

Frequent testing: What are the real impacts of frequent quizzes on students, teachers, and instruction?

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Abstract: Frequent testing in education has been a popular research topic since the beginning of the 20th century, but it has rarely been discussed in the field of English as a Foreign Language. The review of the literature illustrates that the studies done on frequent testing in other fields mostly highlight the benefits of frequent testing while some of the findings suggest several drawbacks. This paper aims to look into teachers' and students' perceptions of frequent testing in an EFL setting, at Middle East Technical University, Northern Cyprus Campus, School of Foreign Languages' Preparatory program. The data are collected with student and teacher questionnaires where the respondents are expected to evaluate the given perception on a five-point Lickert scale and interviews with volunteer teachers. The aim is to cross check the major conclusions on the benefits and drawbacks of frequent testing with students' and teachers' perceptions of frequent quizzes to find whether those conclusions can be considered valid in an EFL context. The results show that the teachers' perceptions of frequent quizzes at METU, NCC, SFL, Preparatory Program are in line with the literature, and the respondent teachers do not have big problems with the frequency of quizzes as far as their quality and effectiveness are assured. The students, on the other hand, admit that frequent quizzes positively affect their learning and retention skills, but they do not agree that frequent quizzes help with exam anxiety or make any contribution to their attendance or study habits, and their performance.

Keywords: *language assessment, test frequency, testing effect, frequent testing, quizzes*

1. Introduction

“... [T]ests and examinations – at the right time, in the right proportions – have a valuable contribution to make in assessing learners' proficiency, progress, and achievement,” but testing is abused “when tests invade essential teaching space, when they are not the final stage of a process of learning but become the beginning, middle and end of the whole process” says Luke Prodromou (2006), in his 1995 *ELT Journal* article, “The backwash effect: from testing to teaching” (p.209). But what is that “right proportion?” How frequent the tests should be given? When do tests become the end instead of the means to teaching and learning? What happens if this is the case? These were the questions I had in my mind when I decided to look into the issue. When I scanned the literature on frequent testing, I realized that although there is a considerable amount of research on the impacts of frequent tests on instruction, students, and their achievement in particular academic fields and levels, it has rarely been a focus of discussion in Teaching English as a Foreign Language (TEFL).

There is no doubt that testing is integral to teaching and can support students and their learning, but there are conditions for this to happen. In their book, entitled *Classroom assessment: Supporting teaching and learning in real classrooms*, Taylor and Nolen (2008, p.8) define four conditions for assessment to support students and their learning as follows:

1. Assessment events should occur frequent enough that the teacher can see “whether the instruction is successful and who may need additional support.”
2. Assessment tools should “give students clear ideas about what is important to learn and the criteria or expectations for good work” and should be aligned with instruction.
3. Assessment processes should comprise feedback “so that students know what they have learned and what they still need to learn.”
4. Assessment decisions should be accurate in that grades accurately “reflect what students have learned.”

When tests are planned and administered with these criteria in mind, in other words, when they are frequent enough to observe learning, clearly matching with instruction, accompanied by feedback, and accurately measuring learning, they are proper tools to support and measure learning. However, in a language classroom, when tests focus too much on the form rather than the use, when testing values accuracy more than learners’ development, language learners may miss the point that the language they are learning is a living entity, with which some real people read, write, play games, watch movies, and communicate with each other. Similarly, when tests serve only for summative purposes, language learners may lose their focus while they are striving for getting better grades rather than learning the language.

Middle East Technical University, Northern Cyprus Campus, School of Foreign Languages' Preparatory program, with its large student and instructor body and with its practice of frequent quizzes as a testing tool gives a proper case to look into the situation. At Middle East Technical University, Northern Cyprus Campus, School of Foreign Languages' Preparatory Program, there are two types of quizzes: unannounced (pop-quizzes) and announced quizzes. The total number of quizzes given in a 16-week semester may differ from 15 to 20. Those quizzes are short exams, usually 15-20 minutes (not exceeding 30 minutes). In 2015-2016 academic year, quizzes contributed 16-20% to the yearly achievement grade-the determiner for whether or not the student will sit in the proficiency exam.

With this picture in mind, and in an attempt to find out the real impacts frequent testing on the students and their learning, the instructor and the instruction in the language classroom, this study looks into student and teacher perceptions of frequent testing at METU, NCC, SFL. It is hoped that the findings will shed light on how preparatory school students and teachers view the effects of frequent testing on variables such as students’ class attendance, establishment of study habits, level of anxiety, level of learning and retention of the taught material, quality of the provided feedback and effectiveness of instruction.

2. Literature Review

Testing effect has always been a focus of interest throughout the 20th century. There is a vast amount of research looking into benefits of frequent testing in various fields of study which is collated successfully in several studies. The discussion in this paper is based on two of them: Roediger, Putnam and Smith’s (2011, pp. 1-36) book chapter, “Ten benefits of testing and their applications to educational practice,” and Kuo and Simon’s (2009, pp. 156-160) literature review in their article, “How many tests do we really need?”

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Roediger et al. (2011, pp. 1-36) examine 10 benefits of testing with reference to preceding literature in a chapter where they argue that “tests can serve other purposes [than assessment] in educational settings that greatly improve performance”:

Table 1: “10 benefits of testing”

<ol style="list-style-type: none"> 1) The testing effect= retrieval aids later retention 2) Testing identifies gaps in knowledge 3) Testing causes students to learn more from the next learning episode 4) Testing produces better organization of knowledge 5) Testing improves transfer of knowledge to new contexts 6) Testing can facilitate retrieval of the information that was not tested 7) Testing improves metacognitive monitoring 8) Testing prevents interference from previous material when learning new material 9) Testing provides feedback 10) Frequent testing encourages students to study

Note. From Roediger et al. (2011; p.4)

In a similar fashion, taking its stand on Bangert-Drawns, Kulik, and Kulik’s 1991 summary of the literature that came up between 1929 and 1989, in their study, Kuo and Simon (2009, pp. 156-160) analyze the frequent testing research in different contexts. Kuo and Simon’s analysis brings several advantages into surface, but in addition to those advantages there are also a number of disadvantages and pre-requisites being discussed.

