Peer-teaching with technology: an Italian grammar case study

Marcella Oliviero¹ and Andrea Zhok²

Abstract

This case study centres on the notion that changing traditional student identities by turning them into ‘student-teachers’ can have very positive consequences on their involvement with the learning process. Technology plays a crucial role and is totally embedded in this approach. In this project, students are asked to research a grammar topic and generate tutorials using Xerte – an open-source authoring suite. They work collaboratively in small groups and teach their peers, delivering their own tutorials in class. Technology allows them to use a variety of techniques, texts and activities, which make the language learning process more creative and interactive. Support and supervision (both academic and technical) from tutors is available throughout the process. This method has proved highly motivating in terms of the acquisition and development of a wide range of transferable skills that go well beyond the specific learning objective – grammar revision – however central it may remain. The paper illustrates the project’s background, rationale, planning, and workflow, and discusses our findings two years after implementation. It also evaluates its impact, effectiveness, and possible wider implications. While articulating a response to a local need for change, we aim at making this case study of interest to others and inspire in them a desire to innovate.

Keywords: peer-teaching, technology-enhanced learning, grammar, task-based learning, collaborative student-centred learning.

1. University of Bristol, Bristol, United Kingdom; mo12244@bris.ac.uk
2. University of Bristol, Bristol, United Kingdom; a.zhok@bris.ac.uk

Chapter 8

1. Introduction

This case study describes a project that was introduced in response to demands for change in a first year post-A level Italian language module for degree students and explains the context and the reasons why it was needed. This course is aimed at students with a British A-level diploma in Italian language or equivalent.

1.1. The educational context – the course

Students taking Italian at Bristol normally choose it as part of a joint honours degree in Modern Languages with another language (French, German, Spanish, Portuguese, or Russian). Other combinations include Italian with Drama, History of Art, Music, Philosophy, or Politics. A handful of candidates study Italian as a single honours programme.

The post-A level course at Bristol consists of three hours of tuition per week, divided into two blocks of eleven weeks over the academic session. This corresponds to the standard teaching provision in British universities (UCML Language Teaching Survey Report, 2014, pp. 4-5). One hour is dedicated to the formal learning of grammar and it is this component of the course which constitutes the focus of our project and is presented and discussed in this case study.

Classes typically consist of fifteen to twenty students, making up approximately a third of the department’s annual intake. The remaining two-thirds are students taking Italian ab initio.

Although some students will have studied Italian for up to five years prior to joining the university, others might have taken an A-level as part of an accelerated course, while students taking A-level as individual candidates might never have studied grammar formally. These may include students from a native speaker background, e.g. heritage speakers. This is one of the reasons why the curriculum includes a complete revision programme, so as to give an equal grounding in the structures of the language to all students. By the end of the first
year, students are expected to have reached a B1 level, according to the Common European Framework of Reference for Languages (CEFR).

1.2. The challenges

The post-A level unit had always posed certain challenges in the overall degree programme. Post-A level students and post-\textit{ab initio} students merge in the second year at Bristol, but despite their perceived advantage, or possibly because of it and the misplaced sense of confidence it engenders, it was not uncommon to see post-A students fall behind post-\textit{ab initio} students – a known phenomenon nationally (Worton, 2009). Better management of expectations regarding university study and the acquisition of stronger independent study skills in the transition from secondary to higher education were necessary. This, together with feedback from dissatisfied students, was an important driver for radical change.

Underpinning the course team’s desire to innovate was the need to re-engage the students with the learning process and react positively to feelings of dissatisfaction amongst them. The idea of challenging them to teach each other seemed a suitable solution to prevent them from becoming passive and complacent about the subject matter.

1.3. A new grammar curriculum

A new teaching and learning approach necessitated a rethinking of the learning objectives. While the unit had mainly consisted of a rather traditional revision of grammatical rules, with the emphasis on morphology, drills, and limited sensitivity to context, the new programme would focus on the following aims:

- to provide a thorough and systematic revision of key grammar topics (from basic morphology to more advanced verb forms);
- to expose students to grammar in use in a wide range of contexts; and
- to emphasise the communicative purpose of grammar.
Moreover, the traditionally linear route from basic to more advanced topics was abandoned, in favour of a mix of easier topics alternating with more challenging ones from the very start, so that students would keep their focus high throughout the academic session, and avoid the impression that interesting topics would be addressed only towards the final stages of the course.

