* (2.45)	0.67	0.109	**0.033**
VOCABULARY	18.41 (7.98)	23.81 (6.81)	5.4	19.36 (7.53)	21.93 (7.84)	2.57	0.701	0.424
GRAMMAR	13.22 (8.47)	17.86 (9.83)	4.64	13.17 (7.81)	18.10 (8.83)	4.93	0.985	0.937
TEST-total	31.63 (14.91)	41.67 (15.17)	10.04	32.53 (14.46)	40.03 (15.22)	7.5	0.839	0.681

*p<0.05

Table 1 presents the results of the pre-post intervention comparison between the two groups along with the difference between the two stages in the four self-regulation types. The difference columns show that while the experimental group becomes more positive as we move towards more self-regulated types of motivation, in the control group this difference remains lower or negative. This indicates a positive effect of the teaching intervention for the experimental group and we may therefore assume that the alternative teaching and assessment methods supported our pupils into their self-regulation process.

Similar results were obtained in other cultural contexts (Lo, 2010; Mak & Wong, 2018). The more cooperative atmosphere cultivated in the teaching intervention with peer and group activities (Lam, 2014) and the instructional scaffolding (Mak & Wong, 2018) provided by the teacher seem to have contributed to an increase in identified and intrinsic regulation and the pupils' increased agency in learning and internalization of the language learning goal.

6.2 The effect of DA on pupils' autonomy

Turning to the *t*-test results for the pupils' relative autonomy index (RAI) (Table 1), we can see that the experimental group's score is more than double compared to that of the control group. These results show that after a two-month period of intervention pupils in the experimental group were led to more autonomy and self-regulation, transforming whatever external means of regulation they exhibited into more internalized forms of motivation. Although the differences in the autonomy index were not statistically significant in the pre stage (pre-RAI: experiment: M=0.03, control: M=-0.64), in the post stage the differences become statistically significant (*t*(38)-2.207, *p*=0.033) in favor of the experimental group (post-RAI: experiment: M=1.57, control: M=0.03). RAI, as a heuristic device, incorporates all different types of regulation and can highlight differences among individuals or groups. These results are further supported by the post intervention statistical differences in intrinsic motivation described above.

When motivation springs from oneself, autonomous learning can make pupils move further in a self-directed way. Traditional testing, grades and parental influences may impede pupils' learning. Only if YL cooperate and co-assess the learning process, as Everhard and Murphy (2015) pinpoint, may they be led to self-regulation and autonomy. Thus, RAI, which concerns our study the most, confirmed the initial expectations that the DA intervention may help YL become more self-regulated and autonomous. Their basic psychological needs of competence, relatedness and autonomy were supported to such a degree to render the differences with the control group statistically significant. Similar results were obtained in other culturally adapted interventions employing instructional scaffolding which included portfolio building with young EFL learners (Law, 2011; Mak & Wong, 2018). Such interventions, similar to the one presented here, indicated both affective and cognitive gains for the learners as we will present in the next section.

6.3 The effect of DA on pupils' language outcomes

The results of the *t*-test on the language test are presented in the last three lines of table 1. In vocabulary both groups fared better in the post- than in the pre-test but

the experimental group seem to have progressed more than the control group (difference between the pre- and posttest, experimental: 5.4, control: 2.57). Both groups also seem to have progressed in grammar but in this case the control group did slightly better than the experimental group (difference between the pre- and posttest, experimental: 4.64, control: 4.93). Our results could imply that DA may affect vocabulary acquisition more than grammar acquisition (cf. Lo, 2010) and that grammatical development requires more time. However, as none of the above differences reached statistical significance, any assumptions in this regard would be highly speculative.

6.4 Does training in DA affect pupils' differently in relation to their level of competence?

In order to investigate the emergent results further, an attempt was made to separate pupils into levels of competence based on their language test results. The average of the language test score (and its standard deviation) from the two groups was employed. The pupils whose test score was higher than a standard deviation were labeled advanced, those with lower than a standard deviation were labeled lower-level, and the range in-between were considered intermediate for the purposes of the study. This resulted in 5 advanced, 13 intermediate and 4 lower-level pupils in the experimental group and 1, 15 and 3 respectively in the control group. The results indicated a considerable benefit from the DA intervention for the intermediate experimental group. They increased their RAI and their total language score was almost double compared to their control group peers. However, the *t*-test did not produce any statistically significant results. The tables representing the scales of regulation, RAI and language test results for the three levels of competence can be found in appendix III.

