Beyond language: a multimodal analysis of success in non-native Business-English pitches

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Abstract

Most universities now target graduate employability as an indicator of their educational self-efficacy. Undergraduate English-for-Specific-Purposes syllabi also include a number of market-wise soft skills such as presenting and negotiating as learner outcomes. However, ESP assessment remains language-bound. This study follows a quantification approach of the impact of multimodal factors in 140 recorded business pitches and 376 written investor reports. It provides statistical evidence of the impact of non-verbal elements on pitch success, revealing in turn an implicit conflation of non-verbal aspects and soft skills in academic assessment. Further analysis on the start-up valuation (a result of funds raised and equity released, in real-life terms) and their success factors (as justified in investor reports) makes it possible to infer that non-verbal elements are more directly related to pitch success than verbal aspects. A qualitative-quantitative analysis of investor reports confirms the minimal presence of linguistic elements as reasons for investment, and the primary focus on paralinguistic features to explain business decisions, which is the exact opposite to the reasons why ESP raters assign grades. In view of both these findings, it seems empirically evident that the theoretical problem posed by assessment discrepancy is indeed present: target soft-skills cannot be readily measured through grades and, conversely, grades do not necessarily reflect the acquisition of these skills. As a potential remedy, the need for a multimodal rubric-based improved method for assessment is put forward, so as to better align assessment and module targets expectations.

Keywords: Business English, multimodality, evidence-based assessment, presentations, non-verbal communication.

Resumen

Más allá del idioma: un análisis multimodal del éxito en las presentaciones de estudiantes no-nativos de inglés de negocios

Actualmente, la mayor parte de las universidades utilizan la empleabilidad de sus graduados como indicador de su propia eficiencia educativa. Sus asignaturas de Inglés para Fines Específicos incluyen como objetivos de aprendizaje una serie de microdestrezas requeridas en el mercado laboral, tales como hacer presentaciones o saber negociar. Sin embargo, la evaluación de estas asignaturas sigue muy ligada al idioma. El presente estudio sigue un enfoque cuantitativo del impacto de los factores multimodales en 140 presentaciones de negocios grabadas y 376 informes escritos de inversores. El estudio proporciona evidencias estadísticas del impacto de los elementos no verbales en el éxito de las presentaciones. El análisis de las tasaciones de las start-ups y sus factores de éxito permite deducir que los elementos no verbales están más directamente relacionados con el éxito. Un análisis cualitativo y cuantitativo de los informes de los inversores confirma el mínimo papel que desempeñan los elementos lingüísticos como razones para la inversión y muestra que las decisiones de negocios residen en los elementos paralingüísticos, lo cual es contrario a los criterios seguidos por los evaluadores de Inglés para Fines Específicos. Como consecuencia de estos resultados, empíricamente parece evidente que hay un problema teórico de discrepancia en la evaluación: las microdestrezas no se pueden medir a través de las notas y, a la inversa, las notas no reflejan necesariamente la adquisición de estas destrezas. Como solución, se ofrece un modelo de evaluación multimodal, basado en rúbricas, que permite acercar la evaluación a los objetivos.

Palabras clave: inglés para los negocios, multimodalidad, evaluación basada en evidencias, presentaciones, comunicación no verbal.

1. Introduction

Years of economic recession have contributed to the establishment of graduate employability as a primary target for universities around the world. Once assumed as a by-product of tertiary education, the employment rate of graduates and post-graduates is now a weighted indicator of the success of universities worldwide (Shanghai, 2018; Quacquarelli Symonds, 2019). This establishes a closer relationship between educators and the labour market: if educational success is measured by employability, then it must be observed as a curricular target, which requires module designers and policy-makers to constantly explore market needs. Reportedly, this not the case: in media

coverage, universities "often receive the strongest criticism on the poor employability assets graduates possess", assumedly on the grounds of an "outdated and irrelevant curriculum" or the persistence of "traditional teaching methods and the absent of career guidance" (Tran, 2015: 207). However debatable the issue might be, it is certainly true that there is evidence that students in the last decade have been persuaded of the idea that their degree is insufficient for market demands, and that employers often fail to perceive this market-oriented turn at universities (O'Leary, 2017; Tymon, 2013).

Most of the suggested solutions have revolved around the distinction between so-called hard and soft skills, the former being knowledge-based and degree-specific, and the latter more context-oriented and transferable. In their Pan-European study on business undergraduates, Andrews and Higson (2008: 413) already identified a number of key competencies sought after by employers, such as:

- Professionalism;
- Reliability;
- The ability to cope with uncertainty;
- The ability to work under pressure;
- The ability to plan and think strategically;
- The capability to communicate and interact with others, either in teams or through networking;
- Good written and verbal communication skills;
- Information and Communication Technology skills;
- Creativity and self-confidence;
- Good self-management and time-management skills;
- A willingness to learn and accept responsibility.

Even in areas where staff shortages are common (such as Engineering or Medicine) there is an evident need for a certain skill-set to complement the hard skills acquired during professional-training degrees. Employers report the need for planning and evaluation, self-guided research and leadership (Buunaaisie, Manyara, Annett, Bird, Bray, Ige & Evans, 2018), critical analysis and multidisciplinary thinking (Rao, 2014), and interpersonal skills (Inti &

Latih, 2018). Additionally, entrepreneurship and self-employment have grown as an alternative to being hired, since persistent changes in overall employment structure in the last decade have limited company ability to incorporate new graduates (O'Connor, 2013). Some recent studies have argued that entrepreneurial teaching programmes have impacted student skills positively (Fayolle & Gailly, 2015; Karlsson & Moberg, 2013). Universities have been recommended to "employ teaching and learning methods that encourage individuals to behave proactively" through "student led approaches […] and experiential learning such as business simulations and scenarios" (Bell, 2016: 13).

