see at the site http://languageresearch.cambridge.org/index.php/teacher-research-2015-introduction/2014-winner.

Can my students use Google Docs to develop their lab and design reports?
(Olga Pavlenko, Ukraine)

EVIDENCE OF UNDERSTANDING OF CURRENT RESEARCH IN THE FIELD (WITH SHORT BIBLIOGRAPHICAL REFERENCE)

Nowadays, digital literacy is seen as an essential requirement for 21st century citizenship. Owing to ICT, Web 2.0 classroom gradually evolves the traditional classroom into Classroom 3.0 incorporating mobile technology with Web 2.0 technology. The shift in the patterns of interaction within the ESP classroom and the increase in the use of ICT imply a new kind of lesson procedure and bring a lot of advantages in ELT.

The learner needs an organized and dynamic authentic environment, where technology enhances learning and the learner can vary and adjust the environment according the needs, learning styles, time and place. ICT has given a learner the opportunity to be autonomous and mobile, and use all possible technologies for achieving better results whereas a teacher or lecturer has got a great chance to make the most of the course content and the technology.

Despite the considerable amount of advantages, ICT and its derivatives have certain disadvantages. ICT in ELT leaves lots questions without answers: starting with school budget planning and organizing academic stuff retraining, and finishing with severe socio-cultural changes in the world.

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THE STATED OBJECTIVES OF THE PROJECT AND HOW THE RESEARCH AIMS TO INFORM UNDERSTANDING OF EMERGING DIGITAL PEDAGOGIES

To begin with, the research aims included several tasks. The first one was to establish interdisciplinary connections between specialism subject area (Electronic Engineering) and

the ESP course. On the one hand, English language teachers are lacking contact hours due to the limited number of hours given for the ESP course (two per week), on the other hand, specialism lecturers and advisors are looking for the opportunity to use authentic materials (that are normally in English) and to teach to organize and present students' (Ss) research findings at the international scene. We agreed to focus on teaching to create and present Lab and Design reports within Ss specialism. To satisfy Ss academic and professional needs and implement the ideas of CLIL at our department, we had to develop digital learning environment. We set the criteria to the digital learning environment: it had to have synchronous and asynchronous possibilities of communication, to be user-friendly, collaborative and free. Moreover, we needed a service which could store everything in one place, was easily accessible in the classroom as well as distantly, had the possibility of creating collaborative products, presenting data and assessing, options for getting feedback. Consequently, we rejected blogging services, wikis as they did not satisfy our needs (they were lacking synchronous collaboration, the content options were limited). Finally, we decided on the suitable service: Google Docs. It fully satisfied our needs as Google Docs allows creating documents, presentations, images and forms. The Form tool was used to create the template for submitting Lab and Design reports; Images tool was used to show the graphical data and for creating some pictures. Students created documents and collaborated on them. English language teachers were able to leave comments about all necessary corrections or suggestions. Final interdisciplinary project was performed with the Presentation tool to create the course project presentation. As a form of feedback, the Form tool was used to choose the best Ss project and to write comments about the

THE RESEARCH METHODOLOGY

Though the focus of the research was aimed at improving writing skills with Google Docs, we outlined three methodological directions: teaching writing for academic and professional purposes, teaching English through specialism and teaching to collaborate in the digital learning environment. Working in these directions we expected to improve Ss subject matter knowledge both in native language and in English; to foster writing skills and productivity, increase accuracy by self-correction and boost motivation.

