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English for Specific Academic Purposes student partnerships across borders

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ISBN 978-0-86355-856-6

10 Spring Gardens
London SW1A 2BN, UK

www.britishcouncil.org

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Abstract

UK universities rely increasingly on the fees paid by overseas students, whose numbers have grown significantly in the past 20 years. Many of these students enter via pre-sessional courses, which combine language development with work on study skills and acculturation into academic life. Peak student-intake falls naturally in July and August, when lecturers are on leave, and the content-shortfall is a challenge for course providers.

At the same time, there are many universities worldwide whose student-bodies combine strong English language skills with up-to-date content knowledge, while lacking the resources needed to study abroad. Significant numbers of these students would view the possibility of collaboration with students on pre-sessional courses at HE institutions in the UK very positively.

The potential for synergies seems clear, but has as yet not been exploited.

We piloted a dual tele-collaboration between the University of Glasgow (UoG), UK, and the Islamic University of Gaza (IUG), Palestine, on the August 2016 pre-sessional course in Glasgow. Applicants to Science, Engineering and Technology (SET) masters-level courses in Glasgow were mentored by SET graduates with strong language skills in Gaza. At the same time, applicants to Biomedical Masters-level courses in Glasgow were partnered (a different role) with Biomed graduates in Gaza. Interactions through the five-week pre-sessional course relied on a range of digital platforms.

Post-course, an analysis of these collaboration-types, one ‘vertical’, the other more ‘horizontal’, has provided data of value to future collaborations between the two institutions. We also offer a set of guidelines, usable by other institutions interested in creating similar cross-border links.

Contents

1

Introduction

In an increasingly globalised and mobile world, growing numbers of students are interested in studying abroad and, specifically, in using English as the Medium of Instruction (EMI). In the UK alone, latest UCAS figures (2015) placed 430,000 overseas students in higher education. In order to gain confidence and ability to manipulate the language, students often choose to complete a pre-sessional course which, apart from academic language development (referred to as English for Academic Purposes, EAP), offers a focus on study and transferrable skills, such as communicating effectively in a range of academic and professional genres, collaboration and problem-solving skills. Many of these programmes move towards subject-specific input in their final phases, offering a unique opportunity to develop language skills in the context of a prospective field or discipline, often referred to as English for Specific Academic Purposes (ESAP). Through dealing with a range of relevant academic texts, both written and spoken, the students get a chance to better prepare for their forthcoming masters or doctoral studies.

The courses are taught by qualified and experienced EAP teachers who understand the challenges of using a language in an academic setting and who may have some background or at least interest in a given discipline. Content lecturers sometimes contribute to the course delivery by giving a lecture on a discipline-related topic, but since the pre-sessional courses usually take place during university summer holidays, more substantial face-to-face engagement on their part to supplement written course materials is often impossible. Video- and web-based input can overcome this shortfall to an extent, but students nevertheless miss content-rich and academically-authentic interactions at this key phase of the acculturation process. This represents a significant problem across HE institutions in the UK.

Alongside this current problem, there is a potential resource: universities overseas. These institutions are not necessarily within Kachru's (2006) 'inner' (or even the 'outer') circles, but many offer great strengths, and would be eager to foster links with English-speaking universities, even informally, in order to enhance the learning and teaching experience. Their students often possess language skills, and more importantly content knowledge, that match or even exceed the standards represented by international students attending a pre-sessional course in the UK. Could UK universities tap into this potential, and establish mutually beneficial relationships in the form of student partnerships and staff collaboration? Might such relationships develop beyond the confines of the pre-sessional course, into more extensive knowledge exchange projects?

We feel that a 'template' formed by a successful UK-expanding circle pre-sessional tele-collaboration, as outlined at the end of this report, could be of very real value, helping to point out possible synergies via creating cross-border ties, furthering EMI via innovative uses of ICT, and enhancing the development potential of ELT. This kind of 'virtual mobility' is likely to feed into institutions' broader and strategic internationalisation activities (O'Dowd, 2013). It is also very much in line with the European Commission's recommendation of promoting student and staff mobility in order to help the participants develop skills needed in an increasingly globalised workplace, and to raise intercultural awareness (of extra significance, given the current migrant and refugee crises).

This report describes a 'peer review' tele-collaboration, linking overseas pre-sessional Masters students at the University of Glasgow (UoG), UK, with their counterparts at the Islamic University of Gaza (IUG), Palestine, in summer 2016. There were two subject-specific groups, namely SET and Biomedical Sciences, and each followed a different format of collaboration, the choice of which was dictated by the particular needs of the participants. The SET partnership was more vertical in nature, akin to a mentoring relationship, while the students within the Biomed cohort developed a more horizontal relationship with parties from both the institutions being co-researchers on equal terms. The paper reports on the course design and rationale, and examines the opportunities and challenges these two different modes of student partnerships present to students, teachers and institutions when it comes to language learning and teaching, content knowledge exchange, and development of transferrable skills, as well as the creation of sustainable research links and a feasible internationalisation strategy. This serves as the basis

for developing a set of guidelines that other educators working with international students and/or at overseas HE institutions could use in order to set up, run and further develop similar collaborations in their contexts.

2

Literature Review

Tele-collaboration in language learning is nothing new; as part of network-based learning, it has existed for 30 years (O'Dowd, 2007) and initially it focused mostly on facilitating contact between language learners with speakers of a target language through technologies. It was a way of expanding a physical classroom and exposing learners to authentic use of the language and culture. One of the more common forms of tele-collaboration is eTandem, whereby two learners teach each other their mother tongue using email or dedicated software. Usually a student provides a written response of prescribed length to which the partner provides corrections and suggestions and then they swap roles. This, through the interaction with a more able peer, Vygotsky's zone of proximal development is created where a lot of learning may take place. For this kind of project to work and benefit the engaged parties in equal measure, two criteria have to be satisfied: reciprocity and autonomy (Appel and Mullen, 2000). Each participating student has to carefully balance their input and output in their role of a learner and mentor and their contributions have to be qualitatively and quantitatively of the same standard in order to maintain motivation at a high level.

Apart from email exchanges, tele-collaboration projects may include students jointly analysing cultural practices associated with their languages and students working on cross-curricular assignments in order to appreciate the multicultural and multilingual nature of the globalised world. To reflect a range of uses, O'Dowd (2007: 144) defines tele-collaboration as 'the use of online communication tools to connect language learners in different countries for the development of collaborative project work and intercultural exchange'. He admits though that despite the explicit inclusion of intercultural training in the definition, learning outcomes of such projects usually focus on developing language fluency and learner autonomy.

Considering the fact that English as Lingua Franca is on the rise, it seems that the definition of the term has to be extended to cover a greater variety of contexts in which the participants use the common linguistic medium to understand not necessarily the cultures associated with English but each other's cultures. Consequently, the language becomes the means to an end rather than the sole end in itself. This is related to EAP and ESAP settings which shift the focus from pure language training to academic skills and content knowledge to prepare the students for future studies in English (EMI). Bringing in more able peers in such an educational context is of particular importance and value as it has the potential to fill in the gap of lack of ongoing and authentic quality content input, identified in the introduction. The project this paper reports on attempts to reconceptualise tele-collaboration in language education as a much richer learning experience, one that not only gives the participants opportunities to develop language but also rather a range of study skills, transferable skills and content knowledge.

There are a number of challenges related to instituting tele-collaborative projects in educational settings. The important ones include the way in which the task is designed, the changes to the roles of learners and teachers, and the way in which the technology is integrated.

In terms of structuring, tele-collaborative projects may be anywhere on the spectrum from completely free activities to highly structured sequences of tasks with clearly defined outcomes and assessments. They may also be tightly embedded in the curriculum and so preceded or followed by face-to-face activities in the classroom, or completely independent. O'Dowd (2007) suggests integrating learning episodes into the teaching time in the classroom, during which a teacher models tele-collaborative practices in order to support the student participants. This is because it cannot be assumed that the learners possess the skills needed to successfully participate in online exchanges. This recommendation is in line with Greener's (2009: 268) idea of e-modelling, which is 'powerful, offering opportunities for attention, retention, reproduction and motivation to learn vicariously [...] helpful for learners, particularly non-traditional students [...] on the assumption that the teacher is prepared to appear open and perhaps vulnerable in class [...]. What they are there to demonstrate is a valuing of learning processes, rather than a valuing of content'. As a result, the teacher's role may require a nuanced shift from 'purveyor of information to counsellor and manager of learning resources' (Little, 1991: 44-45 in Appel and Mullen, 2000: 297). The teacher may also take on the roles of organiser, intercultural partner, model and coach, and

source and resource (O'Dowd, 2007), which means being more active than merely a facilitator. Unsupervised exchanges often fall apart (Appel and Mullen, 2000) and structured projects may result in students performing the tasks more efficiently and effectively. However, Dawn Bikowski, in her 2011 review paper, notices this requires bringing the teacher to the fore and asks if tele-collaborative projects could focus on real-world issues and allow the participants to discover each other's cultures more inductively.

When it comes to the use of technology, historically tele-collaboration has relied on email or other technologies supporting written communication. This comes with benefits and challenges. The exchange is by definition asynchronous and delayed, which means flexibility and availability despite temporal and spatial differences and conflicting schedules on the one hand, but also the need to spread the interaction over a longer period of time. This may not be possible on intensive short courses and additionally motivation may require occasional boosting throughout the project. A written exchange is not transient but permanent and so each message can be carefully edited and re-read multiple times, which facilitates reflection on the part of both the writer and the reader (Appel and Mullen, 2000). It also has to be noted that emailing or messaging can contribute to the rapid development of communicative competence and certain aspects of writing in a foreign language, for example awareness of the audience (ibid).

Tele-collaboration strongly relies on the idea of peer learning and peer teaching, an important component of which is the provision of feedback. Traditionally, in a university setting it had been a teacher who provided knowledge and feedback, but increasingly one can observe a shift from such methods toward peer-to-peer contacts. All Russell Group universities in the UK now acknowledge the value of such interactions for the development of a range of 'graduate attributes', such as communication skills, social awareness, and ability to reflect (see, for example, the University of Glasgow's: http://www.gla.ac.uk/media/media_183776_en.pdf). Ladyshewsky (2006) suggests that using peers to provide feedback may also lead to an increase in critical thinking, an obvious advantage in a university context. As Topping (2009: 22) points out, such feedback offers a quantitative advantage, too:

> *'Because there are more students than teachers in most classrooms, feedback from peers can be more immediate and individualised than can teacher feedback'.*

Touching on the potential for peer review to address social and affective factors, Sadler (1989: 120) notes that 'few physical, intellectual or social skills can be acquired satisfactorily simply through being told about them. Most require practice in a supportive environment which incorporates feedback loops'.

The question, we feel, is not whether peer feedback is a worthwhile supplement to more traditional input, but how best to implement it. For example, Ware and O'Dowd (2008) looked into two different models of tele-collaboration, namely e-tutoring and e-partnering. In the first case, the students were explicitly asked to provide corrective feedback and/or suggestions of improvement having received basic training in doing so. In the other case, the students did not have the obligation to provide feedback unless they decided to do it of their own accord. The researchers have found that the first condition resulted in a greater amount of peer feedback, which corroborated findings from similar studies into synchronous peer exchanges. This would demonstrate the importance of not only training students in providing meaningful and useful feedback but also creating time and space for feedback provision in the project timeline. It would also be in line with a set of criteria for successful peer feedback as outlined by Gibbs and Simpson in 2004 – that it be detailed, promptly received and understandable to students. Another interesting idea with regard to harnessing the advantages of peer feedback comes from Nicol (2011), who emphasises the need for integrating as much reciprocity as possible into the feedback cycles. In other words, students analyse a number of peer assignments and have their own work looked at by a few peers instead of just one. By being exposed to a greater range of responses to the assignment brief, students clarify and crystallise their ideas of how the assessment prompt can be tackled in optimal ways, guaranteeing better performance. This approach to peer feedback could strengthen pedagogical benefits of tele-collaboration if students can share their work within bigger groups.