The literature reviewed in these two studies is much more comprehensive, but within the scope of this paper, what we are going to look into is limited to the points highlighted in the table below:

Table 2: Major benefits and drawbacks of frequent testing in the literature

Frequent Tests			
Benefits	<ul style="list-style-type: none"> • Improve students’ attendance • Encourage regular and more effective study periods • Reduce anxiety • Facilitate learning and retention • Provide both teachers and students with feedback • Increase students’ exam performance • Are favored by students 	<ul style="list-style-type: none"> • Consume class time • Produce superficial/ rote learning • Boost recall of only the tested material • May decrease the quality of feedback 	Drawbacks
	Two pre-requisites for the efficacy of frequent testing:		<ul style="list-style-type: none"> • Immediate/ constructive post-test feedback • Overlapping items between exams (quizzes and midterms/ final exam)

Note. Collated from Roediger et al. (2011, pp. 1-36) and Kuo and Simon (2009, pp. 156-160)

As it can be observed on Table 2, these studies mostly highlight the benefits of frequent testing while talking about a few drawbacks and pre-requisites for them to be effective. Taking those findings as a starting point, cross checking them with student and teacher perceptions of frequent testing at METU, NCC, SFL, this study looks at whether those defined benefits and drawbacks can be considered valid in an EFL context. So as to avoid repetition, details of the relevant literature will be given in the “Key findings and discussion” section.

3. Method

As the aim is to cross-check the conclusions gathered from Roediger et al. (2011) and Kuo and Simon (2009)'s summary of the literature on frequent testing with students' and teachers' perceptions in our context, first, two questionnaires were built up: one for the students and the other for the teachers. A five-point Likert Scale was used for both questionnaires. The responses were scored from 1, "strong disagreement," to 5, "strong agreement," and 3, "not sure" given for the neutral position.

The student questionnaire was made up of two sections where the students evaluated the benefits collated from the studies given above with a given prompt: "Thanks to frequent quizzes..." for the first section and "If there were not this many quizzes..." in the second section (see the appendices for the questionnaires). Student questionnaire was administered to 312 students in class. They were given 10 minutes to respond the questionnaire.

The teacher questionnaire was more comprehensive compared to the student one. It had four sections. The first section was a list of above mentioned benefits collated from above mentioned studies. The second section was built upon Prodromou's article, "The backwash effect: from testing to teaching." More than 20 years ago, in this article Prodromou (1995/2006) calls attention to how teachers sacrifice from their teaching for the sake of testing:

Many teachers, trapped in an examination preparation cycle, feel that communicative and humanistic methodologies are luxuries they cannot afford... Sound teaching practices are often sacrificed in an anxious attempt to 'cover' the examination syllabus, and to keep ahead of the competition. (p.209)

So as to find about whether the SFL instructors feel trapped in the way Prodromou describes, the items in this section were adapted from Prodromou's (1995/2006) discussion of testing practices that cause negative "backwash" effects on teaching where he argues that tests damage teaching practices when they:

1. Are built on fragments of language and skills which are easier to test (p.210);
2. "Deny learners' thinking time" (p.211);
3. Value "only the right answer" disregarding language development processes (p.211);
4. Are not matching with curricula and teaching pedagogy (pp. 209-13).

Therefore, in this section, the teachers responded to situations such as: "due to their inherent nature, frequent tests/quizzes are assessing isolated, sentence level samples of language..." or "...are valuing accuracy more than language development..." (see Appendix 2).

In the third and fourth sections, to find about teachers' perception of an ideal situation, the items were given with two prompts "fewer tests would" and "quizzes work better if..." , respectively. In an attempt to give the questionnaire a scope for "the ideal," teacher-based-assessment and its applications which are well defined in Davison and Leung's 2009 (pp. 395-396) article were utilized to shape the items in these two sections:

1. Integrates the teacher into the assessment processes;
2. Conducted by the learners' own teacher;
3. Applied and adapted to meet the teaching and learning objectives of different classes and students;
4. Integrates learners into the assessment;
5. Gives way to immediate and constructive feedback;
6. Stimulates continuous evaluation and modification of teaching and learning.

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Accordingly, in the third section, the teachers responded to situations like: “fewer tests would allow more comprehensive feedback; and in the fourth section they were given situations like: “quizzes work better if [they] are used to evaluate/ modify assessment procedures to optimize teaching and learning” (see Appendix 2).

In addition to the above mentioned four sections where the respondents were expected to evaluate given situations using a 5-point Likert-scale, “any other comments/opinions” box was also incorporated in the teacher questionnaire. The questionnaire was shared with the teachers in its online version via an email asking for their volunteer response to the questionnaire and inviting volunteers for a follow-up interview.

The questionnaire was sent to more than 50 teachers, but there were only 22 respondents. The participants were anonymous. Only 6 of them responded to “any other comments/ opinions” section. Last, but not the least, 4 teachers, 2 of whom novice with 3 to 5 years experience, the other two experienced with more than 15 years, volunteered to give interviews. Interviews were semi-structured and each took about 30 minutes.

For the analyses of the results, an online survey software was used. As the student questionnaire was administered on paper, the responses were manually entered in the system. Teacher questionnaire was already designed and administered using the same software, so the responses were gathered online. The initial quantitative analyses for both questionnaires were done using the analysis tool of the online survey software. You can find the results being discussed with reference to the literature in “Key finding and discussion” section below.

