# Convincing EFL students to practice writing: Assigning collaborative writing tasks as extra credit pop quizzes 

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#### Abstract

This paper reports the results of a replication experiment on the effectiveness of extra credit pop quizzes within the context of English for specific academic purposes course. In the original experiment, multiple-choice pop quizzes assigned as extra credit were found to be effective at increasing student attendance rates, classroom participation, the pass rate and student satisfaction, without undermining learning objectives or causing grade inflation. This replication sought to maintain these positive results, while mitigating the loss of instructional hours available for formative tasks. This was attempted by converting collaborative writing into unannounced extra credit assignments as substitutes for multiple-choice quizzes. In addition to maintaining the increased level of student effort, awarding extra credit for formative tasks was found to be a more efficient allocation of class time, resulting in a significant increase in student submission of collaborative writing assignments.


Keywords: Extra credit, ESAP, collaborative writing, continuous assessment, higher education.

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## 1. Introduction

Learning a foreign language at university level, in particular learning to write in a foreign language, requires formal instruction, which entails substantial input, interaction, practice and feedback (see Ellis, 2003; Gass, 1997; Lee \& VanPatten, 2003; Lightbown \& Spada, 2006). With this in mind, many university foreign language courses in North America incentivise formal instruction by awarding grades for regular attendance and active participation during lessons. Language courses in other parts of the world, such as at many European universities, only require the completion of graded assignments. Courses at some universities only require the passing of a final exam. In contexts without course attendance and participation requirements, non-attending students are often surprised by the difficulty they face passing their university foreign language courses, especially exams which assess formal writing skills. From their perspective, if students can pass an Economics or a Statistics exam, as examples, by studying an assigned textbook and lecture notes, then they should be able to pass an English exam by applying similar autonomous study methods. The question, then, is how can university language instructors working in such contexts convince students to engage in formal instruction so that they are more likely to pass their exams, and, more importantly, so that they might become more proficient users of the language? In other words, how can we convince them to put forth the effort necessary to acquire the target language? The present article reports on the use of a novel form of extra credit pop quizzes to this end.

### 1.1. Literature review

Extra credit pop quizzes (see Ennis, 2018, p. 6) can be defined as the comparatively rare practice of awarding extra credit for pop quizzes. A quiz is widely understood as a form of continuous assessment which is much shorter in duration than a test or exam. A quiz can be administered during a lesson in order to assess the completion and/or comprehension of previously assigned homework or the achievement of the learning objectives of that lesson. Quizzes involve comparatively few, quickly completed and easily graded items (e.g., true-false, multiple choice, gap fill, matching, etc.). Whether formally or informally assessed, a quiz primarily serves the formative function of continuously assessing effort and progress, and quizzes have proven to have positive effects on student effort and performance on summative assessment across disciplines (e.g., Geiger \& Bostow, 1976; Landrum, 2007; Leeming, 2002; Tuckman, 1996).

A pop quiz is merely a modality of administering a formally assessed quiz. Specifically, a pop quiz is 'unannounced'. Students are usually informed how many pop quizzes will be included in formal course assessment, and they are informed of the point value each pop quiz will carry in the calculation of their final grades, but they are never informed when the quizzes will occur. In the conventional wisdom of high school and university instructors in North America, pre-announced quizzes temporarily increase student effort when students have the expectation that a quiz will be assigned, but the same effort may not be sustained in the absence of that expectation. Pop quizzes, on the other hand, urge students to attend, participate, and study more consistently, because students are uncertain when a quiz will be assigned and which course material it might assess.

Extra credit refers to optional coursework which contributes 'extra' points to a student's cumulative grade. Extra credit assignments can be given in order to give students the opportunity to compensate for un-submitted, incomplete, or insufficient work. However, in the North American tradition, it is more often integrated into a course syllabus and assessment procedure as an incentive. An extra credit pop quiz is, simply put, a pop quiz which awards extra credit.

Previous research provides evidence that extra credit (e.g., Junn, 1995; Mays \& Bower, 2005; Moore, 2005; Oley, 1992; Silva \& Gross, 2004), pop quizzes (e.g., Graham, 1999; Maurer, 2005; Padilla-Walker, 2006) and even extra credit pop quizzes (Fuad \& Jones, 2010; Thorne, 2000; Wilder, Flood \& Stromsnes, 2001) are effective at increasing student effort in secondary and tertiary education in the United States, and that these interventions have helped students pass courses, especially those students at risk of
failing. However, the effectiveness of these practices appeared to have never been empirically studied in the narrower context of language education or in the national context of Italy prior to a previous classroom study conducted by the author (Ennis, 2018).

### 1.2. Aims

The present paper begins by summarising the results of the previous study in which multiple-choice quizzes were assigned as unannounced extra credit assignments to incentivise regular attendance and active participation in an Italian university context where students are traditionally only required to pass a final exam and where English language courses are often plagued by low attendance rates and high fail rates. The original experiment aimed to extend previous research findings on extra credit pop quizzes to the specific context of English as a foreign language (EFL) teaching in Italian higher education. The results suggested that such an intervention can also increase student engagement in a university English course in Italy and thereby the percentage of students who pass the course, but that these outcomes come at a cost-most notably less in-class time for instruction, practice and feedback, with more out-of-class work for the instructor. The replication study presented in the present paper sought to mitigate the negative effects of the extra credit scheme while maintaining the positive effect on student effort and the course pass rate. The replication-which maintained the same course syllabus, teaching methods, learning materials and extra credit scheme-merely replaced some of the multiplechoice quizzes with collaborative writing tasks which had always been a central component of the course design, but which had rarely been completed by previous cohorts of students.

## 2. Methods

### 2.1. Background: original classroom experiment with extra credit pop quizzes

In response to sporadic attendance, low participation and a high fail rate within the context of an English for specific academic purposes (ESAP) course for students of tourism studies at an Italian university (see Ennis, 2015; 2019), the author conducted a classroom experiment with extra credit pop quizzes during the 2014-15 academic year (Ennis, 2018). The final exam of the course was required for degree completion, but per institutional policy, class attendance and participation were optional, and there had been a consistent pattern of low attendance rates and high fail rates in years prior. The extra credit pop quizzes were, thus, conceived as an extrinsic reward for regular class attendance and active participation in the course. The aim of the experiment was to test the effect of the extra credit scheme on student effort-with the assumption that effort is an observable indicator of engagement and/or motivation-and then test whether the expected increase in effort-as measured by both attendance and pop quiz performance-would lead to a higher overall course pass rate and improved average performance on summative course assessment.