The situation becomes slightly more complicated in purely ELT contexts, whereby the student-partners are not necessarily more able peers and students' perceptions and concerns regarding their own and peers' language proficiency are at play. The students may not feel entirely confident and well qualified to give feedback to each other, especially when it comes to areas of greater complexity than lower-order grammar and lexical errors; neither do they necessarily see their peers' feedback as useful and resulting in noticeable improvement of their work, and they attach more value to the tutor feedback. This is not to say such peer feedback is not worth engaging with but the students may be resistant at first and may require more thorough training in order to develop robust evaluative skills. Such difficulties can be

circumvented in an EAP/ESAP context in which the students are asked to provide feedback mainly related to content, while the language feedback still predominantly comes from the tutor.

Bringing in a cohort of students who are peers in terms of language proficiency, but who can be mentors when it comes to content knowledge, constitutes an interesting opportunity and one that is now feasible thanks to the availability of digital technologies, a material change that can and perhaps should be exploited in the context of pre-sessional courses. It seems to us that there is real scope for the introduction of an effective peer-review process on a pre-sessional course which exploits the distance potentialities of the web. What is important to take into account when designing such a tele-collaborative project is the nature of the relationship between the partner-students, whereby one is the reviewer/mentor and the other one a reviewee/mentee. Since the roles are not equal as in the more standard models of tele-collaboration, a question arises whether the principle of reciprocity mentioned earlier can be fostered within the confines of such a project. In the case of a negative answer, another question would be whether such an exchange still constitutes an example of tele-collaboration as conceived when the idea was still in its infancy.

It seems that in a traditional tele-collaboration set-up, as well as peer feedback cycles as described by Nicol, reciprocity involves a peer exchange during which the partners' gains are comparable in terms of quantity and quality. In other words, each student is supposed to take away what they put in. Could the mutuality be defined differently, for example in ways that are more contextualised and personalised in order to address the diverse needs, wants and motivations of the participating students? And if so, how can providers ensure the gains are of more or less equal weight and value?

Responding to the students' varied needs would be in line with the nature of teaching English for Specific Purposes and its main tenets: attention to context, cross-cultural issues, needs analysis, authenticity of communication and materials and focus of situational practice. Dudley-Evans and Johns (1991: 298) stress the importance of being constantly aware of the 'identifiable group of adult learners within a specific context' when designing ESP activities.

White (2007: 325) reminds us that in the globalised and rapidly changing world, ESP teachers have to help their students deal with global communicative practices online, in all their complexities. This echoes very closely what engineering educators are calling for: 'an ability to collaborate in distributed corporate settings, across countries, continents and cultures' (Schaeffer et al., 2012) with people from other educational, professional and cultural backgrounds (Lucena et al., 2008). Any university student should now aim to become not only a scholar but also a lifelong learner and a global citizen (Biggs and Tang, 2011). To facilitate such development, digital technologies may prove helpful as 'through infusion of both global education and technology in teaching and learning, teachers can foster students' understandings of the interrelationships of people worldwide, thereby preparing students to participate meaningfully as global citizens' (Crawford and Kirby, 2008). Online environments lend themselves to instituting a genuine process of knowledge exchange and construction which requires the students to negotiate, construct and reconstruct new meanings, ideas and perceptions coming from themselves and their peers (Mayordomo and Onrubia, 2015). It is important that the pedagogical tasks are devised carefully so that opportunities for critical and creative thinking are enhanced instead of being stifled. It seems open-ended tasks that necessitate divergent thinking and approaching problems from multiple perspectives, embracing ambiguity and avoiding premature closure (Daly et al., 2014) may be better suited to facilitating peer learning and teaching, including processes of knowledge exchange and review during which students' individual strengths come to the fore. If the focus shifts to the development of such skills, the reciprocity could be maintained within an extended definition of tele-collaboration, as an online intercultural exchange, whereby 'intercultural' refers to the combination of global and local culture.

3

Foundations for the project – EAST 1

Every summer English for Academic Study (EAS) at the University of Glasgow runs an intensive EAP/ESAP course for incoming international postgraduate students wanting to study subject-specific disciplines, across a range of fields. The assessment criteria regarding the end-of-course written assignment comprise a selection of categories, such as task achievement, organisation, use of sources, language range and accuracy, style and, in the case of the presentation, presenting skills. Marks for the final product, both the essay and the presentation, feed into the final grade, which decides whether the student gains an entry onto their PG course or not. In the years up to and including summer 2014, in order to progress onto their Master's or PhD programmes, students on the Science, Engineering and Technology (SET) strand had to produce individually a written assignment and an oral presentation investigating an engineering problem of their choosing, and evaluating a range of responses. Although peer discussions of the progress milestones, such as the essay plan, its first and final drafts, the presentation outline and slides, were integrated into the class contact hours at regular intervals, the students mostly worked in solitude and relied on formative comments from their tutors. Tutor feedback was provided in both written and oral form, as essay annotations, a written summary of strengths and areas of improvement, and during a face-to-face tutorial.

In August 2015, an online collaboration with IUG was piloted, the EAS Telecollaboration project (https://easttelecollaboration.wordpress.com), henceforth referred to as EAST 1, which allowed several significant developments. During the project, 20 Palestinian students and 37 UK-based international students were teamed up to form small research groups. The majority of the former were already studying on a Master's course at IUG in electrical engineering, information technology or environmental sciences, many already at the dissertation stage. Their English was assessed through an in-house test and was deemed adequate to allow them to participate actively in an international exchange project. The students in Glasgow represented a range of nationalities (Chinese, Brazilian, Saudi, Libyan, Thai, Italian) and prospective disciplines (electrical engineering, geology, statistics, physics, mechanical engineering). Most of them intended to progress onto a postgraduate course, with a small percentage transferring into an exchange programme for undergraduates. The transnational groups worked together on authentic and highly contextualised SET-related scenarios from the Gaza Strip, devised by the Palestinian students, for instance: Toxicity of organic chemicals (pesticides, detergents, antibiotics); Optical character recognition for Arabic; Wastewater treatment and electricity shortages. Apart from submitting an engineering problem, the role of the IUG participants was to brief their partners on the context by providing factual background information (often starting by outlining the challenges faced by Gaza due to its political predicament) and pointing to relevant sources, for example news and government reports. However, the bulk of their guidance was to provide content-oriented comments throughout the project. They were to act as 'abler' peers or 'critical friends', being direct witnesses to the problem and having more expertise in the discipline. Taking on this mentoring role was facilitated through an intensive preparatory course in constructive feedback – see https://goo.gl/ifxdh7 – delivered to the IUG students online and prior to the commencement of the pre-sessional course. Based on the guidance from their peer mentors, the students in Glasgow analysed and evaluated possible solutions. At the end of the project, they submitted individual essays and delivered group presentations to the audience in Gaza via a videoconference link which again provided feedback and questions for the presenters. Throughout the project the students worked with each other using a range of online tools to communicate, the main one being closed Facebook groups, set up and monitored by EAS staff. Facebook presents possible drawbacks when it comes to security, safety, and the potential blurring between private and academic aspects of life, but ease of use and familiarity with the tool were obvious advantages, and the Gazan students in particular had already used the social network extensively during their previous studies. Facebook is easily accessed on smartphones and other mobile devices, which makes it a flexible and responsive choice, an important feature for busy students, particularly students working across borders and time zones, who have to account for daily power cuts too. Using a university-supported platform, such as the UoG

Moodle, would have been less convenient as the tool is not so mobile-friendly and securing access for non-University of Glasgow learners is a lengthy process.

The EAST 1 project was evaluated highly. In an end-of-project survey, with an 81% rate of completion, the students from both institutions commented on the range of positive outcomes of the participation, for example language practice, development of transferrable skills and enhancement of content knowledge, including the knowledge of real-life subject-specific problems (for a detailed analysis of this project, see Guariento et al., 2016). It was felt, though, that there had been an imbalance in benefits between the two institutions, resulting in unevenly distributed learning outcomes across the groups of students, both in terms of quantity and qualitative weight, an observation made by both the organisers and participants. Since the project was so embedded into a high-stakes pre-sessional course, the immediate and unparalleled advantage for the Glasgow-based students would be the continuation of their study on postgraduate courses. This opportunity could not be offered to the students in Gaza, due to lack of resources needed to bring them over to the UK or to organise an equivalent provision of input and practice online. In their case, the focus of the learning outcomes was shifted to the development of transferable skills in order to address the issue of increasing unemployment rate among the science and engineering graduates in Gaza. It was hoped that engagement in a tele-collaborative project, as well as a prior constructive feedback course, would help them acquire a skillset needed in distributed working environments, thus enhancing their employability and employment options.

However, could their engagement in the project be *extended beyond* the role of mentors assigned to them in EAST 1, to include for example active participation in researching the literature and analysing the evidence, leading to producing an academic assignment and a presentation? We felt that the principle of reciprocity, stipulated by Appel and Mullen (2000) as the prerequisite for successful tele-collaboration, could be better satisfied if the Palestinian students were able to work in full partnership with their counterparts in the UK, taking on a role of co-researchers, co-writers and co-producers. This increased involvement would also introduce better opportunities for exchanging reciprocal peer feedback as recommended by Nicol (2011). A modification along similar lines was suggested by some of the UoG student-participants in focus groups held at the end of the project; a more substantial contribution from the IUG participants would have made the collaboration more engaging, they felt, and would have been worth implementing despite the obvious challenges. Combining our review of the literature with our own and students' observations, we decided to modify the format of the project so that the positive outcomes for UoG students were maintained while those for the IUG partners were enhanced; this considerable change formed the foundations of the EAST 2 project (and the ELTRA application) in 2016.

4

Project Re-Iteration and Re-Design – EAST 2

The ELTRA-funded EAST 2 project run in summer 2016 aimed to address the gaps outlined in the previous section, by making changes to the pedagogic design of the tele-collaboration as well as administration of the project.

In terms of the redesign, the project experimented with the nature of the student partnerships. Alongside the vertically-structured mentor-mentee relationships within the SET cohort as in the previous year, we established a parallel and more horizontally-structured partnership between biomedical students who would be working as co-researchers, thus increasing the reciprocity of the relationship and hopefully ensuring a more equal distribution of benefits. The biomedical sciences were chosen deliberately, as the Gazan students representing this discipline have a strong academic record and high English language proficiency. Their immediate needs, however, differ from those of the SET students. Their access to the job market is less problematic and so development of e-working skills is for them less of a priority. What they need, however, is the ability to effectively communicate subject knowledge in English so that they remain academically and professionally competitive. For this reason, a more horizontal partnership-structure seemed more appropriate.

Logistically, in summer 2016, the SET participants from IUG received pre-course training in constructive-feedback techniques, just as was the case for EAST 1 and, as mentors, continued to provide only content-input to their international partners in Glasgow. The biomedical students from IUG, on the other hand, in teams with UK-based students, were tasked with researching particular aspects of a wider medical problem. For instance, the overarching theme could be chronic diseases and within it each team member had to identify a unique aspect to work on throughout the project, for example a particular type of a chronic disease or treatment of chronic diseases in their country. Even though each student was to carry out individual research they had to remain in close contact with their research group members in order to share general background knowledge of the generic theme and consult each other on the particulars of their unique subtheme, thus essentially providing ongoing peer feedback. The individual jigsaw pieces were brought together in the final presentation delivered by the whole group, including Gazan partners presenting live through a video-conference link-up or (in some cases) by means of a short video prepared and sent to the UK prior to the presentation. Each UoG student had to produce an individual assignment, part of the pre-sessional courses summative assessment, but each Gazan student also wrote a short report which summarised the findings of their research. Both outputs from the IUG students were given joint language and content feedback from EAP tutors at EAS and teaching assistants from the School of Medicine, respectively. While staff within EAS were able to absorb the costs for providing language feedback to IUG participants, funding was needed to pay the medical staff to comment on the more technical aspects of the students' work, an indispensable element for this more 'horizontal' relationship to work well.