In sum, there has been serious concern about the gap between graduate skills and work environment requirements. Researchers have located several desirable skill-sets, but most soft-skills research has failed to acknowledge that, in non-Anglophone contexts, the ability of graduates to use English proficiently is also crucial, and that "English is playing an ever-more prominent role in the curriculum […] in all countries and at all levels" (Erling, 2015: 61). However, in a business context these English skills relate to English as a Lingua Franca (ELF): cultural awareness is a priority for employers, particularly as multinationals have come to dominate markets. Some years ago theorists suggested that students "should have open minds and generosity towards other people; know how to behave in other cultures and how to communicate with people with different religions, values and customs, and not be scared of coping with new and unfamiliar issues" (Wächter, 2003: 39). Due to the rise of multinationals and globalisation, it is becoming clear that using English proficiently within a multinational and multicultural setting is an implied requirement for new graduates entering the job market, and not just a desirable addition.

In the last decade, universities worldwide have promptly responded to both challenges: they have redesigned their curricula to suit more skills-based pedagogical targets, and have provided students with experiences to enhance their English and multicultural skills. In particular, in addition to the already-existing student exchanges with international universities, most tertiary institutions in non-Anglophone countries have relied on fostering English as a Medium of Instruction (EMI) and ESP provisions as part of Internationalisation at Home (IaH), in order to tackle the aforementioned linguistic and cultural targets and to "improve student preparedness for a globalized/internationalised world" (Beelen, 2011: 257). EMI, which entails the teaching of academic subjects through English, has experienced

a sustained growth (Wächter & Maiworm, 2014; Dearden, 2015) as a direct result of university attempts to add language targets to existing programmes of study, and to offer more content-based integration than the more linguistically-focused targets of ESP modules. This move has been in close connection with IaH as the "purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" (Beelen & Jones, 2015: 69).

The inclusion of both formal and informal curricular targets is highly relevant here: IaH has set cross-curricular and informal curriculum targets that formal module assessment has failed to include as evidence of learning. In EMI, language is notably absent in module assessment, since content lecturers have largely refused to integrate linguistic targets (Aguilar & Muñoz, 2014; Dafouz, Camacho & Urquia, 2014), despite English proficiency being one of the main drivers for EMI. In both EMI and ESP, soft skills have been included extensively within module design as outcomes (Spring, 2015) so as to improve employability, particularly in business-related areas (Fisher & Friedman, 2015). However, these very same skills have not been graded explicitly in task-oriented assessment. Hence, there is a severe mismatch between formal and informal curricular targets (soft skills, English, cultural awareness, entrepreneurship, etc.) and the actual assessment instruments in both EMI and ESP. This conflation of the assessment of soft skills in ESP/EMI is clearly problematic on a number of levels. First, it voids the validity of student attainment of these soft skills, since it erases any trace of objective evaluation and feedback on these skills. Secondly, it creates a negative washback effect, since those elements which are not assessed risk being perceived as ancillary by learners and instructors. Finally, it impairs the adequate teaching of other curricular targets (such as content in EMI or language in ESP) since fostering these skills in class leaves less time for targets students will be actually assessed on. Ultimately, if evidence of these informal achievements is tenuous, employers may have doubts about formal learning outcomes as well.

Therefore, it is paramount to improve module assessment in EMI/ESP by including these skills within the evaluation pool. This way, such a move would substantiate these soft skills as module targets (as they indeed stand in modern syllabi), and also align student workload and assessment more closely. How to do this, however, may not be evident; literature on measuring soft skills has stressed that "traits and outcomes are measured using

performance on some task or set of tasks" (Heckman & Kautz, 2012: 4) and that it is possible to observe these skills empirically if decomposed in smaller, more directly observable elements (Balcar, 2014), which is current practice in high-profile human resources (Fan, Wei & Zhang, 2017).

This omission of soft-skill assessment targets is also a point of concern for ESP, which has generally relied on the four basic skills of reading, writing, speaking and listening as a way to conceptualise assessment. Modern tertiary ESP modules such as Business English also include soft skills as curricular targets. Business English has a tradition of designing modules through the assessment of learner needs, which are tailored to the specific labour market (Hind & Moss, 2011). Business English modules include in their design notions of non-verbal communication, active listening, several modalities of giving and receiving feedback, understanding information presented in various forms (such as graphs, charts, or diagrams) that typically require decision-making, problem-solving or further negotiation with others through digital and non-digital channels. Oral communication tasks in Business English typically include interacting, delivering presentations, persuading individuals or audiences, negotiating and problem-solving through a number of channels such as face-to-face, phone or IT-mediated communication, and students can work individually or as part of a team. In this sense, Business English modules have simulated real-life conditions (and, therefore, the soft skills involved). Abilities such as presenting to a specialised audience include in their effectiveness observable verbal, written, and non-verbal material, body language, visual interaction and other modes that must be individually assessed to evidence learning outcomes.

A particular task criss-crossing Business English with entrepreneurship is the business pitch, where entrepreneurs present a start-up with the goal of raising funds. This particular subtype of business presentation is inherently multimodal, since it uses different communication modes (such as speech, text, audio-visual material and body language), and it combines presentation with improvisation, responding to questions and negotiation (O'Halloran & Smith, 2011). For example, presenters may make a point orally, then exemplify it with a diagram, and use eye contact and gestures to draw attention to the visual and explicate previous ideas, again re-checking for understanding via eye contact or check-up questions. The constant interaction between aural and visual modes has led some researchers to draw increasing attention to the visual dimension and to explore its interaction with speech in visually-aided presentations (Charles & Ventola, 2002; Tardy,

2005). Some have stressed the theoretical importance of body language for the effectiveness of the presentation, especially as a way to increase interpersonal rapport (Hood & Forey, 2005). Others have explored the influence of paralinguistic resources to express evaluative interpersonal meaning in business contexts (Hatton, 2007; Furnham & Petrova, 2010). These studies generally find that non-verbal features play an important role in conveying meaning, intensifying declarative and evaluative discourse, and particularly in conveying speaker attitude beyond the actual words uttered. These modes offer different realisations, and they can be combined or sequenced in various manners as per their intended purposes (Kress, 2003; Morell, 2015). This is particularly relevant if the participants are multicultural or their English proficiency requires some communication repair. In educational EMI/ESP contexts (or in ELF work environments such as multinationals, for that matter) it may seem the case that coordinating semiotic resources such as images, writing, layout, sound, gestures, speech and other audio-visual material (Kress, 2010) may be more important than showing a good command of the spoken language.