Organization of any project requires thorough planning. It is clear that interdisciplinary projects normally involve more participants. Our interdisciplinary project included three groups of participants: Engineering department lecturers (EDLs), English language teachers (ELTs) and Students (Ss). Let us consider their roles at different project stages in the table below.
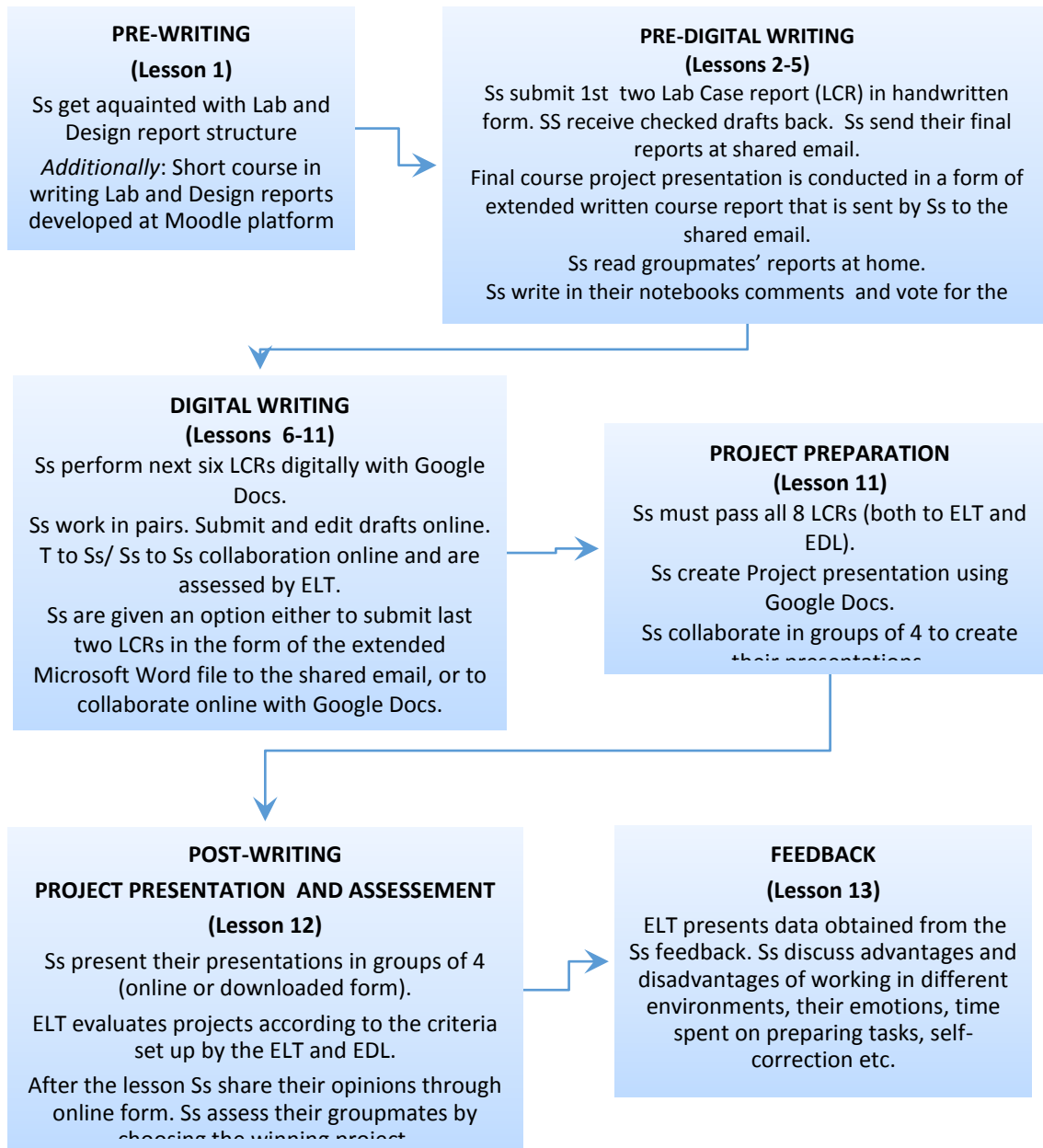
Table 1

Roles of project participants

Stage	Role		
	Engineering department lecturer (EDL)	**English language teacher (ELT)**	**Students (Ss)**
syllabus coordination	• provides ELT with syllabus and corresponding resources; • selects resources in English	• uses syllabus content to create a Lab Case (LC); • helps EDL to select subject-related resources in English	get a set of 8 LCs per semester in native language (NL) and English
course	• includes selected	• uses selected	• at Google Drive

structure	English resources into lectures and labs as an additional resource or for demonstration purposes (e.g. videos of experiments, procedures, processes etc.); ● gives resources in English to find additional information within the course ● instructs Ss on the idea of LCs in NL	English resources as a content for lessons; ● compiles terminological wordlists; ● instructs Ss on using Google docs for real-time collaboration; ● organizes interdisciplinary projects	create personal shared bank of English resources within the subject matter; ● give 1-minute reports at the lesson about their recent findings/ best/worst resources etc.
Assessment	● evaluates Ss content knowledge in NL; ● provides subject assessment criteria in NL to ELT; ● assesses interdisciplinary projects	● evaluates Ss performance within the English course; ● translates subject assessment criteria into English ● adds subject assessment criteria to ESP course assessment criteria ● runs entry and final tests in English ● assesses interdisciplinary projects	● pass subject tests ● solve LCs ● present interdisciplinary projects
Reflection and Feedback	● prepares a group progress report on the use of subject content in English; ● rewards students with extra grades for using authentic materials	● prepares a group progress report on the use of subject content in English; ● rewards students with extra grades for using authentic materials	participate in the final project discussion

It should be noted that the table gives an overview of the roles for a specific interdisciplinary project and could be adapted for other methodologies. However, the approach presented in the table is relatively narrow and requires deeper research.

The research methodology was organized according to the following model.