Administratively, we proposed the employment of an IUG-based teaching assistant to set up and monitor Facebook groups for the Biomed and SET courses. Our experience from the EAST 1 project showed that administration was time-intensive; beyond setting up the Facebook sub-groups, ensuring that participants communicated effectively with their counterparts in Scotland required regular monitoring and reminders, which would, we felt, have been far more effective from a source on the ground in Gaza. We recruited a previous EAST 1 participant, as experience of participation was desirable, alongside proven task and time-management skills, language proficiency and familiarity with technologies to support learning and teaching. Beyond paying for the administrative demands of a course taking place outwith IUG's academic year, funding was principally necessary to pay this teaching assistant.

In summary, we were proposing parallel courses, with differing partnership structures, each offering an incentive for the IUG students that would attempt to respond to their particular needs and circumstances; the incentive for the IUG participants within the SET course was principally provided by the pre-course training in offering constructive feedback, while the incentive for the IUG participants within the Biomed course was principally derived from the feedback that they would receive on their own (written and spoken) output.

During EAST 2 we investigated the effect of the nature of these differing relationships on the development of academia- and workplace-related skills as well as peer feedback provision and its impact on the students' development, by using quantitative and qualitative methods in the form of questionnaires, semi-structured interviews and post-course interviews with the medical teaching assistants. The questionnaires were handed out to the students prior to the project, to investigate their perceptions and understandings of learning and working in partnerships, and their value to development of language, study and transferrable skills as well as content knowledge. Another survey was handed out after the project to evaluate the perceptions of impact of the project on the students' learning, and selected participants were invited to interview, to enable a deeper analysis.

So far, we have outlined our general motivation for EAST 2. In the next section, we will outline our hopes, expectations and findings in detail, starting with the University of Glasgow, and moving on to the Islamic University of Gaza.

5

EAST 2: An overview of hopes and expectations for the student-participants

Uppermost in pre-sessional students' minds is, without doubt, tangible improvement in language skills, and the pursuit of an IELTS-equivalent score that will permit entry to their university course, with perhaps a particular preoccupation with the productive skills. Input in EAP writing skills and subskills (rhetorical moves, referencing rules, avoidance of plagiarism, basic grammar, academic lexis) has not changed for many years on our pre-sessional courses, nor did it change for EAST 1 or EAST 2 – as before, practice in this core skill was provided by trained and experienced EAP tutors, in dedicated writing sessions. The EAST collaboration with IUG now allows UoG students to collaborate with a partner at UoG and two partners at IUG in the gathering of data, but the write-up for UoG students, whether SET or Biomed, remains an individual task (as it must, given the gatekeeping function of the pre-sessional course). We were thus not expecting any significant improvement in the accuracy of the students' writing, and in fact wondered whether the content might if anything be harder for the UoG students to assimilate, particularly in the first instance, as many would be working in areas at best tangentially linked to their own areas of interest or previous experience; the need to pair up with IUG students meant, perforce, a need to compromise regarding research topic. In terms of oral development, we had hopes for a continued advantage over pre-EAST practice, when students worked alone on projects and gained speaking practice merely via their end-of-project presentation. Compared with EAST 1, we anticipated greater interaction between Biomed students in Scotland and Gaza during EAST 2, given the final week's summary reports and oral presentations by IUG students – a motivational incentive for increased Palestinian involvement absent from the SET partnerings. Overall, though, language improvement, while clearly salient for the students, was probably not the key hope for the organisers.

An obvious focus was on the centrality of technologies to the EAST set-up, and the strength of the project in these terms was stressed from day one. A variety of platforms were used by tutors during the course – Facebook, Googledocs, Skype and Wiziq, alongside the final teleconferenced presentations – and students themselves adopted others. But our expectations were of already technologically-savvy SET and Biomed cohorts, and again this was not a key driver for either institution.

The expected learning-outcome for the UoG students was less in terms of traditional language development or technological abilities, than of the need to adapt both language and technology as available to best meet real-world needs and the time-bound nature of the tasks inherent in the coursework and the collaboration with partners – this is where we start to move to the less overt but (we felt) potentially far more weighty benefits of EAST 2. We knew already from EAST 1 that a two-hour time difference and regular power cuts in Gaza would add significantly to any challenges, bringing with it the need to find alternative means of communication. Here, the frustrations of students hoping for clarification from a partner, unable to obtain data and/or anxious for updates may be perceived initially as being technological at root, but they were in fact related to more fundamental issues, namely team-working and problem-solving (the 'graduate attributes' we mention earlier). EAST 1 received positive feedback in terms of team-working and problem-solving and we expected the increased collaboration inherent in the Biomed pairings on EAST 2 to result in a similar, if not further enhanced, rating by participants.

A final and key anticipated benefit of EAST 2 was that of increased cultural awareness among the UoG cohort. Students on pre-sessional courses always need to work alongside students of other nationalities with whom contacts may previously have been limited or non-existent, regardless of any link-up with an overseas institution. It may not be perceived as such initially, as the possibilities for misunderstanding are well-documented, but the future of the English language is ever-increasingly likely to be one of NNS-NNS contact (Saraceni, 2015: 45), thus an ability to accommodate to and even embrace the challenges brought by diversity can only enhance the likely success of any given communicative act, and again, this is an importance acknowledged by the graduate attributes on the university websites. We were curious to investigate the extent to which the SET and Biomed students at

UoG would appreciate the possibilities inherent in collaboration with a student/students from a very different cultural background, and in particular the more 'invested' nature of the IUG contribution to the Biomed project.

The expected learning outcomes for IUG students were similar to the expected outcomes for UoG students but can and should be discussed from a different contextual perspective. The Palestinian context in Gaza is one of challenge, pressure and pain due to the ongoing siege imposed by Israel since 2007 and actual damage / destruction of IUG infrastructure in 2009 and 2014.

Consequently, these students have to face a number of problems on a daily basis that often exert adverse impact on their academic performance and prospects. Some of these challenges include frequent power cuts affecting internet access, which in turn often exacerbates the completion of academic tasks and assignments as well as online communication with international partners; immobility for academic purposes; high rate of unemployment among university graduates (58% among young people, with 42% of the total population now struggling to earn a living, according to the 2016 World Bank Report); and deprivation of face-to-face communication with any international students representing non-Gazan cultural and educational backgrounds.

However, having no other choices to solve these problems beyond a determination to persevere and motivation to engage in intercultural exchange with international teams, the Palestinian IUG students were expected to participate actively in EAST 2, as witnessed in the first run of the project in summer 2015, as well as the high number of applicants.

EAST 2 was built on the full understanding of this context and the qualities of these students, knowing that higher education in general and English language skills in particular are prerequisites to overcoming these problems. Developing the IUG students' academic and professional oral and written communication skills in English strengthens their hope of obtaining a postgraduate scholarship in the UK or universities that use English as a medium of instruction. At the same time, it enhances their chances of finding work in a job market characterised by very high levels of unemployment.

It was hoped that by providing Gaza students with opportunities to use a variety of recent digital tools, such as Facebook, Skype, Googledocs and Wiziq, EAST 2 would not only help them to develop their skills in using technologies to cross their country's closed borders but also would open a vital academic opportunity for them to meet and exchange academic skills and experiences with international students at UoG. Communicating with international students would support these physically isolated students in practising English in real academic situations and producing academic texts as well as using English in everyday contexts.

It was also expected that EAST 2 would enable these Palestinian students to practise the skills of working in specialised teams composed of local and international colleagues to academically explore possible solutions to the SET- and Biomedicine-related problems facing Palestinians in the Gaza Strip.

Going through such an experience had the potential to help the Palestinian students strengthen their confidence and faith in themselves, their university, and (reciprocally) the faith of the international community in them.

Finally, enhanced intercultural understanding was a very significant driver for the IUG partner, just as it was for participants at UoG; the vital role of projects that bring people of different races and religions together, across geographical boundaries was suggested by EAST 1, and it was hoped that EAST 2 would enhance these often intangible, yet absolutely vital, intercultural benefits.

In brief, the Palestinian partner believed that EAST 2 would fill a needed gap in the Gazan context, allowing highly motivated young male and female students an opportunity to develop academic communication skills via tele-collaboration with international students at a prestigious British university.

Summarising the expected benefits for students at UoG and IUG, if a greater understanding of the value of inter-cultural communication could be achieved for students at both institutions, and an awareness of the value of problem-solving, while maintaining the skills development needed for the UoG participants to ensure high progression rates to their Masters courses, EAST 2 could (we felt) be deemed a worthwhile development of EAST 1. We will now move on to examine what EAST 2 actually achieved, and where challenges remain to be overcome.

6

A comparison of SET data from UoG and IUG

This section looks in detail at the SET and the Biomed data separately, beginning with an analysis of questionnaires given to respective discipline cohorts at both institutions, pre- and post-project.

The SET cohort demographics

52 students comprised the SET cohort in EAST 2, of whom 31 were from UoG (60%) and 21 from IUG (40%). The response rate to the survey was 100% by UoG students, but only 48% by IUG students. This is naturally a limitation, one which will be discussed further below, but despite the Gazans being underrepresented in the survey, some useful patterns emerge.

In terms of demographics, the Glasgow-based group was predominantly male (only 23% were women), in their early 20s, and from China; the other nationalities were Syrians and Thais (two students each), a Saudi and a Kazakh. Most of them intended to continue their studies at the postgraduate level but there were also four undergraduates in the group. In terms of the disciplines they planned to specialise in, there was a strong group of statisticians and data scientists (nine students), followed by engineers (civil, electric and mechanical) and individuals wanting to study chemistry, mathematics, computer science, and sensor and imaging systems. Among the Palestinians, there were more females (60% of the respondents, and a preponderance confirmed by the project registration data), and the students were generally older, namely in their late 20s and early 30s. According to the registration data, most had engineering as their major, with specialisations in architectural, computer, electrical, civil, environmental and industrial engineering. The architectural engineering was a strongly represented discipline in the 2016 iteration of the project (also in the survey, with 40% respondents), unlike in 2015 when no prospective architects were present. This was reflected in the choices of scenarios, many of which looked at the use of urban space, inclusion of green spaces and the idea of smart cities.

Before EAST 2 began – SET students' experience and perceptions of confidence

The questionnaire consisted of several multiple-choice questions asking the respondents about their experience with collaborating face-to-face and online and with the assistance of technology. It also covered their perceptions of the level of comfort with particular activities and behaviours, such as communicating in English via technologies, team working, problem solving, digital literacies and peer feedback provision. Some of the questions were accompanied by the option of providing more information in order to elicit details of the students' experience.

The questionnaire showed a significant disparity between the institutions when it comes to collaboration. 80% of IUG respondents registered previous experience of collaborating with others, compared to 52% of UoG students, and 60% at IUG (compared to just 16%) declared themselves to be 'very confident' in team-working. The qualitative comments in this regard indicated that the team working projects UoG students had been involved in were rather small-scale and/or informal, with the face-to-face group project as part of the Supported Independent Study part of the year-round pre-sessional course being the most frequently cited example. The examples provided by the IUG counterparts were more impressive and pointed to higher levels of responsibility, organisation, visibility and professionalism. They were real projects with actual impact on internal and external stakeholders, rather than trials which simply allowed the students to play at being collaborators and researchers. For instance, one IUG student had participated in the Hult Prize project, 'a start-up accelerator for budding young social entrepreneurs emerging from the world's universities' (http://www.hultprize.org/), which engages youth from all over the world in locating innovative solutions to the world's problems. Other examples included groupwork in design studios or working as a manager of a housing unit department, which required high levels of collaboration and co-ordination of teamwork. Further, 40% of IUG respondents also noted some experience of distance collaboration, compared to just 16% of UoG students. Again, some of the actual examples of online teamwork were high-profile, such as the MENA Leader for Change Program, 'a unique regional leadership program that took place 2012-14 in partnership with the U.S. State Department' (http://yalayl.org/yala-academy/).