These studies observe the interaction of verbal and non-verbal cues, and hint at the importance of combining these for effective communication, but have not attempted a quantitative assessment of the relative importance of each particular element involved. The research presented here targets a quantification approach (Rowley-Jolivet, 2015) of such impact by analysing a substantial corpus of business pitches in an entrepreneur-simulation task within a Business English module at a Spanish medium-sized state university between 2010 and 2018. It shows how it is possible to explore quantitatively which factors have greater impact on presentation successfulness, as evidenced from the money raised for student fantasy start-ups. Secondly, it explores how to align assessment with the very ambitious list of typical curricular targets in these ESP Business modules: problem-solving, decision-making, working within an international context, performing in various multicultural contexts, adapting to new situations, engaging in oral and written production, applying cultural aspects from texts to behavioural and simulation models, and using communicative strategies in English to argue, explain, give further details, state opinions, make plans or projects, apologise and promote a product, plan and give oral presentations in English on business-related topics.

Such analysis may achieve two major targets: on the one hand, to evidence which modal element (speech delivery, pace, eye-contact, gesture,

positioning, etc.) has a greater degree of effectiveness; on the other, to confirm the potential dissonance between the language-based grades assigned and intended curricular outcomes, so as to enable more coherent assessment tools within modern ESP modules.

2. Research questions

To better guide the stages of inquiry, analysis, and reporting, the following research questions are put forward:

- Q1. Do paralinguistic elements have a greater impact on pitch effectiveness?
- Q2. Which verbal or non-verbal elements are significantly more successful?
- Q3. Is there any correlation between money raised and student grades?
- Q4. Do investors value verbal elements as a deciding factor in their comments?

3. Method and participants

As a semester-long project for their Business English module (free elective, 6 ECTS, 4th-year, 1st-semester) students create a fantasy start-up, typically set around a flagship product or service. After ideation and market research, students design a guided business plan for growth, including the following aspects:

- Short introduction to your company and flagship (main) product or service.
- Company Analysis: what products and/or services do you offer now and/or what will you develop and offer in the future?
- Industry Analysis: how big is/are your market(s) and how are they changing? What trends are affecting them and are these good for your future success?
- Competitive Analysis: who are your competitors and what are each

of their key strengths and weaknesses? In what areas will you have or gain competitive advantage? How?

- Customer Analysis: who are your target customers? Why? What are their needs?
- Marketing Plan: how will you reach your target customers? What promotional tactics and marketing channels will you use? How will you price your products and/or services?
- Management Team: who comprises your current team and who would you hire?
- Operations Plan: what is your action plan? What are the milestones you must accomplish to go from where you are now to where you want to be at year's end? At the end of five years?
- Financial Plan: how much external funding (if applicable) do you need to build your company? In what areas will these funds be invested? What are your projected revenues and profits over the next one to five years? What assets must you acquire?

These elements are central to the preparation of a 7-minute pitch where students deliver the previously-designed business plan, modelled on BBC game show *Dragon's Den*. Presenters may use a variety of material, from multimedia to realia, so as to show their proof-of-concept models to their classmates, who act as potential investors. The pitch is followed by a 5-minute follow-up where presenters are asked for clarifications, outline the financial aspects of the business, and negotiate equity (i.e. a stake of their business in exchange for investment) with their classmates, who role-play as prospective investors with a pre-allocated budget of £100,000. Investors can fund a sole start-up or distribute their money between up to three projects. At a later stage, investors justify their decisions in writing, thus producing a short report on each start-up they funded.

Although the money raised by students would act as proof of their success in real life, this aspect is not observed in the assessment of their pitch: students are assigned a grade by their instructor as per their linguistic performance, towards an expected Common European Framework of Reference for Languages (CEFR) level B2. Students are assessed on the basis of their use of grammar and specialised vocabulary within this level, but no other multimodal factors are taken into account. In other words, no

assessment criteria gauge their use of body posture, eye-to-eye contact, signposting, voice projection, audience engagement, improvisation, negotiation, turn-taking and other soft skills, even if their importance is practised and discussed in class as part of preparation towards presentations, and these skills feature as explicit module targets.

Participants between 2010 and 2018 belonged to several nationalities. They were tested at the beginning of the module, being CEFR B1 or higher. For statistical purposes, all CEFR values are normalised following a descriptor-based method (Jimenez-Munoz, 2014). As the course was a free elective module, Spanish-to-foreign student balance depended entirely on opt-ins, but the class was decidedly multicultural in every cohort, and the syllabus included entrepreneurial and labour-related topics within an international context. Pitch presenters were recorded on video as proof of assessment. For the 140 individual pitches that make up the corpus of this study, the nationality breakdown is as follows, with no Anglophone participants:

Nationality	Students	Percentage of total
Spanish	61	43.57
Turkish	18	12.86
Italian	14	10
German	13	9.29
French	11	7.86
Mexican	8	5.71
Portuguese	5	3.57
Polish	4	2.86
Czech	3	2.14
Guinean	2	1.43
Japanese	1	0.71

Table 1. Participant nationalities

This mix of Spanish and international students is infrequent in Spanish classrooms, where students are mainly local. Additionally, interaction among these national and international students was heightened by the business pitch simulation: not only did they share the classroom, but they also acted as an active audience, engaging in open negotiation after the pitch. Typically, pitch presenters faced a mixture of nationalities, business cultures, and ELF uses that they needed to respond to.