4. Key Findings and Discussion

4. 1. Attendance

Frequent testing is usually thought to be encouraging students’ attendance, and research (Fitch, Drucker, & Norton 1951; Hovell, Williams, & Semb 1979; Wilder, Flood, & Stromsnes 2001) shows that “students tend to attend more class sessions when frequently scheduled quizzes or tests are implemented” (as cited in Kuo, & Simon, 2009, p. 156).

In our situation, it would not be wrong to say that teachers see frequent quizzes as attendance builders as 86% (including 41% strongly agree) of the participant teachers agree that frequent quizzes improve students’ attendance. However, the student respondents do not agree with their teachers: While 52% (including 19% strongly agree) of the students say they would still care about attending classes regularly if there were not this many quizzes, only 36% of the students (but 22% strongly believe so) say they would not care much about their attendance if there were not this many quizzes (see Figure 1):

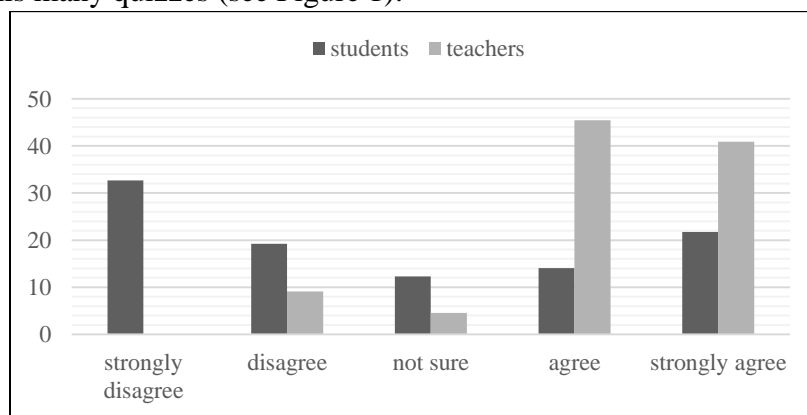


Figure 1: Students' vs. teachers' responses to "Frequent tests improve attendance."

There is no doubt that ensuring students' attendance is important in language courses, and frequent quizzes, both announced and unannounced ones might really encourage regular attendance to classes, which however, cannot be a valid reason for frequent testing because overemphasis on this aspect can easily cause to undervalue or disregard important aspects of language classroom assessment listed by Talor and Nolen (2008, p.8) such as logical frequency of assessment events and appropriateness of tools, processes and decisions.

4. 2. Regular and effective study habits

Frequent testing advocates argue that frequent tests lead to regular and more effective study habits, which is corroborated by the studies done by Azorlosa and Renner (2006), Marchant (2002), Mawhinney, Bostow, Laws, Blumenfeld, and Hopkins (1971). Accordingly, "students reported more regular study periods motivated by frequent testing" (as cited in Kuo, & Simon, 2009, p.156).

However, in our case, it seems that this is more like what teachers think: Although the participant teachers agree that frequent quizzes boost students' study habits and motivate regular study periods with 55% (including 9% strongly agree), the students are rather less sure about this benefit. While 31% of the students agree that frequent quizzes improved their study habits, and they study more regularly and effectively, 39 % students (including 8% strongly disagree) disagree with this situation, and 30% of the students say they are not certain (see Figure 2).

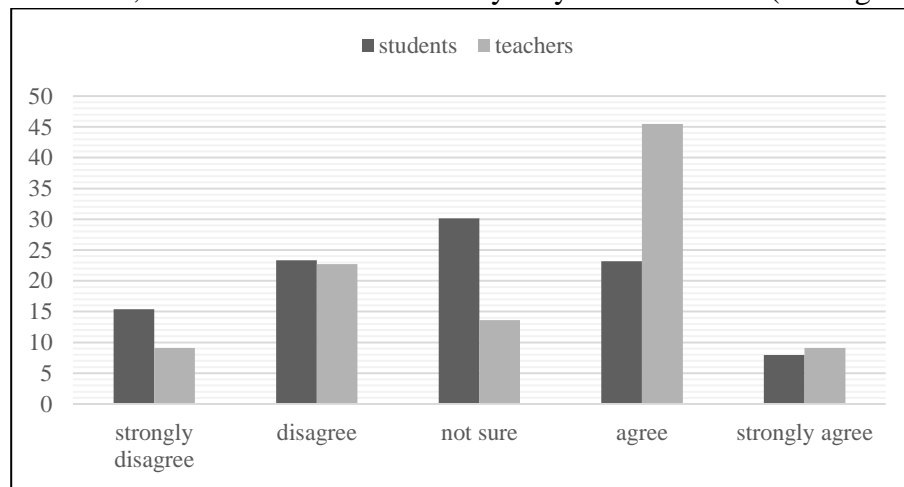


Figure 2: Students' vs. teachers' responses to "Frequent tests encourage regular and effective study habits."

There might be a variety of possible reasons behind this picture that need consideration: It might be because of the motivation loss due to low performance, or not getting quality feedback on their performance. It might also be about poorly communicated and/or mismatching value given to quizzes. Likewise, it might be also about mismatching teaching, learning, and assessment objectives. One of the teachers interviewed linked this situation to the importance attached to testing:

Teacher A: I find my students so stressed. Tests stress the students out so much. It is the importance attached to it not the numbers [number of tests]. Quizzes are not motivating the students [students' regular study habits], and [this is mostly due to] the testing philosophy the school has where mistakes are harshly penalized.

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4. 3. Exam anxiety

As Kuo and Simon (2009, p. 160) cited (Azorlosa & Renner, 2006; Galassi, Frierson, & Siegel, 1984; Graham, 1999; Kika, McLaughlin, & Dixon, 1992; Kling, McCorkle, Miller, & Reardon, 2005; Landrum, 2007; Leeming, 2002; Marso, 1970), “frequently tested students have reported a reduced level of anxiety, attended more class sessions, and felt generally more prepared for exams.” This is quite possible because in ideal circumstances, if there are frequent quizzes, students will be attending more classes; attending more classes they will feel readier and more confident about the exams they are taking; when they feel readier and more confident about taking exams, they will feel less anxious about the exams they are taking.