6.5 Qualitative data from experimental groups' self-assessment handout

Qualitative data from the experimental pupils' self-assessment handouts were coded in a top-down approach according to the questions in the self-assessment handout: likes, dislikes, difficulties, what is important and what facilitates and/or impedes teamwork. We counted the frequency of each theme as presented in tables 2 and 3.

As a general comment, it can be said that because of the young age of the participants the answers were not very elaborate, and there were many repetitions especially in the beginning of the intervention and between their answers in likes and importance.

Table 2: Themes and count of pupils' likes, importance and difficulty statements from the qualitative data

	Likes	Importance	Difficulty
reading texts	49	29	23
learning new vocabulary	27	34	14
peer-assessed dictation	25		30
learning grammar	21	43	17
handicraft/theatre/games	21	9	10
writing a test	19	7	
writing dictation		28	
doing exercises	8		

Table 3: Themes and (count) of pupils' teamwork statements from the qualitative data

TEAMWORK	
Facilitative	**Impeding**
• Helping each other (64) • Cooperating with friends exchanging ideas (15) • Finishing altogether (11) • Finishing earlier (10)	• Wasting time talking and screaming (22) • Writing more quickly than others (11) • Being suppressed by a leader (10) • Writing more slowly than others (10) • Being expected to do everything (10) • Not helping the weaker of a team (10) • Not being with best friends in a team (2)

In terms of likes, the pupils enjoyed DA practices used in class. Specifically, they enjoyed alternative dictation forms such as peer correction and dictation in the form of drawing, handicraft and board games. As for importance, it was interesting to see that pupils even from that young age prioritize grammar and vocabulary building, probably due to the emphasis placed on these aspects in the family and the general school culture.

As regards the difficulty of tasks, there was a noticeable change after the fourth week, about half way in the intervention. Although at the beginning they expressed

difficulty in writing dictation, reading texts, even playing games, then they started making fewer comments, if any, on specific difficulties. As one pupil wrote "nothing seems too difficult". This may signify that pupils got accustomed to new methods quite quickly, reactively adopted them (Littlewood, 1999) and enjoyed them. These results echo Lam's (2016) recommendation for need in training pupils in reflective writing; after learners came in grips with the novel method introduced, they incorporate it into the natural flow of learning. That is why training in self-regulation is important from a young age so that students increase their agency in learning. As Marsh and Martin (2011) verified in an extensive literature review on the topic, "academic self-concept and achievement are mutually reinforcing" and have long-term effects in students' educational outcomes. Thus, the younger the learners develop a positive self-image in language learning, the better educational results they have in the long run.

Most of them enjoyed teamwork, as well: helping each other, exchanging ideas with friends, finishing together. The idea of helping each other was the one most frequently mentioned and as one pupil wrote "[the classmates] they help me!" with an exclamation mark to express his surprise or joy from the experience. As Reeve et al. (2008, p. 230) confirm, "the interpersonal behavior one person provides to nurture another's inner motivational resources" provides autonomy support and leads to self-regulation of action. However, there were a couple of pupils who felt annoyed by the fact they had to cooperate due to the need to negotiate lively because they felt suppressed by others or finished earlier or were expected to complete all the work. Overall, there were more positive comments about the facilitative aspects of cooperation than the impeding ones.

7. Conclusion & pedagogical implications

The present study investigated the effect of DA methods on 3rd grade pupils in a state primary school. After the two-month intervention period, the results indicated a statistically significant increase in the experimental group's intrinsic motivation and relative autonomy index. Moreover, more positive results became apparent in the

intermediate pupils' RAI and total language performance in the post stage while for the lower-level pupils' vocabulary gains were more prominent.