Unsurprisingly (given their field of study), more than 80% of each group declared themselves to be 'digitally literate' but it seems the students, particularly from the UoG cohort, understand the term of literacies in its basic meaning as purely technical skills involving familiarity with hardware and software, rather than cognitive skills required to succeed in online environments such as sifting, critically evaluating and processing vast amounts of information. This interpretation is corroborated by the answers to the questions regarding the use of technology in facilitating group projects or communicating in English. While 60% of IUG respondents noted some previous experience of using technology to facilitate group projects, whether within or outwith Gaza, for 55% of UoG participants in the SET cohort this was their first experience of a technology-enabled group project. Moving on to a language-related issue, 40% of IUG respondents felt 'very confident' in combining technology and the English language in order to communicate; not one of the 31 UoG students answered in this way.

Finally, in terms of cross-cultural awareness, 70% of each group declared themselves to be 'very' or 'quite' comfortable, probably an expected result considering the contextual factors. The UoG international students by definition became part of a different culture for the duration of their studies and a degree of cross-cultural awareness and openness to integration may help them thrive in the foreign environment. The Palestinian students, being physically confined within their country, are motivated to seek contact with the international community and so adequate language skills and knowledge of cultures is key in facilitating their success in this respect.

Overall, the obvious picture before EAST 2 began shows SET students from IUG reporting a greater level of experience and confidence when it comes to working alongside others and by means of technology. Apart from indicating the individual IUG students' enthusiasm, ambitions and commitment to academic and professional advancement as an opportunity to better themselves and improve their prospects, this outcome can be almost certainly attributed to contextual factors, most notably a blockade which has obliged Gazans to exploit to the full digital means of contacting the wider world. A related academic factor is the emphasis of the Palestinian universities on adopting recent technologies to enhance the process of teaching and learning as well as to communicate with international universities to overcome the resultant immobility in and out of Gaza (Aouragh, 2011). IUG is a leading Palestinian university in this field and it has prioritised setting up and developing good-quality IT and ICT facilities, including free Wi-Fi connection across the campus, several well-equipped VC halls, a Moodle virtual learning environment, and a pro WizIQ licence which allows delivery of synchronous online classes and training workshops (https://www.wiziq.com/). A societal factor to consider too is a high level of literacy among the Gazan population, at 96.8% (UNDP, 2014), as well as the fact that almost every Palestinian family living in Gaza has some close relatives living in the diaspora. These families need to use technologies and available social media to stay up-to-date with the news and to communicate with their family members as conveniently, flexibly and cheaply as possible.

After EAST 2 finished – SET students' evaluation of the project impact on their learning

Post-project, the data returned by SET participants offers several clear indications (although the limitations related to the low response rate have to be taken into account when interpreting the data).

'General academic development' (Table 1), an all-encompassing category, was rated as 'very useful' by 61% of the respondents and as 'quite useful' by almost 27%, which matches the corresponding figures from 2015 (67% and 30% respectively). Broken down into separate results for each institution, there was a visible disparity in the students' perceptions of the usefulness of the project. 55% at UoG opted for the highest rank, which is considerably lower than the 80% from IUG. There seems to be a clear signalling of satisfaction with the project as a whole, with the value being particularly recognised among the students from Gaza, which is different from 2015 when the satisfaction rankings were distributed across the two institutions more equally (67% and 58% respectively). This may be due to the changes introduced to the constructive feedback course, thanks to which the IUG students had received more input and opportunities of practice and/or the second reiteration of the project within IUG having received increased recognition. However, the small response rate among the IUG students has to be remembered and the fact that it is likely that it is the more ambitious and driven students in Gaza who filled in the questionnaire.

Table 1: Evaluation of the project in terms of general academic development (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	61	54.8	80
Quite	26.8	35.5	0
A little	7.3	3.2	20
Rather not	4.9	6.5	0

The following categories were rated as 'very useful' by over 50% of respondents at both UoG and at IUG: 'Developing team-working skills' (Table 2), 'Developing problem-solving skills' (Table 3), 'Developing knowledge of real-life issues' (Table 4) and 'Developing cross-cultural awareness' (Table 5).

Table 2: Evaluation of the project in terms of developing team-working skills (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	56.1	54.8	60
Quite	36.6	38.7	30
A little	4.9	3.2	10
Rather not	2.4	3.2	10

Table 3: Evaluation of the project in terms of developing problem-solving skills (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	53.7	51.6	60
Quite	39	41.9	30
A little	4.9	6.5	0
Rather not	2.4	0	10

Table 4: Evaluation of the project in terms of developing knowledge of real-life issues (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	56.1	54.8	60
Quite	34.1	38.7	20
A little	7.3	6.5	10
Rather not	2.4	0	10

Table 5: Evaluation of the project in terms of developing cross-cultural awareness (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	65.9	67.7	60
Quite	26.8	25.8	30
A little	7.3	6.4	10
Rather not	0	0	0

There appears to have been a general awareness that the outcome had in some way mirrored experiences likely in future employment, despite students having to pool knowledge and information in order to overcome the frequent obstacles accompanying a time-bound online course with strangers and power-outages (or, as we will contend in our conclusion, *perhaps because* of these factors). We feel that students' understanding of 'real-life issues' may have varied between an 'understanding of the problems facing people in areas of conflict', and 'an understanding of likely work-related challenges'; our intention was the former, but perhaps the question should have been worded less ambiguously.

The open comments from the respondents provide some insight into the evaluation of the impact. For example, in relation to the development of team-working skills, one UoG student noted that 'Working with a group often involves disagreement between team-mates and this can teach us how we deal with different opinions', echoed by an IUG partner who explained the impact in this way: *'Yes, being in contact with my group members and trying to be solution focused and acknowledge each other about our works and appreciate it that's absolutely sharpening our team work skills'*. However, most of the answers tended to be descriptive, focusing on how the students had approached the collaboration in practical terms instead of elaborating on the extent of the impact. While this still provides useful information, it shows the importance of careful instructions when handing out a survey to students. One IUG student commented on the need to adjust individual working/learning preferences and align individual goals with those of the whole group: *'I had been exercising myself to present any piece of work as a group work not my own work; even if I performed more than my partner, and also speaking on behalf of my group'* while another pointed at the added value of doing the teamwork online as opposed to face-to-face. Some other insights regarding collaboration are also included in the section concerning communication skills (below) as these two aspects of working together online are closely inter-related.

Regarding the problem-solving skills, a couple of UoG students hinted at the necessity of developing a related skill, that of critical thinking; one student noted that *'Finding solutions is quite easy but the difficult thing is finding viable solutions'*. An IUG student, whose group worked on the topic of smart cities, explains in more detail what strategies the teams used in order to overcome the problems they encountered: *'[it] gave us a chance to search in-depth about suggested solution for such a new and recent technology. For example, we tried to consult some*

experts in this field to know more valuable solution and for additional advice and help, which certainly improve our problem-solving skills'. But the range of problems went well beyond those related to the subject matter of the research or even power shortages or intermittent connectivity. For one student, it was the partner's dwindling motivation that they had to deal with in order to keep working as a group: *'When my partner told me that she decided to quit and she is no longer can participate in the project. I tried to solve the problem she is feeling and kept encourage her and pushing her to continue'*.

And lastly, in terms of knowledge of real-life issues, the comments were less revealing than had been the case in the previous iteration of the project. In 2015 the students, particularly from UoG, were very explicit about the value of working on problems that do not come from textbooks but instead are real and experienced by people actually familiar to them. In 2016 the gains in that respect were articulated less enthusiastically and in more general terms: *'Applying what we learn in real life enables us to clearly understand the problems in our life'*. As mentioned earlier, there was an implicit assumption that it would be the Scotland-based students who would benefit most in regard to becoming familiar with the cruel reality of conflict-stricken areas. However, the experience proved equally instructive for some of the IUG students. For instance, one of them confessed: *'You will get astonished when you hear that I have learned many thing about the problems of my countries that I have never known it is existing'*.

A point of interest is that there was only one category rated higher by UoG respondents than by those at IUG, 'developing cross-cultural awareness'; 68% of UoG students returned a 'very useful' rating, compared to 60% at IUG; as Kramsch (1998) points out, the word 'culture' is of course open to a variety of interpretations, but could it be that this was, for the great majority of the students at UoG, their first contact with a group from a poorer country than their own, certainly for many a first contact with a group of Muslim students, even (for the more informed) their first contact with a group from Gaza, an area often reported on with inaccuracy by a partisan press? Though we cannot know for sure, this is one explanation. The open comments from the students are again quite general but they reveal how the students perceive the value of cross-cultural contacts and what strategies they use in order to enhance the impact. For example, one of the UoG students commented that *'[cross-cultural awareness] helps us to know how the others think and that develops our thinking'* while another observed that it is important to know more about differences in culture and customs and so *'before communication, [they] generally did some work of knowing their custom which was helpful to our communication'*. The IUG students also commented on appreciating the cultural differences and learning from them as this kind of knowledge *'really unites us as humans'*.

There were two areas in which UoG participants noted a positive, yet less marked, response to the course at its end; 45% returned a 'very useful' rating for 'developing digital literacies' (compared to 60% at IUG) (Table 6), and 48% for 'developing communication skills' (compared to 70%) (Table 7).

Table 6: Evaluation of the project in terms of developing digital literacies (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	48.8	45.2	60
Quite	39	45.2	20
A little	7.3	3.2	20
Rather not	4.9	6.4	0

Table 7: Evaluation of the project in terms of developing communication skills (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	53.7	48.4	70
Quite	26.8	32.2	10
A little	17.1	16.2	20
Rather not	2.4	3.2	0

The figure for the former category seems unsurprising, given the high percentage of students who declared themselves to be digitally-savvy on arrival, and is aligned with the results from the previous year. However, the caveat discussed earlier has to be remembered: it is not clear what the students understand by the term of *digital literacies*. When analysing some of the open comments regarding the use of technology to facilitate the tele-collaboration, one can conclude that some students had made informed choices when opting for particular technological tools. For example, they considered the ease of use, accessibility and familiarity when deciding to use Facebook or Whatsapp to communicate with each other. They also distinguished between different functionalities of the tools in order to support various types of communication; for instance, they thought the Facebook group wall lent itself better to breaking the ice, getting to know each other and so building a relationship, while the integrated group messaging system was better for exchanging ideas in such a way that each team member could access them no matter when they logged in. They thought that

composing Facebook posts aided reflection and careful consideration of ideas and supported the development of writing skills, whereas Skype not only allowed them to deepen the working relationship but also to exchange ideas rapidly and practise fluency in speaking English.

The use of technologies during the project work involved facing and dealing with a number of issues, which was covered by a separate question. The biggest challenge was related to time in general terms, which featured in 10 out of the total of 21 responses. The students struggled in that respect due to working across different time zones and/or different working day/weekend patterns at each institution. This resulted in longer waiting times (when rapid responses were desired) due to time pressures imposed by, for example, assessment. The time difference was a particular problem when trying to arrange for meet-ups in real time, using synchronous tools such as Skype. Another difficulty was created by power shortages in Gaza and problems with connectivity (mentioned by eight students) and, lastly, the third most-common problem was related to communication, mainly resulting from language and culture differences.

The students resorted to different strategies to solve such issues, which sheds more light onto their problem-solving capabilities. While waiting for their partners to respond, the UoG students remained independent and pro-active in seeking additional information and sources. They readjusted their timetables and agreed to work at less sociable times, for example at weekends and/or at night. They sent reminders to each other and in the worst-case scenario they asked the tutor to intervene. To ensure better connectivity, the Gazan students congregated in places with more reliable Internet access, such as the University or restaurants. To facilitate the communication, the students attended to meaning to ascertain their partner had a clear understanding of the message. This required using *Google Translator* or other online dictionaries to work out the meaning of unfamiliar words, and (of course) patience.