However, in our situation, there is not a strong consensus on whether or not frequent testing reduces exam anxiety: 45% (including 27% strongly disagree) of the teachers and 40% (including 18% strongly disagree) of the students do not think this is the case, 23% of the participant teachers, 34% of the students agree that taking frequent tests reduce students’ exam anxiety. Surprisingly, 26% of the students and 32% of the teachers say they are not sure, which should also be taken in the account.

Reducing exam anxiety cannot be a realistic objective for frequent testing, but if frequent tests work properly, it is very possible to talk about the above mentioned chain of benefits. As, in our context, the students and teachers do not think that frequent tests are reducing exam anxiety, it will be wise to reconsider assessment objectives, structure and procedures to see whether there is something not working properly.

4. 4. Learning the course material

As mentioned above, frequent quizzes can suitably lead to a domino effect, with which we can talk about a chain of benefits: “educators generally agree that both increased attendance and frequent study periods represent behaviors that tend to facilitate learning of course material” (Kuo, & Simon, 2009, 156), so frequent quizzes should help better learning of the course material.

In our context, 69% (including 33% strongly believe so) of the students say they would still care about the course material if there were not this many quizzes, so it seems that frequent tests do not add to the importance attached to the course material from the students’ point of view. However, both students and teachers seem to value frequent tests in terms of their contribution to students’ learning: 60% of the students (including 11% strongly agree) and 55 % of the participant teachers (including 41 % strongly agree) agree that frequent tests/quizzes help students’ learning and relating the course material to their learning.

Although there is not a great consensus, as 30% of the students disagree and 32% say they are not sure, 40% of the students agree that it is thanks to frequent quizzes that they feel more motivated to learn/ to study. In contrast, 50 % of the participant teachers (including 14% strongly disagree) do not think that taking frequent tests helps students’ motivation to learn. One of the instructors who volunteered for an interview explains why this is not the case:

Teacher A: I don’t think it is the number but the importance attached to it. We could have a pop quiz every other day. If it was purely for motivation or feedback purpose, it would not be a problem. But when they have to take these tests to be qualified for the proficiency exam ... I find my students so stressed. I would not care about the number. They [frequent tests] could be perfect motivational tool if students just see how well they perform.

It is obvious that neither the students nor the teachers are completely negative about the frequent quizzes. It seems that frequent testing might really facilitate better learning of the course material or motivate students' learning when it is valued as a teaching/ learning tool with carefully revised assessment policies and procedures.

4. 5. Retention

Educational psychologists believe that “people remember material better after several short periods of practice separated in time (“spaced” or “distributed” practice) compared to one long period of practice (“massed” practice) even when the total number of repetitions is the same in both learning conditions” (as cited in Kuo, & Simon, 2009, p.157). Likewise, according to Roediger et al. (2011, p.1), repeated retrieval:

1. enhances better retention of the new material compared to not testing or even to studying;
2. produces knowledge that can be retrieved flexibly and transferred to other situations;
3. leads to easier retrieval of related information, at least on delayed tests.

When this is the case, frequent quizzes should be working very well in the language classroom, and in our situation, the teacher and student responses support the literature: Both teachers and students do agree that frequent quizzes help to improve students' memory and retention skills as 55 % of the participant teachers (including 41 % strongly agree) and 57% of the students agree (including 17% strongly agree) that frequent quizzes help to improve students' learning and memory skills. However, the picture is not as bright as it seems according to a teacher's interview comment:

Teacher B: But students are constantly reminded of the assessment [with frequent quizzes]. [This is] exam oriented not learning. They are only focused on passing the proficiency [which has] very little connection between what they are learning. They see it just like another school subject.

Frequent tests may well serve the purpose with a careful choice of what is tested and how it is tested. However, if the tests do not test the right skills and types of knowledge in the right way, they may encourage rote learning of the tested material, in which case it may become inevitable that students see them only as a ticket to pass the course, which makes it impossible to talk about real learning of the language.

4. 6. Feedback

Research on frequent testing highlights the value of feedback. Bangert-Drowns, Kulik and Kulik (1991) draw attention on the premise that frequent testing provides teachers with “more opportunities to correct student errors and reward good performance, and give students good indication of what they have learned” (p. 89). However, when students are tested frequently, if there is no posttest feedback given about learning, and if frequent tests are “no more than indicators of a final high stakes summative test, or if they are components of a continuous assessment scheme so that they all bear a high-stakes implication, then the situation can amount to no more than frequent summative testing” (Black, & Dylan, 1998, p. 36). Supporting this, Kuo and Simon (2009) cite Addison's 1995 study where he demonstrated that the presence of a posttest feedback “helps students learn the material better” and conclude that especially for the low performing students it is “crucial to provide feedback and/or remedial instruction after every test” (p. 158).

In our case, the students trust frequent quizzes as a tool to monitor their learning and their progress. They believe that, thanks to frequent quizzes, they can see their weaknesses and strengths (78%). Similarly, they agree that frequent quizzes help them keep track of what exactly

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they are learning (70%) and show them what is important and what they need to study (63%). About feedback they are receiving from the teachers, they still feel that they can better communicate and ask for/receive help from the teacher(s) thanks to frequent quizzes (68%), but when it comes to whether the teacher(s) can see their strengths and weaknesses, they are less certain (48%) (see Figure 3).