The extra credit scheme was designed to incentive regular attendance and active participation without punishing non-attending students and without causing excessive grade inflation. Ten multiplechoice pop quizzes were administered during lessons in order to test the students' recall of the fieldspecific vocabulary, grammar and academic communication strategies that had been previously covered in the lessons and learning material. Only attending students-defined as those who had attended at least 10 of 15 two-hour lessons-were eligible for extra credit at the end of the semester. Attending students were awarded half a bonus point added to their portfolio grade for each quiz on which they scored a minimum of $60 \%$. Students were awarded an additional half a point for perfect attendance and/or if they finished the semester on a 'Top Ten' list for average quiz scores. After the application of extra credit, students could effectively earn a maximum score of 36 out of 30 points on their portfolio, but because the portfolio assignment only accounted for $25 \%$ of the cumulative course grade, the extra credit effectively increased the maximum final grade to 31.5 out of 30 points
(see Table 1) ${ }^{\mathrm{a}}$ As students were required to pass all components of a final exam in order to pass the course, the portfolio score had no consequence on whether a student passed or failed the course. Extra credit only served as an extrinsic reward for passing students who had regularly attended lessons, actively participated in class and completed ungraded assignments.

Table 1. Extra credit scheme for attending students

| Pop quizzes passed | Portfolio bonus | Cumulative bonus |
| :---: | :---: | :---: |
| 1 | 0.5 | 0.125 |
| 2 | 1 | 0.25 |
| 3 | 1.5 | 0.375 |
| 4 | 2 | 0.5 |
| 5 | 2.5 | 0.625 |
| 6 | 3 | 0.75 |
| 7 | 3.5 | 0.875 |
| 8 | 4 | 1 |
| 9 | 4.5 | 1.125 |
| 10 | 5 | 1.25 |
| One leader board | 5.5 | 1.375 |
| Both leader boards | 6 | 1.5 |

The results of the experiment suggested that extra credit pop quizzes were effective at improving student effort and attainment. In comparison to 2013-14, the average attendance rate rose sharply, the attendance rate per lesson was less sporadic and the pass rate during the first exam session in January/February increased. There was also evidence of a positive relationship between effort and both the probability of passing and better performance on summative assessment, where quiz performance was associated with a greater probability of passing and a stronger correlation with end-of-course performance than was mere attendance. Students also expressed generally favourable opinions of the initiative as well as more favourable attitudes towards the course on an evaluation survey. These results were achieved with minimal impact on the average cumulative mark before the addition of extra credit and minimal grade inflation after the addition of extra credit.

Given the small reward for a comparatively substantial increase in effort, it was concluded that the student response was irrational. In fact, it was suspected that the students might have been mostly responding to the novelty of the concept within Italian higher education, and there was doubt that the positive results could be maintained, should the practice become normalised.

Furthermore, there were four negative outcomes observed by the author. The first was that the 10 pop quizzes required on average 20 minutes of class time to administer, thus necessitating a reallocation of approximately $11 \%$ of only 30 instructional hours from purely formative tasks to formal continuous assessment tasks. The increase in attendance also resulted in a higher student-teacher ratio in the classroom, and, therefore, less individualised instruction and corrective feedback for active participants. In addition, the opportunity to earn extra credit attracted a small number of 'freeloaders', or students who would attend lessons only until a pop quiz had been completed. Finally, the marking of the pop quizzes implied substantially more work for the instructor outside of class.

In an attempt to reproduce the positive results and mitigate the negative consequences of giving extra credit in this context, the author decided to modify the extra credit scheme and replicate the experiment in 2015-16. ${ }^{\text {b }}$

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### 2.2. Context: teaching and assessing English for tourism sport and event management

The context of the study was an English language course for students enrolled in an undergraduate degree program in Tourism, Sport, and Event Management (TSE) at the Free University of BozenBolzano (unibz). Situated in the trilingual province of South Tyrol in northern Italy, unibz has three official languages of instruction: English, German, and Italian. ${ }^{\text {c }}$ Approximately, $50 \%$ of subjects in the TSE program are taught in English, 25\% in Italian and 25\% in German. The majority of the students speak German and/or Italian as their first language. English is, therefore, learned as EFL and primarily serves as both lingua franca (ELF) and medium of instruction (EMI) in the program. However, students must also master the basics of standard academic English in order to complete the $50 \%$ of their courses and exams which are delivered in English. This need is partially met in the TSE program by requiring a 30hour 'specialised English' course during the first semester of study.

The author was contracted as the professor of this course from 2011 to 2016. In the absence of a predefined syllabus or learning objectives, all relevant teaching material available on the market was evaluated and tested during the 2011-12 offering, with the conclusion that customised teaching and learning material would have to be developed due to the particular demands of this academic context (Ennis, 2011). Prior to the 2012-13 offering, a formal needs analysis was conducted, including systematic reviews of the degree requirements and the syllabi of all subjects taught in English as well as an online survey given to a sample from the incoming cohort of students. The results indicated that students had above average proficiency in general English (B2 on average) and high levels of language aptitude and motivation to learn and use English, but lacked the specific language and academic communication skills required by the degree program, in particular, the specialised language and academic writing skills they would need to pass exams and, in some cases, write theses in English (Ennis, 2015, pp. 364-365). These results led to the decision to base the course on the concept of ESAP (see Dudley-Evans \& St. John, 1998, pp. 53-73; Jordan, 2005, pp. 228-270), which was interpreted as the adaptation of 'customised learning material to foster the learning of specific language features (grammar and vocabulary), discourse patterns (cohesion, organisation and coherence) and communicative skills (writing and speaking), as applied to the composition of the specific genre (generic academic texts and formal presentations) common to the 'TSE Management curriculum' (Ennis, 2017, p. 153). In effect, this meant writing a course book from scratch beginning in the Autumn of 2012.

The teaching philosophy could best be described as a 'weak' task-based approach which adhered to the input-interaction-output model of second language acquisition (e.g., Ellis, 2003; Gass, 1997; Lee \& VanPatten, 2003; Lightbown \& Spada, 2006). The aim was to design teaching units which were learnercentred, collaborative, meaningful, relevant and authentic, but which also required students to process both the meaning and form of target lexis and grammar in order to develop both fluency and accuracy in reading, writing, and speaking about their field of study. The course book, which is freely accessible online, (Ennis, 2012-2016) consisted of nine thematic learning units, each containing 1) two readings about a relevant theme; 2) a set of target linguistic features and communication skills appropriate for the target proficiency level of the course and 3 ) a series of authentic tasks which engaged the thematic content and linguistic features contained in each text.