For the purposes of this research, these video-recorded pitches were analysed and graded in terms of language, but also non-verbal cues, paralinguistic semiotics, their use of multimedia and realia, and a number of

other factors which may have had a direct influence on their success. Separating and grading these elements in detail enables a quantitative analysis to reveal which elements had a greater impact on student achievement, measured both in real-life terms and the original grade given. This would uncover three major aspects. First, explaining which of these multimodal aspects has a greater impact on awarded grade, its significance, and whether verbal elements are indeed more tightly related to the grade given than non-verbal aspects, as implied by assessment criteria. Secondly, whether real-life targets (such as money raised and equity relinquished) have any discrepancy with evaluative course targets. Finally, whether soft skills are directly observable through these more detailed indicators.

From each recorded pitch, a complex dataset was extracted from the videos, including the following 40 variables:

- Presenter details: ID, sex, age, nationality, L1, CEFR entry level
- Presenter – English-skills appropriateness and accuracy (human-rated, qualitative range 1-100, higher is better): grammar accuracy, grammar variation, grammar appropriateness, vocabulary accuracy (key words), vocabulary variation, vocabulary appropriateness (register), discourse markers, pace, accuracy in intonation and modulation (chunking, sentence stress).
- Presenter – non-verbal skills appropriateness and accuracy (human-rated, qualitative range 1-100, higher is better): eye contact, gestures (hands), posture, positioning, closeness, movement
- Presentation (human-rated, qualitative range 1-100, higher is better): font style, font size, contrast, images, text-to-image balance, integration with discourse, lack of redundancy
- Original grade assigned (human-rated, normalized qualitative range 1-100, higher is better)
- Start-up: title, money raised, equity relinquished
- Interaction – verbal (human-rated, qualitative range 1-100, higher is better): responding, improvisation, revisiting, completion
- Interaction –non-verbal (human-rated, qualitative range 1-100, higher is better): eye contact, gestures, posture, positioning, closeness, movement

The dataset was then explored quantitatively using R software 3.5.1 for r-squared and adjusted r-squared Pearson correlation coefficients between co-dependent variables, with a significance threshold of alpha 0.05. The r-squared test indicates the extent to which two variables are linearly related (with relative values between -1 and 1), and the adjusted r-square adapts to the number of predictors in the model to avoid chance, thus offering a more tailored result. Additionally, a mixed-methods approach was followed to further analyse 376 investor reports in which lenders motivated their investment choices. These reports were codified qualitatively using MAXQDA 18 computer-assisted mixed methods text analysis software. In turn, codification data results were further analysed quantitatively, so as to allow further interpretation of the hard statistical data above.

4. Results

A regression matrix of the 40 variables shows the significant bivariate correlation between these elements when they act individually as dependent variables of the rest; p-value was 0.034, which is below the alpha 0.05 significance threshold, and therefore rules out variable independence. That is to say, it reveals the relation of a dependent variable (such as money raised by start-ups or grade awarded by rater) with an independent variable (such as grammar accuracy or eye contact). Thus, it is possible to determine whether it can be inferred that one or various independent variables (such as gestures or text-to-image balance) have an impact on the dependent variable under scrutiny (such as the grade given or the money raised). This is a fact hardly observable for the whole cohort within the classroom (other than intuitively), and more so when only language targets are being assessed and paid attention to.

In real life, it can be safely assumed than a presenter in a pitch would be judged solely on two product-oriented factors: money raised from investors, and the equity retained. Table 2 shows those variables with greater impact on the money exchanged for equity by the investors. With the exception of vocabulary accuracy, the rest of the variables are prominently non-verbal, and their correlation with the money raised is high. The more appropriate and accurate the use of hands or eye contact is, the more money raised for the start-up, and so forth:

Rank	Variable pair	R-squared	Adjusted R-squared
1	GestureHands ~ MoneyRaised	0.8777	0.8775
2	EyeContact ~ MoneyRaised	0.8352	0.835
3	TextImageBalance ~ MoneyRaised	0.7978	0.8976
4	IntonationModulation ~ MoneyRaised	0.7881	0.7879
5	VocabularyAccuracy ~ MoneyRaised	0.7679	0.7676
6	IntegrationDiscourse ~ MoneyRaised	0.6921	0.6897
7	Pace ~ MoneyRaised	0.6432	0.6431
8	Responding ~ MoneyRaised	0.6219	0.6216
9	Closeness ~ MoneyRaised	0.6133	0.6131
10	EyeContactInteraction ~ MoneyRaised	0.5881	0.5877

Table 2. Top 10 adjusted R-squared coefficients (money raised).

The second of the real-life factors (the equity retained by presenters in exchange for investor's money) shows that, understandably, there is a very strong correlation between the money raised and the equity retained. However, this is less interesting than the fact that most of the same non-linguistic variables above also play a role in decisions, but their relative impact is significantly lower in most cases. Since equity is negotiated after the pitch, it seems that the clarity of presenter responses (but also their ability to revisit the presentation, keep eye contact and appropriate closeness) in interactive negotiation has a greater impact than in the pitch itself:

Rank	Variable pair	R-squared	Adjusted R-squared
1	MoneyRaised ~ EquityRetained	0.9474	0.9472
2	Responding ~ EquityRetained	0.6459	0.6456
3	EyeContactInteraction ~ EquityRetained	0.6145	0.6143
4	Revisiting ~ EquityRetained	0.5961	0.5959
5	Closeness ~ EquityRetained	0.5524	0.5522
6	VocabularyAccuracy ~ EquityRetained	0.5289	0.5286
7	IntegrationDiscourse ~ EquityRetained	0.52111	0.52107
8	DiscourseMarkers ~ EquityRetained	0.4956	0.4954
9	Pace ~ EquityRetained	0.4256	0.4255
10	EyeContact ~ EquityRetained	0.4133	0.4131

Table 3. Top 10 adjusted R-squared coefficients (equity).