1.4. The project

Students are asked to research a grammar topic and generate tutorials using Xerte – an open-source authoring suite. They work collaboratively in small groups and teach their peers, each group delivering one tutorial in class per term. Technology allows them to use a variety of techniques, texts, and activities, which make the language learning process more creative and interactive. Support and supervision (both academic and technical) from tutors is available throughout the process.

The project is structured across several interlinked phases (see Figure 1).

Figure 1. Workflow chart
Firstly, students receive two IT training sessions in which they familiarise themselves with the tool and learn to use its functionalities. After students are divided into groups, assigned a topic, and given a delivery date for the lesson, two meetings are scheduled with the tutor (see Table 1).

The first meeting, two weeks prior to the delivery of the lesson, involves:

- an in-depth revision of the grammar topic; and
- an analysis of the lesson structure.

Each group is asked to think of a suitable context in which their grammar topic could be applied and to create a video in which they themselves perform.

Table 1. Detailed calendar of activities

<table>
<thead>
<tr>
<th>Settimana</th>
<th>Gruppo</th>
<th>Studenti</th>
<th>Argomento</th>
<th>Appuntamento 1</th>
<th>Appuntamento 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Gruppo 1</td>
<td>Harriet E.</td>
<td>Pronomi diretti</td>
<td>Mercoledì 8/10 Alle 12.30 (G107)</td>
<td>Lunedì 13/10 Alle 3pm (G107)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Isabella H.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Camilla B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gruppo 2</td>
<td>Barnaby B.</td>
<td>Pronomi indiretti</td>
<td>Lunedì 1/10 Alle 3.30pm (G107)</td>
<td>Lunedì 20/10 Alle 3pm (G107)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Antonia L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kalise P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Gruppo 3</td>
<td>Elsa S.</td>
<td>Passato Prossimo VS Imperfetto</td>
<td>Lunedì 20/10 Alle 3.30pm (G107)</td>
<td>Lunedì 27/10 Alle 3pm (G107)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Olivia H.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giuliana Di R.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alice R.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Gruppo 4</td>
<td>Victoria D.</td>
<td>Passato Prossimo VS Imperfetto</td>
<td>Lunedì 27/10 Alle 3.30pm (G107)</td>
<td>Lunedì 10/11 Alle 3pm (G107)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Samuel L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Christabel C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tessa D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Gruppo 5</td>
<td>Eleonora R.</td>
<td>Pronomi relativi</td>
<td>Lunedì 10/11 Alle 3.30pm (G107)</td>
<td>Lunedì 17/11 Alle 3pm (G107)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Esme L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Benjamin F.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Students are asked to produce a lesson plan which includes:

- a short film to set the topic in a communicative context;
- the grammar explanation (following guidelines provided by tutor); and
- exercises and activities related to the topic.

Students are then given one week in which to complete their work. The second meeting, a week before the delivery of their lesson, aims to:

- check that the material produced by the students is appropriate (in terms of accuracy and with regards to the learning objectives);
- provide feedback on errors made; and
- provide advice on teaching strategies.

On the day of the lesson, students have fifty minutes in which to deliver their tutorial in the target language. ‘Student-teachers’ are advised to use a communicative approach, maintaining constant interaction with the ‘student-learners’. This encourages students to work together to deduce grammar rules through questioning and helping each other. At the end of the lesson, the ‘student-teachers’ receive some final feedback from the tutor, evaluating their performance in terms of clarity, appropriateness, accuracy, and coherence.
2. Methodology

2.1. Pedagogic rationale and methods used

Turning students into agents of teaching as well as learning seemed to open an array of stimulating possibilities, especially when married to the idea of students as creators of digital learning tutorials, which would form the platform for their teaching. Jones (2007) goes even further, stating that:

“students can’t be ‘taught’ – they can only be helped to learn. In a student-centred classroom, our role is to help and encourage students to develop their skills, but without relinquishing our more traditional role as a source of information, advice, and knowledge. In a student-centred classroom, the teacher and the students are a team working together” (p. 25).