The selection of themes, texts and tasks was informed by the needs analysis, in particular the readings and assignments required across the TSE curriculum. Themes were directly inspired by the TSE curriculum and included current issues in economics, management, law, information systems, event planning, etc. Texts were adapted from textbooks, academic publications, institutional reports, media sources and websites related to tourism studies, many of which were also found in the reading lists of other courses. Reading, listening and writing tasks were designed to resemble the types of assignments students would have to complete in the curriculum, though with an emphasis on language learning. The

[^2]target language and skills were in part pre-defined according to the B2+ level of the Common European Framework of Reference (Council of Europe, 2001), which influenced the selection of appropriate texts, but were ultimately shaped by the specific theme, texts and tasks selected for each unit.

Each unit was structured into two parts requiring students to initially engage each reading separately. Each part moved from top-down to bottom-up processing of the thematic content and linguistic features contained in the respective text (see Carrell, Devine \& Eskey, 1988; Chaudron \& Richards, 1986). Top-down processing consisted of engaging the students in a small group discussion of the theme, which served as an advance organiser, before instructing them to read the text for the purpose of summarising or discussing the content in groups. Bottom-up processing consisted of both inductive and deductive learning. During inductive learning activities, which were influenced by processing instruction (see Lee \& VanPatten, 2003; VanPatten \& Cadierno, 1993), learners completed brief text, genre and language analyses of the complete texts or extracts (see Hyland, 2004; Paltridge, 2001) in order to formulate their own definitions of new lexis, their own explanations of grammar rules and their own descriptions of the embedded conventions of formal writing. Deductive learning involved explicit explanations of the rules and conventions, followed by drills and exercises with solutions and instructor feedback (see Long, 2000; Lyster \& Ranta, 1997).

Basic academic writing was a central feature of the course and was embedded within the underlying structure of top-down to bottom-up processing and inductive to deductive learning. In this sense, the course was based on the concept of reading-for-writing (Hirvela, 2004). Four rules for writing a complete sentence were introduced in the second unit; four rules for writing purposeful paragraphs with clear topic sentences was introduced in the fourth unit and five tips for composing three-paragraph texts (based on prompts with three questions) as the foundation of expository writing (i.e., brief essays and reports) were introduced in the sixth unit. In each case, students first analysed excerpts from readings in order to formulate their own tips/rules, after which the instructor's tips/rules were presented and discussed. Each unit concluded with a collaborative writing task which required the students to consolidate the thematic content and linguistic features of the unit and the academic writing skills. The writing tasks were completed and submitted in groups of three or four students, and instructor feedback was provided on each submission received.

Collaborative writing tasks were chosen for the capstones in part due to the practicalities of implementing a communicative approach with over one hundred students enrolled in the course, but primarily due to the growing evidence at the time that collaborative tasks are effective at dealing with many of the shortcomings of individual writing in L2 classrooms. Working within Vygotsky's zone of proximal development (see Wertsch, 1985) and rooted in Long's (1983) interaction hypothesis, collaborative writing is more learner centred and has been shown to lower anxiety, increase motivation, promote the phenomena of scaffolding, metatalk and languaging offer more opportunities for peer feedback, and improve task performance (e.g., Johnson \& Johnson, 1998; Mulligan \& Garafolo, 2011; Saunders, 1989; Storch, 2005; 2011;).

Course assessment, which consisted of four equally weighted components, including a portfolio of written assignments submitted in two parts and a final exam consisting of three parts (see Table 2), was based upon the principles of 'testing what you teach' and 'testing how you teach' in an effort to promote positive washback (see Lee \& VanPatten, 2003). (The only exception was that all formal summative assessments were completed individually instead of collaboratively.) Assessment of written tasks was based upon four criteria-grammar; vocabulary; organisation, coherence, and expectations of the genre and spelling and punctuation (see Appendix 2) -while the assessment of the oral presentation was based upon five criteria-grammar; vocabulary; organisation and presentation skills; pronunciation and fluency and interaction (see Appendix 3). But it is important to stress that students were not merely assessed on their ability to recall the thematic content, lexical items, grammatical structures and writing and speaking skills practiced during the course; nor were they only assessed on their ability to apply the course content to the completion of tasks similar to those they had practiced. They were also tested on their ability to engage a series of new texts about a new theme and containing new information and
new language. In other words, they were tested on their ability to learn new language as they engaged new content.

Table 2. Summary of course assessment

| Component | Items | Construct |
| :---: | :---: | :---: |
| 1. Portfolio | Various written genre | Ability to compose a brief report on a tourist attraction, sports team, or event in student's hometown (and other relevant genre introduced during course, such as bios or cover letters) |
| 2. Written Exam Part I: Reading, Grammar, and Vocabulary | Six multiple choice, true-or-false, gap fill, and lexical cloze items embedded in or based upon four short texts | Reading comprehension of four short, authentic and relevant texts on a common theme; knowledge of specialised lexis and grammar covered in course; ability to understand the meaning of new lexis from context |
| 3. Written Exam Part II: Writing 4. Oral Exam | Essay with a threequestion prompt Oral presentation | Reading-for-writing: Ability to synthesise language and content of readings to produce a basic, three-paragraph academic text Five-minute formal presentation of the findings of the portfolio report, followed by brief Q\&A |

The combined methods of teaching and assessing could also be described as a 'weak' content and language integrated learning (CLIL) approach in that both teaching material and formal assessment sought to simulate the type of content learning which occurred in other subjects in the curriculum, yet with an explicit focus on the linguistic content (Ennis, 2015). Units urged the students to process and practice target lexis, grammar, discourse features and communication strategies while engaging an authentic and relevant theme, one which they might eventually encounter in another subject during their studies. The primary learning objective was in fact viewed as the development of the autonomous language learning skills necessary for learning English (e.g., scaffolding and the learning of new grammatical structures and lexical items in context), while also succeeding academically within this ELF/EMI context.

During the 2012-13 and 2013-14 academic years, the customised course book appeared effective at meeting these objectives for students who completed the nine units. Unfortunately, the majority of students attended and participated in lessons sporadically and were reluctant to submit ungraded assignments, which implied that they were likely neither practicing nor receiving feedback on their writing. This was associated with disconcertingly high fail rates during the first exam session (Ennis, 2015). The introduction of extra credit pop quizzes in 2014-15 immensely improved the situation by incentivising regular attendance and active participation (Ennis, 2018), but students remained unwilling to complete ungraded assignments, as evidenced by the low number of collaborative writing submissions (see Table 3).