Unlike in real life, in the classroom students were assigned a grade for their performance; that is to say, assessment was process-oriented (how they did) rather than focused on the actual outcome (how much they raised for which equity, and the start-up resulting valuation). Although language-related factors were not individually assessed when the original grade was awarded, Table 4 shows that the discrimination of language-bound variables such as CEFR entry level or Vocabulary accuracy indicates a strong correlation with the assigned grade, but also that some non-assessed elements such as Pace, Revisiting content or Text-to-Image balance also play a role:

Rank	Variable pair	R-squared	Adjusted R-squared
1	CEFREntryLevel ~ GradeAwarded	0.9261	0.9258
2	VocabularyAccuracy ~ GradeAwarded	0.8851	0.8849
3	Pace ~ GradeAwarded	0.7972	0.7967
4	GrammarAccuracy ~ GradeAwarded	0.7865	0.7863
5	DiscourseMarkers ~ GradeAwarded	0.7661	0.7658
6	IntonationModulation ~ GradeAwarded	0.7461	0.7459
7	GrammarVariation ~ GradeAwarded	0.6692	0.6690
8	Revisiting ~ GradeAwarded	0.5211	0.5208
9	IntegrationDiscourse ~ GradeAwarded	0.5163	0.5161
10	TextImageBalance ~ GradeAwarded	0.5053	0.5051

Table 4. Top 10 adjusted R-squared coefficients (original grade).

Since student investors had to justify their decisions in a report, it is possible to scrutinise these texts qualitatively through bottom-up coding of comments in these reports. In the corpus, there are 376 short investment justification reports (150-200 words) on these 140 start-up pitches. The reason that there are more reports than pitches has to do with the fact that students were allocated a budget of £100,000 and allowed to split it into up to three start-ups. Consequently, some students decided to invest in more than one start-up, thus generating more than one report. These texts were codified using MAXQDA, in a process which was semi-automated; codes (i.e., the reasons given to invest) were created manually as arising from reading the texts, and then excerpts were codified both through the use of key words and manually in every text. As the process was inductive, it integrated most of the 40 multimodal variables above, but also other factors stemming from investors' comments, such as usefulness or potential profitability. A total of 1,956 coded items were tagged in discourse extracts, with 38 different reasons given for investment. Quantitative analysis of these coded items yielded the following results:

Rank	Coding	Occurrences	Percentage of total coded items	Percentage of total pitches
1	Idea/Usefulness	284	14.52	75.53
2	Profitability	179	9.15	47.61
3	InternationalOutlook	86	4.4	22.87
4	Confidence	72	3.68	19.15
5	EyeContact	67	3.46	17.82
6	IntegrationDiscourse	54	2.76	14.36
7	ClearEnglish	52	2.66	13.83
8	TextImageBalance	48	2.45	12.77
9	VocabularyApropriateness	41	2.1	10.9
10	Closeness	33	1.69	8.78

Table 5. Top 10 reasons for investment (Investor Reports).

In the reports, student investors focused on the product, and commented repeatedly on the fact that the project presented was a good, innovative idea (investor 32) to cover an unexplored market niche (investor 27) that could yield profits in the future not only in Europe, but in other areas (investor 117). Investors sometimes referred to the confidence and personality of the presenter (investor 58) and occasionally commented on the fact that the presentation was in very clear English (investor 84), with good vocabulary (investor 247), or that it was a sound, very well integrated discourse (investor 29) where the audio-visual really helped selling the idea (investor 312). Comments on the fact that the presenter was looking at the audience all the time (investor 78) and he or she was close and responsive (investor 99) are scarcer but nevertheless present.

5. Discussion

Results show that there is, *prima facie,* a discrepancy between real-life conditions and academic assessment. These two evaluations of the same multimodal speech act reflect upon strikingly dissimilar aspects: the pitch as a linguistic performance and its practical outcome in real-life terms. While ESP scholars have defined modern evaluation as process-oriented, where performance is criterion-referenced, interactive and aiming at fostering intrinsic motivation (Douglas-Brown, 2003), failing to take account of multimodal aspects in assessment complicates the correct evaluation of acts where language is only one factor. It has been suggested that mode "combinations can lead to improved performances" as it may "compensate for verbal deficiencies" and effective presenters "tend to use a variety of modes that often overlap but work together to convey specific meanings" (Morell, 2015: 149). However, it seems that, for investors, the actual language uttered by presenters in communication and interaction was less relevant than kinesic or proxemic elements: eye contact, integration of discourse with visuals, text-to-image balance or closeness weighed more in their decisions than clear English or vocabulary accuracy (cf. Table 5). On the other hand, the task rater seemed to have paid little attention to non-linguistic elements. This is problematic on two counts: it ignores much of the ongoing non-verbal communication, and it fails to foreground soft skills as the learning outcomes specified in the curriculum and practiced through curricular implementation. To discuss our research questions may help to illuminate these issues further.