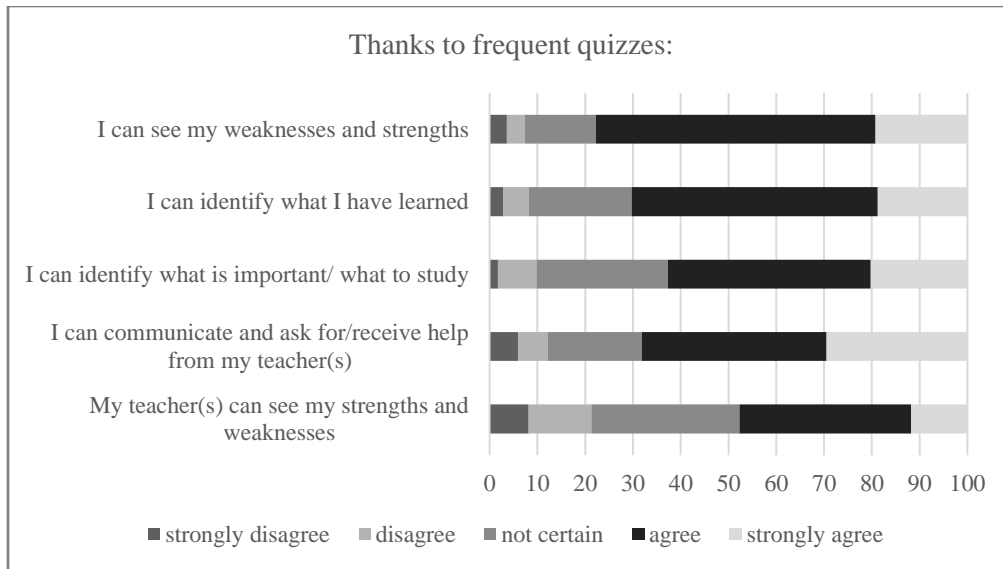


Figure 3: Students' perspectives on self and teacher evaluation and feedback.

It is not surprising that the participant teachers agree with the literature acknowledging that frequent quizzes work better if they offer immediate and constructive feedback (95%). Similarly, they agree with the students as 50% of the teachers believe that frequent quizzes increase students' metacognition and improve the ability to monitor their own progress. In the same vein, 77% of the teachers believe that frequent quizzes help teachers monitor students' learning. However, they are less optimistic than the students about the communication and collaboration between the students and teachers as 45 % of the teachers do not think frequent quizzes lead to improved communication and collaboration between the teacher and students. One teacher sums up the situation in the comment box on the questionnaire well:

Anonymous Teacher Comment: Focusing too much on language accuracy especially in quizzes testing reading or listening skills seem to be a hindering effect on student learning. Moreover, students lose interest in the quiz feedback if they are tested frequently. Another important factor in taking the feedback given after the test is that when they get feedback too late from the instructor, unless they are extremely self-motivated learners, they lack the motive to take the feedback seriously. They don't remember the tasks to bother themselves anyway.

This is most probably why there is a high consensus among the participant teachers that fewer quizzes would offer better assessment of learning, 59% (including 14 % strongly agree) and more comprehensive feedback, 73% (including 27 % strongly agree). A teacher's interview comment explains this finding very well:

Teacher C: Frequent testing, frequent feedback must be important, but the problem is the students are not taking it. They look at the mark [which is] not providing students with feedback. Would be useful if it was for feedback,

monitoring learning. Maybe, not the frequency but the rationale, the methodology [is the problem].

4. 7. Performance

As mentioned earlier, repeated retrieval is important in learning the new material, which is why, it is not possible to disregard the role of frequent testing on students' exam performance. Nevertheless, there are still some important factors to consider to be able to talk about its effectiveness.

Kuo and Simon's meta-analysis (2009) shows that in most of the studies, frequent tests are usually found to have no or not significant effect on students' final exam performance (p.157). In addition to that, according to Bangert-Drowns, Kulik and Kulik (1991) better exam performance does not always mean better learning because "students might direct their efforts on performing better on tests rather than learning" (p.89). Corroborating this idea, Tan (1992), in his study, evidenced that "frequent summative tests were having a profound negative influence on [first year medical students'] learning." He suggests that if the tests are only measuring "low-level skills," they will eventually establish a "hidden-curriculum" which will inhibit "high-level conceptual development" in the absence of which "students cannot apply theory to practice" (p. 255).

On the other hand, in their meta-analysis, Kuo and Simon (2009, pp. 157), highlight the fact that taking "section tests" prior to final exam is beneficial for better final exam performance, in other words, any number of tests is better than taking no tests. However, there is no linear correlation between the number of tests and final exam performance and that a student is successful on "section tests" does not guarantee a better final exam performance. Similarly, they also underline the fact that frequent tests lose their effectiveness beyond a certain number of tests, more than 1 and 2 tests in a semester, for instance, may cause the performance to decline again. Another interesting point in their analysis is that when the questions in frequent tests overlap with those in the cumulative final exam, they are more likely to lead to better final exam performance.

Kuo and Simon (2009) also quote some studies (Graham, 1999; Kika, McLaughlin, and Dixon, 1992) which offer "some indirect evidence suggesting such a link between test frequency and level of student performance. Mid- to low-performing students demonstrated a larger gain in learning outcome when the number of tests had been increased." With reference to those studies, they conclude that "lower-achieving students may benefit more from frequent testing than do higher-achieving students since the latter group tend to do well consistently across exams regardless of test frequency," and they suggest that "for the low performers to benefit from frequent testing, it would then be crucial to provide feedback and/or remedial instruction after every test" (pp. 158-159).

Student questionnaire responses to whether they are getting better grades in high stakes situations thanks to frequent quizzes shows that the students do not believe frequent quizzes help them perform better in bigger exam situations: While 42% (including 19% strongly disagree) say that this is not the situation, 33% of the students (including 7% strongly agree) agree that they are getting better grades in the mid-terms thanks to frequent quizzes, and 26% say that they are not certain. The teachers, on the other hand, are less sure about whether frequent quizzes lead to better student success as 32% (18% strongly disagree) of the participant teachers disagree that frequent quizzes help to improve student success, and 55% of them say that they are not sure about this.

