

The Interaction between Reflective Thinking and Grade Dropping: An Alternative Assessment Policy

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Abstract

The present study aimed to investigate the interaction among grade dropping and reflective thinking abilities of the participants and to also check if action research enhances learners' reflective thinking. A cyclic action research was run for 8 sessions. Kember et al.'s (2010) reflective thinking questionnaire and three in-term quizzes were administered. Students also made questions based on their course book passages and develop reflective thinking journals. Although the results suggested no linear relation between grade dropping and reflective thinking, students strategically decided to drop their lowest score and receive a replacement exam. Furthermore, analyses of students' questions based on Bloom's (1956) Taxonomy and their reflections revealed that learners' reflective thinking level was enhanced. Such results might be conducive to highlighting students' role in assessment policies.

Keywords: Action Research, Grade Dropping, Reflective Thinking, Strategic Decision

1. Introduction

That language testing is central to language teaching, and indeed, testing monitors goals and success for both teachers and students (Davies, 1990) have been around. However, when students receive exam grades, they may feel negative reactions towards test results; they may wish they could have received a better score, or even they had been given another chance. Learners' exam-related reflections always exist since presence of tests is inevitable (Shohamy, 2007); however, opening the windows of classroom to alternatives, although challenging, may widen the scope of teaching and assessment disciplines.

Among assessment alternatives, grade dropping seems eye-catching as it empowers students to make decisions about the effects of a score. Through grade dropping, one bad exam grade does not lead into a poor course grade as students are authorized to omit the lowest score and try a chance for taking a replacement exam (MacDermott, 2009).

Research results on dropping policy (Hadsell & MacDermott, 2010; Macdermott, 2013; Sewell, 2004) are controversial. Macdermott (2013) concluded that dropping the lowest grade in a term will improve the learners' performance on the cumulative final exam, while Sewell (2004) found that the students who were allowed to drop their lowest test score fared worse on the comprehensive final. Although Macdermott (2009) argued that no evidence supports the claim that grade dropping artificially inflates students' final grade, he added dropping one of some equally weighted exams in the absence of a comprehensive final exam is faulty. That is, if stress or an illness negatively affect the students' performance on a particular exam, dropping can let students enhance their performance on the final exam and a similar test is a useful panacea.

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Including both alternative assessment and reflective thinking skills, the present study is also connected to critical pedagogy movements (e.g., Giroux, 1988; Freire, 1998) which centralize the student in education. We particularly followed alternatives that include continuous connections between teachers and students (through action research and students' journal writing and question making), it is what Lo'pez-Pastor (2009) describes as 'shared assessment' which also boost students' autonomy and reflective thinking (as cited by Lorente & Kirk, 2013). Following McMahon (1999) and Gale et al., (2002), in the present study, learners' participation in assessment also included decisions about dropping their lowest score and taking a replacement test and consequently about their total score; meanwhile it was assumed that their dropping decisions might be affected by their reflective thinking levels.

Reflective thinking is the ability to engage in active, persistent and careful consideration of a problem (Dewey, 1933) and is the process of thinking back and considering experiences, to better understand the significance of certain experiences (Richards & Schmidt, 2013). Reflection leads learners to move from surface to deep learning (Moon, 2004). In line with the present study, Ostorga and Estrada (2009) bolded that action research is a focal tool that evokes reflection. Regarding the aims the study, the following questions were raised.

1. Does the level of the learners' reflective thinking affect grade dropping?
2. Does action research enhance the level of the learners' reflective thinking?

2. Method

The study was conducted through cycles of action research and aimed to investigate the interaction among reflective thinking skills of participants and

their decisions about dropping their lowest scores of three in-term quizzes; participants were involved in journal writing and question making activities. Furthermore, the study has been conducted based on the experimental research design and falls into the category of pre- and- posttest measures as the instructor planned to enhance the reflective thinking level of the participants.