The figures relating to the impact of the project on the development of communication skills is of interest when compared to the higher figures for 'problem-solving' and 'team-working'; difficulties in making themselves understood seem to have been of particular salience to UoG participants. Similarly to culture, communication is a broad term and may encompass a number of aspects such as communication online, cross-cultural communication or inter-group communication, not to mention the fact that in the context of the project it overlaps with other skills discussed earlier like problem-solving or team-working. The open comments from the students reflect the ambiguity of the term. As before, some of the students just commented on the mechanics of communication, for example the frequency of contact, or having to restrict themselves to English as the medium, but some noted some more interesting issues, such as raising sensitive topics (*'At the beginning, I didn't know much about Gaza. So I was very careful to talk about some sensitive issues like wars with them'*), use of online-speak (*'Some English online chat language I don't know before, for example, ppl means people, haha'*) and a multiplicity of opinions and perspectives. One of the IUG students took the latter further and associated seeing a problem from other points of view with the development of empathy. Another student focused on the importance of asking questions in order to ensure full comprehension, which is linked with the need for confidence, something which IUG students more often emphasised in their comments. One student described their experience as follows: *'The project encourages me a lot to communicate effectively, not hesitate to ask questions or even being frightened from the new experience in which you interact with people you can't see them or see their facial expressions! I learnt how it is important to response/ react quickly without delay, in order to keep the confidence between partners. Actually, it is very important to ask questions to confirm that their point has been understood. And also to listen well'. Another student confessed: 'before the EAST project i was not have the courage to communicate and speak loudly in English. but after the East project, i am now speaking confidently and without any shyness'*.

A final post-project question regarded 'developing specialist knowledge' (Table 8). The responses for both institutions were again positive, but less so, only 40% at each returning 'very useful'; we will look in more detail at possible reasons for this in Section 8, but it seems that expectations were not met in all cases, and some students may have struggled with topics related only tangentially to their coming fields of study.

Table 8: Evaluation of the project in terms of developing specialist knowledge (EAST 2, SET)

	Total (%)	UoG (%)	IUG (%)
Very	41.5	41.9	40
Quite	31.7	29	40
A little	24.4	25.8	20
Rather not	2.4	3.2	0

Before moving on to examine the responses of the Biomed cohort, questions relating to SET students specific to UoG, or to IUG, should be examined.

Those at UoG were asked to evaluate the project in terms of 'producing the subject-specific essay', 'preparing for and delivering the final presentation', and 'feedback provided by IUG' (areas irrelevant to the IUG students within the SET cohort) (Table 9). The 'very/quite useful' responses descended from (respectively) 71%, through 58%, to 55%; in summary, though the evaluation was again positive overall in all cases, feedback seems to have been perceived as having more obvious benefit to the written output of UoG students (which may reflect the emphasis that teachers placed, throughout the five weeks of the project, on this output). There were only a couple of open comments regarding the impact of the project on producing the final presentation, one identifying marked improvement and another one stating the opposite, with the reason being related to time.

Quite a few students commented 'little' or gave no answer re: the usefulness of IUG feedback. There was one open comment saying IUG didn't seem to know what they are supposed to do, something we need to address in any future iterations of EAST (and which we will come back to in our conclusion).

Table 9: Evaluation of the project in regard to producing the essay and final presentation as well as of feedback from IUG – UoG only (EAST 2, SET)

	SSE	Presentation	Feedback from IUG
Very	41.5	41.9	40
Quite	31.7	29	40
A little	24.4	25.8	20
Rather not	2.4	3.2	0
No answers	2.4	3.2	0

Those at IUG were asked to evaluate EAST 2 in terms of 'developing your constructive feedback skills' (an area irrelevant to the UoG students, who hadn't received this pre-course training) (Table 10). 80% of respondents reported that it was 'very useful'. Two of the students explained this as follows: *'Definitely the constructive feedback was the most important skills that we all gain through variety of strategy, for example, how to be brief yet specific and I become more positive at first when giving my opinion and then the improvements points on an essay or any presentation'* and *'I have no idea about the constructive feedback before or how to give it in it's right way. Here in this project, I have learned how to give a clear, positive, polite constructive feedback; how to encourage the writer and how to give him tips to develop his writing'*. This is a really gratifying response, and one which will certainly inform any future directions the project will take.

Table 10: Evaluation of the project in terms of developing constructive feedback provision skills – IUG only (EAST 2, SET)

	IUG (%)
Very	80
Quite	20
A little	0
Rather not	0

The survey also finished with four open questions attempting to elicit subjective and more holistic gut responses from the students in regard to 'the greatest thing about the project participation', 'the most challenging thing about the project participation', 'recommendation of what should be improved' and whether the respondent would recommend the project participation to their friend. The answers to these questions were compulsory so the response rate was 100% for the student respondents from both institutions.

The UoG students appreciated the opportunity to gain new experience that helped them develop social and professional skills. In terms of the former, ten respondents explicitly pointed at the opportunity to make new friends as the main gain. Another ten linked the social aspect to multicultural collaboration and knowledge exchange. The remaining students focused on either the aspects of real-life problem-solving skills, or communication- and language-related skills, including critical thinking.

While the comments from the UoG respondents were mostly limited to a single aspect of the project participation, i.e. 'the greatest thing', those from IUG students were lengthier and more elaborate. However, most of them referred to similar aspects of the engagement in the project. Additionally, they included favourable comments regarding the opportunity to use technology to study and complete tasks, as well as innovative methods of teaching and learning in more general terms. The following comment aptly summarises the Gazan students' perspective: *'Many things was really great in this success project, and I was excited by the way we learn I suppose it is an innovation methodology of gaining collection of integrated life skills academically and socially'*. Unsurprisingly, a couple of students explicitly referred to the development of constructive feedback provision skills. Three students referred to the Gazan context, the related limitations and the opportunity to increase the awareness of the conditions in Palestine: *'For me the greatest thing is that our voice reach the world by let other people know about Gaza and I really surprised when student from UOG say that he did not hear about Gaza city. I*

am pleased that we show them Gaza which is the beauty, love and life'; 'also knowing that people in the other side of the world love us and also knowing a lot about us unlike what we were thinking'; 'Make others aware about Gaza and its possibilities, real-situation problems, and culture'.

When it comes to the most challenging aspects, the students from the UoG found the communication with their Gazan partners particularly challenging – 11 respondents indicated it as the greatest challenge. Communication in the tele-collaborative context is multi-faceted and complex, encompassing a number of issues beyond the mere language-related difficulties. The respondents pointed to time aspects (3), culture (2), distance collaboration (1) and team-working in general (1). Quite a substantial number of students complained about problems locating reliable information about Gaza and academically acceptable references (9 respondents), which resulted in inadequate understanding of the 'unique' situation or identifying 'viable and sustainable solutions which can be applicable in Gaza'. Two students struggled with the project because of its lack of alignment with their major.

The qualitative comments from the Gazan students also identified communication as the greatest challenge, particularly the need to use English as the communication medium and the resulting necessity to translate unfamiliar words. Two students mentioned 'breaking the ice' at the initial stage of the project as the prerequisite for the effectiveness of the communication and collaboration. These issues were often exacerbated by the technology-related challenges, electricity shortages and schedule conflicts.

As for the recommendations of what could be improved, the recurrent theme seems to be related to the topic choice (mentioned by 8 students), communication (8 students) and scheduling issues (5 students). More specifically, the students suggested that there should be more topic choices, that they should be more specific, related to their subjects and/or jointly negotiated or self-selected, instead of being simply imposed by the Gazan partners. While in general terms this is a worthwhile recommendation, giving the students more freedom may result in further time- and task-management issues as well as minimise one of the strengths of the project design, i.e. the requirement to work with a heavily restricted context, which is likely to push the students towards more innovative solutions. Similarly, the recommendation of establishing a specific schedule to ensure and facilitate frequent and timely collaboration with the partners seems of value at first glance, but at the same time it uncovers lack of understanding of the project context and the issues resulting from the time difference, and differing working day/weekend patterns, as well as the need to be able to work autonomously. Some students suggested a requirement for face-to-face communication. It is unclear whether they mean actual interaction in person when the interlocutors share the physical space, or technology-mediated communication in real time, i.e. synchronous communication via virtual rooms, messenger systems and online telephony, which allow the user to chat via text, audio and/or video. This recommendation was actually made by the project organisers during the induction session, reinforced by a message from an EAST 1 participant (who kindly agreed to contextualise the project on day one) and it seems that the students who had invested time, energy and effort into organising synchronous sessions benefitted greatly from them.

The comments from the IUG students echo the recommendations made by their Glasgow-based partners but they also include some new suggestions, such as *'Ensure the sustainability of collaboration by request an extra joint-research or press article'; 'May be if we swap the role so IUG students give the presentation and UOG ask questions and giving feedback'; 'I hope to contact with native speakers (British) in order to learn the appropriate English expressions'*.

Finally, a decided majority of the respondents from UoG would recommend the project participation to their friends. The main reasons given include the opportunity to solve real problems, communicate with international partners, and develop thinking strategies such as considering a problem from multiple perspectives. Three students were of a different opinion, one arguing that shy students may not benefit from the project as much as more sociable and confident peers, and the other two indicating considerable time investment and misalignment with the major as the main weaknesses. Nine out of 10 comments from Gaza were similarly enthusiastic: *'it provide us with some tools to improve our English language in new and unique way'; 'Because I learn a lot from this project I would like for he/she to learn and thrive in digital society so the benefit may be revealed'; 'Of course yes, It is that experience which break the siege on Gaza, In a word it is great rich experience: Knowledge, Culture, science, shouldn't be missed';* and *'Yes off course, my friend who participated in the last year recommended me to register this year and I am really appreciate her because my skills improved through the project. So I will recommend participating to my other friends in the next project'*.

7

A comparison of Biomed data from UoG and IUG

The Biomed cohort demographics

44 students comprised the Biomed cohort in EAST 2, of whom 24 were from UoG. Of the latter, there was again a strong preponderance of Chinese students, but a larger minority of Arabic speakers; only 25% of the UoG Biomeds were women (among the IUG cohort, 50% were female). At UoG, all students were postgraduate, while the IUG cohort included a small number of undergraduate students. The IUG Biomeds were a slightly older cohort, with more students in their mid- to late-twenties. The response rate to the survey was 100% by UoG students, but only 50% by IUG students, and this low return rate from IUG means that division of the IUG data in table form can only be of limited validity. Having acknowledged limitations linked to the lower response-rate from Gaza, many of the underlying trends mirror those already seen for the SET cohorts, and some interesting differences also emerge.

Before EAST 2 began – Biomed students' experience and perceptions of confidence

Prior to EAST 2, the Biomeds at UoG reported slightly more experience of collaboration in general than those at IUG, but slightly less experience of distance collaboration (75% reporting 'none', compared to 50% at IUG); once again, the latter is unsurprising, given the near-impossibility of exit from the Gaza Strip (for this reason, any non-Gazan collaboration will perforce be at a distance; one respondent had collaborated for Doctors Without Borders with Hong Kong, one with Jordan, and another on an Erasmus Mundus project in Malaysia). Regarding 'communication in English via technologies', 'team-working', 'problem-solving', and 'digital literacies', UoG respondents appeared comfortable across the board, though 25% at UoG self-reported as feeling 'rather uncomfortable' in terms of digital literacies, i.e. they did not share the almost complete confidence of the SET cohort at UoG. At IUG, on the other hand, there was no apparent lack of confidence in using digital platforms: all respondents reported being 'very' or 'quite' comfortable, before EAST 2 began. The response to the 'cross-cultural awareness' by students at both universities was interesting, two thirds at each institution reporting themselves to be 'quite comfortable'; perhaps (as noted above) this reluctance to take a stand can be attributed to the nebulous nature of 'culture', or perhaps the students joining the project were genuinely unsure of their ability to prosper in interactions with those from other parts of the world.