In this new environment, emphasis is placed on interaction between tutor, learners, and technology.

On a practical level, the tutor needs to plan the programme carefully in advance, so that students “are introduced to the technology and learning approach”, at the same time, in line with the learning outcomes, “building in flexibility”, in order to be ready to adapt to the learners’ needs (Marsh, 2012).

The teacher becomes a facilitator, a coach, and ‘guide on the side’ (Jones, 2007), making sure that the topics are thoroughly understood by asking students questions, at the same time suggesting strategies and activities that might be effective in a specific lesson. Students are provided with ‘scaffolding’ and supported with presentation and teaching advice, but they have freedom of choice, for instance, as to what kind of exercises or activities they want to produce, the visual material they want to include, and the appropriate context for the lesson. The tutor motivates, encourages, and challenges students, questioning them in order to help them develop autonomy and reflect critically on their learning experience. Albeit behind the scenes, the teacher reviews the material produced,
in order to guarantee its accuracy and effectiveness and to evaluate the students’ progress. The result is a sharing environment in which input comes from both the students and tutor.

2.2. Choice of online tool

The online tool chosen for this project is the Xerte Online Toolkit (http://www.xerte.org.uk), an open source tool developed by the University of Nottingham and which became part of The Apereo Foundation initiative (https://www.apereo.org/) in 2014. It allows users to create interactive tutorials that incorporate texts, exercises, and other activities. It provides several interactive activity types such as gap fill, drag and drop activities, quizzes, and multiple choice exercises.

Furthermore, the tutorials can be enriched with pictures and audio-visual materials, relevant features which increase learner motivation, promote variety, and stimulate creativity. In addition, pages can be set up to provide explanatory feedback related to learners’ responses. Consequently, the grammar lessons become more engaging and interactive.

Finally, Xerte was supported locally within our institution and was straightforward to embed into our local Virtual Learning Environment (VLE), supported by Blackboard, with positive implications for facilitating access to materials for independent study.

2.3. A change of learning dynamics

One of the most compelling consequences of flipping the learning experience and effecting it through a peer-teaching approach is the way in which dynamics change. In line with current structured constructivist pedagogy theories of peer-teaching and experiential learning (Falchikov, 2001; Whitman, 1988), our students’ identities become more fluid and boundaries between tutor and learners more nuanced. Ownership and responsibility for the teaching and learning process undergo a shift, whereby teaching and learning become inextricably
linked and can no longer be associated with one specific agent invested with a set of fixed expectations and roles – the tutor teaching, the student learning – such as in a more traditional pedagogic model.

One important aspect of this learning environment is the centrality that planning and design acquire. Students become active stakeholders in collaboratively designing their own learning experiences in line with Kress and Selander’s (2012) concept of “interaction design” where “one not only focuses on products, but also on, for example, social processes at different workplaces, and emphasis is laid on the making of products” (p. 266).

This learning model, the environment it creates and the learning acts, exchanges, and objects (the digital tutorials authored by the students) which it facilitates, lead the students through the range of tiers of learning identified by Bloom’s revised taxonomy, from remembering and understanding to applying, analysing, evaluating, and finally creating (Anderson & Krathwohl, 2001). Although not all tiers are equally developed, the higher tiers play a dominant role in our model.

2.4. Assessment

A change of pedagogy requires a realignment of assessment practices. While the summative aspect of assessment entails the grammar component being tested as part of the students’ end of year written exam (through a series of contextualised grammar exercises modelled on and consistent with the topics and task types practised during the year), formative feedback during the entire session takes a variety of forms and becomes much more fluid and diffused. Students receive feedback and feed-forward from the tutor as well as from each other as members of a connected sharing and learning community.

No marks are given for the quality of teaching and the material created. This could be seen as a weakness but equally it could be argued that it can also encourage students to be freer in experimenting without the fear of being formally assessed. Moreover, outcomes to date prove that the sense of collective
responsibility which students feel within their work-groups and towards the class act as effective motivational devices to keep students on track.