Table 3. Collaborative writing submissions in 2014-15

| Unit | Capstone Task | Submissions |
| :---: | :--- | :---: |
| 2 | Sentences | 0 |
| 3 | Sentences | 5 |
| 4 | Paragraph | 6 |
| 5 | Paragraph | 1 |
| 6 | Essay | 3 |
| 7 | Report | 0 |
| 8 | Essay | 0 |
| 9 | Essay | 2 |
|  | TOTAL | 17 |
|  | AVERAGE | 2.1 |

In response to the negative side effects of the extra credit scheme in 2014-15, it was decided to award extra credit for the completion of learning tasks instead of multiple-choice quizzes, in the hope
that this might optimise the allocation of instructional hours and increase the opportunities for individualised feedback, while maintaining the observed level of effort. As academic writing had been identified as one of the students' primary weaknesses, and as getting students to submit ungraded assignments continued to pose a major challenge, it was decided to convert four collaborative writing tasks (as well as one presentation outline and two practice reading, vocabulary and grammar exams, both of which were also completed in small groups) into extra credit pop quizzes for the purpose of the replication study. The extra credit scheme otherwise remained identical as in 2015-16. It was hypothesised that this modification would maintain the course attendance and pass rates observed in 2014-15, but would optimise the allocation of instructional hours and increase the number of collaborative writing submissions, thereby increasing the opportunities for corrective feedback. Further, it was expected that the average performance on the writing component of the final exam would improve as a result.

### 2.3. Participants

The selection of participants for the replication experiment during the 2015-16 academic year was identical to the process used for the 2014-15 experiment. Participants in both years included all students who attended at least one lesson during the offering of the TSE course, and a subgroup of all first-year students who attempted at least one part of the exam during the first exam session in January and February of the respective years. The first group served for the purpose of collecting data on overall course attendance and pop quiz completion and performance in order to measure student effort, and the subgroup served for the purpose of collecting data on the pass rate and average performance on end-of-course assessment in order to determine correlations between effort and performance. Older students (i.e., repeat participants) were excluded from the second group, because the majority of older students who attempt the exam each year failed the exam during the previous year and rarely have time to attend lessons due to other curricular requirements.

As a result of identical sampling methods, the demographics of the 2015-16 cohort were similar to the 2014-15 cohort. As in 2014-15, the students in 2015-16 were predominantly female (see Table 4). Based on data submitted optionally during the first lesson of both academic years, the students had a median age of 19 in both years and a mean age of $19.5,95 \% \mathrm{CI}(19.3,19.7)$ in 2015-16, compared with a mean age of $19.6,95 \% \mathrm{Cl}(19.3,19.9)$ in 2014-15. In both cohorts, the majority spoke German or Italian as their first/dominant language, and the majority had documentation of B2 English language proficiency or higher according to the CEFR at matriculation (see Table 5).

| Table 4. Gender of participants |  |  |  |
| :---: | :---: | :---: | :---: |
| Students who attended at least one lesson |  |  |  |
| Year | Male | Female | Total |
| $15-16$ | 29 | 76 | 105 |
| $14-15$ | 17 | 80 | 97 |
| $13-14$ | 23 | 65 | 88 |
| $12-13$ | 21 | 69 | 90 |
| First-year students who attempted the exam |  |  |  |
| during first exam session |  |  |  |
| Year | Male | Female | Total |
| $15-16$ | 29 | 69 | 98 |
| $14-15$ | 15 | 71 | 86 |
| $13-14$ | 19 | 57 | 76 |
| $12-13$ | 12 | 49 | 61 |

Table 5. Languages of participants
First/dominant language $14-15 \quad 15-16$

| German | 36 | 33 |
| :--- | :--- | :--- |
| Italian | 35 | 42 |
| Both | 4 | 0 |
| Other | 7 | 9 |
| Total | 82 | 84 |
| English language proficiency | $14-15$ | $15-16$ |
| A2 | 0 | 1 |
| B1 | 12 | 8 |
| B2 | 53 | 50 |
| C1 | 6 | 11 |
| C2 | 1 | 0 |
| Unknown | 10 | 14 |
| Total | 82 | 84 |

### 2.4. Procedures

The experimental procedures were held as constant as is possible in a classroom context. Only minor corrections were made to the course book, and the same assessment procedures and criteria were employed. Each component of summative assessment accounted for $25 \%$ of the final grade, students were required to pass both parts of the written exam and the oral exam to pass the course, and onehalf a point was added to the portfolio for each passed quiz and for perfect attendance and top-ten quiz performance. The only change to course design was that four of ten multiple-choice extra credit pop quizzes were replaced with collaborative writing tasks, one was replaced with a collaborative presentation outline task, and two were replaced with reading, grammar and vocabulary practice exams, the latter of which were completed in pairs (see Table 6). Students were informed that any task completed during lessons could be converted into a pop quiz before, during, or after completion, but they received no advance notification. In fact, on two occasions writing tasks were converted into quizzes on the basis of the instructor's observations of pair effort to complete. The collaborative writing assignments were the capstone writing tasks found at the end of the respective units in the course book (Ennis, 2012-2016). All writing assignments submitted as extra credit assignments were assessed using the same criteria as the writing task on the final exam. Appendix 4 presents the fifth extra credit pop quiz assigned during the class in which Unit 7 was completed. Students were asked to write a practice report during the lessons based on data presented in other reports and tables, and were informed during the task that it would subsequently be marked as extra credit. In this manner, all collaborative writing tasks were subject to becoming extra credit assignments.

Table 6. Extra credit scheme for attending students

| Quiz | Quiz type | Task type |
| :---: | :--- | :--- |
| 1 | Multiple choice | Individual |
| 2 | Multiple choice | Individual |
| 3 | Practice paragraph | Small Group |
| 4 | Practice paragraph | Small Group |
| 5 | Practice report | Small Group |
| 6 | Multiple choice | Individual |
| 7 | Practice essay | Small Group |
| 8 | Practice presentation outline | Small Group |
| 9 | Practice reading exam | Pair |
| 10 | Practice reading exam | Pair |

All students present during the first lesson were given a detailed explanation of the extra credit scheme and a general description of the aim of the experiment. They were then given the option to classify themselves as attending or non-attending students. Students not present during the first lesson
( $N=23$ in 2015-16) were given the same explanation and given the same option upon their first presence in class. All students were permitted to change their status at any point during the course.