A number of pedagogical implications can be drawn. As there seems to be a close relation between DA and autonomy learners may need training in self and peer assessment to gain more self-regulation in learning, a useful skill which can make them autonomous learners in the future. DA and the tools proposed by the IEP may be a useful tool in teachers' hands while dealing with YL. Thus, a combination of alternative with traditional assessment would be ideal since the aforementioned benefits of the former may be combined with the objectivity of the latter to serve different purposes (Mahshanian et al., 2019). The instructional framework proposed by Pintrich (2000) with special emphasis on monitoring, metacognitive awareness and reflection will provide pupils with the flexible structure they need to develop their self-regulation and autonomy.

Despite the rigorous analysis that has been attempted, we do acknowledge the fact that the present study is small-scale both in terms of the number of participants and the length of the intervention. Thus, a year-long intervention would render more valid results and even better ones if the project was implemented in the whole school to initiate a change into the whole school culture. Moreover, we have to admit that due to their young age participants may have responded superficially or carelessly in the questionnaire or the self-evaluation handout. However, it is important that we take their views seriously into consideration and adopt the playful, participative and self-reflective aspect that the whole DA process inspired and promoted for our pupils. Self-regulation and autonomy take long time to get established as individual characteristics and it would have been interesting to check the delayed effects of our intervention. However, factors beyond the researchers' control prevented such an endeavor.

Zoe Kantaridou is a teacher of English for Academic Purposes in the University of Macedonia, Greece. She holds a PhD in Applied Linguistics from Aristotle University of Thessaloniki, Greece. Her research interests lie in the areas of motivation for language learning, curriculum design, task-based teaching, learning styles and strategies and English for Academic/Special Purposes.

kantazoe@uom.edu.gr

Christine Hatzopoulou is a state school ELT teacher. She has been teaching in primary education for the last 15 years. She holds a M.Ed. in TESOL from the Hellenic Open University. Her research interests lie in alternative assessment and teaching young learners through technology.

kristine_hat@yahoo.gr

References

Alexiou, T., & Mattheoudakis, M. (2011). *Magic Book 2.* Greek Ministry of Education and Religious Affairs.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, *84*(3), 261–271.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101. https://doi.org/10.1191/1478088706qp063oa

Cameron, L. (2001). *Teaching languages to young learners.* Cambridge: CUP.

Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Strasbourg: Council of Europe Publishing. www.coe.int/lang-cefr

Cresswell, A. (2000). Self-monitoring in student writing: Developing learner responsibility. *ELT Journal*, *54*(3), 235–244. https://doi.org/10.1093/elt/54.3.235

Creswell, J. M. (2014). *Research design: Qualitative, quantitative and mixed methods approaches.* London: SAGE Publications, Ltd.

Dörnyei, Z. (2001). *Teaching and researching motivation.* Harlow: Longman.

Dörnyei, Z. (2007). *Research methods in Applied Linguistics.* Oxford: Oxford University Press.

Dörnyei, Z., & Taguchi, T. (2010). *Questionnaires in second language research: Construction, administration, and processing*. New York: Routledge.

Everhard, C., & Murphy, L. (Eds.). (2015). *Assessment and autonomy in language learning.* London: Palgrave Macmillan.

Grolnick, W. S., & Raftery-Helmer, J. N. (2015). Contexts supporting self-regulated learning at school transitions. In T. J. Cleary (Ed.), *Self-regulated learning interventions with at-risk youth: Enhancing adaptability, performance and well-being.* Washington, DC: American Psychological Association.

Ινστιτούτο Εκπαιδευτικής Πολιτικής – IEP. (2017). *Οδηγός εκπαιδευτικού για την περιγραφική αξιολόγηση στο δημοτικό*. Αθήνα: Ινστιτούτο Εκπαιδευτικής Πολιτικής του Υπ.Π.Ε.Θ. http://www.iep.edu.gr/el/component/k2/287-pilotiki-efarmogi-tis-perigrafikis-aksiologisis

Integrated Programme of Studies for Foreign Languages in primary & secondary education – IPFL. (2016). ΦΕΚ (Government Gazette), Τεύχος Β΄, αρ. φύλλου 141417Δ2/9-9-2016. Αθήνα: Υπουργείο Εθνικής Παιδείας και Θρησκευμάτων.