2.1 Participants

The participants consisted of 90 intermediate female language learners of an Institute in Abadan, Iran. They were members of two classes and formed the two control and the experimental groups, aging 13-40. According to the institute regulations students had to attend the classes three days a week for 19 sessions, each class lasted for an hour and fort five minute, hence there was enough time to plan the action research and investigate the relation between variables of the study. At the beginning of the course, ten learners dropped the course since the course class hours interfered with their university class hours. To follow the aims of the study a handful of instruments were used.

2.2. The Reflective Thinking Questionnaire

To quantify reflective thinking level of the participants, Kember et al.'s (2010), questionnaire which included sixteen items was used. The instructor read all the 16 items of the questionnaire out to the learners and clarified the technical and difficult terms. Regarding the design of the study, this questionnaire was implemented twice for both experimental and control groups; once before running the action research and once at the end of the experiment.

2.2. Three in-term Quizzes

Three in-term 40-item multiple-choice quizzes, prepared by the institute assessment committee, were conducted. After announcing the results of these quizzes, the instructor could examine the participants' decisions toward dropping policy; it should be mentioned that due to restrict regulation of the institute (Iran Language Institute) teachers are not allowed to use their own tests for assessing students' knowledge. All the quizzes content including grammar, vocabulary and reading knowledge was based on the course materials.

2.3. Bloom's (1956) Taxonomy of Questions

As part of students' involvement in assessment process, the learners and the teacher were supposed to classify the questions that they made, based on Bloom's (1956) Taxonomy; although the final classifications were modified by the two researchers of the present study. The taxonomy included 6 levels of knowledge, comprehension, application, analysis, synthesis and evaluation. In this way, the instructor could observe the possible changes on question type and the learners' thinking level. It is suggested that Bloom's Taxonomy of questions can challenge students' thinking and it is widely applied in research area (e.g., Nentl & Zietlow, 2008; Ramirez, 2017; Vrchota, 2004).

2.2.4. Reflective Thinking Journals

Reflecting on one's performance can be conducted in various ways, one of which is through reflective journals (Abednia, Hovassapian, Teimournezhad, & Ghanbari, 2013; Kim, 2013; Zulfikar & Mujiburrahman, 2017). Kim (2013) states that the prime goal of a reflective journal is to enable students to be

responsible for their own learning. Hence, in the present study, the learners were asked to keep a reflective thinking journal to record their reflection on the class life, their involvement in action research, and problems regarding question making. Some learners preferred to make a hand-made, well-designed notebooks for their journals and some bought a small notebook. The first page of all the journals was the same; the instructor informed the learners with the definition of reflection and reflective thinking; the definitions were jotted down on the first page.

2.2.5. Questions Made on the Course Book Passages

As part of the institute's mandate, both the instructor and the learners were supposed to make someyes/no-and-wh questions based on each passage of the course. The questions were classified based on Bloom's Taxonomy (1956) by the two researchers (in fact one of the researchers was also the instructor) of the present study to determine the learners' thinking level; students' views about the classification were also useful prompts.

2.3. Procedures

Initially, the instructor explained the features and the procedures of action research to the two intermediate classes (each holding 40 female learners); thereby the learners were invited to participate in this research. The students doubted if doing the class assignments based on the researcher's schedule might have any negative effects on their total class activity mark in case they might not properly understand what to do ; however, the researcher made them sure that neither their class performance nor their mark would be affected adversely. Hence, the learners eagerly accepted to cooperate with the

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researcher. Afterwards, the notions of action research, reflection and reflective thinking were clarified to the learners by the instructor. Firstly, Kember et al.'s (2010) reflective thinking questionnaire was distributed to examine the level of the learners' reflective thinking. After that action research was conducted through three main cycles in eight sessions for experimental groups. Burns's (2015) action research cycles were followed since regarding the number of sessions and aims of the study the suggested cycles seemed proper.

Start  Plan and Act  Observe  Reflect

Cycle 1: the learners were informed about what they were going to do. Indeed, they planned the research with the instructor together. The instructor would ask four questions before teaching every passage of the course book and the learners were supposed to make four questions after instructor's teaching. At the same time, the students were asked to keep a reflective journal to record about their learning experience and the way they would study this term. Every session they reported about the connection of the lesson taught with their previous lessons. Clearly, they described their feelings and reflections on the passage. Sometimes, they drew stick figures or some other interesting small paintings to show their reflections on what, how or why they studied something.