### 2.5. Data collection and analysis

The replication experiment employed nearly identical data collection and analysis methods as the original. Individual student attendance was recorded each lesson. In 2015-16, this data was collected through the submission of a real pop quiz or the submission of a "fake" pop quiz (see explanation below), whereas in 2014-15 a signed attendance sheet was also used on two occasions. In both years, attendance data was recorded in a spreadsheet which also contained student grades on all marked assignments, including the extra credit assignments. Students' attitudes about the extra credit scheme and the course in general were measured on a five-point Likert scale based upon responses to a course evaluation survey administered after the conclusion of lessons but prior to the final exam. In addition to quantitative data, several qualitative observations of the impacts of the extra credit scheme were noted by the author throughout the semester.

Changes in course averages (i.e., average number of assignment submissions, average course attendance, average scores on each component of course assessment, average responses on the course evaluation survey) between 2014-15 and 2015-16 were verified by means of the Student's $t$-test, while changes in pass rates were tested using the $z$-test for two proportions. Chi square tests were performed to measure the significance of differences in pass rates for attending versus non-attending students as well as between students who earned an average score of $60 \%$ or above on the pop quizzes and those who earned less than 60\%. A z-test for two proportions with partially overlapping samples (Derrick, Dobson-Mckittrick, Toher \& White, 2015) was employed to test the significance of the comparative predictive power of attendance versus pop quiz performance with regard to the likelihood of passing the course. Linear regression was conducted to determine the correlation between attendance and each component of summative assessment, as well as between pop quiz performance and each component of summative assessment.

## 3. Results

The most noticeable effect of the new extra credit scheme was the appreciable increase in the number of submissions of collaborative writing assignments, where the starkest increases were observed for those tasks which were assigned as extra credit (see Table 7). This was in part because students were observed to be noticeably more engaged during these tasks than in previous years, and in part because they had more time than in 2014-15 to complete these tasks in class. The total number of submissions increased sharply from 17 in 2014-15 to 99 in 2015-16, while the average number of submissions per assignment increased from $2.1,95 \% \mathrm{Cl}(0.5,3.7)$ to $12.4,95 \% \mathrm{Cl}(5.8,14), t(14)=2.95$, $p=0.005, d=0.62$. This also implied a sharp increase in the number of students receiving regular feedback on their written production. (As students worked in groups of three or four, the average number of participants per assignment increased from approximately 7.4 to 43.4.)

Table 7. Written assignment submissions in 2015-16

| Unit | Capstone task | $\mathbf{1 4 - 1 5}$ | $\mathbf{1 5 - 1 6}$ |
| :---: | :--- | :---: | :---: |
| 2 | Sentences | 0 | 0 |
| 3 | Sentences | 5 | 6 |
| 4 | Paragraph* | 6 | $25^{*}$ |
| 5 | Paragraph* $^{*}$ | 1 | $22^{*}$ |
| 6 | Essay | 3 | 8 |
| 7 | Report* | 0 | $19^{*}$ |
| 8 | Essay | 0 | 2 |
| 9 | Essay* | 2 | $17^{*}$ |
|  | TOTAL | 17 | 99 |


| AVERAGE | 2.1 | 12.4 |
| :--- | :--- | :--- |

*Assigned as unannounced extra credit.

Despite the fact that the number of students who attended at least one lesson increased from 97 to 105 between 2014-15 and 2015-16, the number of first-year students who attempted at least one exam component during the first exam session remained constant at 85 in 2015-16, compared with 86 in 2014-15. Both the downward trend in the attendance rate per lesson (see Figure 1) and the average course attendance rate (see Table 8) remained unchanged by the adaptation of formative tasks as extra credit pop quizzes. The average course attendance rates were statistically identical at $73.1 \%, 95 \% \mathrm{Cl}$ ( $68.2 \%, 78.0 \%$ ), and $73.3 \%, 95 \% \mathrm{Cl}(67.5 \%, 79.1 \%)$, respectively, $t(200)=0.04, p=0.968, d=0.005$. A slight decrease in the pass rate from $68.6 \%, 95 \% \mathrm{Cl}(w-=57.9 \%, \mathrm{w}+=77.9 \%)$, to $63.5 \%, 95 \% \mathrm{Cl}(\mathrm{w}-=$ $52.3 \%, \mathrm{w}+=73.5 \%$ ), was not found to be statistically significant, $z(182)=-0.70, p=0.484$.


Figure 1. Attendance rate per lesson with extra credit

Table 8. Effect of extra credit pop quizzes on attendance and pass rate

| Academic <br> year | Attending <br> students | Average student <br> Attendance rate | Exam <br> attempts | Course pass rate |
| :---: | :---: | :---: | :---: | :---: |

In 2014-15, attending students had a significantly higher pass rate than non-attending students, $\chi^{2}$ (1, $N=86$ ) $=19.99, p<0.001$ (see Table 9), as did students with passing average quiz scores in comparison to students with failing average quiz scores, $\chi^{2}(1, N=86)=19.35, p<0.001$ (see Table 11). Moreover, there was strong evidence that a passing quiz score led to a greater probability of passing than mere attendance, $z 8(68)=3.23, p=0.001$. In 2015-16, the effect of attendance was statistically insignificant, $\chi^{2}(1, N=85)=0.6211, p=0.431$ (see Table 10), while the effect of quiz performance remained significant, $\chi^{2}(1, N=85)=11.99, p<0.001$ (see Table 12). The level of confidence in the
increased likelihood of passing associated with quiz performance in comparison to attendance was thus increased, $z 8(70)=3.99, p<0.001$.

Table 9. Comparison of pass rates for attending and non-attending students 2014-15

|  | Exam pass | Exam fail | Total | Pass rate |
| :--- | :---: | :---: | :---: | :---: |
| Attending | 55 | 14 | 69 | $79.7 \%$ |
| Non-attend | 4 | 13 | 17 | $23.5 \%$ |
| Total | 59 | 27 | 86 | $68.6 \%$ |

Table 10. Comparison of pass rates for attending and non-attending students 2015-16

|  | Exam pass | Exam fail | Total | Pass rate |
| :--- | :---: | :---: | :---: | :---: |
| Attending | 47 | 25 | 72 | $65.3 \%$ |
| Non-Attend | 7 | 6 | 13 | $53.8 \%$ |
| Total | 54 | 31 | 85 | $63.5 \%$ |

Table 11. Comparison of pass rates for passing and failing average pop quiz scores 2014-15

|  | Exam pass | Exam fail | Total | Pass rate |
| :--- | :---: | :---: | :---: | :---: |
| Quiz pass | 41 | 5 | 46 | $89.1 \%$ |
| Quiz fail | 18 | 22 | 40 | $45.0 \%$ |
| Total | 59 | 27 | 86 | $68.6 \%$ |

Table 12. Comparison of pass rates for passing and failing average pop quiz scores 2015-16

|  | Exam pass | Exam fail | Total | Pass rate |
| :--- | :---: | :---: | :---: | :---: |
| Quiz pass | 44 | 14 | 58 | $75.9 \%$ |
| Quiz fail | 10 | 17 | 27 | $37.0 \%$ |
| Total | 54 | 31 | 85 | $63.5 \%$ |

Regression analysis of the performance on each component of course assessment both as a function of attendance rates and as a function of average quiz scores during the 2014-15 academic year, adjusting for extra credit, resulted in low correlation for the portfolio assignment and moderate correlation according to Cohen's Scale ( $0.30 \leq r<0.50$ ) for the reading, writing, and oral components (see Table 13). The correlation was stronger for average quiz scores than for attendance rates. The correlation remained stronger for average quiz scores than for attendance in 2015-16, but all correlations dipped into the low correlation range ( $0.10 \leq r<0.30$ ) in the replication (see Table 14).