Kohonen, V. (2000). Student reflection in portfolio assessment: Making language learning more visible. *Babylonia*, *1*, 13–16.

Kohonen, V. (2003). Student autonomy and teachers' professional growth: Fostering a collegial culture in language teacher education. In D. Little, J. Ridley & E. Ushioda (Eds.), *Learner autonomy in the foreign language classroom: Teacher, learner, curriculum and assessment* (pp. 147–159). Dublin: Authentik.

Lam, R. (2014). Promoting self-regulated learning through portfolio assessment: Testimony and recommendations. *Assessment & Evaluation in Higher Education*, *39*(6), 699–714. https://doi.org/10.1080/02602938.2013.862211

Lam, R. (2016). Taking stock of portfolio assessment scholarship: From research to practice. *Assessing Writing*, *31*, 84–97. http://dx.doi.org/10.1016/j.asw.2016.08.003

Law, Y.-K. (2011). The effects of cooperative learning on enhancing Hong Kong fifth graders' achievement goals, autonomous motivation and reading proficiency. *Journal of Research in Reading*, *34*(4), 402–425. https://doi.org/10.1111/j.1467-9817.2010.01445.x

Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, *20*(1), 71–94. https://doi.org/10.1093/applin/20.1.71

Lo, Y. F. (2010). Implementing reflective portfolios for promoting autonomous learning among EFL college students in Taiwan. *Language Teaching Research*, *14*(1), 77–95. https://doi.org/10.1177/1362168809346509

Mahshanian, A., Shoghi, R., & Bahrami, M. (2019). Investigating the differential effects of formative and summative assessment on EFL learners' end-of-term achievement. *Journal of Language Teaching and Research*, *10*(5), 1055–1066. http://dx.doi.org/10.17507/jltr.1005.19

Mak, P., & Wong, K. M. (2018). Self-regulation through portfolio assessment in writing classrooms. *ELT Journal*, *72*(1), 49–61. https://doi.org/10.1093/elt/ccx012

Marsh, H. W., & Martin, A. J. (2011). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology*, *81*(1), 59–77. https://doi.org/10.1348/000709910X503501

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego, CA: Academic Press. https://doi.org/10.1016/B978-012109890-2/50043-3

Reeve, J., Ryan, R. M., Deci, E. L., & Jang, H. (2008). Understanding and promoting autonomous self-regulation: A self-determination theory perspective. In D. Schunk & B. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research and application* (pp. 223–244). Mahwah, NJ: Erlbaum.

Seale, J. K., Chapman, J., & Davey, C. (2000). The influence of assessment on students' motivation to learn in a therapy degree course. *Medical Education*, *34*(8), 614–642. https://doi.org/10.1046/j.1365-2923.2000.00528.x

Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Phychology*, *57*(5), 749–761. https://doi.org/10.1037/0022-3514.57.5.749

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*, 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Senécal, C., Koestner, R., & Vallerand, R. J. (1995). Self-regulation and academic procrastination. *The Journal of Social Phychology*, *135*(5), 607–619. https://doi.org/10.1080/00224545.1995.9712234

Sheldon, K. M., Osin, E. N., Gordeeva, T. O., Suchkov, D. D., & Sychev, O. A. (2017). Evaluating the dimensionality of self-determination theory's relative autonomy continuum. *Personality and Social Psychology Bulletin*, *43*(9), 1215–1238. https://doi.org/10.1177/0146167217711915

Stefanou, C. R., Perencevich, K. C., DiCintio, M., & Turner, J. C. (2004). Supporting autonomy in the classroom: Ways teachers encourage student decision making and ownership. *Educational psychologist*, *39*(2), 97–110. https://doi.org/10.1207/s15326985ep3902_2

Stiggins, R. (2005). *Student-involved assessment FOR learning.* New Jersey: Pearson Prentice Hall.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, *41*(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

APPENDIX I: Self-regulation questionnaire in Greek

Α. Γιατί κάνω τις εργασίες για το σπίτι;

1. Γιατί θέλω η δασκάλα μου να νομίζει ότι είμαι καλός/καλή μαθητής/μαθήτρια. (INJ)

2. Γιατί θα μπλέξω αν δεν το κάνω. (EXT)