3. Results and discussion

From a pedagogical perspective, the average quality of tutorials ranged from satisfactory to high. The tutor’s judgement, after observing tutorials being delivered, was that they were coherently and attentively structured, the information provided was accurate, and the exercises and activities comprehensive. The material produced showed the students’ personalities and creativity. Pictures, font colours, and audio-visual materials were appropriately chosen with regard to the grammar topic and were aimed at highlighting concepts and facilitating the memorisation of rules and notions (see Figure 2).

Figure 2. Example of video by students and grammar in context/comprehension task

While teaching and learning grammar, students also practise all their language skills, as this work includes written and oral/aural production. Their revision of grammar is much more in-depth, since they are responsible for their classmates’ learning (Boud, Cohen, & Sampson, 2001) and this impacts positively on their awareness and knowledge of the language.
Furthermore, all the tutorials are made available on the VLE after they are delivered in class, which creates a resource pool that students are encouraged to use throughout the session. These materials are also shared with the *ab initio* students, for revision purposes.

Nevertheless, some weaknesses were also noted, mainly related to the students’ presentation and teaching skills: most of them had never had any previous teaching experience, hence, especially in the initial stages, they lacked confidence and needed appropriate training and guidance from the tutor and additional practice. In the first term, most students underestimated the importance of their own performance and found lesson delivery challenging. From our observations, students experienced the most difficulty when having to face the classroom and handle their classmates’ queries. The ‘affective filter’ ([Krashen, 1982](#)) also influences both ‘student-teachers’ and ‘student-learners’, sometimes preventing interactions from being fluid. Thus, the presentation may be weak and the transmission of information not always clear. In the second term, students are much more prepared and aware of what to expect; the group work is organised and structured more accurately; they tend to be less intimidated by their classmates. Furthermore, they perceive a sense of community, relationships are tighter and interactions much more fun and constructive.

### 3.1. Student feedback

Collection of data consisted of questionnaires[^3] submitted by all students at mid and end point to assess students’ satisfaction. Interviews were also carried out, including with students at the end of the second year.

According to the qualitative feedback, most students involved in this project enjoyed the group work, in terms of planning and teaching, creating exercises and activities, and performing. Most of them stated that the peer-teaching combined with Xerte added value to their learning experience, helped them to reinforce

[^3]: See sample questionnaire at [https://research-publishing.box.com/s/qowhihvpppgelqnuai9kq88ly1g68](https://research-publishing.box.com/s/qowhihvpppgelqnuai9kq88ly1g68)
their prior knowledge of the subject, increased their confidence, and created a varied, enjoyable and relaxing learning environment. Students acknowledged the interactive features of the software as a relevant contribution to the active participation of all the learners.

Although overall student satisfaction was 100%, a small percentage expressed unease over the use of technology involved in the course. They claimed not to be sufficiently competent with technology and in some cases they questioned its educational value. Although the number of students detached from technology was very small, their opinions were generally very strong. This highlights that assumptions about the new generation of students being ‘digital natives’ (Prensky, 2001) should not go unchallenged. Teacher-level barriers and school-level barriers related to the use of technology have been studied (Bingimlas, 2009), yet more attention needs to be paid to student-level barriers in the context of higher education.

4. Conclusion

Learning grammar through the medium of teaching has encouraged a more participatory and active attitude towards the subject. While it is problematic to quantify the learning gains due to the lack of suitable conditions for comparison, qualitative data confirm that the aim of increasing student satisfaction and engagement was achieved and suggests the same pedagogic principles could be adapted to other teaching and learning contexts.

Future implementations and developments of the project could incorporate a stronger element of teacher training, to overcome some of the difficulties encountered in the delivery of certain aspects of the curriculum. This could especially suit more advanced students. Finally, we believe that the scope and nature of the project make it adaptable to other languages and environments and we hope it can inspire experimentation in an area – grammar – where traditional assumptions on what and how to teach are particularly entrenched in the profession.
References