Cycle 2: Every session the learners and the instructor ticked the type and level of the questions based on Bloom's Taxonomy (1956) including knowledge, comprehension, application, analysis, synthesis and evaluation. Both researchers made decisions about questions to raise reliability of the classification. Moreover, every two sessions the instructor examined the reflective journals to check the class reflections and gave them feedback either to the whole class or individual in both written and oral form. Interestingly, the learners clarified their reflection by drawing some stick figures to show their emotions better.

Cycle3: The actual changes in question making behavior were observed; the learners who could make questions only up to level four of Bloom's taxonomy, later made questions matched with level six of Bloom's via the instructor's feedback and consciousness raising. Meanwhile, the appropriate reflection toward passages and class procedure was noticed by the researcher.

Finally, after eight sessions of action research Kember et al.'s (2010) reflective questionnaire was delivered again to meet the expected changes regarding the learners' reflective thinking level. Furthermore, the learners were asked whether they wanted to drop their lowest grade of the three in-term quizzes or not.

3. Results

To find about the interaction between reflective thinking and grade dropping data obtained from participants' performance on reflective thinking questionnaire after action research were compared (shown as Q2 in the tables). Pearson Correlation, which is a two-tailed analysis was used (Table 1).

Table1. *The Correlation between Grade Dropping and Reflective Thinking*

		Reflective Thinking Grade Dropping	
		Experimental Control	Experimental Control
Q2 Experimental and Control	Pearson Correlation	1	.06
	Sig. (2-tailed)		.59
	N	80	80
Grade Dropping Experimental and Control	Pearson Correlation	.06	1
	Sig. (2-tailed)	.59	
	N	80	80

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The correlation between experimental and control groups' performance on second administration of reflective thinking questionnaire and experimental and control grade dropping is 0.60 with the significance level of 0.59 which is more than 0.05. The performance of experimental group's on two administrations of reflective thinking questionnaire was also analyzed (Table 2).

Table 2. Paired Samples t-test Results of Experimental Group's Performance on Reflective Thinking

	Mean	SD	SEM	95% Confidence Interval of the Difference		t	df	Sig.(2-tailed)
				Lower	Upper			
ExperimentalQ1–								
ExperimentalQ2	-3.27	4.6	.73	-4.75	-1.79	-4.47	39	.000

Regarding the concerns of the study on the merits of action research, Table 2 comparing the performance of the experimental group's performance before and after experiment indicates $t = -4.47$ and the significance level is 0.00; furthermore, as the mean of experimental group performance for questionnaire 2 (after action research) is 3.27 more than the mean of the same group for the first administration (Q1), it can be said that the teaching method had a significant effect.

To further gain insight about students' reflections in their writing journals, which mirrored their views about involvement in the experiment, their views were classified into three categories of definitely positive, no difference and somewhat negative. In this classification, modifiers *definitely* and *somewhat* are deliberately used since students' views skewed toward positive end.

Table 3. Learners' Views about Their Journal Writing

Total student number	Definitely positive	No difference	Somewhat negative
40	36	3	1

Seemingly, most of the learners declared in their journals that they could understand class material better and they were solving their class problems (herein question making) faster. The questions were checked every two sessions, and it was discovered that all learners' questions matched level four of the Bloom's Taxonomy although some syntactical mistakes were found. Accordingly, the mistakes were explained and discussed on the board by the instructor. The learners were involved in figuring out the problems too; meanwhile, they made notes in their journals how or why they made grammatical mistakes and then their reflection was examined. Sample questions of the learners' examples related to the first four sessions of the research is reported below.

Knowledge:

1. What is the passage about?

As it went on, the learners themselves observed and reported the changes in their question making process. For instance, one of the learners (an aerobic coach) said that class question making helped her be faster and more careful in her sport class. Another learner who was a dentist reported that she asked her patients clearer questions at the office. Furthermore, a 19-year old learner explained that she would ask her university teachers sharper questions about a particular course content. Similarly, a school boss (aged 40), claimed that in-class questioning and reflecting on class learning process made her more conscious at work and she could manage the problematic cases better in her school. Consequently, learners got familiar with the meaning and use of reflection and applied their new information into question making.