3. Γιατί έχει πλάκα. (INT)

4. Γιατί θα νιώθω άσχημα με τον εαυτό μου αν δεν το κάνω. (INJ)

5. Γιατί θέλω να καταλάβω το μάθημα. (IDEN)

6. Γιατί αυτό υποτίθεται ότι πρέπει να κάνω. (EXT)

7. Γιατί μου αρέσει να κάνω τις εργασίες μου. (INT)

8. Γιατί είναι σημαντικό για μένα να κάνω τις εργασίες μου. (IDEN)

Β. Γιατί κάνω τις ασκήσεις που βάζει η δασκάλα μέσα στην τάξη;

9. Για να μη με μαλώσει η δασκάλα. (EXT)

10. Γιατί θέλω η δασκάλα να νομίζει ότι είμαι καλός/καλή μαθητής/μαθήτρια. (INJ)

11. Γιατί θέλω να μαθαίνω καινούρια πράγματα. (IDEN)

12. Γιατί θα ντρεπόμουν αν δεν το έκανα. (INJ)

13. Γιατί έχει πλάκα. (INT)

14. Γιατί αυτός είναι ο κανόνας. (EXT)

15. Γιατί το απολαμβάνω. (INT)

16. Γιατί είναι σημαντικό για μένα να κάνω τις ασκήσεις στην τάξη. (IDEN)

Γ. Γιατί προσπαθώ να απαντήσω δύσκολες ερωτήσεις στην τάξη;

17. Γιατί θέλω οι συμμαθητές μου να νομίζουν ότι είμαι έξυπνος/έξυπνη. (INJ)

18. Γιατί ντρέπομαι για τον εαυτό μου όταν δεν προσπαθώ. (INJ)

19. Γιατί μου αρέσει να απαντώ σε δύσκολες ερωτήσεις. (INT)

20. Γιατί αυτό υποτίθεται ότι πρέπει να κάνω. (EXT)

21. Γιατί θέλω να μάθω αν είμαι σωστός/σωστή ή λάθος. (IDEN)

22. Γιατί έχει πλάκα να απαντάς σε δύσκολες ερωτήσεις. (INT)

23. Γιατί είναι σημαντικό για μένα να προσπαθώ να απαντώ σε δύσκολες

ερωτήσεις στην τάξη. (IDEN)

24. Γιατί θέλω η δασκάλα να λέει καλά πράγματα για μένα. (EXT)

Δ. Γιατί προσπαθώ να τα πάω καλά στο σχολείο;

25. Γιατί αυτό υποτίθεται ότι πρέπει να κάνω. (EXT)

26. Για να νομίζουν οι δάσκαλοί μου ότι είμαι καλός/καλή μαθητής/μαθήτρια. (INJ)

27. Γιατί μου αρέσει να κάνω καλές εργασίες. (INT)

28. Γιατί θα μπλέξω αν δεν τα πάω καλά. (EXT)

29. Γιατί θα νιώθω στ' αλήθεια άσχημα για τον εαυτό μου αν δεν τα πάω καλά. (INJ)

30. Γιατί είναι σημαντικό για μένα να προσπαθώ να τα πάω καλά στο σχολείο. (IDEN)

31. Γιατί θα νιώθω στ' αλήθεια περήφανος/περήφανη για τον εαυτό μου αν τα πάω καλά. (INJ)

32. Γιατί ίσως ανταμειφθώ αν τα πάω καλά. (EXT)

APPENDIX II: Self-assessment handout

- Αυτό που μου άρεσε περισσότερο στο σημερινό μάθημα είναι … επειδή …

- Το σημαντικότερο που έμαθα σήμερα είναι …

- Σήμερα μου φάνηκε δύσκολο …

- Αυτό που μου αρέσει περισσότερο όταν συνεργάζομαι με τους/τις συμμαθητές/τριές μου στην ομάδα μου είναι …

- Αυτό που με δυσκολεύει όταν δουλεύουμε σε ομάδες είναι …

APPENDIX III

Table III-1: Means and (SD) of the self-regulation scales in the pre and post intervention stages of the advanced students