Theoretically, in every specialised domain there are different "multimodal affordances" (Airey & Linder, 2009) which connect the interplaying elements and settings, but their relative importance is always subject to a "disciplinary affordance that underpins appropriate holistic meaning-making" (Linder, 2013: 44). The results above show the quantification of these multimodal elements within business pitches and their relative impact on grades or investor decisions. Our first research question asks whether paralinguistic elements have a greater impact on pitch effectiveness. Clearly, there is a perceived imbalance in the importance of paralinguistic elements in real-life situations. Tables 2 and 3 above showed how these elements correlate with money raised or equity retained more closely than linguistic factors. However, pitch effectiveness is measured in real-life terms by the money raised, the equity retained, and the difference from the actual investment required by the start-up to cover heading costs. It follows that, to align with real-life assessment, ESP task evaluation necessitates discipline-specific knowledge. Even if students were partially graded on money raised, for a task grade to reflect skill acquisition subject knowledge is needed: pitch successfulness cannot be measured solely on money raised, but on a more complex success ratio (percentage of investment required actually raised / equity relinquished), assigning a total valuation to each start-up. On average in our dataset, investors paid £32,246 in exchange for 26.6% of the shares, which yields an average whole-company valuation of £121,225. This value (calculated for each start-up) can be further tested against linguistic and non-linguistic variables in the dataset, yielding the relative impact of every pitch multimodal element in real-life valuation. Table 6 averages the correlation of all English-related factors (such as grammar, vocabulary, intonation, etc.) and non-linguistic elements (such as gestures, eye contact, positioning, etc.), thus revealing their distinct degree of effectiveness:

Rank	Variable pair	R-squared	Adjusted R-squared
1	NonLinguistic (avg) ~ Valuation	0.7152	0.7149
2	Linguistic (avg) ~ Valuation	0.4588	0.4586

Table 6. Adjusted R-squared coefficients (Valuation).

There is a significant correlation between the successful use of non-linguistic elements and the start-up valuation obtained by students, and a weaker correlation between company worth and language performance, something which was also observed in Tables 1 and 2 above when correlating these variables against money raised and equity retained. This makes it possible to

infer that, empirically, non-verbal elements are more directly related to pitch success than verbal aspects, which reveals the ESP gap between language-bound and skill-bound assessment criteria.

The second research question ponders on the individual impact of verbal or non-verbal elements on effectiveness, measured in Table 7 below through start-up valuation. It lists the elements with the highest correlation, unearthing the importance of several linguistic aspects hitherto unnoticed when observing money raised only:

Rank	Variable pair	R-squared	Adjusted R-squared
1	GestureHands ~ Valuation	0.8762	0.8759
2	EyeContact ~ Valuation	0.8166	0.8164
3	TextImageBalance ~ Valuation	0.7787	0.7785
4	IntonationModulation ~ Valuation	0.7523	0.7521
5	VocabularyAccuracy ~ Valuation	0.7216	0.7214
6	IntegrationDiscourse ~ Valuation	0.6624	0.6623
7	Pace ~ MoneyRaised	0.6221	0.6219
8	Responding ~ Valuation	0.5836	0.5834
9	Closeness ~ Valuation	0.5534	0.5531
10	EyeContactInteraction ~ Valuation	0.5486	0.5484

Table 7. Top 10 adjusted R-squared coefficients (Valuation).

While using hand gestures, keeping eye contact and making a balanced used of visuals are successful elements in the business pitches, it is now revealed that some linguistic factors (such as the presenter's previous CEFR level, vocabulary accuracy and intonation) also play an important role in the valuation, implicitly. This importance is, as commented above, less evident in investor reports, thus highlighting the fact that English is an expected scaffold for the pitch and generally overlooked in conscious reporting.

Our third research question wondered about the correlation between money raised and student grades. It is very weak (0.092), particularly when compared with the other factors analysed in Table 2. This highlights a major fact: if the goal is to put soft skills into practice by putting together a pitch and negotiate for investment, then why are students judged merely on their oral performance? Likewise, if there is considerable attention given in class to the non-linguistic aspects of presenting, why are students graded solely on their language performance? The four graders involved were interviewed on their assessment methods, and they all commented on grammar and vocabulary accuracy, pace and intonation appropriateness, and some on a holistic evaluation of task effectiveness. However, they largely failed to mention gestures, eye-contact and other non-verbal factors in the assessment

rubric, although they had all practised and commented on them in class. As aforementioned, this represents a major problem for skills-based assessment in the first place, and ultimately for curricular validity. Statistically, the difference between academic and real-life assessment is significant, since the correlation between Grades and Valuation is relatively weak, at 0.2213 r-squared and 0.2211 adjusted r-squared. This demonstrates quantitatively that the theoretical problem posed by assessment discrepancy is indeed present: target skills cannot be measured through module grades and, conversely, grades do not necessarily reflect the acquisition of these skills. The tenuous correlation among these factors is crucial, because curricular design established learning outcomes that cannot be ensured (merely expected, without sufficient ground) to have been achieved.

Our last research question asked whether investors valued language elements as a deciding factor in their report comments. Report analysis findings reveal that student investors seemed to overlook linguistic elements. They are not language professionals (nor are they doing a Linguistics degree), and therefore their focus is primarily on content. However, of the fact that they ignored the obvious (that a presentation must be given in good English to be effective) is problematic, particularly as it seems to challenge the traditional idea that observer affect is determined by language factors (Krauss, Apple, Morency, Wenzel & Winton, 1981; Chen, Yao & Kotha, 2009). These results may suggest that the reasons which make the pitch successful transcend multimodal analysis, at least partially. That is to say, from the report analysis, only 23.8 percent of presentations can have their success in receiving funds associated with verbal or non-verbal elements to some degree, but language-related elements account for a meagre 2.56 percent in total. However, some of the coded reasons are intersected by multimodal elements: while there are clearly non-modal indicators (such as the idea itself, or its profitability) the effect of the combination of proficient English and gestures or discourse integration with images, and written text may have played a role in the confidence observed by investors. Similarly, what is referred to as clear English may have been appreciated as such because of an adequate pace, grammar and pronunciation, which are aspects virtually unmentioned in these reports. A sub-disciplinary affordance is relevant here: there seems to be little evidence of the impact of multimodal elements in investor reports because the investment is target-oriented, which means that investors seem to value the idea and economic prospects over anything else. The relative absence of multimodal elements in reports has more to do this heightened

focus on economic viability and potential return on investment than the actual reflection on their role in effectiveness.