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However, the participant teachers are more obviously leaning towards the negative side when the discussion is about the effectiveness of frequent testing. For instance, 64% (including 14% strongly agree) of the participant teachers do agree that frequent quizzes boost recall of what is tested, but may harm the recall of what is not tested. Similarly, 68% (including 27% strongly agree) of the participant teachers do agree that frequent quizzes are producing rote learning, which is most probably due to the test and assessment procedures practiced in the program: 64% (including 32 % strongly agree) of the participant teachers do agree that frequent quizzes are assessing isolated, sentence level samples of language by means of M/C, gap fill or transformation type of questions; 91% (including 50% strongly agree) of the participant teachers do agree that frequent quizzes are valuing accuracy more than language development and form more than content. The fact that 59% (including 14% strongly agree) of the participant teachers agree that fewer quizzes would offer better assessment of learning also shows that they do not believe in the effectiveness of the frequent tests given (see Figure 4).

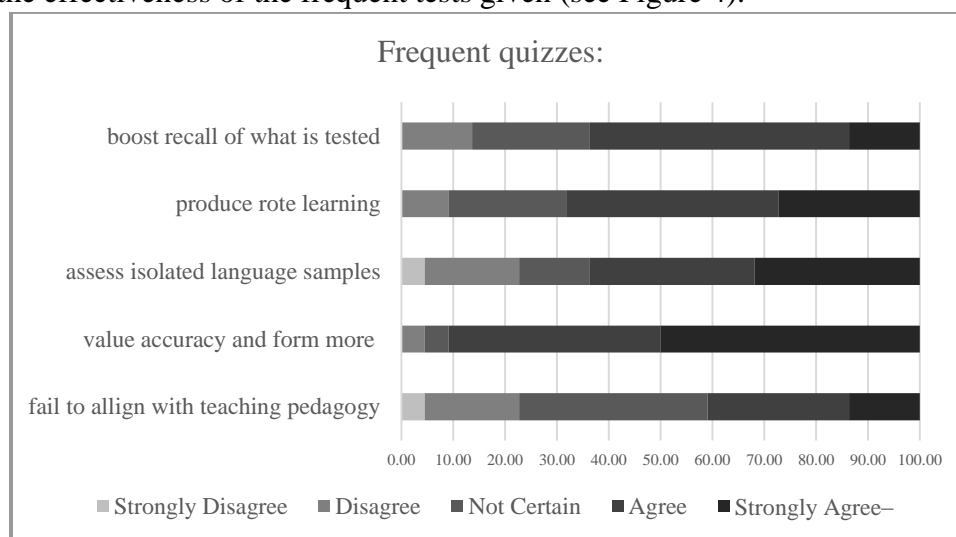


Figure 4: Teachers' perceptions of the effectiveness of the frequent quizzes.

To sum up, in our situation, neither the students nor the teachers trust frequent quizzes as exam performance builders. The teachers believe that what is valued in the quizzes is leading to superficial learning, and/or the quizzes are not assessing real learning, which is most probably why the participant teachers are this much negative about the effectiveness of the frequent quizzes:

Teacher B: I don't think the quizzes assess learning in the best possible way. [They are] not designed in the best way. When you have this many quizzes, of course you can see the students' progress, but how well/how fair they are graded when they [the quizzes] are this many [is an issue].

4. 8. Instructional effectiveness

Although advocates of frequent testing may think that it is a well-spent time, there is no doubt that tests given in class time takes valuable time away from instruction. In conclusion to their meta-analysis, with reference to four studies where students' attitudes towards test frequency was measured and was found that students "had a more favorable opinion of their instruction when they were tested more frequently," Bangert-Drowns, Kulik and Kulik (1991)

suggest that frequent testing can “improve the effectiveness of the instruction,” (p. 97) and may help creating a more positive atmosphere in the classroom (pp. 97-98).

To see the effect of the frequent quizzes on the instruction in prep school at METU, NCC, I raised several questions to both students and teachers on the survey. When I asked the students whether they would pay less attention to class-work or homework if there were not this many quizzes, 72% (including 34% strongly believe so) said they would still be paying this much attention. Likewise, as given earlier, 69% said they would still care about the course material if there were not this many quizzes.

When I asked the teachers whether they think frequent quizzes are consuming class time, take time away from other critical classroom activities, there was no notable consensus. On the other hand, three of the teachers who volunteered to give interviews expressed some positive feelings about the class time given to quizzes:

Teacher B: I find it relieving at times, especially with my problematic class. When you have motivational problems... sometimes, the quiz time gives the teacher some time to reflect on... break time... during which you don't have to do much...

As opposed to this, they all mentioned how uneasy it is to teach with frequent quizzes. For example, the same teacher said:

Teacher B: However, most of the time, it is a pain because you cannot do what you are going to do, and you cannot do it next hour because they will be talking about the quiz. Or you will need to give them a warm-up activity next lesson at the beginning. Can mess up the whole morning. Difficult if you have something you need to finish with.

It seems that the problem is not limited to the time the quizzes are given. Frequent quizzes seem to have an effect on teaching and instruction in pre-and post-quiz situations as well. Although there is no noteworthy agreement or disagreement on whether frequent quizzes improve their teaching or not, 45 % (including 14 % strongly agree) of the participant teachers agree that fewer quizzes would allow more time for preparation, teaching and learning; and 41 % (including 14 % strongly agree) do agree that frequent quizzes are failing to align assessment procedures with curricula and teaching pedagogy. What's more, 59% (including 32% strongly disagree) of the participant teachers do not think frequent quizzes help to improve students' active participation in the classroom. One teacher explains why this is the situation:

Teacher D: The teacher's job as the observer and/or facilitator of learning, but [with the quizzes] we are losing this opportunity as we are simply watching them performing we cannot facilitate or observe learning; and when we talk about this many quizzes, over time, you build up a number of hours with lost opportunities.