Table 13. Correlation between attendance/quiz scores and exam component scores 2014-15

|  | Portfolio <br> score | Reading exam <br> score | Writing <br> exam score | Oral exam <br> score |
| :---: | :---: | :---: | :---: | :---: |
|  | $r(86)=\mathbf{0 . 2 6}$, | $r(86)=\mathbf{0 . 3 1}$, | $r(77)=0.34$, | $r(57)=\mathbf{0 . 3 4}$, |
| Attendance rate | $p=0.016$ | $p=0.004$ | $p=0.002$ | $p=0.010$ |
|  | $r(86)=\mathbf{0 . 2 8}$, | $r(86)=0.42$, | $r(77)=0.45$, | $r(57)=\mathbf{0 . 4 0}$, |
| Average quiz score | $p=0.009$ | $p<0.001$ | $p<0.001$ | $p=0.002$ |

Table 14: Correlation between attendance/quiz scores and exam component scores 2015-16

|  | Portfolio <br> score | Reading exam <br> score | Writing <br> exam score | Oral exam <br> score |
| :--- | :---: | :---: | :---: | :---: |
|  | $r(86)=\mathbf{0 . 2 2}$, | $r(85)=0.21$, | $r(79)=0.13$, | $r(55)=\mathbf{0 . 1 1}$, |
| Attendance rate | $p=.042$ | $p=.052$ | $p=.253$ | $p=.424$ |
|  | $r(86)=0.27$, | $r(85)=0.25$, | $r(79)=0.22$, | $r(55)=0.16$, |
| Average quiz score | $p=.012$ | $p=.021$ | $p=.051$ | $p=.239$ |

It was expected that the average performance on the portfolio assignment and the reading and oral exams would be unaffected, while the average performance on the writing exam, and the course
overall, would be improved. However, there was only evidence of an increase in average performance on the oral exam, ${ }^{\text {d }}$ while net changes for all other components and the average cumulative grade were statistically insignificant (see Table 15).

Table 15. Comparison of average performance by exam component

| Component | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\boldsymbol{t}$-test |
| :--- | :---: | :---: | :---: |
| Portfolio | $\mathbf{2 2 . 2}, 95 \% \mathrm{Cl}[20.1,23.3]$ | $\mathbf{2 0 . 9}, 95 \% \mathrm{Cl}[19.5,22.3]$ | $t(169)=-1.524, p=0.065, d=0.23$ |
| Reading | $\mathbf{2 1 . 5}, 95 \% \mathrm{Cl}[20.8,22.3]$ | $\mathbf{2 2 . 2}, 95 \% \mathrm{Cl}[21.4,22.8]$ | $t(171)=1.442, p=0.076, d=0.22$ |
| Writing | $\mathbf{2 1 . 1}, 95 \% \mathrm{Cl}[20.0,22.2]$ | $\mathbf{2 0 . 2}, 95 \% \mathrm{Cl}[19.3,21.1]$ | $t(156)=-1.245, p=0.107, d=0.20$ |
| Oral | $\mathbf{2 3 . 7}, 95 \% \mathrm{Cl}[22.9,24.5]$ | $\mathbf{2 4 . 9}, 95 \% \mathrm{Cl}[23.8,26.0]$ | $t(113)=1.690, p=0.049, d=0.32$ |
| Total | $\mathbf{2 3 . 4}, 95 \% \mathrm{Cl}[22.8,24.0]$ | $\mathbf{2 3 . 9}, 95 \% \mathrm{Cl}[23.4,24.3]$ | $t(111)=0.761, p=0.224, d=0.19$ |

Course evaluations completed in 2014-15 indicated that students held generally positive attitudes about the extra credit scheme and that there was an increase in overall satisfaction with the course in comparison to 2013-14. In 2014-15, the statement "the pop quizzes were a helpful way to review and practice" produced a mean score of $4.0(N=41), 95 \% \mathrm{Cl}(3.78,4.22)$, on a five-point Likert scale. In response to the statement 'overall I am satisfied with the course' students in 2014-15 responded with a mean score of $3.83,95 \% \mathrm{Cl}(3.62,4.04)$, which was a statistically significant increase from the score in $2013-14$ of $3.34,95 \% \mathrm{Cl}(3.05,3.63)(N=41), t(80)=2.766, p=0.004, d=0.61$. Although there was no evidence of a change in overall satisfaction with the course in 2015-16, as the first statement above produced a mean score of $3.70,95 \% \mathrm{Cl}(3.43,3.97), t(79)=-0.761, p=0.224, d=0.17$, students did express less favourable attitudes toward the extra credit in 2015-16, as the second statement produced a significantly lower score of $3.53,95 \% \mathrm{Cl}(3.20,3.86), t(79)=-2.413, p=0.009), d=0.54$.

Grade inflation was maintained at a minimum in 2015-16. The average total extra credit earned in 2015-16 was 3.7 points on the portfolio and approximately 0.9 points overall, compared with 3.1 points and approximately 0.8 points, respectively, in 2014-15. In 2015-16, the net effect on the average passing score during the first exam session, after rounding to whole numbers, was exactly 1 point on a 30 -point scale, an inflation rate of $4.2 \%$, compared to 0.9 points ( $3.8 \%$ ) in 2014-15. In 2014-15, only one student of 59 total passing students was awarded the cum laude designation for the course due to a cumulative score above the maximum of 30 points; none of the 54 passing students earned this designation in 2015-16.