After EAST 2 finished – Biomed students' evaluation of the project impact on their learning

Beginning again with 'general academic development', the majority of respondents at both institutions found it 'very' or 'quite' useful, 42% of UoG Biomeds opting for a 'very useful' rating, and 60% of IUG Biomeds (a reminder of the remarkable 80% 'very useful' return for IUG SET students is worthwhile, though).

Table 11: Evaluation of the project in terms of general academic development (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	47.1	10	60
Quite	44.1	50	30
A little	2.9	0	10
Rather not	5.9	8.3	0

A preponderance of SET students at UoG had rated 'team-working skills' as 'very useful' post-project, and almost half of UoG Biomeds also felt this way, one noting: *'Some times we may have different understanding about the requirements, before I explain my view, I may try to change my position and think about why they have different opinion, and it is really help us understand each other effectively.'* Satisfaction among the IUG Biomed respondents, however, remained higher at 60%, and responses (from this smaller group) were interesting: *'whenever brains increased, ….greater creativity'*. Another at IUG suggested that success was due to *'every one in the team have one role'*, while a UoG respondent noted *'When we have different ideals about the topic we will take a long time to make a decision'*, (two very different perspectives, both of which perhaps reveal a degree of category-overlap with the next question).

Table 12: Evaluation of the project in terms of team-working skills (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	47.1	10	60
Quite	44.1	50	30
A little	2.9	0	10
Rather not	5.9	8.3	0

For the development of 'problem-solving skills' and 'communication skills', there was a much more noticeable inversion of the 'very useful' and 'quite useful' returns among UoG students when compared to the SET, i.e. with less obvious satisfaction levels in the Biomed cohort, and this was mirrored by the IUG respondents. One IUG comment suggests their greater employment experience as a possible explanation for these slightly less positive results:

'I'm become very independent in my work inside hospital, I can solve any problem by analysing it'. A UoG student noted the difficulty of reconciling differing interests, alluded to earlier: *'because we study in different major, we all have different angle on topic'*, while another noted (as a challenge presented by the project) *'to make others to agree with my opinions'*.

Table 13: Evaluation of the project in terms of problem-solving (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	32.4	29.2	40
Quite	58.8	58.3	60
A little	2.9	4.2	0
Rather not	5.9	8.3	0

Table 14: Evaluation of the project in terms of communication skills (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	35.3	33.3	40
Quite	55.9	58.3	50
A little	2.9	0	10
Rather not	5.9	8.3	0

Satisfaction with enhancement of 'digital literacies' among the UoG respondents was again slightly less marked among Biomeds than among the SET cohort, though 32% of UoG students returned a 'very useful' rating and more than 50% returned a 'quite useful' rating. One UoG student left the following positive comment: *'I feel more comfortable working with others at a distance….it was an eye-opener experience.'* 50% of IUG respondents felt the Biomed course had been 'very useful', the majority agreeing on a judicious mix of Facebook and WhatsApp. One student said that *'One technology was enough for us.. We could do everything using Facebook'*, while another differed, and provided detail: *'Skype for weekly meeting for all the group. WhatsApp for follow up and instance advice for each member.'*

Table 15: Evaluation of the project in terms of digital literacies (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	32.4	25	50
Quite	50	54.2	40
A little	11.8	12.5	10
Rather not	5.9	8.3	0

Significantly lower numbers of the Biomed students at UoG returned a 'very useful' rating for 'cross-cultural awareness' when compared to the SET cohort (38%, compared to 78%), with a similar (though much less marked) difference in rating between SET and Biomed cohorts at IUG also discernible. There were relatively few open responses to this category, and one might posit a preference towards the labelling of any negative (or less than positive) attribute with anything other than a 'cultural' brush.

Table 16: Evaluation of the project in terms of cross-cultural awareness (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	38.2	37.5	40
Quite	52.9	50	60
A little	2.9	4.2	0
Rather not	5.9	8.3	0

Finally, in terms of 'developing specialist knowledge', we have seen that the SET students at UoG (though still clearly enthusiastic) ranked this as perhaps the least useful aspect of their course, a 42% 'very useful' rating, and this was even more marked among the UoG Biomeds, only 35% of whom returned a 'very useful' rating, one noting *'about specific essay I did not get many help from others'*. In this category, the IUG Biomeds seem to have found the research involved slightly more relevant to their field of study than did the SETs, 50% returning a 'very useful' rating.

Table 17: Evaluation of the project in terms of developing specialist knowledge (EAST 2, Biomed)

	Total (%)	UoG (%)	IUG (%)
Very	35.3	29.2	50
Quite	50	62.5	20
A little	8.8	0	30
Rather not	5.9	8.3	0

Though the small size of the IUG sample needs restating, we feel that the open comments from the Biomed respondents again provide some insight into the evaluation of the impact. We will now address questions relating specifically to elements of the Biomed course (absent from the SET course).

On the Biomed course, students at *both* UoG and IUG produced written work which received feedback; in the case of the UoG students, a 1,500-word subject-specific essay (mirroring that produced by the SET students); in the case of the Biomeds at IUG, a 750-word report. Likewise, Biomed students at *both* institutions contributed to shared final-week oral presentations, receiving feedback (among the SET cohort, it was only the UoG students who received such feedback). Comments from the IUG Biomed students on feedback, whether for their written report or their oral presentation, were overwhelmingly positive; 70% in each case returned a 'very useful' rating. For the Biomeds at UoG, 29% rated their subject-specific essay as 'very useful', and 38% rated the production and delivery of their oral presentations in this way. We have already seen that 45% of SET students at UoG rated the production of the subject-specific essay as 'very useful', while 36% rated their oral presentations in this way. The enthusiasm for the receipt of feedback on the part of the IUG Biomeds is one of the clearest results of EAST 2.

The Biomed survey, like the SET survey, finished with four open questions, attempting to elicit subjective and more holistic gut responses from the students.

When it comes to the question about the greatest aspect of the project, teamwork again emerged highly from this more open question, six of 22 UoG responses bearing on this topic. The social aspects (*'When I saw Gaza friends on screen, It's amazing!'*) of the project were also mentioned explicitly by five students, and the opportunity to enhance subject-specific knowledge by four, as was the opportunity to develop oral English skills. Communicating at a distance was chosen by three UoG students, and one comment was difficult to categorise, yet heartening: *'Borden my horizons and found my own weakness'*. IUG respondents' answers were longer, more complex, and therefore harder to categorise. Of eight responses, three mentioned the social aspects, and two the opportunity to work beyond Gaza's borders, if only online. Two mentioned the kudos gained from collaboration with a prestigious university. Only one specifically mentioned the teleconferenced presentation, which was 'awesome', but overall there was a really positive flavour to the responses, and a feeling of multifaceted benefits (though the low number of responses again needs to be stated).

The next question, as before, was about the greatest challenge, and of 22 UoG responses, seven mentioned issues related to 'time', though for some this appeared to mean the two-hour time difference, for others the difficulty of reaching their IUG partners. Five mentioned language comprehension difficulties (though this may have been intra-team, i.e. between the UoG team members). Four mentioned teamwork as presenting challenges (*'We can't meet the compromise point'*; and *'time management between the team'*), though again it was unclear whether this was a cross-border issue. Only three UoG students specifically referred to the technological difficulties facing their partners in Gaza, though two mentioned 'distance' as a problem, another example of an opaque category-overlap. Of 10 responses from IUG students, 'time' was again the category most frequently mentioned, with five participants noting this as a problem, and two specifying exactly why: *'we have other things to do'; 'Time actually….we were very busy and the project needs attention'*. This we feel may have been a key reason for the low completion rate for Biomed students from IUG – they simply had more pressing outside commitments than the SET students in Gaza. One participant combined 'time' with another challenge in Gaza: *'Electricity shortage was an obstacle whenever I have free time…'*, a problem mentioned by another with the lapidary *'electrisity'*.

In terms of recommendations, four UoG students felt that the EAST project could not be improved, but others had suggestions to make, all of which were interesting, and some of which might inform future iterations of EAST. Four students felt that some form of pre-project input regarding content and organisation would have been useful: *'I spent amount of time to understand the project'*, a comment mirrored by one of the teaching assistants, which we will consider in our conclusion (only one introduction session was offered to the students, as well as to the teaching assistants). Three would have liked longer, which (as noted already for the SET responses) might detract from the advantages that time-constraints can confer; one IUG noted, perceptively, that *'having a narrow time factor has increased the amount of pressure, but it was a motivation to continue and see the hard work results'*. Two UoG students felt that IUG

availability for communication should be mandatory, which suggests that, as organisers, we needed to make the constraints under which the IUG students were participating clearer from the outset, along with the fact that they were joining on a wholly voluntary basis. IUG comments were really interesting; though no clear picture really emerges, there were some really interesting ideas for possible future development. One student asked for closer matching between majors, while another asked for precisely the opposite, i.e. an opportunity for inter-disciplinary work. Like the UoG students, two would have appreciated a longer project, and two (quite understandably) hoped for funding to allow the foreign travel that would allow genuine face-to-face encounters. The interesting idea of expansion to embrace other universities was also mooted, presumably (though not necessarily) within Palestine. The idea of extending the teleconferencing aspect of the project to permit IUG participants to interact with UoG experts in their respective fields is an intriguing (and achievable) one, as was extending the pre-course input to include *'some lectures on how to present and manage a team work'*.

And lastly, in response to the question whether they would recommend the participation to their friends, of 23 UoG responses, 18 said 'yes', two said 'no', and three were unsure. The motivations behind the overwhelmingly and gratifyingly positive response were on the whole fairly generic, though language enhancement (without reference to any specific skill), the chance to make friends, study-skill enhancement, increased inter-cultural awareness, and sheer fun were mentioned by three or more students. Of 10 IUG responses, all said 'yes', two had already recommended it to their friends (before the project had technically ended), and one asked to be allowed to take part a second time, if the project is repeated.

We have looked in some detail now at the specific findings, and in Section 8 will now step back to see the bigger picture, taking the 'very useful' findings as an indicator.

8

EAST 2: Discussion of overall findings

Though using the 'very useful' findings as an indicator of general satisfaction may seem over-simplistic, it forefronts two facets of EAST 2 with some clarity: the project was evaluated highly by a commanding majority of UoG respondents, and the evaluation of the project by the SET cohort at UoG was consistently more positive than that given by the Biomeds.

Table 18: 'Very Useful' answers, SET vs Biomed (University of Glasgow students)

	SET	Biomed
General academic development	60%	41%
Communication skills	45%	33%
Team-work	56%	41%
Problem-solving	54%	29%
Digital literacies	45%	25%
Cross-cultural awareness	65%	38%
Real-life issues	55%	n/a
Specialist knowledge	40%	29%
Usefulness to subject-specific essay/report	48%	33%
Usefulness to final presentation	46%	42%

Moving on to view the IUG respondents' 'very useful' ratings, two interesting aspects emerge: firstly, EAST 2 was once again evaluated very positively (even more so than by the UoG participants); secondly, the evaluation of the SET cohort data was again, in almost all categories, higher than that given by the Biomeds.

Table 19: 'Very Useful' answers, SET vs Biomed (IUG students)

	SET	Biomed
General academic development	60%	41%
Communication skills	45%	33%
Team-work	56%	41%
Problem-solving	54%	29%
Digital literacies	45%	25%
Cross-cultural awareness	65%	38%
Real-life issues	55%	n/a
Specialist knowledge	40%	29%
Usefulness to subject-specific essay/report	48%	33%
Usefulness to final presentation	46%	42%

Two fundamental questions emerge:

1. Why did the SET cohort rate their project more highly than did the Biomeds, at both institutions?

We feel that the answer to this may lie in a combination of two factors. One fundamental point to note is that employment opportunities for Gazan students post-university are considerably lower for SET than for Biomed graduates, and it may be the case that SET students at IUG invested more in the programme's possible outcomes (or, more likely, simply had more time available to dedicate to supporting their partners in Glasgow). The more 'horizontal' relationship trialled by the Biomeds in EAST 2 asks equally of both sides, and it may be that the Biomeds at IUG lacked the time to exploit to the full the opportunities provided by the project and that, as a result, the UoG Biomeds too felt slightly less positive about overall outcomes than did the UoG SET students. But the higher satisfaction levels for SET than for Biomed may also have been less driven by time available in Gaza than by the nature of the research tasks. The SET students were looking at science- and engineering-related issues that were in the majority of cases linked specifically to the situation in Gaza, while the Biomeds were looking at medicine-related issues that were in the main generic, of relevance to broader humanity. This might appear at first sight to be an advantage. But our suspicion is that the Gaza-specific nature of the tasks facing the SET students actually set up a vital, and

very motivating, information-gap; the students in Glasgow needed answers which (of fundamental importance) they couldn't get from a simple internet search, so Gaza-Glasgow interactions were taking place for a genuine reason.