In our context, the majority of the students are coming from the Turkish education system where there is too much emphasis on testing and exam performance, which is why it will not be surprising if they favor frequent tests. However, students' responses in this particular situation do not back up this assumption. Similarly, although the teachers volunteered to give interviews have made some positive comments about the class time given to the quizzes, the points raised are not strong enough to justify the frequency of the quizzes. Likewise, the teachers' responses to the questions relevant to instructional effectiveness show that they are not positive about frequent quizzes' contribution to the instruction.

5. Conclusion

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The results show that the teachers at METU, NCC, SFL, Preparatory School are mostly in line with the literature on frequent testing, but when the question is about the level of anxiety or effectiveness of the instruction, there is not any significant consensus. However, from the students' perspective, except for their positive impact on their learning, retention and self-monitoring skills, frequent quizzes do not make any big contribution to their attendance and study habits, level of anxiety or performance (see Table 3):

Table 3: Summary of findings in comparison with the literature

The impact of frequent tests on	In the Literature	For the Students	For the Teachers
Attendance	Positive	“no” or “not significant”	Positive
Study habits	Positive	“no” or “not significant”	Positive
Anxiety	Positive	“no” significant consensus	“no” significant consensus
Learning	Positive	Positive	Positive
Retention	Positive	Positive	Positive
Feedback	Positive	Positive	Positive
Performance	“no” or “not significant”	“no” effect	“no” effect
Instruction (from students' point of view)	Positive	“no” effect	“no” significant consensus

In brief, the teachers trust frequent quizzes as attendance builders although the students repudiate their teachers. Similarly, while the teachers are more positive about frequent quizzes' capacity to encourage more regular and effective study habits, the students have doubts about this situation. However, while leaning towards the negative side, both the teachers and the students are mainly not sure about whether the frequent quizzes help to reduce students' exam anxiety or not.

The majority of the students and the teachers agree that frequent quizzes help better learning and relating the course material and improve students' memory and retentions skills. Likewise, both parties believe that frequent quizzes help teachers' monitor students' learning and help students see their own progress, but the teachers have some concerns about the effectiveness of the feedback in frequent quiz situations. In addition, frequent quizzes are not thought to be facilitating better student performance at high stakes situations. Finally, the students do not seem to be favoring frequent quizzes in this particular situation, and the teachers believe fewer quizzes would have a positive effect on the instruction.

It is unfortunate that the participant teachers do not trust the efficacy of the frequent quizzes as they think they can easily produce superficial/ rote learning and boost recall of only the tested material, and they agree that fewer tests would offer better assessment of learning as they would allow giving more comprehensive tests and offer more time for grading.

There are, of course, limitations to this study: First of all, although the idea was to find about teacher and student perceptions of frequent quizzes, the data I collected via student and teacher questionnaires mainly hold quantitative characteristics rather than being qualitative. The

interviews I conducted with four of the participant teachers allowed me to move closer to the qualitative end, but I did not interview any students at this stage. Although the questions in both surveys appear to hold content, internal and external validity, the number of teacher respondents to the questionnaire might reduce the validity in terms of sample representativeness. Conducting the surveys again with different groups of students and teachers to test the reliability was not possible at this stage due to practical and logistical reasons.

Despite its limitations, this study shows that frequent tests given in a language classroom demand careful consideration. Be it qualitative or experimental research, it is obvious that the impacts of frequent testing in a language classroom require closer analysis. In conclusion, if this much emphasis to testing is needed to be given, then those tests should serve a formative function with a greater emphasis on the opportunities for effective feedback and students' self-monitoring of their learning. Testing objectives and tools should be well chosen to make sure frequent tests serve the right purpose. Only then, it may be possible to justify the amount and frequency of the quizzes and get the possible benefit out of them.

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References

- Addison, W. E. (1995). Consequences of missing post exam review sessions. *Teaching of Psychology*, 22, 121–23.
- Azorlosa, J. L., & Renner, C. H. (2006). The effect of announced quizzes on exam performance. *Journal of Instructional Psychology*, 33, 278–83.
- Bangert-Drowns, R. L., Kulik, J. A., & Kulik, C. L. C. (1991). Effects of frequent classroom testing. *The Journal of Educational Research*, 85(2), 89-99. doi: 10.1080/00220671.1991.10702818
- Black, P., & Dylan, W. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74. doi: 10.1080/0969595980050102
- Davison, C., & Leung, C. (2009). Current Issues in English Language Teacher-Based Assessment. *TESOL Quarterly*, 43(3), 393-415. Retrieved from <http://www.jstor.org/stable/27785027>
- Fitch, M. L., Drucker, A. J., & Norton, J. A. (1951). Frequent testing as a motivating factor in large lecture classes. *Journal of Educational Psychology*, 42, 1- 20.
- Galassi, J. P., Frierson, Jr. H. T., & Siegel, R. G. (1984). Cognitions, test anxiety, and test performance: A closer look. *Journal of Consulting and Clinical Psychology*, 52, 319–20.
- Graham, R. B. (1999). Unannounced quizzes raise test scores selectively for mid-range students. *Teaching of Psychology*, 26, 271– 73.
- Hovell, M. F., Williams, R. L., & Semb, G. (1979). Analysis of undergraduates' attendance at class meetings with and without grade-related contingencies: A contrast effect. *Journal of Educational Research*, 73, 50-53.
- Kika, F. M., McLaughlin, T. F., & Dixon, J. (1992). Effects of frequent testing of secondary algebra students. *Journal of Educational Research*, 85, 159–62
- Kling, N., McCorkle, D., Miller, C., & Reardon, J. (2005). The impact of testing frequency on student performance in a marketing course. *Journal of Education for Business*, 81, 67–72.
- Kuo, T., & Simon, A. (2009). How many tests do we really need? *College Teaching*, 57(3), 156-160. doi: 10.3200/CTCH.57.3.156-160
- Landrum, R. E. (2007). Introductory psychology student performance: Weekly quizzes followed by a cumulative final exam. *Teaching of Psychology*, 34, 177–80.
- Leeming, F. C. (2002). The exam-a-day procedure improves performance in psychology classes. *Teaching of Psychology*, 29, 210–12.
- Marchant, G. J. (2002). Student reading of assigned articles: Will this be on the test? *Teaching of Psychology*, 29, 49–51.
- Marso, R. N. (1970). Classroom testing procedures, test anxiety, and achievement. *Journal of Experimental Education*, 38, 54–58.
- Mawhinney, V. T., Bostow, D. E., Laws, D. R., Blumenfeld, G. J. & Hopkins, B. L. (1971). A comparison of students studying: Behavior produced by daily, weekly, and three-week testing schedules. *Journal of Applied Behavior Analysis*, 4, 257–64.
- Prodromou, L. (2006). The backwash effect: from testing to teaching. *Readings in Methodology* (pp. 209-214). Retrieved from: <https://btk.ppke.hu/uploads/articles/671983/file/Somogyi-Toth2006%20Readings.pdf> (Reprinted from *ELT journal*, 1995, 49(1), 13-25)
- Roediger III, H. L., Putnam, A. L., & Smith, M. A. (2011). Chapter One: Ten Benefits of Testing and Their Applications to Educational Practice. *Psychology of Learning and Motivation*, 1-36. doi:10.1016/B978-0-12-387691-1.00001-6