6. Conclusions

The qualitative-quantitative approach to the multimodal analysis of business pitches has indicated that non-verbal cues, paralinguistic elements, presenter use of multimedia and realia, and a number of other factors influence success in real-life terms, as measured by start-up valuation. Disaggregating these elements and analysing them individually showed that the use of hands, eye contact, visuals and voice modulation explains student success in raising funds better than language proficiency. Conversely, the impact of paralinguistic features remains scant on student grades within the module, despite relatively strong correlations among some of the non-verbal elements and achievement. This highlights a methodological discrepancy between linguistic and skills-based learning outcomes, and implicit resistance to incorporating multimodal and real-life factors like assessment criteria in such simulations. Therefore, an improved method for assessment is needed: one that includes both speech and other modalities, including task effectiveness under simulation, to better match the real-life skills targeted by curricular design. This is not a new idea; Canale & Swain (1980) already pointed to the importance of non-verbal communication in testing criteria so that classroom discourse and real contexts are aligned. However, the issue has failed to be addressed systematically (particularly in ESP, in light of the findings above) and there is still a need for a "communicative testing model which is grounded in a wider, multi-dimensional interpretation of what is believed to constitute communicative behaviour and oral language proficiency" (Pillar, 2011: 24).

Such improvement can be achieved through rubrics which not only include multimodal aspects but also interpersonal modes. This shift is already in progress; the new CEFR includes Mediation so as to "move away from the four skills, as one of the four modes of communication, that is: reception, interaction, production and mediation" (Council of Europe, 2018). To attempt a congruent alignment with skills-based approaches, task outcomes (in discipline-related real-life terms) should also be included in the rubric. The benefits would include better assessment (with clearer evidence of learning objectives as descriptors of the assessment tool itself) and enhanced

circularity: the learning of the communicative procedures and devices used to transmit the targeted disciplinary knowledge or accomplish the disciplinary task are explicitly taught, and as important in the assessment of the task as the task outcome itself. This may be useful for both those who would like to integrate soft skills into their assessment and ESP lecturers willing to include multimodal aspects as well, in light of their impact on communication.

Such a fine-grained rubric, in which the many elements above are gauged, would provide a formative assessment tool affecting English learners' multimodal text production and performance beyond existing theory-driven models (Hung, Chiu & Yeh, 2013). The findings of this research may contribute towards the establishment of more evidence-based assessment within ESP contexts, as it exemplifies how the use of research and theory can inform the selection of assessment targets, methods and processes. As noted in the pursuit of multimodal curricula, "multimodal communication environments require broader, more integrated epistemologies: one must be able to entertain multiple perspectives and multiple strategies for communication" (Fordham & Oakes, 2013: 315). This multiplicity also affects ESP: not only beyond the assessment of the basic four skills, but also beyond language itself, and into multimodality and measurable skills as proof of complex literacies towards employment-enabling education.

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References

Aguilar, M., & C. Muñoz (2014). "The effect of proficiency on CLIL benefits in engineering students in Spain". *International Journal of Applied Linguistics* 24: 1–18.

Airey, J., & C. Linder (2009). "A disciplinary discourse perspective on university science learning: Achieving fluency in a critical constellation of modes". *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching* 46: 27-49.

Andrews, J., & H. Higson (2008). "Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study". *Higher Education in Europe* 33,4: 411-422.

Balcar, J. (2014). "Soft Skills and their Wage Returns: Overview of Empirical Literature". *Review of Economic Perspectives* 14,1: 3-15.

Beelen, J. (2011). "Internationalisation at Home in a Global Perspective". *Revista de Universidad y Sociedad del Conocimiento* 8,2: 249-264.

Beelen, J., & E. Jones (2015). "Redefining Internationalization at Home", in A. Curaj, L. Matei, R. Pricopie, J. Salmi, & P. Scott (eds.), *The European Higher Education Area*, 59-72. New York: Springer.

Bell, R. (2016). "Unpacking the link between Entrepreneurialism and Employability: An assessment of the relationship between entrepreneurial attitudes and likelihood of

graduate employment in a professional field". *Education + Training* 58: 2-17.

Buunaaisie, C., A. Manyara, H. Annett, E. Bird, I. Bray, J. Ige, D. Evans (2018). "Employability and career experiences of international graduates of MSc Public Health: a mixed methods study". *Public Health* 160: 62–69.

Canale, M., & M. Swain (1980). "Theoretical bases of communicative approach to second language teaching and testing". *Applied Linguistics* 1: 1-47.

Charles, C., & E. Ventola (2002). "A multi-semiotic genre: The conference slide show" in E. Ventola, E. Shalom, & S. Thompson (eds.), *The Language of Conferencing*, 169-210. Frankfurt a.M.: Peter Lang.

Chen, X., X. Yao, & S. Kotha. (2009). "Entrepreneur passion and preparedness in business plan presentations: A persuasion analysis of venture capitalists' funding decisions". *Academy of Management Journal* 52: 199-214.

Council of Europe. (2018). *Common European Framework of Reference for Languages: Companion Volume with New Descriptors.* Strasbourg: Council of Europe.

Dafouz, E., M. Camacho, & E. Urquia (2014). "Surely they can't do as well: A comparison of business students' academic performance in English-medium and Spanish-as-first-language-medium programmes". *Language and Education,* 28, 223–236.