2. Why were the IUG students in almost all cases even more positive than the UoG students, across both cohorts?

Here, the very specific challenges that face Palestinians must be acknowledged. Higher education and the English language represent what a partner from Gaza termed a 'rope of hope' for building a better future for student-participants and, beyond this, improving the life qualities of families. In the context of high rates of unemployment among graduates and the tough competition for a very limited number of jobs and postgraduate scholarship opportunities (see World Bank, 2014), students bring a strong motivation to work hard, improve their language skills and prove their professional competence. As natural resources have been confiscated, and industry, tourism, exports and imports have been subject to strict limitations for decades, the principal natural resource currently available to Palestinians is their human capital, expressed in particular through education and English (see PCBS, 2016) Strong intrinsic and extrinsic motivation, and a positive attitude towards education in general and the English language in particular result, and (we feel) in all probability explain the affective factors behind their very positive ongoing commitment to the course, and similarly enthusiastic responses to the end-of-course survey.

The above two questions give good bases for generalising the discussion regarding tele-collaboration so that it is more of use to other educators willing to experiment with such projects. We take the 2007 paper by O'Dowd which reports on the benefits of tele-collaboration and use our projects as a case study to comment on the researcher's findings.

O'Dowd (2007) refers to the uniqueness of cultural exchanges, whereby the participants get access to 'national memory', a set of subjective and personalised perceptions of the culture represented which is completely different from the cultural facts as presented in textbooks. This seems true for the SET cohort, with the Glasgow-based students being able to see the Gazan context not just by reading about it but through their partners' eyes. They could actually experience aspects of it by being unable to contact their mentors due to power shortages or problems with connectivity. An added advantage in this situation was that youth from a politically and economically underprivileged culture gained an outlet to voice their concerns and represent the reality in the way they experience it to a sympathetic and interested audience.

Tele-collaborative projects often facilitate the development of constructive dialogue as opposed to 'a mere unreflective exchange of information between partners' (O'Dowd, 2007). In order to ensure this, collaborative assignments must be structured in such a way that students are intrinsically motivated to rely on each other for contributions, react to them and act on them, rather than just perform individual tasks that later can be assembled into the final output; in other words, the tele-collaboration design needs to attend to the process as well as the product. In the case of the EAST project, this was confirmed because the task design required ongoing negotiation within wider groups (IUG vs UoG) and local subgroups within them (UoG and IUG). This was particularly true for the SET cohort, whose task was structured in such a way that the information had to be not only exchanged but also actively listened to and acted upon, and the students used a range of language functions in order to elicit action from their partners by means of direct and indirect questions, requests, etc. While dialoguing, the students were interested in disentangling nuanced meanings of the information provided by their partners, as they were aware of the fact that the correct understanding would support them or hinder in their further work. It could be said that the exchanges were purely transactional and instrumental by nature (and task design) as the students, particularly those at UoG, were under considerable assessment-related pressure and working within tight time-frames. The task set-up for the medical group was less successful as it created a loophole in the sense that it was possible to complete the project with minimal inter- and intra-group interaction, as illustrated by some of the final presentations.

Another finding O'Dowd reports on in his 2007 paper is related to purposeful use of technology during tele-collaborative projects. Technologies offer different affordances when it comes to carrying out particular types of pedagogic activities; for instance, asynchronous communication tools, such as email, facilitate delayed communication which is likely to support written output that is more in-depth, reflective and carefully thought out (like a reader who is given more time to process information and respond to it). Synchronous technologies, on the other hand, such as Skype text, Voice or Video Chat, lend themselves well to quick and dynamic communications whose depth is perhaps compromised, but the rapidity of responses and feedback is likely to make up for the loss of deeper

analysis. Chatting in real time may be less time-consuming and it resembles face-to-face conversations, which can be very motivating for all the parties involved. In the case of the EAST project, it was clear that at least some of the students tried to vary the use of technology and the decisions taken often depended on the outcome they wanted to achieve. Using synchronous tools was not compulsory but we recommended it and the previous year's participant highlighted in his talk how useful Skype had turned out to be in the completion of his project work in 2015. As the survey results show, some of the students engaged in real-time exchanges despite the logistical challenge of setting them up. The question arises why it is that some students opted for such a mode of communication; for example, are there certain prerequisites at play here such as personality traits, learning preferences, the level of commitment to the project itself, and (in the case of UoG students) the whole pre-sessional course and the following PG study? It is probably the combination of all these factors, but this may be something to explore prior to setting up any tele-collaborative project to ensure such driven participants are distributed evenly across the groups, to help all the students to progress at the same pace and achieve higher-quality outcomes.

When planning and implementing tele-collaborative projects, it cannot be assumed that the students and teachers have the necessary skills to participate in such pedagogic activities successfully. Some of the more reflective individuals may be able to pick these up while on the task, as illustrated by some of the questionnaire open comments discussed earlier, but again this cannot be assumed safely for the whole cohort. The EAST project showed that the time spent preparing the SET students at IUG for their role of mentors by offering them an online course in constructive feedback was well spent. The experience of face-to-face project work some of the UoG students gained in the earlier phases of the pre-sessional course may have been helpful in organising the groupwork. However, it seems more structured support has to be built in to help the students manage the online aspects of working together within such tight time frames and under assessment pressure. The debriefing sessions, organised ad-hoc for the medical cohort by the project co-ordinators at UoG, were helpful but more systemic and better integrated solutions are needed to avoid the students' and teachers' confusion on both sides. Speaking of the latter, it is necessary that the teachers are on board and take ownership of the project and even model various aspects of the tele-collaboration in the classroom (O'Dowd, 2007). In the case of the EAST project, the teachers' involvement was brought to a minimum in order not to increase their already high workload, but it seems a lot of information and guidelines may not have made their way to the students, as the teachers relied on the organisers to convey the messages to the students directly, either via social media or the virtual learning environment, and so they did not reinforce them in class.

Finally, it is interesting to note that so many EAST participants indicated meeting new people and making friends as the main gain of the project. Appel and Mullen (2000: 298), in their paper on pedagogical considerations for tele-collaborative projects notice that in the case of forming friendships, reciprocity deteriorates and the language benefits decrease. While this may be true for narrowly-defined tele-collaborations, i.e. as email exchanges between native speakers of two different languages, forming a friendship in a broadly conceptualised tele-collaboration using English as a Lingua Franca, like the EAST project, may have a very positive effect on commitment and engagement, as students are likely to communicate more with people they care about.

9

Tele-collaboration set-up guidelines

In order to help other educators to design a tele-collaborative project (following the extended definition whereby English, being lingua franca, is the means to an end) that fits their contexts and their students' needs, we have devised a set of guidelines which outline the steps, challenges and concerns to take into account when planning, implementing and evaluating a tele-collaborative project. In devising it, we have drawn on our own experience as well as the learning design toolkit as suggested by the Hands-On ICT Project (www.handsonict.eu) and recommendations made by O'Dowd in his 2013 paper focusing on overcoming barriers to the integration of tele-collaboration into the higher education curriculum.

The learning design approach sees educators as designers who use techniques typical of user-centred design, such as empathy, iteration, rapid prototyping and reflection, often exploited by architects, software engineers and product designers to solve the challenges set by their clients. A designer-educator identifies a similar challenge or puzzle in their settings, refines their understanding by investigating the stakeholders, their profiles, needs and wants as well as wider social material and other contextual factors. Having acquired this knowledge, as well as researched similar challenges in other settings, the educator designs the preliminary solution prototypes and rapidly refines it in order to arrive at a better version. The evaluation is built into the process very early on in order to maximise learning from failures and mistakes.

When investigating how the tele-collaboration may fit into the curriculum, it is worth starting with a rough plan which identifies the material and social characteristics of the environment in which the organiser (often the teacher) and their learners operate. Another thing to do is to pair up with a partner abroad. Research into tele-collaboration shows that robust and steady working relationships between organisers result in more successful and sustainable tele-collaborative projects (O'Dowd, 2007; O'Dowd, 2013) and our experience confirms that. Once an initial expression of interest has been warranted, a round of negotiations and discussions, interwoven with careful investigation into each local context, can start. The first thing to consider and discuss is what both partners want to achieve through the project and how, if successful, it is going to affect them, their learners and also colleagues, and possibly their departments and even whole institutions. It may be useful to identify each partner's strengths and see how these can contribute to the project in complementary ways. When imaging the project, the following recommendations from O'Dowd (2007) may be very useful as they focus on creating authentic contextualised tele-collaborations: an educational context with a language focus; participants' needs are identified and met; participants are given guidance and preferably training in providing peer feedback; interaction is structured around authentic tasks; the flow of communication is maintained by establishing realistic milestones and deadlines; the stakeholders are sufficiently efficient in using the tools; and, lastly, partners are as compatible in terms of interests and personality as possible.

To ensure the compatibility, a technique for learning design approach may prove useful, namely a 'persona' concept, which stands for the archetypical student-participant (and teacher, particularly if it is a team of teachers who are going to be involved). When thinking of the prototypical participant, it is better to identify their behaviours instead of focusing on demographics, as the former will be more helpful in identifying their goals and so later designing appropriate tasks. The things to consider include: education and experience, role and responsibilities, technical skills, subject domain skills and knowledge, motivation and desires, goals and expectations, obstacles to success, and unique assets, and how these can affect, positively or negatively, the behaviour, actions and performance. Something to pay particular attention to would be the existing skills in relation to being engaged in a tele-collaborative project, including digital literacies and transferrable skills. This should later be matched against the minimum of skills needed to participate successfully and any gaps and mismatches should be addressed by providing training and support prior to and while the project is under way.

The next step is to investigate the context by focusing on factors and concerns related to key contextual aspects: material, social and intentional, and how these impact the design planning, implementation and evaluation so that the needs of

the stakeholders are met as closely as possible. This examination can help to reframe and refine the educational challenge by considering and assessing what may go wrong. The material characteristics refer to the physical space and the tools and objects the stakeholders have access to. These will certainly include access to hardware, software and networks available to participants at university and at home. As mentioned earlier, particular types of tools, for example ones facilitating synchronous and asynchronous communication, come in with various affordances and it is a worthwhile exercise to weigh up their advantages and disadvantages to make an informed decision so that they contribute to the pedagogical gains rather than losses. O'Dowd (2007) recommends that technologies should be selected depending on the function and which aspect of the project they can best support, an approach to technology integration he refers to as 'realistic'. A related issue is the set of skills the participants have or need to have in order to participate in the project effectively, including constructive dialoguing and peer feedback provision, as well as to troubleshoot when things fail to go according to a plan, which takes us back to the persona concept discussed earlier. This need to go back to an earlier planning stage demonstrates well the iterative nature of the design process.