Finally, the instructor observed that class time was used much more effectively as a result of the new extra credit scheme. Students were still attending much more regularly than during the years prior to 2014-15, they were still completing homework and studying more frequently, and they remained more engaged in class, in particular when completing collaborative tasks which might (or might not) serve as extra credit. However, the dramatic increase in student submissions resulted in significantly more time spent marking both graded and ungraded assignments. In addition, the freeloader problem, which was observed in passing in 2014-15, became more conspicuous. In 2014-15, a few students would attend lessons until a pop quiz was given and then promptly leave once the quiz had been collected, but as the quizzes were completed individually, each student's score was representative of his or her own knowledge and effort. In 2015-16, however, some students were observed adding their names to a group extra credit submission, despite the fact that they had obviously contributed very little to the collaborative work.

### 3.1. Discussion

The replication experiment succeeded in reproducing most positive effects of extra credit pop quizzes on student effort which were observed during the original experiment. The course attendance rate remained above $70 \%$, the trend in the attendance rate per lesson remained comparatively stable, and

[^3]the pass rate remained above $60 \%$, without resulting in substantial grade inflation or relaxing educational standards. The second experiment also succeeded in optimising the allocation of limited class time by converting formative tasks into low-stakes, continuous assessments, thereby increasing the number of collaborative writing submissions. The results, however, differed in terms of the measurable effect which effort, as measured by course attendance and pop quiz performance, had on student achievement on summative assessments.

One difference in the results was that, while a passing average of $60 \%$ or above on pop quizzes was still associated with a higher probability of passing the course, attending $66.66 \%$ of the lessons was no longer a predictor of passing in 2015-16. In 2014-15, pop quiz performance was a stronger predictor than regular attendance, and it was speculated that this was because attendance was in actuality an indicator of an effort to exploit the extra credit opportunity, whereas pop quiz performance was a better indicator of effort to practice, study, and, perhaps, learn. The fact that achieving attending status alone did not increase a student's probability of passing in 2015-16, offers more conclusive evidence supporting this interpretation. This might also explain the weaker correlation between attendance and summative assessment performance, which was observed in 2015-16.

That there was a weaker correlation between pop quiz performance and performance on summative assessment as well as no change in average student performance on the writing exam compared with 2014-15 - whereas there was an increase in average performance on the oral exam - were unexpected results. There are only three possible explanations.

The first explanation is the obvious fact that the experiment did not control for the quality of student writing prior to the course. A more robust experimental design would include a pre-test in which students complete a mock exam during the first lesson in order to measure the differences in scores at the end of the semester. The data analysis could then measure improvement in performance as a result of effort, as opposed to end-of-course performance alone.

The second plausible explanation is that the new incentive to freeload distorted the impact that quiz performance had on pass rates and end of course assessment performance. Freeloaders who signed their name to group or pair work assigned as extra credit received the same score and the same amount of extra credit, without matching the effort of their peers. Habitual freeloaders thus may have skewed the data collected on pop quiz performance, while performing worse than their more engaged peers on end-of-course assessments. Unfortunately, no data was collected which might help quantify the freeloader effect.

The third plausible explanation is that due to the success of the intervention, the instructor's expectations were higher than the previous year. Noticing the increase in collaborative writing submissions and the additional opportunities to give more focused instruction and feedback, it is conceivable that the instructor may have overestimated the potential impact this would have on the quality of writing on the final exam. In response, the instructor may have been stricter in marking that component, whereas the freeloader effect likely inflated pop quiz performance, the false expectations of the instructor may have deflated summative assessment performance. The only empirical evidence to support this latter explanation is that the average oral exam score, which was rated by a commission, was improved in 2015-16. This explanation therefore requires further consideration in the future.

The substitution of collaborative writing assignments for multiple-choice quizzes required significantly more effort on the part of students for the same minimal reward. The less favourable opinions of the extra credit pop quizzes expressed by the 2015-16 cohort might be a result of this increased workload. Regardless of the students' subjective experience of the intervention, there is little doubt that those students who eagerly completed the extra credit assignments were responding irrationally.

In sum, the results of the replication experiment offer further evidence of the positive impact that extra credit schemes can have on student effort in university language courses. It is particularly informative that such a small extrinsic reward can result in a substantial increase in effort. Yet it also
revealed that there is room for improvement. For example, one possibility would be to assign collaborative writing as pair work instead of small group work, as there is evidence that doing so may encourage participation of individual students (Dobao, 2012). This would undoubtedly result in an even greater workload for the instructor, but that effect should probably be accepted as an unavoidable consequence of any extra credit scheme.

## 4. Conclusion

The replication study presented here offers further evidence to support the potential of extra credit pop quizzes as an incentive for course attendance and participation in university EFL instruction in Italy. These findings suggest that the intervention may have comparable effects in similar contexts, where these practices are not already common practice and where student engagement is unsatisfactory. Most interesting, it seems that students are, somewhat irrationally, willing to put forth significantly more effort for a marginal extrinsic reward. This finding bodes well for contexts in which students require extensive writing instruction, but seem unwilling to complete and submit ungraded practice writing assignments. Assigning collaborative writing tasks as unannounced extra credit assignments may provide an effective alternative to traditional learning tasks. Colleagues are, however, advised to be prepared to put forth more effort themselves preparing and grading the tasks, and should also be prepared to devise ways to monitor and mitigate the practice of freeloading, that is, students skipping class after the submission of an extra credit assignment and/or contributing less work than their peers to a collaborative assignment. In particular, pair work could be explored as a means to inhibit freeloading.

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## APPENDICES

## Appendix 1: Sample pop quiz

Complete each sentence with the best word or tense.

1. There have been attempts to clarify what is meant by the term "visitor" as opposed to "tourist" and the distinction between tourists who travel within their own country ( $\qquad$ tourists) and those who travel to other countries (international tourists).
(a) domestic
(b) outbound
(c) national
(d) visitor
2. In the USA, estimates of domestic second-home ownership range between 3.6 million and 9.2 million properties, the majority of which are located in coastal or $\qquad$ areas.
(a) elderly
(b) rural
(c) seminal
(d) static
3. Tourism arises from the movement of people to and their stay at various $\qquad$ .
(a) vacations
(b) holidays
(c) industries
(d) destinations
4. While it is true that industrialised nations have lost market $\qquad$ the OECD countries nonetheless continue to occupy a strong position in the world tourism market.
(a) budget
(b) share
(c) demand
(d) entry
5. The exploding domestic and $\qquad$ tourist markets of China and India are poised to propel global tourism into yet another period of accelerated expansion.
(a) abroad
(b) outbound
(c) outflow
(d) overseas
6. Households in emerging economies $\qquad$ able to put aside a travel budget.
(a) is now
(b) are now
(c) is now being
(d) are now being
7. Mass tourism destinations $\qquad$ into mega tourism destinations.
(a) now explodes
(b) now explode
(c) is now exploding
(d) are now exploding
8. Tourism $\qquad$ from the movement of people to and their stay at various destinations.
(a) arise
(b) arises
(c) is arising
(d) was arising

## Appendix 2: Assessment criteria for written assignments

Grammar: (0-8 points)

0 Points-The student demonstrates no or very limited ability to appropriately use the core grammar of the B2 level. The student's text is marked by numerous errors that interfere with communication and task completion.
4 Points-The student demonstrates some ability to appropriately use grammar into the B2 level. The student's text, however, is still marked by errors that interfere with communication and task completion. 8 Points-The student demonstrates an ability to appropriately use a vast range of grammar through the B2 level in order to complete the task. His/Her text is marked by very few errors that seem to be mere mistakes.