Dearden, J. (2015). *English as a Medium of Instruction: A Growing Global Phenomenon.* Oxford: British Council.

Douglas-Brown, H. (2003). *Language Assessment: Principles and Classroom Practices.* New York: Pearson.

Erling, E. (2015). *The Relationship Between English and Employability in the Middle East and North Africa.* Manchester: British Council.

Fan, C., X. Wei, & J. Zhang (2017). "Soft skills, hard skills, and the black/white wage gap". *Economic Inquiry* 55,2: 1032–1053.

Fayolle, A., & B. Gailly (2015). "The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence". *Journal of Small Business Management* 53: 75-93.

Fisher, D., & H. Friedman (2015). "Is accounting education failing students? The case for a skills-based curriculum". *Journal of the CPA Practitioner* 7,2: 5-8.

Fordham, T., & H. Oakes (2013). "Rhetoric across modes, rhetoric across campus: Faculty and students building a multimodal curriculum" in T. Bowen, & C. Whithaus (eds.), *Multimodal Literacies and Emerging Genres*, 313–335. Pittsburgh, PA: University of Pittsburgh.

Furnham, A., & E. Petrova (2010). *Body Language in Business: Decoding the Signals.* London: Palgrave.

Hatton, A. (2007). *The Definitive Business Pitch: How to Make the Best Pitches, Proposals and Presentations.* London: Pearson.

Heckman, J., & T. Kautz (2012). *Hard Evidence on Soft Skills.* Cambridge, MA: National Bureau of Economic Research.

Heugh, K., X. Li, & Y. Song (2017). "Multilingualism and Translanguaging in the Teaching of and Through English: Rethinking Linguistic Boundaries in an Australian University" in B. Fenton-Smith, P. Humphreys, & I. Walkinshaw (eds.), *English Medium Instruction in Higher Education in Asia-Pacific*, 259-279. New York: Springer.

Hind, D., & S. Moss (2011). *Employability Skills*, 2nd ed. Sunderland, UK: Business Education.

Hood, S., & G. Forey (2005). "Introducing a conference paper: Getting interpersonal with your audience". *Journal of English for Academic Purposes,* 4,4: 291-306.

Hung, H., Y. Chiu, & H. Yeh (2013). "Multimodal assessment of and for learning: A theory□driven design rubric". *British Journal of Education Technology*, 44,3: 400-409.

Inti, M., & A. Latih (2018). "Pedagogical approaches required for fostering interpersonal skills among mechanical engineering technology students". *Advanced Science Letters* 24,4: 2854-2857.

Jimenez-Muñoz, A. (2014). "Measuring the impact of CLIL on language skills: a CEFR-based approach for Higher Education". *Language Value* 6: 28-50.

Karlsson, T., & K. Moberg (2013). "Improving perceived entrepreneurial abilities through education: Exploratory testing of an entrepreneurial self efficacy scale in a pre-post setting". *International Journal of Management Education,* 11: 1-11.

Krauss, R. M., W. Apple, N. Morency, C. Wenzel, & W. Winton (1981). "Verbal, vocal, and visible factors in judgments of another's affect". *Journal of Personality and Social Psychology* 40,2: 312-320.

Kress, G. (2003). *Literacy in the New Media Age.* London: Routledge.

Kress, G. (2010). *Multimodality: A Social Semiotic Approach to Contemporary Communication.* London: Routledge.

Linder, C. (2013). "Disciplinary discourse, representation, and appresentation in the teaching and learning of science". *European Journal of Science and Mathematics Education* 1,2: 43-49.

Morell, T. (2015). "International conference paper presentations: A multimodal analysis to determine effectiveness". *English for Specific Purposes* 37: 137-150.

O'Connor, A. (2013). "A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes". *Journal of Business Venturing* 28,4: 546-563.

O'Leary, S. (2017). "Graduates' experiences of, and attitudes towards, the inclusion of employability-related support in undergraduate degree programmes; trends and variations by subject discipline and gender". *Journal of Education and Work,* 30: 84-105.

Pillar, G. (2011). "A framework for testing communicative competence". *Partium Journal of English Studies* 2: 24-37.

Quacquarelli Symonds (2019). *QS World University Rankings*. URL: https://www.topuniversities.com/qs-world-university-rankings/ [01/09/19].

Rao, M. (2014). "Enhancing employability in engineering and management students through soft skills". *Industrial and Commercial Training,* 46: 42-48.

Rowley-Jolivet, E. (2015). "Quantification in conference talks and proceedings articles in engineering". *English for Specific Purposes* 38: 11-22.

ShanghaiRanking Consultancy (2018). "Academic ranking of world universities". URL: http://www.shanghairanking.com/ARWU2018.html [25/09/18].

Spring, J. (2015). *Economization of Education: Human Capital, Global Corporations, Skills-Based Schooling.* New York: Routledge.

Tardy, C. (2005). "Expressions of disciplinarity and individuality in a multimodal genre". *Computers and Composition* 22,3: 319-326.

Tomlinson, M. (2008). " 'The degree is not enough': students' perceptions of the role of higher education credentials for graduate work and employability". *British Journal of Sociology of Education* 29: 49-61.

Tran, T. (2015). "Is graduate employability the 'whole-of-higher-education-issue'?". *Journal of Education and Work* 25,3: 207-227.

Tymon, A. (2013). "The student perspective on employability". *Studies in Higher Education* 38,6: 841-856.

Wächter, B. (2003). "An introduction: Internationalisation at home in context". *Journal of Studies in International Education* 7: 5-11.

Wächter, B., & F. Maiworm (2014). *English-taught Programmes in European Higher Education: The State of Play in 2014.* Bonn: Lemmens.

Watkins, H., & R. Smith (2018). "Thinking globally, working locally: Employability and internationalization at home". *Journal of Studies in International Education* 22,3: 210-224.

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