The social aspects include organisational structure, groupings of and relations between various stakeholders, conventions and norms. Depending on the nature of the collaboration across the borders resulting in different types of relationships between the students, for example vertical mentorships or horizontal co-researching partnerships, one may need to think of devising support mechanisms for mentors and mentees or co-researchers, as well as in cases of dysfunctional groups. And, lastly, it is important to look into beliefs, desires, motivations, expectations, and mental and emotional barriers of individual actors, which constitute the intentional factors. The students' perceptions may be shaped by various past experiences, not always positive ones, and it may be useful to discuss those with them in order to manage their resistance as well as expectations, so that they know exactly what the project involves in terms of commitment, input and output and what challenges they are likely to encounter. Such induction sessions should be offered more than once and preferably topped up with follow-up meetings, or at least instant communication opportunities for any student or teacher to voice their confusion or concerns. It may actually be worth, if possible, involving the students and other staff members in the design process, so that they co-own the project, take responsibility for it and have a clear understanding of the rationales for making pedagogical and logistical choices. Something to consider is the tele-collaboration contributing directly, or at least indirectly, to the students gaining credit at the end of the course (O'Dowd, 2013). This is not so much to exert pressure by means of assessing the activity outcomes but more to give recognition to the efforts made by the students and teachers alike. The activity also gains more importance this way and it may be easier to negotiate additional resources for the staff involved.

While considering the wider social context of the project, namely the whole institution as opposed to the very localised context of the course itself, O'Dowd (2013) recommends looking into how the tele-collaborative activity can be linked with issues and activities at a higher level, for instance internationalisation activities, physical mobility programmes and the institution's external profile. This is crucial as, according to the researcher, tele-collaboration still does not belong to the mainstream of pedagogical activities and so there may be numerous obstacles to implementing it, for example not accounting for increased workload for the participating staff, need for technical support or additional training for teachers and students alike. As a result, a lot of work may have to be done initially by the individual teachers themselves, and in their own time. It is crucial to plan small but dream big and perhaps have a longer-term plan of a growing cycle of tele-collaboration activities, as we for instance did with by extending EAST 1 to devise EAST 2. This is because, as O'Dowd (2013) asserts, careful, purposeful and sustainable instances of technology integration often stand a good chance of being noticed and accepted as part of normalised teaching practice. Such a recognition may be helpful in overcoming certain institutional barriers and result in a change of attitudes on the part of the management, leading to recognising the value of tele-collaborative projects.

The next thing to do is to define the learning objectives of the tele-collaborative project, which should identify the behaviour, the conditions and the standard required of the project participants to demonstrate that they have acquired the skills and knowledge that are subject of the project. It is helpful to include peer feedback provision, as without the explicit mention of this it is easy for it to slip through the net during the design of the activities. And if peer feedback does not explicitly feature in the timeline of the project, the students are not likely to engage in it, as the research by Ware and O'Dowd (2008) showed and as some of our observations confirm.

To gain a global picture of the project, a scenario approach is recommended. Having received feedback from colleagues and stakeholders on the

ideas generated so far, it should be possible to outline the main characteristics of the project using the scenario format:

- Actors – Who is involved?
- Goals – What is the rationale?
- Settings – Where and when is it happening?
- Objects – What tools are involved?
- Actions – What do actors do?
- Events – What happens to actors?
- Results – What is achieved?
- Your design – What role does the tele-collaboration project play?

When designing the tele-collaborative activities, it is worth thinking of creating genuine opportunities for learners to engage with each other's ideas. This is more easily achieved if the tasks involve higher-order thinking skills such as analysing, synthesising, creating or evaluating, as these may yield bigger volumes and better quality constructive dialogue between the partners. If the activity focuses on simple information exchanges that do not invite the students to act upon it, the dialogues may end by being rather unreflective (O'Dowd, 2007).

Overall, tele-collaborative projects, as described in this report and other studies on the topic, tend to be messy and unpredictable due to their open-ended nature and the number of participants involved, as well as variables often beyond the control of the organiser. They are also time-consuming, multifaceted and complex when it comes to organisation and integration, a common issue for any educator involved in such projects (O'Dowd, 2013). While careful planning is key, and this would include contingency plans, not everything can be predicted and so organisational and logistical issues are bound to arise while the project is under way, as are communication breakdowns and disagreements between stakeholders. For this reason, participating learners *and* teachers have to be warned and prepared as well as possible, but certain qualities like embracing ambiguity and uncertainty may be success-driving factors. If the partnership is to develop over the years, it is crucial to build the growth potential into the project and actively seek ways of linking it to wider institutional practices related to internationalisation and technological integration.

10

Conclusion

This overwhelmingly positive evaluation of EAST 2 from students in both Gaza and Glasgow – particularly gratifying in terms of general academic development and cross-cultural awareness, but also clear as regards problem-solving and teamwork – suggest that the collaboration between the two institutions should be maintained and further developed. The next collaboration will focus on the SET cohort, which (we have seen) returned higher satisfaction levels than the Biomeds. We feel that the provision of feedback to IUG students (on language and on content), as provided to Biomed students, should be extended to the SET participants in any future iteration of EAST – this was commented on very positively by the Biomed students at IUG during EAST 2. This will necessitate finding teaching assistants within the UoG School of Engineering, and the funding needed to pay them. EAST 3 is likely thus to be more focused, in that it will concentrate on just one subject-set, and will provide feedback to the IUG participants which should have a further knock-on effect on the commitment of the SET students from IUG (already high) to the project, and consequently on the 'subject-specific feedback' responses, assessed relatively poorly during EAST 2. There will be a need to pay for travel allowances, but the scaling-back (without Biomeds) will reduce overall costs, from the £9,000 required to run EAST 2 (and paid for via the British Council English Language Teaching Research Award) to an anticipated £4,500 / £5,000 for EAST 3.

Suggestions leading on from specific feedback may be useful, particularly in terms of information to be provided to the UoG students on day 1. Some suggested that a teleconference could be initially arranged by the organisers right at the start of the course, to help the students from both institutions break the ice. Explicitly stating the increasing dominance of NNS-NNS exchanges across the English-speaking world would also help the students see the value of persevering to overcome comprehension challenges. IUG students knew about the nature of the collaboration well in advance, and it might also be useful (as both participants and teaching assistants suggested) to give UoG students some time for mental preparation. Uncertainty regarding who, exactly, will arrive in Glasgow before the very day the course commences has to date prevented this, but it is something we plan to explore for EAST 3.

More ambitious plans may also be possible, post-2017. One very interesting development, leading directly from this ELTRA-supported project, has been a successful bid for Erasmus+ funding of 231,000 Euros, which will bring 24 IUG students to the University of Glasgow in summer 2017. The desirability of face-to-face encounters was suggested in student feedback, and this is clearly a very welcome development indeed. We cannot predict how many of these will be SET students, but we are already working on how best to exploit their physical presence, and excited by the possibilities this offers.

One obvious way forward would be to embrace other interested overseas institutions: any new partner must be available to work in July / August, the time-zone must be close to the UK's, and broadband speeds must be similar to those available in Gaza. Above all, faculty and staff need to buy into a project that is more about the educational 'process' than about any tangible 'product', with the many day-to-day uncertainties this brings, and benefits that are thus often intangible. Should such an expansion be possible, we again hope to make use of the administrative strengths of IUG, the expertise of their staff, and the experience they have gained, in developing any future links with a third party; the possibility of developing IUG as a pre-sessional support 'hub' is one that we would be excited to explore. We also hope that other institutions will find the template included in this paper of use, and may be curious to exploit / report on similar collaborations between organisers of summer pre-sessional courses in the UK and institutions overseas.

References

Aouragh, M (2011) Confined Offline, Traversing Online Palestinian Mobility through the Prism of the Internet. *Mobilities*, 6(3), 375-397.

Appel, C and Mullen, T (2000) Pedagogical considerations for a web-based tandem language learning environment. *Computers & Education*, 34 (2000), 291-308.

Biggs, J and Tang, C (2011) *Teaching for Quality Learning at University*. Buckingham: Open University Press, McGraw Hill.

Bikowski, D (2011) Review of 'Online Intercultural Exchange: An Introduction for Foreign Language Teachers'. *Language Learning and Technology*, 15(1), 24-28.

Crawford, E and Kirby, M (2008) Fostering Students' Global Awareness: technology applications in social studies teaching and learning. *Journal of Curriculum and Instruction*, 2(1), 56-73.

Daly, SR, Mosyjowski, EA (2014) Seifert, CM Teaching creativity in Engineering courses. Journal of Engineering Education, 2014, 103/3, 417-449.

Dudley-Evans, T and St John, MJ (1991) *Developments in ESP. A multidisciplinary approach.* Cambridge: CUP.

Gibbs, G and Simpson, C (2004) Conditions under which assessment supports learning. *Learning and Teaching in Higher Education*, 1, 3-31.

Greener, S (2009) e-Modelling – Helping Learners to Develop Sound e-Learning Behaviours. *Electronic Journal of e-Learning*, 7(3), 265-272.

Guariento, WA, Rolinska, A and Al-Masri, N (2016) Investigating EAST (English for Academic Study Telecollaboration). *Proceedings of the 123rd American Society for Engineering Education Conference*, New Orleans, USA.

Kachru, B (2006). *The handbook of World Englishes*, Wiley-Blackwell, London.

Kramsch, C (1998) *Language and Culture*. Oxford, OUP.

Ladyshewsky, RK (2006) Peer Coaching: A constructivist methodology for enhancing critical thinking in postgraduate business education, *Higher Education Research & Development*, 25/1, 67-84.

Lucena, J, Downey, G, Jesiek, B, Elber, S (2008) Competencies beyond countries: The re-organization of Engineering Education in the United States, Europe and Latin America. *Journal of Engineering Education*, 97/4, 433-447.

Mayordomo, RM and Onrubia, J (2015) Work coordination and collaborative knowledge construction in a small group collaborative virtual task. *Internet and Higher Education*, 25/1, 96-104.

Nicol, D (2011) *Developing the students' ability to construct feedback*. Quality Assurance Agency for Higher Education. Available at: http://www.enhancementthemes.ac.uk/docs/publications/developing-students-ability-to-construct-feedback.pdf?sfvrsn=30 Accessed 30/08/2016.

O'Dowd, R (2007) Evaluating the outcomes of online intercultural exchange. *ELT Journal*, 61(2), 144-152.

O'Dowd, R (2013) Tele collaborative networks in university higher education: Overcoming barriers to integration. *Internet and Higher Education*, 18(2013), 47-53.

Palestinian Central Bureau of Statistics (PCBS) (2016) Press Release on the Eve of International Literacy Day, 8th September. Available at: http://www.pcbs.gov.ps/site/512/default.aspx?tabID=512&lang=en&ItemID=1483&mid=3171&wversion=Staging

Sadler, DR (1989) Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119–144.

Saraceni, M 2015, *World Englishes, a Critical Analysis*. London, Bloomsbury.

Schaeffer, D, Panchal, JH, Thames, JL, Haroon, S, Mistree, F (2012) Educating engineers for the near tomorrow. *International Journal of Engineering Education*, 28/2, 381-396.

Topping, KJ (2009) *Peer Assessment, Theory Into Practice*, 48: 1, 20-27.

UCAS (2016) Available at: https://www.ucas.com/ucas/postgraduate/postgraduate-study/international-students Accessed 02/06/2016.

UNDP (2014) Available at:, http://www.ps.undp.org/content/dam/papp/docs/Publications/UNDP-papp-research-PHDR2015Education.pdf

Ware, PD and O'Dowd, R (2008) Peer feedback on language form in telecollaboration. *Language Learning and Technology*, 12(1), 43-63.

White, C. (2007) Focus on the language learner in an era of globalization: Tensions, positions and practices in technology-mediated language teaching. *Language Teaching*, 40/4: 321-326.

World Bank (2014) Available at: http://www.worldbank.org/content/dam/Worldbank/document/MNA/Factsheet_Gaza_ENG.pdf Accessed 02/04/2016.

World Bank (19 Sept 2016) Economic Monitoring Report to the Ad Hoc Liaison Committee. Available at: http://www.worldbank.org/en/country/westbankandgaza/publication/economic-monitoring-report-to-the-ad-hoc-liaison-committee-september-2016

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ISBN 978-0-86355-856-6