## Vocabulary: (0-8 points)

0 Points—The student has not integrated any key terms of his/her field of study into the text.
4 Points-The student has integrated a few key terms relevant to his/her field of study into the text, and uses them to discuss specific aspects of the topic.
8 Points—The student demonstrates knowledge of a wide range of key terms relevant to his/her field of study, and uses them to discuss the topic abstractly and formulate opinions.

## Organisation/Coherence/Genre (0-10 points)

0 Points-The text does not adhere to the standards of the genre (e.g. report), and the student fails to organise and link ideas into a coherent response to the task questions.
5 Points-The presentation adheres to the standards of the genre, but the student fails to organise and link ideas into a coherent response to the task questions (or vice versa).
10 Points-The student adheres to the standards of the genre and the student formulates a coherent response to the task questions.

## Spelling/Punctuation (0-4 points)

O Points-The student misspells numerous words, mixes national dialects (e.g. American/English), and makes numerous punctuation mistakes thereby interfering with communication.
2 Points-The student misspells numerous words, mixes national dialects (e.g. American/English), and/or makes numerous punctuation mistakes thereby interfering with communication.
4 Points-The occasional misspelled word or punctuation mistake does not interfere with communication and the student does not mix national dialects.

## Appendix 3: Assessment criteria for oral presentations

## Grammar: (0-8 points)

0 Points-The student demonstrates no or very limited ability to understand and appropriately use the core grammar of the B 2 level. The student's speech is marked by numerous errors that interfere with communication and task completion.
4 Points - The student demonstrates some ability to understand and appropriately use grammar into the B2 level. The student's speech, however, is still marked by errors that interfere with communication and task completion.
8 Points-The student demonstrates an ability to understand and appropriately use a vast range of grammar through the B2 level to complete the task. He/She makes very few mistakes at this level and tends to selfcorrect such mistakes.

Vocabulary: (0-8 points)
0 Points-The student has not integrated any key terms of his/her field of study into the presentation, and seems unable to respond to questions involving such terms as they relate to the chosen topic.
4 Points-The student has integrated some key terms relevant to his/her field of study into the presentation, and is able to use them to discuss specific aspects of the chosen topic.
8 Points-The student demonstrates knowledge of a wide range of key terms relevant to his/her field of study, and uses them to discuss the chosen topic and formulate opinions.

```
Organisation/Presentation (0-8 points)
O Points-The presentation does not follow a logical organisation and the student is unable to link ideas into
a coherent argument in order to complete the task.
4 Points-The presentation follows a logical organisation, but the student struggles to link ideas into a
coherent argument in order to complete the task.
8 Points-The presentation is very well organised and the student formulates a clear argument in
completing the task.
Pronunciation/Fluency (0-4 points)
O Points-The student's mispronunciation of words and disconnected speech interfere with communication.
2 Points-The student's occasional mispronunciations and breaks in speech do not interfere with
communication.
4 Points-The student makes no significant pronunciation errors and speaks with acceptable fluency for the
level.
Interaction (0-2 Points)
O Points-The student is unable to ask for and give clarification, or answer questions about his/her chosen
topic.
1 Point-The student struggles to ask for and give clarification, and/or answer questions about his/her
chosen topic.
2 Points-The student is able to ask for and give clarification, and easily answers questions about his/her
chosen topic.
Bonus (0-2 Points)
The student demonstrates extraordinary creativity in the presentation of his/her topic.
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## Appendix 4: Sample collaborative writing task assigned as extra credit pop quiz

Discussion and Writing 7.3: You have been asked to prepare a brief report on Tourism in Italy for the Ministry of Tourism. Work with your group to write a brief report on the Italian tourism market. You should use information and language from Reading 7.1 and you can adapt the sentences you wrote for Discussion and Writing 7.1 and 7.2. Your report should answer the following questions: 1) What are the main attributes of tourism in Italy, past and present? 2) What are some of the recent economic trends in the Italian tourism sector? (Use some data!) 3) What do you predict for the future and what do you recommend to improve the market? CITE YOUR SOURCES! (see Author, 2012-2016, pp. 65-77)

## Extra Credit Pop Quiz

Work together in a group of 3-4 students. Write the FINAL COPY of your report for Discussion and Writing 7.3 below. You may use the teaching material and your notes, but you may not work with other groups!

Your score will be based on:
Your accuracy and range of grammar covered so far in the course: 8 Points
Your accuracy and range of vocabulary covered so far in the course: 8 Points
The quality of your text (and paragraphs and sentences): 10 Points
Your punctuation and spelling: 4 Points
You will lose 5-30 points for plagiarism.


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[^1]:    ${ }^{\text {a }}$ In Italian higher education, students are assessed on a thirty-point scale, where a score of eighteen or more is a pass.
    ${ }^{b}$ As the replication experiment was underway, the author shared the results of the first experiment and the initial results of the replication during a conference presentation in the autumn of 2015 . These results were then shared at the request of a colleague, who subsequently implemented a similar extra credit scheme using pop quizzes. She reports similar results as the first experiment. But as her use of extra credit pop quizzes aimed to encourage student participation in an action research project studying the implementation of a negotiated portfolio, she does not report the statistical significance of the effects of extra credit pop quizzes on student effort and performance, and no comparison

[^2]:    can be made. The results nonetheless offer further anecdotal evidence in support of using extra credit pop quizzes in the L2 classroom (see Prior, 2017).
    ${ }^{c}$ Ladin, a minority language spoken in the Italian Alps, also serves as a medium of instruction in the MA program in Primary Education.

[^3]:    ${ }^{d}$ However, even this result would be insignificant if the conservative Dunn-Sidak correction were employed in order to maintain a family wise error rate of 5\%.