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- Tan, C. M. (1992). An Evaluation of the Use of Continuous Assessment in the Teaching of Physiology. *Higher Education*, (3). 255-272. Retrieved from <http://link.springer.com/article/10.1007/BF00145016>
- Taylor, C. S., & Nolen, S. B. (2008). *Classroom assessment: Supporting teaching and learning in real classrooms*. (2nd ed.). Upper Saddle River, N.J. : Pearson/Merrill/Prentice Hall.
- Wilder, D. A., Flood, W. A., & Stromsnes, W. (2001). The use of random extra credit quizzes to increase student attendance. *Journal of Instructional Psychology*. 28, 17-20.

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Appendix 1

Student Questionnaire

Please indicate how much you agree or disagree with the following items:

Thanks to frequent quizzes	1 Strongly	2 Disagree	3 Not certain	4 Agree	5 Strongly
1. I feel less anxious about the mid-terms/ final exam.					
2. I can better understand what I have learned.					
3. I can better identify what is important/ what to study.					
4. I can see my weaknesses and strengths and the points I need to					
5. My teacher(s) can see my strengths and weaknesses and monitor my					
6. I can communicate and ask for/receive help from my teacher(s).					
7. I feel more motivated to learn/study.					
8. I learn better and find it easy to relate the course material with my learning.					
9. My learning and memory skills have improved.					
10. I am getting better/ have already got better grades in the mid-term and the					
If there were not this many quizzes	1 Strongly	2 Disagree	3 Not certain	4 Agree	5 Strongly
11. I wouldn't care this much about my attendance.					
12. I wouldn't care this much about the course material.					
13. I wouldn't pay this much attention to class-work or homework.					

Appendix 2

Teacher questionnaire

Please indicate how much you agree or disagree with the following items:

Frequent tests/ quizzes:	1 Strongly Disagree	2 Disagree	3 Not certain	4 Agree	5 Strongly Agree

1. Provide students with feedback.					
2. Reduce student anxiety, students feel more comfortable/relaxed or prepared for the mid-terms or the final exam.					
3. Help student motivation.					
4. Help students learning and relating the course material and do better in the exam.					
5. Help to improve students learning= retention or learning skills.					
6. Boost students' study habits; motivate regular study periods.					
7. Increase students' metacognition and improve the ability to monitor their own progress.					
8. Students attend more classes.					
9. Help students' active participation.					
10. Help to improve communication and collaboration between the teacher and students.					
11. Improve students' achievement.					
12. Help to improve teaching.					
13. Help to monitor students learning.					

However, due to their inherent nature, frequent tests/quizzes ...	1 Strongly Disagree	2 Disagree	3 Not certain	4 Agree	5 Strongly Agree
14. Boost recall of what is tested, but it may harm the recall of what is not tested.					
15. Are producing rote learning of a superficial sort not in a deep fashion.					
16. Are assessing isolated, sentence level samples of language by means of M/C, gap fill or transformation types.					
17. Are valuing accuracy more than language development and form more than content.					

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18. Are failing to align assessment procedures with curricula and teaching pedagogy.					
19. Are consuming lecture time= take time away from other critical classroom activities.					

Fewer tests would:	1 Strongly Disagree	2 Disagree	3 Not certain	4 Agree	5 Strongly Agree
20. Allow giving more comprehensive tests					
21. Offer more time for grading					
22. Offer better assessment of learning					
23. Allow more comprehensive feedback.					

Quizzes work better if:	1 Strongly Disagree	2 Disagree	3 Not certain	4 Agree	5 Strongly Agree
24. The teacher is integrated fully into the assessment process including planning, assessment, evaluating performance, and making decisions based on results.					
25. Conducted by and under the direction of the learners' teacher (not external assessor).					
26. Applied and adapted to meet the teaching and learning objectives of different classes and students.					
27. Integrate learners into the assessment. Utilize self and peer assessment in addition to teacher assessment.					
28. Offer immediate and constructive feedback.					
29. Used to evaluate/ modify assessment procedures to optimize teaching and learning.					