4. Discussion

As the result in Table 2 indicates there was no linear relationship between the learners' reflective thinking level and grade dropping behavior; however, regarding the process of their involvement in assessment decision, it can be claimed that by introducing dropping policy to the learners, the frightening atmosphere of the class regarding taking a quiz was reduced, so the learners were brave enough to take the test again. Similarly, it is also bolded by Hadsell and MacDermott (2010), that grade dropping policy has potential benefits for both teachers and students and may create positive attitudes toward the course. In fact students believed they were comforted to take a similar exam; such reflections followed Hadsell and MacDermott's (2010) who argued the probability a student will choose to complete an optional final exam is affected by the role of that exam in their final score.

To date, to our best knowledge, no academic research has dug the relation between reflective thinking and grade dropping policy, but MacDermott's (2013) investigated the impact of two assessment policies on learning: replacement exams and grade dropping and consequently announced, contrary to the previous research, that allowing students to drop their lowest grade improved performance on a cumulative final exam, while offering a replacement test had no significant effects. MacDermott's (2013) also reiterates little research has been done to investigate students' behavior concerning grade dropping policy and its interaction with other variables like age factor or education degree. Sewell (2004) measured students' risk attitude and announced no significant role in students' decisions to miss exams or prepare adequately. That the findings of this study did not show any significant correlation between grade dropping and reflective thinking might be participants' recourse to what Hadsell and MacDermott (2010) call strategic

behaviours; the participants of the present study showed a strategic behavior when they voted for replacement exams as it could positively affect their total term score.

The second aim of this study, the effectiveness of action research on the improvement of reflective thinking level, it can be argued that action research was effective for the experimental group. The reflective thinking level of the participants in the experimental group was enhanced as there was a significant difference between experimental and control groups in terms of their level of reflective thinking ($p < 0.05$; Table 2). The findings of the present study are in line with the results of an action research done by Ostorga and Estrada (2009) who distinguished that the high levels of reflectivity could be enhanced by applying an action research. Ostorga and Estrad (2009) emphasized on the effects of the collaborative process; that is, when the learners worked on a team the levels of deep reflection were observed.

Furthermore, the instructor focused on various cycles of action research both to involve learners in solving the problem of learners' question making and enhancing reflective thinking level. Based on learners' views about their journal writing (Table 3), they positively reported (both written and orally) changes in their question making practices and even extended their enhanced reflective thinking skills into their daily practice. Supporting the results of earlier studies (e.g., Griggs et al., 2016; Abednia et al., 2013; Zulfikar & Mujiburrahman, 2017). Abednia et al. (2013) found that writing a reflective journal has fostered self-awareness and reasoning skills. Similarly Zulfikar and Mujiburrahman, (2017) reported that their participants were able to translate their reflection learning into something meaningful for their practice in work places. However, as Van Velzen's (2015) suggested learners may not use reflection or metacognitive level of learning on their own since the case is

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mentally demanding hence teachers should shoulder the responsibility of including alternative action research, reflective practices and assessment alternatives to language classrooms.

5. Conclusion

That the literature of language testing in general and results of the present study in particular highlight whenever students are given roles in language testing fears are diminished and positive results are obtained. In fact, insisting on common restrict testing practices could harm education policies. That the participants of this study willingly were merged in a simple assessment process and felt no fear to take the tests again, following the same routines is a danger. Although more research is required to shed the light on dropping policy or the learners' strategic behavior, the role of students as one of the most important parties in test-making decisions call for more democratic testing situations (Shohamy, 2007).

Furthermore, that when students are invited to do something effective (make decision about their exams, and develop writing journals while involving in action research) they felt empowered to extend their abilities to their real life. Since assessment is an integral part of education and a process that clarifies the power relations and hierarchical categories as part of academic fields and disciplines (Lorente & Kirk, 2013; Tahmasebi & Yamini, 2013) students should not be ignored anymore.