PRE-WRITING
(Lesson 1)
Ss get acquainted with Lab and Design report structure
Additionally: Short course in writing Lab and Design reports developed at Moodle platform

PRE-DIGITAL WRITING
(Lessons 2-5)
Ss submit 1st two Lab Case report (LCR) in handwritten form. SS receive checked drafts back. Ss send their final reports at shared email.
Final course project presentation is conducted in a form of extended written course report that is sent by Ss to the shared email.
Ss read groupmates' reports at home.
Ss write in their notebooks comments and vote for the

DIGITAL WRITING
(Lessons 6-11)
Ss perform next six LCRs digitally with Google Docs.
Ss work in pairs. Submit and edit drafts online.
T to Ss/ Ss to Ss collaboration online and are assessed by ELT.
Ss are given an option either to submit last two LCRs in the form of the extended Microsoft Word file to the shared email, or to collaborate online with Google Docs.

PROJECT PREPARATION
(Lesson 11)
Ss must pass all 8 LCRs (both to ELT and EDL).
Ss create Project presentation using Google Docs.
Ss collaborate in groups of 4 to create their presentations.

POST-WRITING
PROJECT PRESENTATION AND ASSESSEMENT
(Lesson 12)
Ss present their presentations in groups of 4 (online or downloaded form).
ELT evaluates projects according to the criteria set up by the ELT and EDL.
After the lesson Ss share their opinions through online form. Ss assess their groupmates by choosing the winning project.

FEEDBACK
(Lesson 13)
ELT presents data obtained from the Ss feedback. Ss discuss advantages and disadvantages of working in different environments, their emotions, time spent on preparing tasks, self-correction etc.

During the whole process ELT moderates Ss collaboration, tracks mistakes made during handwritten and digital drafting, checks the genre and structure of the engineering report, watches plagiarism. EDL controls the content of LCRs, provides online support and collaborates with all participants.

ANALYSIS OF THE RESEARCH DATA

The efficiency of the proposed methodology was measured taking the following components into account:
- syllabus integration;
- course structure (a bank of subject resources created as a result of EDL/EFL collaboration, developed LRCs);
- dynamic shared digital learning environment (drafting, collaboration, error correction, feedback).

Syllabus integration helped us to bridge to vital components: the content and the language. We chose professional syllabus (engineering) as a basic and reformatted ESP syllabus. Moreover, we included more tasks for teaching Academic English which helped to enrich Ss vocabulary, focus on developing such writing skills as note taking and referencing. The final ESP syllabus includes all topics from the engineering syllabus that are realized in the form of texts, videos, terminological wordlists, and groups of exercises. Though the courses structure was not reformatted much, integrated syllabus created as a result of EDL/EFL collaboration lead to the necessity of developing LCs, which, in turn, required more lesson time. EDL had to arrange a group discussion before the start of the first case due to the Ss unreadiness to solve cases. Unfortunately, case studies are becoming popular in our country at a slow pace. LCs appeared to be rather difficult for ELT as Ss tended to ask subject questions to ELT. In such situations we asked Ss to write their questions in English directly to EDL in the special Discussion file or in Gmail chat (if EDL had been online).

Implementing digital learning environment helped us to achieve better results. Drafting was easy and less traumatic for Ss as they did not waste time on waiting for the result, they did not have to rewrite their paper drafts etc. Error correction was made automatically by the browser and was monitored by the teacher in the Statistics section. According to the Ss opinion, they spent more time collaborating in Google Docs than they would normally do in real life. However, 3 Ss (17 Ss total) mentioned that transferring their collaboration into Google Docs was not comfortable as they wanted to use social media.
The research showed that handwritten form of passing the reports was unacceptable for Ss. They came to the conclusion that Google Docs is a powerful service for academic and professional collaboration, but less suitable for everyday collaboration. All Ss were satisfied with this form of studying ESP course and the idea of integrated course material storage. This helped them to *"save time as two subjects merged together"* and to understand that *"English lessons can really bring lots of useful language".*

DISCUSSION OF THE ANALYSIS AND THE PRACTICAL IMPLICATIONS TO PERSONAL TEACHING CONTEXT

The conducted research was aimed at studying the possibilities of using Google Docs to develop[writing skills. Writing is a time-consuming task. Due to the limited number of hours ELT in our university had to give writing tasks for homework. Technical Ss considered any writing task as difficult, boring and useless from the point of view of their professional value. Traditionally, ELTs in collaboration with EDLs selected appropriate writing tasks for each specialty and we hope that using digital learning environment for developing writing skills could give a great opportunity to integrate the subject content with the English language and to bring interdisciplinary cooperation at a higher level.

Unfortunately, we had only two months to set up the research, so we managed to run only the half of the proposed LCs cycle. Despite the fact that we studied only one genre (Lab and Design reports) and only one aspect (writing and speaking/writing and reading), we got an amazing feedback from our Ss and colleagues. This inspired us to use one more powerful tool to achieve the set goals – we created Moodle course that gives general guidance and several exercises on writing Lab reports. We plan to start the full LCs cycle in September and to conduct a workshop at ELT department on teaching with Google Docs. Moodle course structure and content as well as Lab Cases can be presented on demand.

The developed approach will be useful for all ESP teachers as it is based on CLIL ideas, is adjustable to the syllabus and students' needs, uses free software and increases students' motivation.