ADVANCED STUDENTS

SELF-REGULATION SCALES	EXPERIMENT GROUP			CONTROL GROUP		
	PRE	POST	Difference	PRE	POST	Difference
EXTERNAL	3.13	2.97	-0.16	2.78	2.67	-0.11
	(0.12)	(0.65)		(-)	(-)	
INTROJECTED	3.11	2.51	-0.6	3.56	2.56	-1
	(0.35)	(0.53)		(-)	(-)	
IDENTIFIED	3.28	3.54	0.26	3.57	3.14	-0.43
	(0.59)	(0.27)		(-)	(-)	
INTRINSIC	2.80	3.05	0.25	3.29	3.00	-0.29
	(0.38)	(0.29)		(-)	(-)	
RAI	-0.49	1.19	1.68	1.03	1.25	0.22
	(1.29)	(1.32)		(-)	(-)	
VOCABULARY	24.96	30.00	5.04	27.6	30.00	2.4
	(3.30	(0.00)		(-)	(-)	
GRAMMAR	22.56	28.32	5.76	25.2	27.00	1.8
	(5.74)	(1.66)		(-)	(-)	
TEST TOTAL	47.52	58.32	10.8	53.4	57.00	3.6
	(6.08)	(1.66)		(-)	(-)	

Table III-2: Means and (SD) of the self-regulation scales in the and post intervention stages of the intermediate students

INTERMEDIATE STUDENTS

SELF-REGULATION SCALES	EXPERIMENT GROUP			CONTROL GROUP		
	PRE	POST	Difference	PRE	POST	Difference
EXTERNAL	3.13	2.66	-0.47	3.51	3.03	-0.48
	(0.48)	(0.68)		(0.42)	(0.67)	
INTROJECTED	2.96	2.51	-0.45	3.34	2.68	-0.66
	(0.24)	(0.39)		(0.50)	(0.56)	
IDENTIFIED	3.38	3.55	0.17	3.61	3.66	0.05
	(0.46)	(0.25)		(0.38)	(0.27)	
INTRINSIC	2.91	3.13	0.22	3.10	2.81	-0.29
	(0.45)	(0.72)		(0.59)	(0.70)	
RAI	-0.02	1.96	1.98	-0.53	0.54	1.07
	(1.40)	(2.29)		(1.38)	(2.46)	
VOCABULARY	17.80	23.90	6.1	22.04	24.56	2.52
	(6.92)	(4.75)		(4.68)	(4.68)	
GRAMMAR	11.30	18.05	6.75	15.01	21.08	6.07
	(5.27)	(6.12)		(7.20)	(6.02)	
TEST TOTAL	29.10	42.45	13.35	37.44	44.44	7
	(10.66)	(8.47)		(10.90)	(9.39)	

Table III-3: Means and (SD) of the self-regulation scales and the language test in the pre and post intervention stages of the weak students

WEAK STUDENTS

SELF-REGULATION SCALES	EXPERIMENT GROUP			CONTROL GROUP		
	PRE	POST	Difference	PRE	POST	Difference
EXTERNAL	2.97	2.75	-0.22	3.07	3.22	0.15
	(0.27)	(0.44)		(0.54)	(0.48)	
INTROJECTED	2.72	2.47	-0.25	3.52	2.92	-0.6
	(0.19)	(0.41)		(0.39)	(0.44)	
IDENTIFIED	3.18	3.39	0.21	3.04	3.43	0.39
	(0.61)	(0.29)		(0.16)	(0.51)	
INTRINSIC	3.21	3.50	0.29	2.71	2.57	-0.14
	(0.33)	(0.37)		(0.57)	(0.75)	
RAI	0.93	2.42	1.49	-1.19	0.79	1.98
	(1.14)	(1.53)		(0.69)	(2.04)	
VOCABULARY	9.60	14.25	4.65	6.00	8.80	2.8
	(6.91)	(6.65)		(2.61)	(7.71)	
GRAMMAR	3.75	2.25	-1.5	4.00	3.20	-0.8
	(2.87)	(2.87)		(1.92)	(3.01)	
TEST TOTAL	14.85	16.50	1.65	10.00	12.00	2
	(8.64)	(5.19)		(2.27)	(6.00)	