References

- Bloom, B. S., Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: The classification of educational goals*. New York: David McKay.
- DANNY. BURNS. (2015). *Navigating complexity in international development: Facilitating sustainable change at scale*. Practical action pub.
- Davies, A. (1990). *Principles in language testing*. Oxford.
- Dewey, J. (1933). *How we think: A restatement of the reflective thinking to the educative process*. Heath.
- Freire, P. (1998). *Pedagogy of freedom: Ethics, democracy, and civic courage*. Rowman & Littlefield.
- Gale, K., Martin, K., & McQueen, G. (2002). Triadic assessment. *Assessment & Evaluation in Higher Education*, 27(6), 557-567.
- Giroux, H. A. (1988). *Teachers as intellectuals: Toward a critical pedagogy of learning*. Greenwood Publishing Group.
- Griggs, V., Holden, R., Lawless, A., & Rae, J. (2016). From reflective learning to reflective practice: Assessing transfer. *Studies in Higher Education*, 1-12.
- Hadsell, L., & MacDermott, R. (2010). Grade Dropping, Strategic Behavior, and Student "Satisficing". *American Journal of Business Education*, 3(7), 57-72.
- Kember, D., Leung, D. Y., Jones, A., Loke, A. Y., McKay, J., Sinclair, K., & Yeung, E. (2010). Development of a questionnaire to measure the level of reflective thinking. *Assessment & evaluation in higher education*, 25(4), 381-395.
- Kim, A. K. (2013). Reflective journal assessment: The application of good feedback practice to facilitating self-directed learning. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 13, 255-259.

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- Lorente, E., & Kirk, D. (2013). Alternative democratic assessment in PETE: an action-research study exploring risks, challenges and solutions. *Sport, Education and Society, 18*(1), 77-96.
- MacDermott, R. (2009). The effects of dropping a grade in intermediate macroeconomics. *New York Economic Review, 40*(1), 40-50.
- MacDermott, R. J. (2013). The impact of assessment policy on learning: Replacement exams or grade dropping. *The Journal of Economic Education, 44*(4), 364-371.
- McMahon, T. (1999). Using negotiation in summative assessment to encourage critical thinking. *Teaching in Higher Education, 4*(4), 549-554.
- Moon, J. A. (2004). *A handbook of reflective and experiential learning: Theory and practice*. Psychology Press.
- Nentl, N., & Zietlow, R. (2008). Using Bloom's taxonomy to teach critical thinking skills to business students. *College & Undergraduate Libraries, 15*(1-2), 159-172.
- Ostorga, A. N., & Estrada, V. L. (2009). Impact of an action research instructional model: Student teachers as reflective thinkers. *Action in Teacher Education, 30*(4), 18-27.
- Ramirez, T. V. (2017). On pedagogy of personality assessment: Application of Bloom's taxonomy of educational objectives. *Journal of personality assessment, 99*(2), 146-152.
- Richards, J. C., & Schmidt, R. W. (2013). *Longman dictionary of language teaching and applied linguistics*. Routledge.
- Shohamy, E. (2007). Language tests as language policy tools. *Assessment in Education, 14*(1), 117-130.
- Sewell, E. (2004). Grade dropping: An empirical analysis. *The Journal of Economic Education, 35*(1), 24-34.

- Tahmasebi, S., & Yamini, M. (2013). Power relations among different test parties from the perspective of critical language assessment. *Journal of Teaching Language Skills, 31*(4), 103-126.
- van Velzen, J. H. (2015). Are students intentionally using self-reflection to improve how they learn? Conceptualising self-induced self-reflective thinking. *Reflective Practice, 16*(4), 522-533.
- Vrchota, D. (2004). Touchstone Award: Challenging students' thinking with Bloom's Taxonomy. *Communication Teacher, 18*(1), 2-5.
- Zulfikar, T., & Mujiburrahman. (2017). Understanding own teaching: becoming reflective teachers through reflective journals. *Reflective Practice, 19*(1), 1-13.